Essay on concept paper

Introduction

Virtual education is greatly considered the potent solution to the growing problems of public education. This new form of distance education delivers instruction and content as a formal course of primary, secondary and collegiate studies by means of the Internet and technological tools. While it can be a promising vehicle, it would require a strong reorientation. The teachers should be well trained and the course content must be of high quality. The facilities for online learning must also be good. (Demi, Coleman-Jensen, & Snyder, 2010) This type of education faces many new challenges especially in terms of its delivery. This study considers the focal point played by the virtual teachers in making effective and differentiated teaching and instruction in K-12.

Statement of the Problem

Excellent teachers are crucial in virtual education. To be able to recruit and train them is the number one problem in the 21st century education. For high school students, the virtual teacher must engage and motivate them to learn independently. Hence, the virtual teachers must act as a facilitator of learning and eventually lead the students to higher levels of thinking and resourcefulness while being more independent through newly appropriated methods of instruction. (Ferdig, et. al., 2009)

The research problems presented in this study are the following:

1. What are the types of virtual schools and the types of virtual instruction in K-12?

2. What are the various preparations and trainings for the virtual teachers in

K-12 in these various types of virtual schools?

3. How differentiated is their methods of instructions from those of the traditional classroom instruction in K-12?

4. How do technical preparations help them effectively teach K-12 students online?

Purpose of the Study

This study emphasizes the crucial need for ample training and screening for virtual teachers in K-12 to be a significant part of the virtual education solution. It aims to provide the context and the content for the teachers' effective online teaching. It recognizes the special requirement of online environment, the learners and the technological aids which make K-12 teachers more effective and efficient.

This study shall outline the various needs, resources and preparations for virtual teachers in K-12. It defines their teacher training apart from the traditional teacher training for secondary education. It hinges on the various technological and technical preparations needed by virtual teaching. Ultimately, it shall suggest the best ways for teachers to be recruited and/or trained so that they become good virtual teachers for high school.

Brief Review of the Literature

The Professional Development for Virtual Schooling and Online Learning Research (2010) considers virtual schools as the " bridge between the traditional classroom and 21st century education." This is because virtual schools are expected to link high quality teaching and high quality courses with the integrative, networked, knowledge-rich environments that are the qualities of best education in the digital age. States, districts, schools and

universities are geared towards providing excellent development in the conception, operations and maintenance of virtual schools throughout the country. Utmost support is expected from school principals and teachers who are key to the success of this transition to virtual learning. Virtual schools are linking quality teachers to students in rigid, interactive and knowledge-rich courses across the K-12 levels. This signals a whole new opportunities for online teachers.

As virtual education is turning to be a major thrust of the public school system in the United States, it is imperative to provide quality online instructions. Teacher training and support is a major area for instilling this quality. Teachers are a major critical component of quality virtual education. Stavroula, Leonidas & Mary (2011) echo the views of any scholars and researchers who think that instructors are the crucial component of virtual education. They set their teaching functions differently from those of the traditional teachers. They affirm that virtual instructors must be highly trained and well supported.

According to Cavanaugh & Blomeyer (2007), the most fundamental approach to assessing the professional development of virtual teachers is to remember that while the teachers may be new with online teaching, they are adept with being a teacher. Their qualifications are just more stringent. Instead on being focused on classroom management in the typical classroom, virtual school is more focused on students' engagement. Hence, it is primary importance for virtual teachers to learn how to work individually with students. Their courses and course content do not vary much, though since the virtual teachers commonly adopt their online classes with the use of a

catalog of existing courses. The authors stress that most of the professional development for virtual teachers are geared towards their training on the technologies which make them more effectively in online teaching online. (Ibid.)

Evidences show that implemented teacher development programs to enhance traditional teachers' transitions from the original classrooms to the virtual classrooms have been effective. (Ibid.) Bonk and Graham (2006) also studied that financial support and pedagogical excellence of virtual instructors will greatly help in the development of their online programs. They also cited that the virtual teacher's technical competency is also crucial for effective online teaching. This necessitates the need to further train and develop the competencies and readiness of virtual teachers as they enter a whole new learning and teaching environment, devoid of the traditional functions they were formerly trained and equipped with.

Wang and Holcombe (2010) made a short-term longitudinal research that evaluated the relationships among middle school students' perceptions of school environment, school engagement, and academic achievement. Their findings showed that the type of school engagement (i. e. traditional versus virtual) contribute differentially to the three types of school engagement in their next level of middle school.

In a study of teachers as moderating online discussions, Shi (2010) found out that the number and the quality of the teachers' postings influence the mental interests of the online students. Hence, the teacher must be well aware of the various needs and interests of the students and invite them to a more meaningful virtual interaction and learning. They must know how

computer conference and online discussions can be a collaborative channel of learning wherein students will be socio-emotionally, behaviorally and intellectually engaged. This clearly illustrates the quality of learning which is carried out by the effectiveness of the virtual teachers.

Various literatures also highlight the relationship between technologies and differentiated learning in an online environment. Dlab, et. al. (2009) refers to technology as very " innovative and useful instruments to collaborate learning." They argued that through web tools, for instance, students have the power to create and change static content. According to Hall (2009), this makes it more challenging for teachers to present content and lectures in the most interesting ways. Virtual teachers have the options on how to let their students submit their works, and how students learn. Hence, they need to be very skill at differentiating learning for each student and each individual learner's needs.

Research Method

This research is an exploration of the differentiated training methods, approaches and implementation in the United States virtual schooling, particularly for K-12. The major problems in this study are exploratory in nature. It aims to explore the teacher preparation and professional development factors for effective virtual teaching.

To answer the research problem, this research will gather data to gain a better understanding of who makes up the overall population of K-12 online distance educators. This will basically include the gathering of data for the online teachers' demographic details i. e. age, sex, race, etc. Their school descriptions will also be gathered and these include the class size, format,

and authorship. Most importantly, this research shall make a distinction between a full fledge virtual schools (or those which do not have any site based school) as against those K-12 institutions which have home schools but are still chartered to K-12 schools and those for special learners such as athletes and physically challenged students. The latter is basically the traditional component of distance education wherein the students are facilitated by teachers in their remote sites.

A Teacher Survey will be conducted to generally determine their own perceptions of their knowledge, skills and preparation in virtual teaching in the three categorized virtual schools – full fledge, home schooling and distance education. These shall be related as to how they link the domains of pedagogy, technology, teaching content, and the intersections of these areas into their own methods and styles of instructions.

Since these data will be tremendous, a survey methodology will be appropriated. The survey instrument shall cover questionnaires which are demographic in nature. There will also be questionnaires about the school settings and the said categorization and questionnaires to determine their level of knowledge and preparation vis a vis technological pedagogical content knowledge used by K-12 online teachers all over the United States.

Survey Population

The population to be surveyed for this study shall include all teachers throughout the West who have taught at least a single virtual class with K-12 students in a state-sanctioned virtual school. The years of experience for virtual teaching must be from one year onwards. This study will concentrate on the publicly funded virtual schools and this shall include schools that are

state sponsored, or supported by universities, lead educational agencies (i. e. individual school districts), and consortia of virtual schools. While there are also private virtual schools, this study shall focus on the publicly funded and sanctioned by the state governments because they have a comparable jurisdiction with the traditional schools. Hence, these schools are required to hold teachers to the same state licensing and highly qualified status directly linked with the No Child Left Behind (NCLB) standards.

Teachers from these public institutions are a very good source of data because they characterize an excellent source of the teacher population in the United States, particularly their demographics and preparedness, all of which are the main problems contained in this study. Their data and their supplemented information will provide significant amount of information to draw out the most effective teacher training programs to address their needs and their requirements for effective virtual instruction in K-12.

Survey Design

This study will employ a survey instrument to capture demographic information about K-12 online teachers and the category of vitual schools West of the United States. After the descriptive data has been captured, it shall prepare a survey instrument in the framework of the skills needed by online teachers (i. e. application of technological, pedagogical, and content knowledge). It shall be considered as success factors in effectively teaching online K-12 students. A needs assessment of the virtual teachers will be surveyed afterwards. Then, a baseline program to address these needs will be determined.

References:

Anderson, T., Rourke, L., Garrison, D. R., Archer, W. (September, 2001). Assessing teacher presence in a computer conferencing context. Journal of Asynchronous Learning Networks, 5(2). Retrieved from, http://www. aln. org/publications/jaln/v5n2/v5n2_anderson. asp

Bonk, C. J. & Graham, C. R. (2006). The Handbook of Blended Learning: Global Perspectives, Local Design. San Francisco, California: Pfeiffer Publishing.

Cavanaugh, C. & Blomeyer, R. (2007). What Works in K-12 Online Learning? International Society for Technology in Education. Retrieved from, http://docs. google. com/viewer? a= v&q= cache: Owfo4wIWZ38J: www. iste. org/images/excerpts/K12OLL-excerpt. pdf+The+need+for+differentiated+instruction+within+a+K-12+online+environment&hl= tl&gl= phπd= bl&srcid= ADGEESjj6YIBxycuTDfcewWk6Rp4qh3wBWQMoUE8ztskKQx1LVDUe1_ah2nVL msyI7MHQoGMLIPS7ssENCCjL0goFCVCW3U1SJDl3eBwmW0sRvkM1D66HL9m UQcNMXXXYesI3Ky0a-fE&sig= AHIEtbSV_D1sNYKpCktH06tl2e-arlidfQ.

Demi, M., Coleman-Jensen, A., & Snyder, A. (2010). The rural context and post-secondary school enrollment: An ecological systems approach. Journal of Research in Rural Education, 25(7). Retrieved from, jrre. psu. edu/articles/25-7. pdf.

Dlab, Martina Holenko & Hoić-Božić, Nataša. (2009). An approach to adaptivity and collaboration support in a web-based learning environment. International Journal of Emerging Technologies in Learning (iJET)," 4, 28- 30. doi: 10. 3991. ijet. v4s3. 1071.

Ferdig, R., Cavanaugh, C., DiPietro, M., Black, E. & Dawson, K. (2009). Virtual schooling standards and best practices for teacher education. Journal of Technology and Teacher Education, 17 (4), 203-226.

Hall, Richard. (2009). Towards a fusion of formal and informal learning environments: the impact of the read/writeweb. Electronic Journal of e-Learning, 7(1), 29-44. Retrieved from, http:/ / www. ejel. org/ Volume-7/ v7-i1/ Hall. pdf.

Professional Development for Virtual Schooling and Online Learning Research Committe Report. (2010). North American Council for Online Learning. Retrieved from, http://docs. google. com/viewer? a= v&q= cache: zB4TfC3fAYMJ: www. inacol. org/docs/NACOL_PDforVSandOlnLrng. pdf+virtual+schools+%2B+training+teachers+at+K-12&hl= tl&gl= phπd= bl&srcid= ADGEESgIS6s_UMT9GTcgwrscEAJZQtrPNVVjeEIuE_Zyj2eWJACZFqggEQ9aIyrLl zgzhRd0AESr7ryqdjHl7jJYiQR-J4sL-ZVARLHygLFYQEYHjM_pxYvmVVD347rv2vx7e1Qf5ouo&sig= AHIEtbSItYCQJ3iu1GJFXk4U2dpgX5pQcg.

Shi, S. (June, 2010). Teacher Moderating and Student Engagement in Synchronous Computer Conferences. MERLOT Journal of Online Learning and Teaching. 6 (2).

Stavroula, V., Leonidas, K., & Mary, K. (January, 2011). Investigating the Impact of Differentiated Instruction in Mixed Ability Classrooms: Its impact on the Quality and Equity Dimensions of Education Effectiveness. Paper presented at the International Congress for School Effectiveness and Improvement 2011. Retrieved from, http://docs. google. com/viewer? a=

v&q= cache: woHjZLpCOFoJ: www. icsei.

net/icsei2011/Full%2520Papers/0155.

pdf+differentiated+instructions+in+an+online+environment+

%2B+2010+journal+sources&hl= tl&gl= phπd= bl&srcid=

ADGEESiil9qerUrq0ZyZGVPAbMNAe_QrXYupHr1M2sm-

SPy4_4z4P_32OqJ0N07MSvbZv_0ArsSYaOlWy2N0PHHw37bQxVuS1F8R2klHvb

plKV-3OO3ACHCPK6Bhxxwd-UM1CVfA99LU&sig=

AHIEtbS3w0dT0rLO4VJCa0nDkcJrVr4JRg

Trochim, W. & Donnelly, J. (2008). " The Research Method Knowledge Base."

Mason, OH: Cencage Learning.

Wang, Ming-Te & Holcombe, R. (2010). Adolescents' Perceptions of School

Environment, Engagement, and Academic Achievement in Middle School.

American Educational Research Journal. 47(3), 633-662.