

Research Methods in Educational Technology Leadership

Project 1

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CHAPTER 1

Introduction

Many high school students take online courses over the summer or during the school year to preview courses they may be taking in the coming year; to take a course with intention to skip a course during the coming year; to add a course they may not otherwise have access to, or to recover credit from a course previously completed unsuccessfully. Online courses available to high school students have many advantages including program variety, cost, convenience and flexibility. The options available to high school students continue to expand, however, students are not always successful in online courses. Students are not always successful in face to face courses either, but with the increasing opportunity and options, a close look into how to support student success in an online course is warranted. Study skills transfer to executive functioning skills and when students do not have proficiency in these areas, and opportunities are not presented for them to build capacity in these areas, the same skills that may keep students from being successful in face to face classes will keep students from being successful in online courses. Time management and self-motivation are among the top study skills | executive functioning skills that prevent students from being successful in online courses. Time management is an essential study skill | executive functioning skill that often differentiates strong students from students who struggle. This problem is exacerbated in an online course.

Problem

High school students avoid or struggle with online courses due to study skills weaknesses in the areas of time management and self motivation. Either of these could be a concern in face to face environments as well, however, in the absence of opportunities for active learning which may be missing from online courses, it is hard for students to strengthen these skills while they are in an online class. The penalty for not having already acquired these skills may be unsuccessful completion. Many

studies involving online delivery involve specifications for school administration or for teachers/facilitators. Few examine the experiences of the actual students in the course, nor examine whether they are successful, whether they struggle or make an effort to determine the reasons for such.. If the problems that prevent success can be identified, interventions can be placed inside of the courses to ensure student success. Motivation can be enhanced with engagement strategies and time management can be practiced with pacing guides.

Purpose

The purpose of this study is to find out from parents and students what (if anything) prevents students from meeting their goals with participation in online courses. It is intended to capture the experiences of students who take online courses. These students may be taking online courses for a variety of reasons. Parent and students may identify the benefits and or the limitations of online learning as it relates to the learners ability to fulfill on the intention for taking the course.

Research Questions

1. Are k-12 students more successful (do they meet their goals) when they take online or blended summer school courses than they are when they take face to face online courses?
2. Are there strategies are used by the learners to support student success that overlap in summer k-12 face to face and online or blended environments ?
3. What percentage of students take k-12 online or blended summer schools courses vs face to face summer school courses?

CHAPTER 2

Introduction

Most of the literature identifies needs from the point of view of K-12 school administration. Few studies examined the goals, success and challenges from the students and or parents point of view. More research that identifies requirements from the parent and student point of view may close the gaps on what is missing that would have every child who takes an online course meet that course armed with tools to be successful. It is the same expectation we would have in a face to face classroom. Students are not always choosing an online courses because of their own interest. Sometimes the choice is because of a graduation requirement or other necessary course required for high school graduation.

Yin (2015) studied the increasing number of students participating in massive open online courses (MOOCs) in school, as well as on their own time. This study highlighted the large number of students for whom self directed learning was a highlight and a preferable method of learning new things. Uncovering student experience during online sessions may inhibit some, but for students taking courses voluntarily, the experience of audio and video kept them engaged. The experiences was more like entertainment than a traditional classroom, The experience can be stopped for any conversation and picked up again without missing anything. The interactive learning elements of MOOCS increase the level of engagement. Although these courses are designed for post secondary or adult study, this design accommodates the interest and curiosity of younger children as well.

Cavanaugh (2009) disclosed the vast opportunities for 21st century teaching and learning presented by student learning opportunities that are not limited to physical boundaries. The learning is student-centered, personalized and paced individually to maximize the experience of new learning. Student choice is at the heart of online courses as students determine the length of time on task. Each year the offerings available to students increase and more students take advantage of the vast content available. Online learning models provide student practice for mastery of 21st century skills while

engaging students with required content. Students work independently through content and apply new knowledge through digital writing, video, and other digital tools. Schools that are not providing online opportunities for student learning are planning to do so. Facilitated learning offers more value than homework which is often completed without guidance and therefore may be filled with errors that are tough to redirect.

Students who are in danger of failing a grade or failing a class or dropping out of high school may be find online learning a means to create successful linkages in curriculum content areas. Challenges for successful student completion may involve circumstances that are more than simply academic in nature . Student challenges may include attendance, language, pregnancy, and other factictors from home. Researchers at InaCol collected data to determine which strategies were most successful with students at risk. Feedback that is specific and actionable supports student achievement. Students receive feedback and revise assignments until they meet intended targets. Increased school / family communications support student progress.(Inacol 2010).

Beasley and Beck (2017) identified strategies that support academic success in face to face classrooms and surveyed online teachers about their use of similar strategies. Differentiation leads to success for student face to face, as well as, online. Differentiation has the largest impact on student success. Students have different learning styles and these determine how they learn best. Differentiation services students needs, interests and preferences. This can be accommodated by a variety of activities that may be part of an online course. Sensory modalities are accommodated by video and audio and kinesthetic learners interact with the technology. Lessons and activities that are modified to bring face to face formats online, naturally include visual, auditory and kinesthetic opportunities for all learners. (Allison & Rehm, 2016)

Sorenson (2012) found parents liked most the opportunity for students to work at their own pace and they found keeping the students on pace with the course to be the most problematic part of the online experience. Flexibility, and individualization of online learning environments are unmatched. Lack of self-discipline and time management skills, make the experience difficult for some. Missing synchronous feedback is also a hindrance for many. Inability to create structure, maintain focus and work independently challenged many students based on the parent survey. Technical issues were a concern as well. Even with the aspects on the online learning environment that seemed to be negative. There overall experience was student success even if it appeared to be a struggle for parents to keep their children on task and motivated.

Corry (2016) examined Hispanic or Latino students and discovered as participation in online courses increases, students have better outcomes than in traditional face to face instruction. When graduation and dropout rates were measured, dropout rates were found to be on the decline. The state of Arizona has one of the largest K-12 online enrollments and that is largely Hispanic and Latino youth. Compared to their brick and mortar counterparts, students in 100%online courses performed better than blended or face to face environments.

De la Varre (2014) studied students in rural schools taking an online Advanced Placement course and many students dropped the course. Online courses are offered not only to provide flexibility for students, but to overcome retainment concerns, geographic concerns and enrollment concerns. Students that dropped out faced challenges with motivation, managing time, lack of immediate access to the teacher and technology problems. Surprisingly, the analyses performed found no difference between the success of students in a brick and mortar classroom and students in the online programs. There are students that found the online dropout rate to be higher. Isolation and lack of support may be among the reasons for lack of student success. Among other reasons may be student comfortability with computer

technology. Study habits and skills that are not strong may also be a deterrent. Even students at the top of the class lacked some self management and time management skills.

Bedard & Knox (2006) identified the student perspective. The research manifests the advantages that online learning is to expand student critical thinking, problem-solving, and creative thinking skills. Separation from the antiquated model that the traditional classroom is, students are more actively engaged in online learning. Technology is a natural for students. It is part of life and can therefore be added to facilitate learning experiences for young people. The expansion of choices, flexibility of location, and range of available courses, make it an option for many. In order to maximize learning, some strategies are required that may not need to be used as often or to the same extent they do in the traditional classroom. There is evidence that the online experience can actually improve learning outcomes for students.

Cunningham (2011) researched an online program targeting poor performing students and found that the dropout rate after students entered the online program were actually higher than those in the brick and mortar environment. Motivation may be the leading factor. In these circumstances reward interventions were used to engage students. When the extrinsic reward was added, student engagement increased.

Summary

Studies on online learning for students K-12 focus on students getting the best experiences and the best outcomes. Few studies have examined students own reported experiences in an online course including reasons for dropping out of an online course. Most of the research focuses on school

administrators or teachers. Measures and methods can be used to determine which variables related to or predict online course dropouts. Most of the studies describe the benefits that the opportunity for online education is for K-12 students however, for students who do not have strong study skills in the areas of time management and working self directed, successful completion of the an online course may be a struggle.

CHAPTER 3

Methodology

Data will be collected from participants to determine whether or not they have had an experience with an online course and whether or not they were successful or met the goals of taking the course. Some of the students are known to have taken online course and some are not. That may influence the percentage participation because it will not be blind.

Research Design

This research focus on the identification of concerns that cause high school students to struggle in online courses and identify what has them persevere or not. The approach is a quantitative design. Parent and student surveys will be distributed via email upon parent confirmation of acceptance for data collection. A likert scale will be used to document parent and student responses. The surveys will be e-mailed to the participants.

Population and Sample

The population will include 30 parents and students in the community who have attended the community high school. They will be contacted through personal email. Parents who have students who recently graduated or may still have students at the community high school, have experience with students taking online course for placement, advance placement, to skip a class, preview a class or to recover credit.

Instrument

Appendix A Survey

References

Allison, B., & Rehm, M. (2016). Accommodating Students Sensory Learning Modalities in Online Formats. *Journal of Family & Consumer Sciences*, 108(2), 48-53. doi:10.14307/jfcs108.2.48

Archambault, Leanna; Diamond, Daryl; Brown, Regina; Cavanaugh, Cathy; Coffey, Marla; Fournes-Aalbu, Denise; Richardson, Jared; Zygouris-Coe, Vassiliki (2010, March 31). Research Committee Issues Brief: An Exploration of At-Risk Learners and Online Education. Retrieved from <https://eric.ed.gov/?id=ED509620>

Beasley, J. G., & Beck, D. E. (2017, April 29). Defining Differentiation in Cyber Schools: What Online Teachers Say. Retrieved from <https://link.springer.com/article/10.1007/s11528-017-0189-x>
Yin, Y., Adams, C., Goble, E., & Vargas Madriz, L. F. (2015). A classroom at home: Children and the lived world of MOOCs. *Educational Media International*, 52(2), 88. Retrieved from <https://draweb.njcu.edu:2055/docview/1719443100?accountid=12793>

Bedard, S., & Knox-Pipes, B. (2006). Online distance learning: The K-12 student's perspective. *Distance Learning*, 3(4), 13-19. Retrieved from <https://draweb.njcu.edu:2055/docview/230726198?accountid=12793>

Cavanaugh, C. (2009). Getting Students More Learning Time Online: Distance Education in Support of Expanded Learning Time in K-12 Schools. Retrieved from <https://www.americanprogress.org/issues/education-k-12/reports/2009/05/18/6132/getting-students-more-learning-time-online/>

Corry, M. (2016). Hispanic or latino student success in online schools. *International Review of Research in Open and Distance Learning*, 17(3) Retrieved from <https://draweb.njcu.edu:2055/docview/1792745975?accountid=12793>

Cunningham, C. A. (2011). Using learner controlled progress-based rewards to promote motivation and achievement of at-risk students in managed online learning environments (Order No. 3474164). Available from Education Database. (897068541). Retrieved from <https://draweb.njcu.edu:2055/docview/897068541?accountid=12793>

de la Varre., Irvin, M. J., Jordan, A. W., Hannum, W. H., & Farmer, T. W. (2014). Reasons for student dropout in an online course in a rural K-12 setting. *Distance Education*, 35(3), 324-344.

<http://dx.doi.org/10.1080/01587919.2015.955259> Retrieved from
<https://draweb.njcu.edu:2055/docview/1619322907?accountid=12793>

iNACOL Research Committee Research Committee Issues Brief: An Exploration of At-Risk Learners and Online Education Written by: Leanna Archambault, Brief Co-Chair Daryl Diamond, Brief Co-Chair Regina Brown Cathy Cavanaugh Marla Coffey Denise Foures-Aalbu Jared Richardson Vassliki Zygouris-Coe Edited by: Donna Scribner Michael Barbour April 2010

Liu, F., & Cavanaugh, C. (2011). SUCCESS IN ONLINE HIGH SCHOOL BIOLOGY: Factors influencing student academic performance. *Quarterly Review of Distance Education*, 12(1), 37-54,71-72. Retrieved from <https://draweb.njcu.edu:2055/docview/920291750?accountid=12793>

Sorensen, C. (2012). Learning online at the K-12 level: A Parent/Guardian perspective. *International Journal of Instructional Media*, 39(4), 297-307. Retrieved from <https://draweb.njcu.edu:2055/docview/1273686108?accountid=12793>

Viano, S. L. (2017). At-Risk High School Students Recovering Course Credits Online: What We Know and Need to Know. *American Journal of Distance Education*,32(1), 16-26.
doi:10.1080/08923647.2018.1412554