The Rationale, Success, and Critics of Virtual Schooling:
An Annotated Bibliography
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Introduction

The purpose of this research is to examine the rationale, success, and critics of virtual schooling for students and teachers in America's education system. The history of online learning at the K-12 level is almost as long as its history at the post-secondary level, with the first virtual school programs beginning in the early 1990s. While these opportunities were designed as a way to provide students with access to more specialized courses, as opportunities have become organized into virtual or cyber schools the nature of students served by these institutions have broadened. Unlike traditional learning in general, much less is known about virtual schooling, even less of which is based on systematic research. Regardless, the growth and practice of virtual schooling has far outpaced the production of reliable and valid research. The following seven articles will focus upon describing the evolution of K-12 online learning in the United States, how that evolution has impacted schools, what lessons can be learned from the experiences with K-12 online learning, the implications virtual schooling has on students and teachers regarding training and challenges, and effective strategies for implementing instruction and learning.

Davis, N. E. , & Roblyer, M. D. (2005). Preparing Teachers for the "Schools that Technology Built": Evaluation of a Program to Train Teachers for Virtual   Schooling. *Journal of Research on Technology in Education 37*(4): 399-409. Retrieved from: http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=262610e6-eb99-461eb2103ecf3abd9377%40sessionmgr104&vid=4&hid=113

The goal of the research provided in this article is to help educators understand the Iowa State planned model that has been designed and integrated into pre-service training to help train teachers for virtual schooling. The planned model incorporates an assessment of the range of acquired competencies and skills needed to provide an innovative model of curriculum. The article also discusses the evaluation component of assessing the virtual schooling pre-service program through formative and summative measures of the implementation, results, institutionalization, and assessment instruments and resources. The ultimate goal of the project aspires to go beyond small representative samples of participating teacher education programs, and to create a universal model for the entire country to implement. The research suggests that the creation of a model for incorporating virtual schooling in pre-service teacher education programs with appropriate assessment of the effectiveness of the range of competencies would be a significant innovation.

Prior to reading this research, I was unaware of the rapid increase of virtual schooling, in which the American public school system is providing school courses and diplomas through distance technologies. As a high-school teacher, this was eye-opening for me since I realized that technology will make advances in education in the next decade that go far beyond any changes that have taken place in the past. Curriculum, teaching methods, and schedules can all be customized to meet the learning styles and life situations of individual students. As a future aspiring leader, I have learned that evaluating and assessing teacher effectiveness in virtual education is crucial since it will transform the core components of schooling in years to come.

Barbour, M. A. , Graham, C. R. , Hawkins, A. R. & Sudweeks, R. R. (2013). Academic Performance, Course Completion Rates, and Student Perception of the Quality and Frequency of Interaction in a Virtual High

School. *Journal of Distance Education 34*(1): 64-83. Retrieved from: http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=595a4e64-0709-4d91-9315f7d345552727%40sessionmgr112&vid=4&hid=113

The goal of the research provided in this article is to help educators examine a virtual high school and the relationship between students' perceptions of the effectiveness of student-teacher interaction, and the academic performance of students through using Pearson's product correlation coefficient and linear modeling. The research suggests that in the past, virtual schooling has faced higher dropout and failure rates compared to traditional classrooms. In this study, student success depended on different external factors, such as student pre-course orientation sessions, study skills, strong computer skills, and student-teacher interaction as the main issue. In the study conducted, 3.4% of the student population filled out the class evaluation survey, with 75% of the respondents indicating they had completed the course, and 25% of the respondents indicated that they had not completed the online course. The data indicated that students who completed the course perceived greater interaction and quality of interaction than non-completers. However, in contrast to interaction impacting completion, the research showed that there was not any significant effect of interaction on the grade awarded in the course.

Prior to reading this research, I was surprised on how very little surveys were retrieved back from student respondents. However, I think more results could have been yielded if the research team had utilized various tools other than just e-mails. I learned that effective student-teacher interaction is imperative in determining student success in a virtual education course. As a future aspiring leader, I think it's important to provide ample opportunities for teacher training/professional workshops on effective communication, student orientation, and increasing the quality and frequency of interaction and engagement between students and teachers.

Chamberlain, R. , Vrasidas, C. & Zembylas, M. (2003). Complexities in the Evaluation of Distance Education and Virtual Schooling. *Educational Media International 40*(3): 201-

218. Retrieved from: http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=595a4e64-0709-4d91-9315-f7d345552727%40sessionmgr112&vid=6&hid=22

The goal of the research provided in this article is to help educators examine the challenges involved in the evaluation of distance learning and virtual schooling. The research analyzed the Large Unit District's Association Education Foundation Virtual High School, it's planning committee (which consisted of LUDA representatives and teachers), and the evaluation design that this group created to resolve the challenges related to online class development. The focus of the evaluation was to collect data to help the LUDA Education Foundation improve the virtual school. Data was collected through surveys, interviews, email messages, memos, and usability testing. The findings were very positive, with a very low student dropout rate of only 4.2%, frequent student-teacher interaction, alignment with the school districts technology plan, and high quality resources and collaboration were all underlying factors in the program's success. However, the study also concluded that other factors needed to be addressed, such as student selection and support, teacher training on instructional strategies for online learning, and educating the public on the benefits of online learning.

Through this article, I learned the importance of committee planning, and collaboration. I was surprised how powerful this process can be, and it was the contributing factor for the LUDA virtual school to have a successful start. As a future leader, it is important to implement team (teacher, student, and parent led) action plans, strategic programs, on-going teacher training, and evaluation to improve the issues of online learning.

Compton, L. , Correia, A. & Davis, N. (2010). Pre-Service Teachers' Preconceptions, Misconceptions, and Concerns About Virtual Schooling. *Journal of Distance Education 31*(1): 37-54. Retrieved from: http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=

595a4e64-0709-4d91-9315-
f7d345552727%40sessionmgr112
&vid=8&hid=22

The research incorporated a qualitative study of analyzing the personal journals, responses, and feedback of 65 pre-service teachers in the United States in regards to virtual schooling that had no previous experience other than attending a virtual schooling demo course. The research helped to show educators that there were common themes in the respondents misconceptions and concerns, which included career loss and job threat, academic dishonesty and equity, student-teacher interaction, teacher feedback, and academic rigor. However, I was surprised to see that when the same pre-service teachers were provided with case studies of virtual schooling and various reading activities about virtual schooling in the United States, most overturned their previous beliefs and showed in their reflections that they actually found the virtual schooling curriculum to be beneficial, plausible, and intelligible.

Through this article, I learned and now understand the importance of providing substantial amount of teacher training, professional workshops, and research in order to get teachers on board for online learning and virtual teaching. Reform efforts and integrating technology as a school course can be initially challenging. However, it is the duty of educational leaders to provide opportunities in reading tasks, research, and virtual schooling practices in order for faculty members to feel more comfortable in implementation of online learning.

Belair, M. (2012). An Investigation of Communication in Virtual High Schools. *International Review of Research in Open & Distance Learning 13*(1): 105-123. Retrieved from: http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=595a4e64-0709-4d91-9315f7d345552727%40session mgr112&vid=10&hid=22

This article helps educators examine a qualitative study on how regular phone calls by teachers contributed to the academic success of students in four virtual schools. Eight virtual teachers were observed and interviewed, and the data showed that they did not find phone calls an effective way of communication with their students. I was surprised

that the data also revealed that all eleven of the students interviewed indicated they preferred written communications over phone calls. Only 20% of the students responded to teacher phone calls and only 9% of these students completed the work requested by their teachers.

From this article, I learned the importance of communicating in different ways to students, especially by written communications. Teachers must chose wisely in the ways they communicate with their students to maximize learning and student success. This information is important to me as a future leader since effective teacher-student communication is an imperative aspect and one of the most important factors in determining student academic success in virtual schooling.

Feng, L., Black, E., Algina, J., Cavanaugh, C., & Dawson, K. (2010). The Validation of One Parental Involvement Measurement in Virtual Schooling. *Journal Of Interactive Online Learning, 9*(2), 105-132. Retrieved from: http://web.a.ebscohost.com.proxy.wm.edu/ehost/pdfviewer/pdfviewer?sid=70 e301b3-dfcf-4ffc-b1fb-e24735baac76%40sessionmgr4001&vid=4&hid=4109

The impetus of the research conveyed in this article is that parental involvement has been recognized as an important factor for student achievement in traditional school settings. However, the lack of research regarding the effect of parental involvement on student achievement in virtual schooling is, in part, due to the absence of a valid and reliable instrument to measure this construct. The article introduces the Hoover-Dempsey and Sandler's Parental Involvement Mechanisms Instrument to address this issue. The instrument includes four factors: parent reinforcement, parent modeling, parent encouragement, and parent instruction. These were analyzed using the Confirmatory Factor Analysis, with data collected from a state-led virtual school. The results show that this instrument is overall a valid and reliable measurement of parental involvement in virtual learning environments.

In reflection, this study will be beneficial to educators, researchers, online program administrators, and society at large. It could shed

light on the process of the design and development of a reliable and valid instrument in online learning research. It also called for more validation studies with instruments in online learning environments. This article provides the evidence for the establishment of a quantitative model during the online learning process and will help promote more rigorous quantitative research in virtual education in general and the virtual school learning environment in specific. It also has

practical implications for virtual school teachers who can make good use of parental involvement mechanisms during the design and development of academic activities, such as the development of learning materials and implementation of instructional strategies.

Compton, L., Davis, N., & Correia, A. (2010). Pre-service teachers' preconceptions, misconceptions, and concerns about virtual schooling. *Distance Education, 31*(1), 37-54.doi:10.1080/01587911003 725006. Retrieved from: http://web.a.ebscohost.com. proxy.wm.edu/ehost/pdfviewer/pdf viewer?sid=70 e301b3-dfcf-4ffc-b1fb-e24735baac76%40sessionmgr4001& vid=4&hid=4109

The purpose of this article was to examine how virtual schooling is growing exponentially in the United States. Of the 50 states, 45 have established a state virtual school and state-led online programs. Although virtual schools tend to develop their own approach, there is a great diversity of approaches to virtual schooling across the country, including organizational structures, pedagogies, and technologies deployed. This has led many educators to have misconceptions about it. Pre-service teachers' personal histories as students and their preconceptions, misconceptions, and concerns influence pre-service teacher training experiences. A qualitative study of an introductory field experience course that included this new mode of schooling for the first time analyzed the personal journals and online discussion responses of 65 pre-service teachers in the United States. Through this study, the data identified that common misconceptions and concerns included career threat, viability of virtual schooling, academic dishonesty, reduced interaction,

teacher feedback, and lack of rigor. The curriculum innovations in this innovative teacher preparation program were shown to address these misconceptions and concerns and facilitate understanding and acceptance of virtual schooling as an alternative form of education by many of these pre-service teachers. Three main recommendations were proposed to address these issues, which included implementing virtual schooling in early field experiences because of the pervasiveness of virtual schooling as a new mode of schooling, to provide an increased range of curriculum materials reflecting virtual schooling in a greater range of content areas, virtual schools, and regions, and to address institutional sources.

About the author

Jay Samant is an EdD student in the Educational Policy, Planning, and Leadership program, focusing on K-12 Administration.