

Review

The Underlying Issues Responsible for Success and Failures in the use of Distance Educational Technology

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Abstract

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This article is an excerpt from a previous research. The study was a qualitative case study and the purpose was to explore the need for program development in a distance learning environment in the United States as a whole and to identify strategies for using best practices established in U.S.-based distance education programs as a basis for developing a model for other systems. To preserve anonymity of the cases and participants involved in the study, all names were changed to pseudonyms. The schools are identified as follows: Private School A (PSA), Private School B (PSB) and Online Public School (OPS). Private School A participants are designated with the names John, Janet, Teresa, Jerry, Elizabeth, Mathew, Cynthia, Ben and Stacy. Private School B participants are designated as Boris and Jonathan, and the OPS participants are named Andrew and Samantha. The study findings can inform institutions where quality education is needed to better prepare under-served school populations for higher education and for further contribution to the development and prosperity of that nation.

Keywords: Distance Education, Facilitator, Failure, Staff, Success, Sustainability, Technology

INTRODUCTION

Distance education is rapidly becoming part of mainstream education as the number of distance education courses is on the increase in educational institutions (Cooper, 2002; Monolescu et al., 2004). It has been credited with reducing the educational gap between developed and developing nations (Breen, 2006; Nsiah, 2011). Learners around the world are demanding anytime and anywhere forms of education and learning institutions are responding to that demand by implementing various forms of digitally-based education (Bogdanović, 2012; Schrum dan Hong, 2002).

According to Cooper (2002) and Nsiah (2011), the success of distance education begins with a solid framework for service prior to beginning actual delivery of instruction. In alignment with this concept, this study explored the various issues considered in laying this framework. The interview questions designed to offer

insights on specific issues that contribute to operation of distance education included the following:

- IQ1: Address the issue of sustainability in keeping your program viable.
- IQ2: What are the underlying factors responsible for the success of your program?
- IQ3: What are the underlying factors responsible for the failures, if any, of your program?

From these questions, three major categories of issues emerged during the interviews. The following sections address those three main issues connected to this research question: Success issues, failure issues, and sustainability. The issue categories emerged from answers to the interview questions are the result of building a logical chain of evidence through identification of patterns of uniformities that line up with the research questions (Creswell, 2007; Davies, 2007). These issues

are explored and discussed through the participants' comments with emphasis on identifying points of agreement between respondents on these issues.

Success Issues

Success, as revealed by the study data, is a combination of human and capital resources working together to best serve the student. These identified issues, and the ways in which they were put in motion at each of the study schools, are discussed in the following sections.

Technology

Technology was deemed a success factor because without technology, the delivery programs would not be possible for contemporary distance education, which relies on technology. Jerry, superintendent for PSA, offered his perspective on the importance of technology by emphasizing the importance of matching technology applications to the particular aspects of program delivery:

I think technology caught up with our dreams. The better the technology became, the more attainable our dreams were. When we started fifteen years ago, our dreams were way ahead of technology. But as technology has advanced; it caught up, and I think that's the reason for the success.

Ben, the director for PSA program, also believed technology and its reliability are crucial in distance education programming: *—If the technology is not reliable, the program cannot run smoothly.* In agreement, Samantha, OPS e-solution manager, remarked, *—If our technology weren't reliable, then we wouldn't still be here, because we all know how frustrating it is when you're working on the Internet and it doesn't work.*

Teachers

All of the respondents testified to the importance of quality teachers who are skilled at working in the distance education environment. Ben, director for PSA, believed teachers are important in ensuring success in distance education. However, he also believed distance teaching is not for everyone. He did not expect teachers to be technology savvy in order to teach in distance environments, but he believed the willingness to try something new is key in hiring someone to teach in such an environment. In his own words: *—It's a very different delivery system. It's adventuresome and one must be interested in doing something different—willing to learn.*

Teresa, administrator/instructor at PSA, concurred with Ben as shown in the following statement:

You can have a teacher that is teaching in a traditional school, and they're just a spectacular teacher, but if they're forced to work in a distance learning environment, then that can really affect your program because it's a change in mindset as far as how you present your information. You have to want to do it.

PSA's Teresa advised: *—In hiring teachers for such an environment, consideration should be given to people who are passionate about wanting to do it.*

Jonathan, a former teacher from the PSB program, also believed teachers to be key factors for success. He connected teachers' success role, however, to relationship—love and care for their students. He remarked,

The number one thing that makes a program successful is the teachers and how they demonstrate to their kids they really care about them, even if they're three thousand miles away. Teachers should show interest and demonstrate the level of friendship and interest and care and love that they have for their kids even though they're a long distance away. In my experience, the happy students in class are those whose teachers, you know, present themselves that way. They may not be all warm and fuzzy, to use that kind of a term, but if they still demonstrate that they care and are interested in the student, then the student's going to do better in that class than if the teacher just came in and gave the education and delivered their content and that was it. So I try to present myself in a way that demonstrates, —Hey, I care about you even though I've never met you in person and I want you to do well in my class, and in school, and I want you to be successful in your relationship with Christ. So I try to present myself in that way.

With regard to Jonathan's assertion on teacher-student relationship as important for success, Samantha, the e-solution manager at OPS, also believed the interactions between teachers, students, and parents plays a key role in success. She explained how OPS teachers are advised on the need of frequent interactions with the students and their parents based on their knowledge of research on best practices. She posited,

We tell teachers in the onset that we expect that you will talk to parents and students once a month. You are expected to return phone calls and e-mails within 24 hours. You are expected to grade work within 48 hours of when it comes in. And those are all based on best practices and research that says that if you wait to answer a student's question, then their motivation is gone. They've moved on. If you don't get to them in that time, then we've lost them.

Site Facilitators

Online facilitation, in broad terms, can be described as the act of managing the learners and the learning through an online medium (Australian Flexible Learning Framework, 2002).

The importance of qualified and engaged classroom facilitators is recognized in distance education programs by researchers such as MacGregor and Atkinson, 2002-2003; Spencer, 2002; and Wang, 2008. Literature has revealed four interrelated roles played by facilitators in distance education—intellectual, social, managerial, and technical (Hoostsein, 2002; Wang, 2008).

Interviews at the three case study sites elicited responses that concurred with the literature. Elizabeth, the PSA pioneer, expressed her thought about the importance of utilizing site facilitators in distance education programs, saying, —*You have to have somebody that's going to be there at the receiving site, that is going to be there to help the change process.* Ben, the director of PSA program also believed facilitators at the receiving sites play important roles in running a successful distance education program. He remarked, —*I can go down a list of sites for the past ten years and say, =this site was successful because they had a good quality facilitator, and this site was not because they did not have a good quality facilitator.* Similarly, Jerry, PSA superintendent, remarked:

If you have a good facilitator, your program will do well. If you have a poor facilitator, it will lose. What I mean by facilitator, on the secondary level, you know, if you have five kids that are taking English from the computer, you have to have a facilitator there to make sure those kids are focused. If you have a good facilitator, the program works beautifully. If you have a poor facilitator, it will fall on its face.

PSB and OPS both required site facilitators (the parent of the student in the case of distance learning school-to-home school and a supporting adult in distance learning school-to-receiving site school) to ensure the smooth running of the program.

Support Staff

The importance of the office team, including the presence of effective and collaborative support staff, recurred during the interviews. Cynthia, instructor at PSA, gave her perspective on the importance of good support staff. She expressed it this way:

You must have people who are willing to work with you and do all of the underlying support. They've got to understand your mission. One of their first jobs, after you decide what course management system you're going to use, is to get in there and know how to use it.

Administratively, Ben, PSA director, suggested also —*surrounding oneself with good people . . . people who are willing to work with you through thick and thin to get the program to succeed.* Elizabeth, also from PSA, elaborated on Ben's comment saying that it needed to be—*somebody that believes in the program and is positive about the program.*

Like those at PSA, Samantha at OPS advocated friendliness and team work. She recalled the friendly nature of her working environment and also the culture of team work:

When I first came here, one of the things I noticed was how happy people were to work here. I sat in the front office while I was waiting for my interview, and every person who came by said hello to me. And they were all just-- and it's not always like that in a school. And here's a culture that's very different. And we--the culture is something that also makes us successful, [the fact] that we work in teams, that we need each other to succeed, that we really truly believe that the student is at the center of every decision we make. We don't have a lot of hard and fast black and white, but we have a lot of grey because when you're dealing with people, especially kids, everybody has a story, and everyone has a situation. And if you don't know those, then you're doing a disservice.

Without a strong team, and a friendly and efficient front line of office staff, it will be difficult to get things done. Teamwork and friendly working environment are part of a formula for success.

Positive Character Traits

As with any new venture, establishing and nurturing a distance education program takes substantial time, effort, and perseverance. Participants suggested that in order to succeed in running this kind of program, there is need for a variety of positive character traits. Ben, PSA director, advocated patience in setting up a distance education program. According to him, things may not happen overnight. It may take a while. Patience is needed to get things to work well. In his own words,

Be patient, be patient! Some people thought five years ago that it would take over the country, but it didn't. People are resistant to change. They don't want change. They will tell you, —It's always done this way, so why should I do something different? || You will get discouraged and disillusioned because it's different, but don't give up because it will work.

In a similar frame of reference, Elizabeth, PSA pioneer, advocated graciousness, tenaciousness, resilience, flexibility and creativity as key ingredients for success. She remarked,

—*You've got to have people that have those five charac-*

ter traits and are well vested in them.

Andrews, vice president for OPS, identified commitment as important issues for success, stating, —Every decision we make we ask ourselves a question— How is this good for kids?’ And we strive to be a learning organization.

PSA attributed their success to technology reliability, teachers willing to try new things, passion, good site facilitators, and positive character traits among all constituents including patience, graciousness, tenaciousness, resilience, flexibility and creativity. Like PSA, PSB also tied success to technology reliability and positive character traits of teachers and site facilitators.

OPS also tied success to technology reliability, teacher’s ability to call students, and the prompt return of student course work. OPS credited the use of site facilitators as one of their factors for success and saw friendliness, teamwork, and commitment as additional attributes leading to success. All three sites also agreed that technology reliability and skilled facilitators are critical to success, and both PSB and OPS stated that teacher’s positive relations with students were important for program success as well.

Just as success issues emerged from the interviews, so did a number of issues that participants said should be avoided. These are discussed in the following section.

Failure Issues

Beside the success issues mentioned above, participants also expressed concern over issues they consider responsible for failure in operation of distance education programs. These concerns included the lack of skillful ways to address student needs, lack of good site facilitators, conflicting mindsets among teachers and students regarding online education, lack of good communication, unmotivated students, and others. Mathew, PSA technical director expressed his concerns in these terms:

We don’t have a way to skillfully address the needs of students that are not squarely in the middle of the bell curve, or slightly above the middle of the bell curve. We lose the ends of the bell curve. You know, I think that other people would tell you the program’s not for everyone. You have to be somewhat of a self-starter. If you don’t have a local source of accountability, it’s tough for somebody, for a teacher, to pull your strings from a thousand miles away. So you have to have someone—a parent, or a facilitator—that is going to hold that student accountable for their work load. And that is, I would think, that is a common failure of any school—the inability to reach into the home and help a student be accountable. So, have we been a failure in any other way? . . . At times in the past we’ve had technology failures, you know, places where there hasn’t been a local champion for

technology or a liaison, and there’s been sort of a dearth of local technology knowledge. Then we haven’t been able to be effective in those places. In places where there’s not a good facilitator, it’s difficult for us to be effective, and the situation failed.

Teresa, PSA instructor/director attributed failure to content management software and wrong mindset of teachers about online teaching. She commented,

We’ve had a few different areas of failure, and all of them have just been resolved by choosing something different. For example, when we started, we used content management software that wasn’t very easy to function with, and it makes the year very complicated for everybody. So we had to change and find one that was more suitable for the program. We have had teachers come in who just really struggle with the concept. They came in not because they were excited about the technology or the possibilities of what they could do but because they thought it would be an easier way of teaching. They could just teach at home and not have to be in a school and not have extra boarding academy type work. And they realized that you still have the same amount of work; it’s just different types of work.

Jonathan, PSB instructor, remarked on lack of good communication and unmotivated students:

Communication is like one of the major things that we saw at [our site]. If you didn’t communicate well, then that was very detrimental to the program. That really caused a lot of problems if you didn’t communicate with the parents or the facilitators. That was one thing that caused a lot of failures. Another thing would be having students who are not self-motivated. Online programming is not for everyone. And that’s hard for some people to accept. You need a student to be self-motivated or have somebody that can keep him focused. If you don’t have motivated children and you have an adult that’s not participating actively and not pushing them, then they’re going to fail.

Boris, PSB’s director/initiator, proffered concerns related to mismatch of local school goals and local constituency goals:

I think that the mismatch between the local school goals and local constituency goals, and having distance education, I think, was the real problem in our situation. The local church didn’t understand why they should be supporting a school that had students from around the country. So it just--there was mismatch there, and it didn’t make sense.

Andrews, OPS vice president, noted wrong mindset of students about online learning as a cause of failure. He expressed this idea in the following way:

Sometimes kids ‘think they’re coming to take our courses because they’re easy, and they find out they’re not--and that they actually have to do work. Sometimes we’ve seen problems for kids that are actually enrolled in our course and they’re enrolled in a traditional course. And they drop out of our course and finish the

traditional one.

Challenges and failures are experienced in every sphere of life, and online education is not excluded. PSA identified a point of failure in their inability to skillfully address the needs of students that are in the middle or slightly above the bell curve. Unmotivated students, a lack of good site facilitators, lack of parental support, erroneous beliefs about online education, technological challenges, and lack of technical personnel were all mentioned as risk factors for distance education among the respondents from PSA. PSB cited their sources of failure as lack of communication, unmotivated students, and a mismatch between local school goals and constituency goals. OPS spoke about the importance of motivation and the damage that low motivation can have on a program. Further, OPS emphasized the importance of avoiding misconceptions about distance education since a failure to understand the unique environment of instruction at a distance was a decisive factor for failures experienced in their program.

Sustainability

According to Monolescu et al. (2004), prior to the launch of a distance education program, there should be an agreement about the program's profit and sustainability goals.

Various issues contribute to sustainability of distance education programs including content development, professional development, funding or resources, etc. (Cavanaugh et al., 2007). This was borne out in the interviews with participants.

PSA had run for 12 years non-stop, and Ben, the program director, credited that to their ability to balance the budget for program viability. He remarked, —*I think from financial perspective, we have done fairly well at stabilizing and have it run at a pretty balanced budget perspective.* As noted earlier, the program was running on a budget in excess of \$500,000, initially. At the time of the interviews, however, it was operating on a budget of \$150,000 dollars a year, which tuition was able to offset. Mathew explained how the program could remain viable:

I think in order for the program to remain viable into the future, we really have to maximize the production time, then classroom time. We have to realize the goal of making that a product rather than--at the moment it's sort of an ad hoc. We meet together and we have classes, and they live in an archived form for maybe ten days, and then they die. In order for the program to be sustainable for the long run, we have to achieve the goal of making a production that produces a permanent or semi-permanent product where you have a class that is containerized electronically and then distributed through a network of schools and students, so that it has a life of its own. It's not just a temporary fleeting moment of

instruction. In other words, if you teach a class today, and then students have access to that material for ten days to two weeks, there is a certain temporary value in that, but if you can really produce a video or an encapsulated live interaction, and then it has increased the longevity of the session. And then of course we have to drastically increase the quality of the production of what we do, where you have sort of a studio look and feel. Now it is sort of a very colloquial or casual kind of a feel. I think that we have to really raise the bar on quality as far as what we are producing. So, those two things, and then we have to offer it. The third thing, I would say, is we have to offer it to a larger market.

Teresa, administrator/instructor at PSA, offered the idea of change as a means for sustainability:

I would say the biggest issue with that would be making sure you're willing to change. Technology is changing every day. And trying to make sure that you're not only keeping up with technology but you're making it something that answers the needs of your students---. But you definitely have to be willing to change. It's not a traditional program that you can choose one thing and just stick with that. It's changing all the time.

PSB operated for seven years and could not sustain itself due to enrollment issues, which

Boris, the initiator/director, attributed to financial challenges. He explained, *The challenge that we had of being able to continue was due to marketing. Typically, when you have a small church school, marketing efforts happen naturally just because people hear about the program. But when you have an on-line program, you have to use more aggressive marketing campaigns because people don't just naturally hear about the program. So you have to spend money to do that. And that was where we really ran into trouble. Without the support of the conference, we didn't have anybody to rely on, and without money to go out and do marketing, we didn't really have a way to keep the word out about the program. So eventually we just started trickling. We had a reasonable number of students. The numbers never really dropped down, but the local school board just decided that the numbers had never really grown large enough to make it what they believed to be sustainable.*

OPS, on the other hand, had delivered instruction for 17 years and were a state-sponsored program. As long as the state continues to exist and to allocate taxpayer dollars to this program, OPS is expected to be viable. Samantha, the e-solutions manager, explained what they had been doing to sustain the program and also suggested what they should be doing to continue viability, stating,

What we need to do is to continue to keep our eyes open as to what's going on around us. Virtual education changes so quickly. There are so many changes, so, in order for us to keep meeting the needs of students, we can't just keep doing things the same way. So we are

constantly changing. We look at our data continuously to see where our high and low peaks are and to make adjustments in our curriculum. And it's not just in curriculum but in teaching style. We try to run matrix on everything we do, including customer service—how my teaching deals with clients—and looking at all of that because we read a ton of books about focusing on customers. And because we are part business and part school, we try to merge together the best of both worlds to keep us moving forward.

PSA attributed their sustainability to budget balancing, maximizing productivity and classroom time, increasing the quality of their educational product, and maintaining a willingness to change and adjust to changing student needs. For PSB, sustainability was characterized by maintaining student enrollments and promoting an aggressive marketing strategy. OPS emphasized that willingness to change and engaging in data-driven decision making was important to their sustainability.

Sustainability, then, stems from maximizing the identified issues for success and avoiding the pitfalls of failure. Maximization of production quality and upgrading program to reflect current standards is important for sustainability. From the experience of PSB, it would appear that depending on an unreliable source of funding and not taking other measures to support operation is a recipe for failure.

SUMMARY AND CONCLUSION

As noted previously, Cooper (2002) pointed to the increase of distance education courses offered in educational institutions. The success of these courses and the programs that run them, according to Nsiah (2011), begins with a solid framework for service prior to beginning actual delivery of instruction. In alignment with this concept, this research explored the various factors considered in laying the necessary groundwork. Three major issues were brought forward by research questions—success issues, failure issues, and sustainability. Success, according to the study data, is a combination of human and capital resources working together to best serve the student. In response to the Interview Question 2, participants offered these issues as common themes of agreement: technology, instructors, site facilitators, support staff, and positive character traits, such as, patience, graciousness, tenaciousness, resilience, flexibility and creativity.

The issues for success and the risk issues for failure were defined consistently among the respondents. The reliability of the technology was cited universally as requisite to program success and sustainability. Qualities of the individuals working within the educational program were also considered important factors that can promote success or expose the organization to risk. Well-

prepared, friendly, passionate teachers who were skilled in their profession and were also liked by students were identified as an important factor for success. In matters of both technology and interpersonal relations, reliability and consistency ultimately supported success in the respective programs. In addition, all three sites recognized that the changing nature of distance education technologies make flexibility in planning essential. A failure to respond to changing technologies or student needs limits distance education program success and sustainability.

Failures are experienced in every sphere of life, and online education is no exception. When asked about factors that put their programs at risk for failure, participant's answers varied. Private School A (PSA) referenced the challenges they faced in differentiating instruction for high-achieving students whose abilities exceed the standard curriculum. More universally, patterns emerged in responses that focused on unmotivated students, lack of involvement by parents, misconceptions about distance education, lack of parental support, and technology failures, all of which put programs at risk for failure. What makes the factors for failure unique is that they are not easily addressed. Student motivation is a challenge for all educational programs, and many schools also struggle with disengaged parents. Misconception about distance education and failures of technology are two examples that are unique to distance education, but the responses noted for both success and failure highlight the fact that distance education has much in common with face-to-face instruction. Thus, a strong distance education must address all of the challenges a traditional classroom must face but must also address the technology-focused issues that are intrinsic to its delivery.

Since the goal of any distance education program is to become sustainable, questions related to this were also important. Responses on this issue highlighted the importance of sound budgeting, making data-driven decisions, maximizing productivity, and continuous quality improvement in the educational product. All three groups also highlighted the importance of flexibility in maintaining the success of their programs. As student needs change and technology evolves, it is incumbent on distance education programs to remain responsive to these changes. Failure to do so will likely leave a program behind.

Sustainability, according to the data analysis, stems from ability to maximize the identified issues for success and avoid pitfalls that cause failure. Evidently, maximizing productivity, improving program quality, and maintaining flexibility are requisite to program sustainability. Private School B (PSB) provided an example of the consequences of a failure to maximize the factors for success, and these lessons should inform choice of components to be incorporated into model for other

system's distance education program.

REFERENCES

- Bogdanović M (2012). Growing Importance of Distance Education. *I.J.Modern Education and Computer Science*, 2012, 3, 35-41.
- Breen P (2006). Coming out of the darkness of the past. *Turkish Online Journal of Distance Education*, 7(4), 1-8.
- Cavanaugh C, Blomeyer R (2007). *What works in K-12 online Learning*. Washington, DC: International Society for Technology in Education.
- Cooper L (2002). Online courses: Strategies for success. In R. Discenza, C. Howard and K. Schenk (Eds.), *The design and management of effective distance learning programs* (pp. 125-140). Hershey, PA: Idea Group.
- Creswell JW (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.
- Davies MB (2007). *Doing a successful research project using qualitative or quantitative methods*. New York, NY: Palgrave Macmillan.
- Hootstein E (2002). *Wearing four pairs of shoes: The roles of e-learning facilitators*. Retrieved March, 2010, from <http://www.learningcircuits.org/2002/oct2002/elearn.html>
- MacGregor SK, Atkinson TR (2002-2003). Facilitating learning interactions in the two-way video classroom. *J. Edu. Technol. Sys.* 31(1), 45-62.
- Monolescu D, Schifter CC, Greenwood L (2004). *The distance education evolution: Issues and case studies*. Hershey, PA: Information Science.
- Nsiah G (2011). Case Studies in U. S. Distance Education: Implications for Ghana's Under-Served High Schools. *Creative Education*, 2, 346-353.
- Spencer J (2002). *USU distance education site facilitator handbook*. Utah State University. Retrieved from <http://www.usu.edu/uenss/Handbook-Sep02.pdf>
- Wang Q (2008). Student-facilitator's roles in moderating online discussion. *Brit. J. Edu. Technol.* 39(5), 2008.