SED 322 Signature Assignment: Review of Literature

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**Abstract**

School budget limitations have been a norm in this country, but how do we approach this problem within our own classrooms? This paper looks to examine the background of resource limitation in schools and affords some insight into the ways teachers can compensate for these limitations within the classroom environment. It also addresses the potential barriers and obstacles limiting change in this area. Lastly, it reflects on the potential improvements and long-term effects of this action’s application.

**Introduction to the Problem**

As a government service, in order for our educational system to properly function, we must depend on resources provided from various sources in order to provide the best education possible to our charges. While it is easy to see this as a problem of limited resources, there is much more to be said for how these resources are utilized. The problem that this paper hopes to tackle is the mismanagement and under-utilization of the resources available not only to teachers,but the educational community as a whole.

Regarding the current federal government’s observations of the matter, the answer does not lie in additional funding. According to the current head of the Department of Education, Betsy Devos, “The notion that spending more money is going to bring about different results is ill-placed and ill-advised," (Lattimore, 2017) Regardless of one’s opinion on the matter, it is clear that this is a problem that cannot be solved exclusively with more funding. The need for superior resource management is critical and one that could make a substantial difference in the next few years and even further beyond that.

**Background**

One facet of resource management that teachers should become more aware of, is the evaluation of resource quality. Funding for software and technology is one instance where this point is most pertinent. According to the ASCD, “Schools in the United States spend a lot of money on education technology—estimated soon to be $56 billion dollars—36 percent of which is spent in K–12 education. That's about $400 per student per year.” (ASCD, 2011) With all of this money being dedicated towards technology, it is important that we ensure the quality and effectiveness of these resources by regularly evaluating the effects and benefits they provide.

The ASCD offers up a hypothetical scenario to establish how this process develops. Software utilized by schools is one area where an evaluation of quality is essential. In the example, a teacher evaluates the quality of a reading comprehension software by determining whether it fulfills the criteria she wishes to establish in her lesson. She closely examines how each facet of the software aligns to her standards and distinguishes whether it can serve as an essential piece of her teaching. Then she evaluates if there is a correlation between the software’s usage and an increase in students learning effectiveness. With just these two evaluations teachers can determine the value of any digital resource they encounter.

With such large numbers dedicated to technology and software, it is only logical that teachers dedicate time to evaluating the resources within their classrooms. One option to help integrate this into schools would be to require teachers to submit regular evaluations on the efficacy of the various resources that the school can provide. Annual individualized examinations like these could go a long way toward eliminating unused assets and free up space in the school budget for more pertinent and effective resources. While this is not an unheard-of idea, it is important that the teachers are deeply involved in this process as they are the ones who will ultimately utilize them. Solutions to this problem do not lie in just the teachers hands however.

In Archer County, Texas, “The district has a system in which schools are assigned points based on the number of students qualifying for free and reduced-price lunches, student mobility and other factors indicative of a high-need school. For example, if 70 percent of a school’s students qualified for free and reduced-price lunches, the school would receive two points for additional staff positions. One point earns a school one full-time-equivalent teaching position.” (Strategy) Plans such as these are instances of district policies that can help ensure that the distribution of resources is not only equitable, but that they will be prioritized for the areas that need them most.

It is also effective, in that this method does not depend on increasing resources, but better using what is available. According to the article on the matter, “Archer County is not particularly affluent. Its economically disadvantaged population approaches 50 percent, yet the district learned to better manage and allocate its resources to support schools. The points and safety-net programs provide principals with increased flexibility.” (Strategy) This flexibility is the real benefit provided from programs such as these. Every school and district has unique needs and administration and teachers should have an acute understanding of these needs. By allowing more flexibility in how these issues are confronted, the need for additional funding becomes less of an issue. It is how schools use what is provided to them that will make the greatest difference in these instances.

**Stakeholders Involved**

Solutions to this problem originate in the involvement of teachers. In order for resources to be properly managed, it will require the contributions of the many educators in this nation. In many ways, they are also one of the most affected by its outcome. An improper balance of resources can lead to substantial cuts in certain areas and can severely hamper the effectiveness of educators. Improper resource management also limits the scope with which teachers can work in as well. The freedom for teachers to direct teaching in innovative and progressive ways depends on sufficient resources. Much like scientists who seek to discover new aspects of the world, teachers look to improve upon their methods of teaching and create innovative ways of engaging their students. If a lack of management is present, then much of these opportunities are squandered. If the situation is particularly bad, then teachers may even be required to pay out of pocket in order to fund some of their ideas.

While teachers are one of the major stakeholders, they are matched in involvement with the students themselves. As the ones on the receiving end, student’s quality of education depends heavily on the proper usage of these resources. Mismanagement of resources limits the practices that can be employed to assist students both in an academic and social sense. Resources that would traditionally be dedicated to extracurriculars, clubs and other similar programs can be severely limited if they are being wasted elsewhere. Much like how teachers’ practices are limited, students will also suffer from this with increased class sizes limiting the attention they can receive from their teachers. Mismanagement in a technology budget is also a concern as students will have less experience utilizing these resources that are becoming more and more commonplace in the working world.

**Existing Challenges and Potential Barriers**

A primary challenge to these solutions will be the proper application of teacher freedom in the classroom and the resources they utilize. While the ideas and plans listed above have proven to be effective in certain areas and situations, there is no guarantee that it will apply the same way for everyone. Differences in economic background and individual state laws and policies can greatly hamper this type of progress. There are also considerations to be made for how these new solutions will be received by the employees of the districts. Implementing new policies will take time and there will undoubtedly be disparities in effectiveness. While the easiest of these changes would be the individual evaluations of resource quality by teachers, even this can be challenged as an inefficient usage of teacher time. Despite these concerns, the benefits to be gained from better management are clear and far outweigh the disadvantages it may present.

**Discussion of How This Problem Has Been Identified in the Field**

In this day and age, education is undergoing a revolution. Educators are striving to abolish the assembly-line quality of teaching and treat students as unique and independent vessels for knowledge, each with their own set of skills to bring to the classroom. Two ways in which educators are following this revolution are by integrating technology and the arts in curriculum. The goal of the former: to foster the skills needed to thrive in this digital age; and the latter: to engage students by allowing opportunities for self expression using multiliteracies and creative-thinking.

**Barriers**

These two types of integration align to the core principle of the revolution---democratic education. This refers to an education where teachers establish equity in the classroom, giving students the support they need to practice self-efficacy in mastering material (TED: The Education Revolution, 2016). Jerry Mintz, founder of AERO (Alternative Education Resource Organization), explains that democratic education gives students the resources they need to take ownership of their education (Mintz, 1989). Schools world-wide are enacting this type of education; however, many find that it’s not necessarily a straight-forward quest. Today, schools are finding difficulty in partaking in the education revolution---specifically by integrating technology and the arts--because of factors such as lack of funding, lack of training, time restraints, and lack of support.

**Lack of Funding.** Today, only 60% of American schools use laptops in the classroom daily, according to a study featured in the article, “Five Biggest Barriers to Education

Technology” (Jones, 2017). One of the *barriers* from making this a universal practice is cost. This may be a surprise to some people considering that investments in edtech have raised over 30% since 2016, but as the 2017 Global Learning Technology Investment Patterns reveal, Pre K-12 institutions received only 13% of the investment, whereas the rest of the money flows into corporate academic companies (Adkins, 2018). That is why technology in the classroom is still a rare find in some districts.

        Another issue is that administration is not spending their funding for technology

Effectively. In fact, they are wasting money. One common example of this is the vast integration of SmartBoards that are seldom used. The other vacuum is unused software licenses. According to BrightBytes Annual Insight Report, “30% of software licenses were unused by students” in 2018 and “97.6 % are never used intensively” (Erlanger, 2018). These findings will, in turn, discourage districts from implementing edtech. Why waste money on digital software if it will go unused?

        Because of the financial strain put on educational institutions, extra curricular activities are often the first to be cut, especially fine arts programs. This problem will only intensify if Trump’s TY2018 budget proposal is enacted, for it calls for a complete withdrawal of funding for the National Endowment for the Arts (Americans for the Arts, 2018). Now, students may only get to learn arts education if it is integrated in core curriculum, but schools may view this as another unnecessary spending spree, especially if it takes away from the time and resources that could be used for test prep.

**Lack of Training.** Another obstacle in successfully integrating technology and the arts in curriculum is the lack of training or familiarity with these elements. Another barrier to education technology mentioned in Jones’ (2017) article was the lack of training for non “digital natives”—aka people who did not grow up in a generation with accessible technology. Teachers, regardless of how tech savvy they are, are pressured to not only teach students various technological skills and internet etiquette, but also function as a model for digital citizenship. Overwhelmed by this new responsibility, 71% of teachers in a 2015 survey revealed a desire for their school district to establish “an office dedicated solely to technology use in the classroom;” that way, they could have resources to aid them in the tech integration and share the responsibility with co-teachers who specialize in techEd (Jones, 2017).

        Likewise, teachers may find art-related activities a bit foreign, or even irrelevant to their content area. Some may not be aware of the arts’ ability to adhere to a variety of content. Also, there is the false notion that you need talent to do be able to do art, but that is not the case. We are all born with creativity, the ability to analyze topics from multiple perspectives and solve problems in innovative ways. In actuality, it is not the lack of training that inhibits a teacher from integrating arts in education, it is the mind set that only those born with natural talent, or those who are right-brain oriented, can do art.

**Time Restraints.** Although the pay-off of technology and/or arts integration is extensive, one cannot deny the amount of effort put into the process. Teachers already have the tough job of taking their work home with them (grading papers, crafting lesson plans, etc). Enhancing curriculum with technology or art practices would eat up time because of the factors that go into it such as research, professional development, extensive scaffolding, and cutting down instructional material to make room for engaging activities.

        Time is further eaten away because of the wild goose chase administration has to undergo to acquire resources. The amount of bureaucracy involved in requesting resources is abundant. The teacher must get a “yes” from the principal or dean, who must get consent from the Office of Research and Assessment, who must get consent with district curriculum designers, who must get consent from the school board, who must get consent from the state government. In total, the average sale cycle can take up to eight months--well over half the school year (Ramasubbu, 2017). The amount of time and energy spent checking all the boxes is enough to dissuade educators from attempting to execute a holistic technological integration.

**Lack of Support.** All of the challenges and barriers discussed can discourage schools from taking measures to enhance their curriculum with technology or arts integration. Another factor may be the mere fact that some educators have settled in terms of their educational philosophy. They have found a curriculum and teaching style that works for them. They use the same lesson plans every year with little to no modifications. They may favor test-readiness or mastery of content over engaging their students. Everyone may have experienced a teacher like this at least once in their lifetime. This commonality demonstrates that we (American educators) are afraid to take risks, or that we are not successfully fostering a growth mindset.

**A Battle Worth Fighting**

Despite the challenges that come with integrating technology and the arts, both have proven to aid in not only the students’ success, but also their overall well-being. Technology promotes collaboration amongst peers, it piques the students’ interest, it provides more personalized learning, and, simultaneously, students are acquiring essential career skills (Pham, 2018). As for arts integration, it has been proven that students who engage in some sort of arts program are “twice as likely to be recognized for academic achievements…and to graduate college” (“Americans for the Arts, 2013). Furthermore, arts integration improves students’ well-being by giving them an outlet for self-expression, fostering social skills, building leadership skills, and by allowing students to communicate in a variety of mediums. Although it may be costly to implement the two, the results are priceless, and they make a lasting, positive impact on the generation that will next lead our society.

**Group Suggestions/Recommendations**

All teachers enter the classroom with some resources provided to them, but often times these resources go overlooked. When thinking about resources the main ones asked for are technology tools such as smart boards, computers, iPads, etc. However, resources range beyond that and include items such as textbooks, paper, classroom space, and anything found in a typical traditional classroom setting. A big question that remains though is how to make the most out of these resources when they are battered, ripped, and broken. The first instinct is to ask for more funding from the school, but you know how difficult that process can be. Instead, there are many different ways to obtain and make the most out of the resources already given to teachers.

**Professional Development Workshops**

           As mentioned above, focus on what you *do* have rather than what you lack. One of the main reasons schools have gotten funding cuts for resources is because teachers are given expensive equipment for their classes and they’re just sitting there collecting dust. To avoid this, professional development workshops and seminars should be attended to teach instructors how to use these tools they’re being given. There are numerous workshops that schools can sign up for and typically range from $50-$200 to attend per person. If one person is sent to these (preferably the department chair or spokesperson) or signs up for an online session (*Integrating Technology in the Classroom*.), they can then use what they’ve learned and go back to teach their peers. This process saves thousands of dollars for the school and benefits the entire department. Although workshops are a great tool to inform teachers how to use the technology and supplies in their classes not everyone may have the time or money to attend. That’s why there are other ways to use the most out of class resources.

**Communicating Between Schools**

Reaching out to other schools to obtain what your school may be missing is an easy way to gather new supplies and resources. Schools within the same district often times have strong communication and bonds between one another. Different schools have different resources that oftentimes go unused. Many times, a teacher is given laptops, iPads, or a smart board and they prefer traditional teaching methods and would rather pass these down to a newer teacher. If a teacher is lacking a class set of books, chances are another school in the same district might have that set and isn’t using them. Building relationships with other schools and teachers can benefit the students’ needs because unused supplies can be shared or traded to fit lessons. Teachers can also share successful lesson plans that students have enjoyed working with that fit their curriculum. Asking is the best way of receiving, especially when the student’s interests are kept in mind.

**Third Party Providers**

Aside from neighboring schools there are also third-party providers who often times seek out teachers to give materials to. Whether it be to test out a new product, or support education, teachers can reach out to these providers. One Principal of Columbus Park Elementary School in Worcester, MA, partnered with an audio company to help improve student engagement in the classroom. Her partnership allowed for the company, Lightspeed Technologies, to test its surround sound system in a school setting while the teacher provided feedback on how to improve this device for all teachers to use. Their students were more engaged and eager to enter their classrooms and collaboration between students improved. They did this for about 4 years and throughout that time the teachers at Columbus Park began to see the importance of technology in their classrooms all thanks to the free providing of this third-party provider. (Gribouski) There’s so many resources you can obtain from these companies; free technology tools, computer programs, funding for supplies, classroom materials, etc. There are many ways to find providers online by searching for nearby organizations or by reaching out to your district office which usually has a list of approved contacts.

A similar alternative to this is applying for grants. Although time consuming, grants are a great way to ask for resources or funding for specific needs in the classroom. Grant writing workshops are often done for free in many school districts or there are online guides to help with the writing process. Many new teachers are required to take a grant writing course before finishing their teaching programs, so reaching out to peers for help is essential. The principal and school board directors can also help with this process and are an important factor in deciding if your grant will be approved or not, so work with them. Reaching out to your community is also a good way to gather supplies or funds. Setting up fundraisers or donation centers where families and neighbors can donate any materials, they don’t use such as; books, paper, pencils, markers, decorations, technology, etc. This depends a lot on the community you’re in, if you’re in a low-income title one school this may be more difficult to implement.

**Stakeholder Perspectives**

           The main group that needs to be considered when dealing with resources and how to use them is the students. Are your students really going to benefit from a brand-new set of iPads? Or is that just something you want for your classroom. Thinking about their needs and what can improve their learning is the key here. Many students have different ways of learning so consider using resources that can help you differentiate your lessons and target their problem areas. The second most important stakeholder involved is you, the teacher. You’re the one who will be deciding how to use your resources and seeking out any additional materials. If a teacher doesn’t care enough about utilizing the supplies in their classroom to enhance learning, then there’s really nothing that can be done about that. An instructor needs to have motivation and time to implement new resources into their classroom and essentially change their structure of teaching.

The school board and administrators are the ones who decide whether or not they’ll allow their schools to partner with outside companies and approve grants. It can be beneficial to them, but many times they wish to have no connections with third party vendors. They’re an important stakeholder because almost all decisions need to pass through them, including budget increases for resources. (Engage Your Stakeholders when Important Budget Decisions Must Be Made) The community members that surround the school such as parents, residents, and businesses, are always going to be affected by what’s happening within their neighboring schools. If they can contribute to the resources needed in classrooms students can improve their overall school experiences and it will reflect positively on the community. However, there’s also the thought process of “why should I care about what’s happening in schools if I don’t have kids or don’t go to school myself?” Not everyone will be so willing to help. Funding laws are typically decided at the federal level, so our state members of the educational board are also important stakeholders. Their overall decisions decide on how the public schools within Arizona can obtain funding and how much. Although these are all important individuals within the issue of resource use in our schools, there’s many factors that can prohibit them from contributing that need to be considered.

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