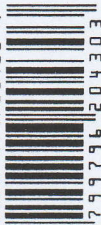


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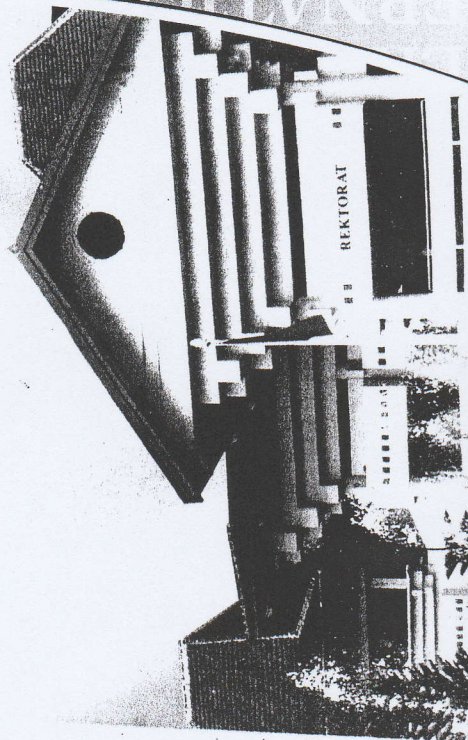
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PROCEEDING INTERNATIONAL SEMINAR ON EDUCATION

Responding to Global Education Challenges



Yogyakarta State University

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GOING VIRTUAL: PROVIDING AN OPTION IN EL

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Summary

One of the impacts of the Internet in education is the emergent of virtual schools. A virtual school is a form of schooling where teaching and learning processes are communicated synchronously, in real time, and asynchronously, in different times, through the medium of online computers. Students and teachers are separated by time and geographic location. Teachers present the course materials in the virtual schools' websites and instructions are carried out via e-mails, online chats, discussion boards, video or telegraphic or audiographic conferences (Lamb & Callison, 2005; Russell, 2003; Tuttle, 1998). A virtual school is a form of distant education which targets its courses to K-12 levels. Its operation is arranged by states, school districts, higher education institutions, non-profit and profit organizations (Rice, 2006).

Today virtual schools gain more popularity. In the first year of its establishment in 1997, the Florida Virtual School had only 77 students. In 2006, the number of enrollment has reached 68,000 (www.floridaschoolchoice.org). This growth of virtual schools is made possible in general because of the advancement of technology which has facilitated lower costs of computer equipments and Internet connection.

Indonesian government has implemented policies and actions to encourage the use of ICT in educational institutions (Ali, 2004). Recent statistics places Indonesia in the 13th rank out of the top 15 countries in the world with Internet usage (Worldwide Internet Users, 2006). This shows that the use of ICT, especially the Internet, is increasing in Indonesia. Therefore, it is the right time for Indonesia to consider the educational opportunities offered by virtual schools.

Virtual schools provide an alternative in English Language Teaching (ELT). English is taught as a foreign language in Indonesia. This context has limited students to be exposed to English as soon as they are outside the classroom walls. They also have limited opportunity to communicate using the language. Yet, English is one of the main

subjects to be included in the national examination. It is understandable if many students do not get good scores in their examination. When English is included as one of the courses offered in a virtual school, Indonesian students' English ability can be improved as this program supplements them with communicative activities which are very crucial in language learning.

Some literature mention the educational and economical advantages of virtual schools to students, parents and their community (Fox, 2006; Fulton, 2002; Campbell, 2000). These advantages also contribute to the growth of virtual schools. On the other hand, the phenomenon has raised several concerns over the possible risks that may result from such phenomenon. Examining both sides of opinions is imperative to come to a critical view toward the existence of virtual schools. This paper argues that the values of virtual schools for students, parents and their community will be realized if several conditions are met. The following section of this paper concerns with both advantages and problems of the virtual schools for students, parents and communities. Then, the contribution of virtual schools in ELT is discussed. Finally, several conditions are reviewed in order to achieve the best potentials of virtual schools in general education and especially in ELT.

INTRODUCTION

One of the impacts of the Internet in education is the emergent of virtual school. Virtual school is a form of schooling where teaching and learning processes are communicated synchronously, in real time, and asynchronously, in different times, through the medium of online computers. Students and teachers are separated by time and geographic location. Teachers present the course materials in the virtual schools' websites and instructions are carried out via e-mail, online chat, discussion boards, video or telegraphic or audiographic conference (Lamb & Callison, 2005; Russell, 2003; Tuttle, 1998). Virtual school is a form of distance education which targets its courses to K-12 level. Its operation is arranged by states, school districts, higher education institutions, non-profit or profit organisations (Rice, 2006).

As the number of virtual schools is increasing, there are several variants of virtual schools and their categorizations can fall under different criteria, for example, based on

who the provider is whether it is provided by state-level, university-based, legal education agent or private (Clark, 2001). Russell and Holkner (2000) classify virtual schools into three main types. The first is 'cyberspace' where instructions are completely online and students are not required to come to school to do parts of their courses since school building may not be present. The second type of virtual school is of 'hybrid' type. Virtual schools of this type include face to face meetings to complete certain courses like sports and arts. Those meetings are conducted in the local conventional schools. "Coaching" is the third type of virtual schools where students attend conventional schools but they may take a certain subject online because it is not available at their conventional school due to teacher shortage or to cater for students' special needs such as above-level or low-performing students.

Today virtual schools gain more popularity. In 2001, 40,000 to 50,000 highschool students in the US were estimated to enroll in online courses. According to the National Center for Education statistics' report in 2005, 36% of U.S. school districts students, that was more than 300,000 students, participated in virtual schools as of 2003. Further estimation states that by the year 2006 a majority of American highschool students will participate in online courses before they graduate (Fulton, 2002; Roblyer, 2006). In the first year of its establishment in 1997, Florida Virtual School had only 77 students. In 2006, the number of enrollment has reached 68,000 (www.floridaschoolchoice.org).

This growth of virtual school is made possible in general because of the advancement of technology which has facilitated lower cost in computer equipment and Internet connection. In developed countries like the US, Canada, and Australia, many households can afford such technology. This can be seen by the increasing statistics of household possession of computer and Internet connection. By June 2006, there are 5.1 million of household Internet subscribers in Australia which shows an increase compared to the 4.4 million of household Internet subscribers in 2003 (ABS 2006). In the US, the percentage of home computer users rose from 31.7% in 1997 to 56.9% in 2003 (NCES, 2005). Broadband subscriptions in all countries of OECD members increased from 136 million users during 2005 to 158 million by December 2005 (OECD, 2006). Virtual school delivers its materials and instructions mostly via the Internet and students work with Internet connected computer. Therefore, many people today have access to learn from home with the medium of technology. Almost 100% of

schools in the US are already wired (NCES, 2003) so they have options whether to provide online services for their students to complement their on-going courses. The technology is also improved by its convergence with multi media technology so interactivity is enhanced (Fulton, 2002). This convergent technologies enable students to communicate with their teachers and peer students in real time or different time regardless of distance. The presentation of learning materials varies from text and graphic to audio and video presentation.

Several literatures mention the educational and economical advantages of virtual school toward students, parents and community (Fox, 2006; Fulton, 2002; Campbell, 2000). These advantages also contribute to the growth of virtual schools. On the other hand, virtual school phenomenon has raised several concerns over the possible risks that may result from such phenomenon. Examining both sides of opinions is imperative to come to a critical view toward the existence of virtual schools. This paper argues that the values of virtual school for students, parents and community will be realized if several conditions are met. The following section of this paper discusses both advantages and problems of virtual school for students, parents and community. Next, several conditions are reviewed in order to achieve the best potentials of virtual school.

STUDENT ANGLE

Virtual school offers several benefits for students. First, since virtual school is a form of distance education, its flexibility becomes an advantage (Kouki & Wright, 1999; Rice, 2006). Learning can take place 'anytime, anywhere, any pace and for anybody'. This can be seen as diminishing educational gap since it provides more opportunities for certain groups of students, for example, students who live in remote or rural areas, incarcerated students, students who have serious illness, students who need to work or students who have to travel a lot such as athletes, actors or actresses. Second, access to expanded curriculum, which offers more options for students with special needs such as gifted students, students who need to complete certain courses for college admissions and low achieving students, is promoted (Clark & Berge, 2003). Virtual school is also considered as a way out for the victims of natural disaster, like Hurricane Katrina, to cope with school graduation requirement (Fox, 2006). Next, it provides extended resources for students (Clark, 2001). Virtual school can also suit individual

learning style (Tuttle, 1998). Since it uses mostly web-based materials, students can digest the materials according to their needs (self-paced). They are in control of the when, where, and how long they conduct their learning (Noonan & Tunison, 2001).

In addition, compared to conventional school, virtual school may offer reduced pressure of learning condition. Research conducted among a group of educationally disadvantaged students reveals that they feel less threatened when they learn using computer technology compared to traditional learning for reasons such as "the computer doesn't yell at me" or "my mistakes weren't so embarrassing" (Swan, Guerrero, Mitrani, & Schoener, 1990). Del Litke's research of virtual schooling at the middle grades finds that "student participants identified freedom, time flexibility, fewer distractions, better marks, more individual attention from teachers, a higher degree of satisfaction, and fewer hassles with teachers and other students as the major strengths of this program" (Del Litke, 1998).

Another advantage of virtual schools for students concerns with the use of virtual learning environment with its interactivity capability. The discussion board and chat room, for example, enable students of the virtual schools that have international students enrollment to acquire global perspectives on cultures, opinions and ideas (Lamb & Callison, 2005). Thus, these kinds of communications provide contexts for students to be involved in scholarly discussions which can enrich their academic experiences. Finally, virtual school students are immersed in the use of computer and Internet technology, a skill which many people believe will be of the work markets's preference (Cavanaugh, Gillan, Kromrey, Hess, & Blomeyer, 2004; Kouki & Wright, 1999).

However, there are also critiques that question the effectiveness of virtual school in enhancing students' learning. Anytime learning can be no time learning if students are not aware of time management (Clark & Berge, 2003). Virtual school learning environment requires students to be responsible in learning under minimal supervision. They need to be good readers and have good self-discipline and time management to cope with the deadlines of the assignments. That virtual schools do not result in real learning is supported by reports that the dropout and failure rates of virtual courses are 60% to 70% (Roblyer, 2006).

Kapitzke (2005) notes that the unfulfilled promise of online learning on students' learning achievement is caused by the same teaching methods used in conventional classes. "Yet the educational potential of much online learning today remains unrealized as interactive technologies continue to be used for didactic, one-way lectures to students in remote locations (Kapitzke 2005, quoting Oblinger et al., 2001). She states further that many courses utilize pedagogies that are the same for all students.

Virtual school's students need to work a lot with computer and the Internet. There is an argument that children working with computer enhance only the left-hemisphere of the brain while the right-part which is responsible for creative analysis is left untrained. This has led those children to develop 'hypertexts mind', they jump from an information to another without the ability to demonstrate a line of reasoning (Oppenheimer, 1997). This argument is contradictory to the belief that virtual class interactivity facilitates discussions among students from different backgrounds, thus promoting students to express ideas and to exercise critical thinking.

Socialization is another issue here. In virtual school learning environment, students need to spend a great deal of time in front of computer. Several studies, eg. Kraut et al. (1998) (as quoted in Russell & Russell 1999) and Nie and Erbring (2002), find out that the Internet has a negative impact on the social relationship of its users as they lose contact with their social environment. In terms of teaching and learning, this kind of isolation reduces contact between student-teacher and among students. Many people believe that it is through traditional communication found in conventional schools that students learn about the prevailing culture of the society's norms and values such as honesty, tolerance, respect, empathy and gratitude. Most virtual schools lack ability in teaching these values to the students. Even though it is said that relationship can still be supported in online communication, it is not the same as traditional communication since "with asynchronous technologies such as email, teachers have a restricted ability to monitor students' affective responses because cues such as body language and facial expressions are absent" (Russell, 2004a).

Virtual school students can also suffer from health problems like muscular pains in hands, neck, and back because of incorrect sitting positions. Headache and sore eyes

courses, they need to provide necessary facilities and ensure that students have equal access to these facilities.

PARENT ANGLE

Virtual school is considered as an option for parents who seek educational choices for their children other than traditional schooling. Parents might see public schools as unsafe places for their children considering the increasing violence, school bullying, drugs abuse and shooting in schools. Recently, the news has reported a series of shooting which happened in a college in Canada, a public high school and an Amish school in the US and a school massacre plan by a group of seventh graders in a school in the US (www.smh.com.au). Some parents are in disagreement with schools' educational practices such as overcrowded classes, authoritarian teachers, or less access to monitor their children's progress. These parents can turn to virtual school as an alternative.

Some people look at the safety issue differently though. Threatening or harassing messages, the use of rude words, in other words, cyber-bullying happen in online communication (Litke, 1998; Shaheen, 2005). Such practices have the possibility to psychologically disturb students.

Supervision is seen as another form of inequality. Not all families can afford to have one of the parents to stay at home to fully supervise their children as both parents need to work to support their family (Russell & Holkner, 2000). However, students at the post-compulsory level of education do not usually require parental full supervision since they are considered as adult learners who are already familiar with the concept of independent learning.

Parents may be in doubt in considering virtual school as an option for their children education because of the accreditation status of virtual school (Turtle, 1998). They are concerned whether the credit is transferable in public schools in the local area as well as outside the state or district. They may also be unsure of the quality of the teachers since the nature of online activities and communication can easily cover unqualified teachers to be employed in virtual schools (Russell, 2004b).

are also common because they spend too much time in front of computer (Del Litke, 1998; Rittschof & Griffin, 2003).

Another disadvantage of virtual school relates with limitation in course availability. Selwyn (1999) argues that virtual learning environment has several drawbacks. It ignores the uniqueness of many educational processes found in traditional learning and real-life learning experiences are missing in online learning context (Selwyn, 1999). This view is in line with Clifford Stoll's who believes that "no computer can teach what a walk through a pine forest feels like. Sensation has no substitute" (Oppenheimer, 1997). These limitations prevent courses offered in virtual schools from being various since it is difficult to teach activities that involve human senses, hands-on experiences, or highly technical subjects in online learning environment (Cavanaugh, Gillan, Kromrey, Hess, & Blomeyer, 2004). Lack of learning on these aspects prevents students to develop fully, intellectually, mentally and physically.

It is also difficult to confirm the authenticity of students' work. With reduced supervision from teachers, there is a danger that students submit other people's work for their assessment (Russell, 2004b). There is no guarantee that students will not give their password log in account to somebody else to complete the assignment for them. If this happens, then, learning will not take place.

The flexibility feature of virtual school mentioned earlier which is considered as providing access and equality in education can be seen as an inequity issue as well. Students from low income family may not be able to afford internet connection at home or even a computer set that enables multi-media technology. A survey conducted by Bikson and Panis found out that in the time span of 1984 to 1997, the same gap existed between low income and high income family in terms of household's ownership to computer and network services. They mention further that despite the decreasing price and improved performance of computers, the digital divide is not narrowing down (Bikson & Panis, 1999). In addition to income, the ratio between the number of students and computers availability in school with large classes can also create inequal access (Clark, 2001). Most schools do not have enough computers to be used equally by their students. Thus, if schools decide to use virtual school service to supplement their

COMMUNITY ANGLE

Joseph citing Giroux (1997) and Connell (1993) mentions several criticisms on schooling. Schooling is considered as practicing a culture of positivism where knowledge and behaviour are measurable through activities such as streaming, academic ranking and examination. Curriculum determination reflects social inequality as well. In most countries, schools' curriculum follows "the masculine paradigms" in which "the sciences are more privileged over liberal arts". Schools, then, are seen as being authoritative and do not facilitate self-reflection, critical thinking and communicative interaction (Joseph, 2005). Added to the list of criticisms toward conventional schooling are its large classes, and strict schedules. School's culture that is rich with bureaucracy and routinized has yielded problems such as low teacher quality (Hodas, 1993). This condition triggers the need of reforms in education.

Wagner (1993, p. 24) proposes another reason for educational reform. He urges that education should keep pace with today's demands of "rapid economic and social transformation", and in order to do so education needs to "adapt to new technologies, changing markets, and global competition". Virtual school is believed to be a model to facilitate high school reform to take place quickly because it offers more freedom, interactivity and academic rigour (Cavanaugh, Gillan, Kromrey, Hess, & Blomeyer, 2004). It complies with the demand of the twenty first century's digital age in terms of globalization, market drive and technological skills.

From the economic point of view, virtual school is a solution to save the nation's economy. It can reduce the costs of school buildings and their facilities. It can also solve the problem of teachers shortage. When a large number of school members throughout the country participate in virtual schools, they do not have to travel to school on regular basis. It means that the government can save the costs of providing the transportation system. With the reduced usage of transportation, it will help the environment to be less polluted so the community can live a healthier life which can lead to its members' improved productivity (Russell & Holkner, 2000).

However, since virtual school uses computer to mediate instructions, criticisms on the use of computer in education should be considered as well. Nissenbaum and Walker (1998) present several arguments on the use of computer in education that range from

seeing computer as posing a threat to the economy such as teachers loosing jobs, changing role of supervision from teachers and parents to 'a techno-elite and to corporate and business special interests', to enforcing 'technicist mindset' which places more values on

"experimental innovation over substantive traditions, abstract and theoretical ways of thinking over implicit forms of understanding, the autonomous individual over the collective memory and interdependence of the cultural group, and a reductionist, materialistic view of reality that denigrates the forms of spiritual discipline necessary for living harmoniously with other forms of life that make up the Gaia of planet earth" (quoted from Bower, 1988).

Some people are worried that the use of computer in education will dehumanize education which will negatively affect the life of the people in the community.

As regards the idea of saving the cost of economy, Oppenheimer (1997) believes that computerizing education is a bad investment since a large amount of money will be wasted. He sees that computer and Internet technologies do not bring about significant improvement in teaching and learning. It is true that if online education is becoming so nation wide, government does not need to spend money for building school infrastructures. However, in exchange to that the government has to finance online learning infrastructures which can be an expensive venture considering several factors such as the constant new developments of technology, the provision of teachers' professional development program to cope with this ever changing technology, and the maintenance costs.

MAKING THE MOST OF VIRTUAL SCHOOL

One thing that is obvious in light of the above controversies is that virtual school does present educational values for students, parents and society. The fact is that the number of virtual schools and students enrollment are increasing at a great rate. Efforts should be taken to reach for the best potentials of virtual school. Thus, some possible solutions should be offered in order to overcome the problems that may arise as the result of the application of virtual school. In order to do so, student needs must receive

class sizes and shorter duration of courses are ideal since teachers can better monitor their students' progress and teachers' work load can be reduced too.

The problem of authenticity in students' work can be addressed by arranging "independent testing of students to confirm that they have the understanding, knowledge and skills suggested by their submitted work" (Russell 2004b, p. 12-13). This can be done online in synchronous mode of communication or face to face in an appointed school site.

All types of virtual schools need to provide a good service facility for their students. A help desk that can be contacted 24 hours, 7 days a week, for example, should be available for the students if they have technological problems. Students should be able to contact teachers easily whenever they need educational help and they should receive immediate feedback on their questions and assignments. Virtual school relies on technology. It is imperative then that the technology that is used should be user-friendly, safe and interactive.

Since learning in online environment is different from traditional learning, virtual school must employ different pedagogical practices such as teaching styles, instructional designs and assessment types. A principle of constructivism suits online learning because it puts learners at the central point where they are actively engaged in constructing their own knowledge in a real world through problem-solving activities. Collaboration work among students should also be encouraged to facilitate social skills and critical thinking. Teachers function as facilitator, mediator and even co-learner during the whole process. Thus, the learning and teaching processes are maintained to be interactive.

However, online learning experiences might result in students getting lost in the sea of information and teachers' minimum supervision can lead to students not knowing what to do. Therefore, teachers need to design a set of learning tasks as guidance for the students so they know what to do in their constructions of meaning. Furstenberg (1997) believes that the learning task is "crucial in an interactive multimedia or Web environment since the task is what gives meaning to the learner's explorations. Only a well-designed task can ensure the quality of the learning process". In terms of assessment, it should also be suited to individual learning styles which support more

the highest priority over the other considerations such as the nation economy (Russell, 2004b) or parents' beliefs.

To ensure student learning achievement, several virtual schools such as Kentucky Virtual High School (www.kvhhs.org) and Illinois Virtual High School (www.ivhs.org) administer an online quiz and ask their prospective students to fill it in, in order to consider whether virtual school really suits their learning needs and styles. Fraser Valley Distance Education School (www.fvdes.com) provides a set of guidance for students and parents to realize their duties and demands in online learning environment. The online quiz and the guidance are necessary to confirm motivation and to raise students' awareness on different natures and expectations of virtual learning. They can also avoid students' misconception that virtual learning is easy and does not require hard work (Roblyer, 2006).

In order to provide socialization opportunity for the students, the type of virtual school that organizes a portion of face to face meeting where students can meet the teacher to discuss their progress or difficulties and meet the other students for social interaction is a good option (Russell, 2004b). Students who dislike learning in the online environment (Simonson, 1997) but because of a certain reason have to join virtual school can consider this type of virtual school. Illinois Virtual High School provides extra-curricular activities where students can join the Student Congress, student clubs, or participate in forum discussions. Fraser Valley Distance Education School organizes activities such as field trips, Fine Arts workshops and choir. Its elementary teachers arrange for home visits for elementary students enrolled full-time who live within a reasonable distance. In Odyssey Charter School, "students are required to attend a school or centre on a regular basis to ensure that they receive counselling and course advice" (Russell 2003, p. 14).

A study conducted by Cavanaugh in 2001 concludes that students can take the benefit of distance education if its participants are placed in smaller sized groups and there is a shorter duration of the course (Rice 2006). Kapitzke and Pendergast (2005) when evaluating the performance of Queensland's Virtual Schooling Service (VSS) confirmed that the number of students in a class should be kept minimum, ideally no more than 6 students for language courses and 10 students for other subjects. Smaller

problem-based or authentic project instead of content-based types of assignments. Authentic project can also be seen as giving students time to get away from their computer, thus preventing them from headaches, muscle pains and sore eyes. Teaching students of younger age should also be differentiated from teaching older students. Younger students might not be ready to be in charge of their own learning, they need scaffolding processes as parts of their online learning experience. Older students usually have experienced a certain level of autonomy in learning. Teaching styles and course designs must adapt to this difference (Cavanaugh, Gillan, Kromrey, Hess, & Blomeyer, 2004). To facilitate these ideas, it becomes crucial then to support teachers with proper professional development.

In addressing the equity issue, several efforts have been demonstrated by some state-funding virtual schools. Del Litke (1998) mentions that in the virtual school where he conducted his study students are loaned a computer set with all necessary softwares. The key parent of the students needs to sign an insurance agreement beforehand indicating "the school's ownership of the computer and the key parent's financial responsibility for damages". The participating schools in The Virtual High School "donate computers, internet connectivity and staff time" in exchange of their students placement in the VHS (Rutkowski, 1999). Florida Virtual School does not charge course fee to their middle and high school students in Florida (www.floridaschoolchoice.org). The fees are paid by the Florida state government's public education fund. Government's involvement in funding is vital to ensure equity for students.

Since virtual school is regarded as a model of educational reform, it should not fall into the same trap as traditional school. It should avoid authoritative practices of traditional school. Efforts to prevent these from happening are present. There are more variations today in virtual school curriculum as it includes courses outside the mainstream. For example, Christa McAuliffe academy, a private owned virtual school, offers courses on sewing, cooking, handwork class and music (www.macademy.org). KVHS has physical fitness courses while Illinois Virtual High School recommends an online flying course! Most virtual schools, as mentioned in their websites, are willing to negotiate their courses' designs to suit students' needs.

In order to be certain of teachers' qualification in virtual school, the US government has taken necessary action to guarantee quality, not only teachers' quality but also course content quality. Watson (2005) reports that all online courses must meet the state's content standards and all virtual school teachers must also meet the state's standards of licensure or certification. Failure to comply with these requirements will risk the virtual school of loosing its license. Moreover, since there are more and more virtual school providers, the competition is getting tough. This has urged virtual schools to make evidence of their teacher qualification accessible to the public (Russell, 2004b). It is obvious then, for other countries that wish to develop virtual schools, that their government supports are essential to safeguard the quality of virtual schools. However, government policies in course content and teacher qualification should be designed especially for online learning context. So far, the policies are still the same as the ones in conventional learning context (Watson, 2005).

As for the accreditation issue, parents need to check with the local schools first if they accept course credit transfer. In Florida, it is the intent of state law that receiving public schools accept credits and course completions from Florida Virtual School (Winn, 2006). Considering the potentials of virtual schools and their future prospects, it is likely that state and school policies will need to be adjusted to address this issue for the sake of virtual school consumers.

CONCLUSION

Considering the advantages and disadvantages of virtual school, it can be concluded that not every student suits virtual school learning environment. Therefore, before deciding whether to enroll in a virtual school, students and parents need to make informed decision by getting insights into the factors mentioned above.

Further research on the evaluation of virtual schools, effective pedagogical practices and students social experiences in virtual environment should be encouraged. Research on these areas can assist virtual schools to make some improvements so that the main goal, i.e. students' learning achievement, can be attained.

The future of virtual schools is promising as they keep on refining their curriculum, course design, teaching methods and teacher qualification in order to meet the needs of the students. The government in the countries where virtual schools are flourishing shows efforts to adjust its education strategies and policies to ensure effective establishment of virtual schools. Virtual school indeed gives people a choice in education.

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