

ASSESSING TEACHERS' AND STUDENTS' PERCEPTIONS ABOUT TEACHING AND LEARNING USING VIDEOCONFERENCING METHOD OF INSTRUCTION

Arif Ahmed M. H. Al-Ahdal¹, Abdulghani Ali Al-Hattami²

¹Qassim University, ²University of Dammam,
KSA.

¹Arif_al_ahdal@yahoo.com, ²aghani20032000@yahoo.com

ABSTRACT

In a rapid changing world, technology has dominated many aspects in our lives, education is one of them. Many universities have started teaching high-degree courses online. There have been many and different reasons for making use of videoconferencing in order to allow access to those learners who are locationally (physically) dispersed over wide area. In Saudi Arabia, the culture urges universities to teach through videoconferencing when men teach female students. Although teaching by using videoconferencing medium is widely used, the quality and effectiveness of using this method of teaching has not been well-researched yet. This study aims at investigating the positive and negative aspects of videoconferencing method of teaching and learning from the English language teachers' and students' perception. Eighteen male faculty members and forty-six female students who are taught/learned through videoconferencing method were surveyed and interviewed. This is one way to find out if the videoconferencing is an effective teaching method. The results indicated that both teachers and students, overall, were happy with it and only recommended that technology equipment should be of high quality to ensure that videoconferencing experience is successful. The authors concluded the paper with some useful recommendations.

Keywords: Videoconferencing, Distance Education, Interaction, Educational Technology, English Language Teaching

INTRODUCTION

Videoconferencing has gained acceptance in almost all countries. It has made itself felt as effective method to exchange information. It has made distance education easy, convenient and interesting. Instead of providing written lessons to the distant learners, this technology has made it possible to provide lessons in an interactive manner; the presentations of new language have been made attractive and interesting by adding pictures of the real situation, caricatures and by making extensive use of graphics. The lessons look more like short films which attract and grab attention and, often in effective dialogues. The other supporting techniques/equipments obviously are cameras, video displays, microphones and speakers.

Electronic media and Internet applications are in a constantly evolutionary stage; perfection is not in sight as major breakthroughs in Information and Communication Technology (ICT) applications occur in a surprisingly short time. Videoconferencing is in fact one of the Internet and telecommunication applications. It may be described as the transmission of image (video) and speech (audio) back and forth between physically separate locations. In other words, two or more persons at different locations can see and hear each other at the same time by using videoconferencing technology; as we know, the present era of technological development and the application of wide range of technology in all human activities has opened up opportunities for a culture of collaborative functioning. It is sharing

of each other's experience, information and expertise with synergic effort with happier and better result in implementation/execution of activities. As such, the professional institutions have liberally adopted the combined use of cameras, videos, texts made compatible with the technological presentations to be instantly acceptable to the students at distance locations and through linkage in different institutions (two-point or multi-point) with advantage.

Describing the efficacy and convenience of teaching English language through videoconferencing, we can see that there is no need to carry 70 kilogram of flesh and blood (human being as communicator – teacher or student) for thousands of miles when any oral or written message, and in any image, can be transmitted at the speed of light. In this medium, the whole world becomes one unit with virtually zero energy expenditure as compared to what we would otherwise witness as existing before the birth of electronic age. One enthusiastic teacher-supporter of videoconferencing asserts that people using videoconferencing believe that it is nothing else than pure interaction itself and also that it instructs (Bilton-Ward, 1997).

Videoconferencing method of teaching and learning will no doubt reduce learners to mute group as interaction will be drastically reduced. Face-to-face interaction will get reduced too. Much depends upon the pedagogy. Deliberate intervention has to be injected to encourage interaction. Still, the option to interact or not remains with the students who are at distant locations. Let us, therefore accept the fact without bias that videoconferencing method of teaching will reduce the face-to-face interaction and perhaps most of the learners will welcome it as the teachers' presence in the traditional system was often inhibiting factor and hence detested (not welcome, particularly to the shy students). It happens only when the role of technology is clearly defined. In the Saudi Arabian context, however, it is more of audio conferencing than videoconferencing as students can see the teacher and the teacher can just not see the students at all; verbal communication, however, is maintained at both ends. Education in Saudi Arabia has developed since the foundation of the Kingdom in 1932. It is free to its entire citizen from preschool to college. However, in Saudi Arabia male and female students are taught in separated schools and colleges. Furthermore and in most cases, male teachers are not permitted to teach female students and vice versa. This necessitated the use of videoconferencing teaching method.

As against this, under the traditional system, it is said by Hiltz and Turoff (1993) that there has been no means under the traditional system for a group of people to exchange information among themselves adequately in order to reach decisions; they had to meet frequently and talk over the matter or point face-to-face videoconferencing method is taken as a tool for teaching. Therefore, the teachers have to create inputs with imagination and creativity. We can draw attention here to the various advertisements. There is unimaginable amount of creativity and uniqueness in the manner of text writing, graphics and theme; the message is conveyed in very few phrases and such phrases stick to the psyche. Similarly, the teachers have to devise methodology to create lessons to be attractive, interesting (sought after like scenes of a film) and understandable without straining their mind.

There is a distinct advantage of using videoconferencing in distance education, and that is its cost-effectiveness. With modern technology making itself user-friendly, videoconferencing remains no exception. Laptops, mobile phones and similar devices produced to satisfy human needs have motivated production world to make everything portable and cost-effective.

It is important to consider the methods of teaching adopted in videoconferencing situations. It is necessary to consider whether the technology is more suited to a particular teaching strategy. We may refer to the experiment made in Australia where lecture delivery was made through video which was two-way video. Microwave was used to make delivery of learning

inputs that comprised lectures, group discussions, case studies. Although all the teachers did not use the two-way video for all kinds of teaching and interaction yet the experiment tells encouraging acceptance of video system. There is, therefore, hope that seminars, interaction and lessons delivery will be done via videoconferencing method more in the near future and it would be satisfying to both teachers and learners.

Stone (1992) has given a guarded view. He says that “none of the projects reviewed provided firm evidence that two-way live videoconferencing was more effective than one-way video plus two-way audio, or even the distribution of video tapes for individual use. Indeed, there was some evidence that mature students who were working preferred flexibility to live video interaction, if the latter meant they had to being a certain place at a certain time” Kendall & Oaks (1992).

In a videoconferencing mode, shy students can participate without worrying about “bullies”. A “speaker” is not interrupted or intimidated. A friendly rather than confrontational atmosphere is created. Instead of being pressured into answering a question “on the spot”, people can think about one question, do some research, then respond to it when they are completely prepared. These aspects go to improve communication and understanding.

Students turn up to take notes; note-taking gives advantage of sharpening listening skills; it also facilitates to go through the notes at the moment of final revision of courses when detailed reading is not permissible due to time constraints. Besides, note taking develops habit of writing and capturing key points in sequence. There are negative points also. All students do not take responsibility for their learning. They need to be supervised, some of them more intensively. Some learners will not, as a direct result of this technology, turn into interactive lot as it might be difficult for them to shun their habitual shyness and the fear of teacher, however remote or less interfering or intervening he/she might be. It is admitted fact that students may make progress at their own speed, some students may like to be in close proximity of the teacher and thereby they learn better. This leads us to admit that videoconferencing is not going to be totally the best method of teaching/learning, pushing the traditional methods to the dump.

Videoconferencing started as a means of making traditional lectures accessible to more people; there was little concern that the traditional lecture should be made more interesting, keeping teacher away and presenting the content through video like film for entertainment. Videoconferencing use has reached a stage where it is found interesting and fun by the learners; it affords opportunity for conversing, raising queries and all in all it turns out to be a good discussion in highly interactive and lively manner. Teachers have found this method of teaching/learning in situation created dramatically and more interesting.

Moore (1990) is sure that the learners under distance education mode enjoy a certain degree of autonomy; this autonomy may not otherwise, in other circumstances, be a comfortable proposition. It is this very reason that the educator in the distance teaching mode has compulsion to act as supporter and guide in his changed role, due to distances involved. The teacher has to prepare his lecture for the print-based teaching in such a way as to make the lesson intelligible and follows strictly the basic rule of ‘Keep it simple and short’ (KISS). Similarly, the lesson has to be simple and attractive for the videoconferencing of language learning with more of graphical presentation and situation based to lend the presentation as much attractive features as possible to arrest attention of the students. This approach has to be reviewed on the basis of reflective thinking on the part of the teachers as well as on the basis of feedback from the distance student-community. While efforts will be made by the teachers for enabling learners to meet their goals, whether the material passed on is used or nor remains unknown; the teacher has no control over it. Also, the decision of transmitting

lectures in this form and of the learners on the other hand depends upon how worthy are the contents of the texts of the lectures in the program (Moore, 1990).

Paul Rixon (cited in Coventry, 1998) and Abott et al (1993) have made studies on this subject. Their views are as under:

1. Students were found to prefer videoconferencing method to the traditional method of learning and teaching as far as distance education was concerned.
2. Students were reported to be self-reliant; they had access to many types of options – from own rooms to lectures and libraries.
3. The students reported that the peer pressure, which they termed as comfortable, acted as motivating and encouraging factor and they took maximum benefit of their lectures and interactions sitting at common place.
4. Students at University of Ulster stated that videoconferencing method was the best one for the learners and had many plus points over the lecture method; it encouraged uninhibited discussions as the students felt freer.

In another study, Ritchie and Newby (1989) picked up students and divided them to form three groups. One group was put in a traditional class room where an instructor was assigned. The second group was made to occupy TV studio and an instructor was provided in that room. The third group of students was given a room which contained a video but there was no instructor posted. The feedback from the three groups was collected after having given them same lessons. It transpired that the group in the Studio class room expressed dissatisfaction with the instruction; they stated that the instruction was not enjoyable and they did not involve as much as the other groups did. It goes to prove that presence of instructor is not unwelcome in videoconferencing but it is a facilitating factor.

This study aimed at assessing the English language teachers' and students' perception about the use of videoconferencing; what the positive and negative aspects are of its use. It was also an effort to find out broadly how the method was useful compared to the traditional method of teaching/learning.

METHODOLOGY

The researchers collected the information needed to answer the research questions using different resources; questionnaire, interviews, and observations at two public universities in the Kingdom of Saudi Arabia. A convenient sampling method was implemented in this study. The sample size consisted of 18 male faculty members who teach English language through videoconferencing and 46 female students who are taught English language through videoconferencing mode. Getting information from both teachers and students is one way to find out if videoconferencing is a successful method for teaching and learning at the university level. The questionnaire used in the study was validated by three experts in the educational technology field. The faculty members who filled the questionnaires were also interviewed after they showed their willingness to do so. A random sample of students was also interviewed informally to get the bigger picture about the context of videoconferencing instruction.

RESULTS

This study was descriptive in nature. We have seen on the basis of research and in this study too that videoconferencing is very useful, entertaining and interesting medium to give instruction. The corporate bodies are making use of videoconferencing for proceedings of

board meetings and for holding discussions on business matters as well as for negotiating bank loans and advances. It is, therefore, in the fitness of things that in the Arab world, where traditions are honored, teaching can be effectively given through this medium with no embarrassment to the female population. As during the videoconferencing, there is no direct contact between male and female, there would not be much of objection for female students to get instruction in distance mode. In the classroom situations, this method of teaching will prove most efficient and interesting where females can be taught by female teachers. It is felt that content-based courses are more advisably taught through this method than would skill-based courses be. The results of the teachers' and students' perceptions along with the observations are presented below.

Teachers' Perception

Most faculty members have found the technology more straightforward to use, although technical support was necessary in the initial stages. In addition, they stated that there are definite pedagogical advantages gained by videoconferencing teaching mode. It has potential to influence learning by increasing student motivation and other higher order-thinking skills. Videoconferencing gives added excitement as it helps their positive attitude towards the subject.

Nevertheless, faculty encourages students to participate fully; they should not expect them to speak publicly before they are ready to do so. In fact, one faculty member asserted that videoconferencing method made him believe in his work and its value. Some students, however, are found to react positively in the medium, showing great joy and consideration.

Some faculty pointed out to few problems that they usually face with this technology. Problems with audio and video equipment and the speed of the internet affect the quality of teaching and learning during videoconferencing. Therefore, reliable tools should be available. Another important issue is the availability of facilitator with female students who would govern the sessions.

Students' Perception

Some students in this study find videoconferencing intimidating at the beginning of the course; it takes them time to acquire confidence to talk to their teachers. However, they then take part and get fully involved in activities. Students can present their work and explain it to others.

Students can make Power Point Presentations on their projects and/or activities. Some students said that videoconferencing was convenient for them than the traditional method of learning; teacher should not look over their shoulders. They feel more independent as learners and less threatened by teachers' presence.

Students mentioned that they get opportunity to work collaboratively. Team-working culture made them happy and they realized the better performance due to exchange of experiences and views in the group they are working with. A couple of students contented that videoconferencing method enriched the four language skills; listening, speaking, reading, writing, and widened their educational horizons. From the personal perspective, they believe that videoconferencing improves students' confidence, develops creativity in students, and encourages sharing of ideas, views, opinion and experiences. The videoconferencing technology helped students interact with international participants using social media like Facebook and chatting rooms. This made videoconferencing particularly enjoyable for everyone.

A handful number of students, however, found this teaching method not as effective as the traditional method. These students reported that they are not technology savvy. They prefer interacting with instructors face to face. The barrier between the instructor and the students creates no effective interaction. They even added that some teachers are dull and do not create opportunities for exciting interaction.

Observations

Regarding distance learning, we observed that videoconferencing has established itself as a rich communications technology; it has potential and promise of opening out vistas of knowledge-convenience. In short, it offers new, interesting and diverse possibilities for distance education. This is because of its ability to combine diverse end-points into a single setting. In that sense, it facilitates audio and/or video clips, graphics, animations and computer applications from each end-point to share on real-time basis thus enabling not only the whole new levels of interaction but also generating entirely new types of communication and fruitful ideas.

This study shows that it is imperative to go in for teaching students through interactive videoconferencing technology in the case of men teaching female students. Further, education has to be given to more women because, otherwise, the female population shall remain confined to the home and hearth, contributing nothing to the state exchequer. Female population is substantial and they can engage in professions to help create human capital that will push the country ahead and ultimately gain a place of pride in the comity of nations.

It is not the technology alone or the students that are directly involved for using videoconferencing. Teachers have to be trained in the use of this technology and they have to be attitudinally prepared themselves. They cannot motivate the students to adapt to this modern method unless they are themselves convinced of its advantages, and they are able to program their lessons appropriately as all the courses or full course cannot be delivered through this technology alone. There might be some portion of the syllabus/curriculum where teacher-taught contact is unavoidable. Teachers should, therefore, be able to distinguish these two types of contents/parts of curriculum. It is in this context that teachers have to be trained pre-service to make a perfect fit. They need to adjust their teaching style to suit this method of instruction providing variety of opportunities for group work, discussion, role-play, etc.

CONCLUSION

Videoconferencing mode and method of education will spread education fast and will be more interesting and interactive to the students who will get rid of the rigidities of the classroom environment. This technology will enable efficient and well trained teachers to share field experiences through inspirational stories, episodes, short films and, above all, by bringing the real world before their eyes: the teaching will be contextual, situation-specific and student-centered.

The present study is a humble attempt in bringing to light the advantages and disadvantages of videoconferencing method of teaching. The result of the analysis of responses also indicates that substantial majority of the respondents have favored this method of teaching. However, there are cautions to be observed while using this technology. Teacher-taught contact cannot be packed off as a strategy for the sake of convenience and being modern saying: use videoconferencing method because it is there. This will hinder the real teaching of some topics or subjects.

It is true that in the modern knowledge society, there is continuous effort to enhance conveniences, increase happiness and lessen burden, both physical and mental. We have

never-ending quest for increasing sources of prosperity. By prosperity, the wise men limit their greed and feel satisfied if their income is a little more than their running expenditure. These limits are voluntarily fixed through the process of self-exploration – by putting questions/queries to self. The answers are independently found out and life is lived accordingly. If it is found that the process adopted was faulty and non-satisfying, realization dawned upon the self and course changed accordingly and right understanding created through the experience. Similarly, videoconferencing method of teaching and learning takes the learner back through the memory lane when he/she copied others to learn all that the elders did by observation and seeing. Videoconferencing does the same thing. Seeing through the visuals and interacting freely makes life learning a happy experience. Audio-video is carried further under the videoconferencing so that the learners could see the teacher and others and talk on matters where clarification is sought or where doubts need to be cleared.

RECOMMENDATIONS

Through videoconferencing, lessons would be more interactive and due to the graphics and pictures used, the students will be attracted towards the instruction. All subjects can be taught through videoconferencing; not just English language teaching. Still, this method may be selectively used. The teacher will be the best judge to opt for another or traditional method as per demands of the topic/subject and ground realities.

Inhibition or cultural block in teaching/learning will be reduced because of the visual effect and because of the teacher-taught feeling important as the pictures/appearing before the eyes will improve self-image and self concept will change for the better. Receptivity will definitely go up. The videoconferencing can be mixed with other methods and modes to make them complementary and supplementary to each other.

After videoconferencing, resume-writing can be done to encourage reproductive and/or creative writing; writing practice and comprehension will sharpen communication skill (oral and written) and intellect. Therefore, to explain concepts and theories, videoconferencing will be rewarding but to reinforce such learning will demand practical application – writing, live discussion in groups, paper writing, essay writing, etc. So, exclusiveness may not be allowed to be claimed by videoconferencing method; it should be allowed where considered most appropriate and suitable.

There is no harm in continuing with this method in colleges and in schools, to teach English language or any other course. Feedback may continuously be gathered for finding its effectiveness and appropriateness on an ongoing basis.

REFERENCES

- [1] Abott, L., Dallat, J., Livingston, R. and Robinson, A. (1993). *Videoconferencing and Distance Learning*. University of Ulste.
- [2] Allington, R. L. (2001). *What really matters for struggling readers: Designing research based programs*. New York: Addison-Wesley.
- [3] Andres, Y.M. (1993) Global Schoolhouse: pilot Phase. In Tel•Ed '93: *Global Connections.*, Foster, D. and Jolly, D.V. (eds) (1993) *Proceedings of The 2nd International Symposium on Educational Telecommunications*, Southwest Educational Development Lab: Texas.
- [4] Arnold, T., Cayley, S. & Griffith, M. (2002) *Video conferencing in the classroom: communications technology across the curriculum*, Devon County Council, Sowton. SCIS 1121965
- [5] Backes, C. E., & Backes, L. S. (1999). Making the best of a learning experience. *Techniques*, 74(5), 23 – 24.
- [6] Barnett, M., Harwood, W., Keating, T., & Saam, J. (2002). *Using emerging technologies based programs*. New York: Addison-Wesley.
- [7] Bates, A.W. *et al* (1992) *Video-Conferencing in Open and Distance Learning: A guide to current* be used with pre-service teachers. Tech Trends: Linking Research.
- [8] Beck, R. J., King, A., & Marshall, S. K. (2002). Effects of video case construction on pre-service teachers' observations of teaching. *The Journal of Experimental Education*, 70(4), 345-361.
- [9] Bilton-Ward, A. C. (1997). *Virtual teaching—an educator's guide*. Waco, TX: CORD Communications Inc.
- [10] Bullough, R. V., Burbank, M., Gess-Newsome, J., Kauchak, D., & Kennedy, C. (1998). "What matters most: Teaching for America's future?" A faculty response to the report of the national commission on teaching and America's future. *Journal of Education of Teaching*, 24(1), 7-33.
- [11] Constantinou, C. P. & Papadouris, N. (2004). Potential contribution of digital video to the analysis of the learning process in physics: A case study in the context of electric circuits. *Educational Research and Evaluation*, 10(1), 21-39.
- [12] Coventry, L. (1998). *Video conferencing in higher education*. Edinburgh: Institute for Computer Based Learning, Heriot Watt University.
- [13] Darling-Hammond, L. (1997). *Doing what matters most: Investing in quality teaching*. New York: National Commission on Teaching & America's Future.
- [14] Darling-Hammond, L., & Sykes, G. (2003). Wanted: A national teacher supply policy for education: The right way to meet the "Highly Qualified Teacher" challenge. *Education Policy Analysis Archives*, 11(33).
- [15] Greenwald, R., L., Hedges, V., & Lane, R.D. (1996). The effect of school resources on student achievement. *Review of Educational Research*, 66(3), 361-396.
- [16] Haberman, M. (2005). Raising teacher salaries: The funds are there. *Education*, 125(3), 327-342.
- [17] Hiltz, S. R., and Turoff, M. (1993). *The network nation*. Cambridge, MA: MIT Press.

- [18] Hyun, E., & Marshall, J. D. (1996). Inquiry-oriented reflective supervision for developmentally and culturally appropriate practice. *Journal of Curriculum and Supervision*, 11(2), 127-144.
- [19] Kendall, J. R. and Oaks, M. (1992) Evaluation of perceived teaching effectiveness: course delivery via interactive video technology versus tradition classroom methods. *Deosnews*, 2(5).
- [20] Kurz, T. L., Llana, G., & Savenye, W. (2005). Issues and challenges of creating video cases to Laboratory.
- [21] Kurz, T. L., Llana, G., & Savenye, W. (2005). Issues and challenges of creating video cases to be used with pre-service teachers. *TechTrends: Linking Research and Practice to Improve Learning*, 49(4), 67-73.
- [22] Laine, S. W. M., & Otto, C. (2000). *Professional development in education and the private sector: Following the leaders*. Oak Brook, IL: North Central Regional Educational Laboratory.
- [23] Lambdin, D., Duffy, T., & Moore, J. (1997). Using an interactive information system to expand preservice teachers' vision of effective mathematics teaching. *Journal of Technology and Teacher Education*, 5, 171-202.
- [24] Moore, M.G. (1990) *Contemporary Issues in American Distance Education*. Pergamon Press.
- [25] Norton, J. L. (1997). Locus of control and reflective thinking in pre-service teachers. *Education*, 117(3), 401 – 411.
- [26] Ritchie, H. & Newby, T.J. (1989). Classroom lecture discussion vs. live televised instruction: schools. *Phi Delta Kappan*, 78(1), 82-83.
- [27] Ross, D., Brownell, M., Sindelar, P., & Vandiver, F. (1999). Research from professional development schools: Can we live up to the potential? *Peabody Journal of Education*, 74(3&4), 209-223.
- [28] Stone, H. (1992). *Use of video-conferencing at Rennselaer Polytechnic Institute*. Washington.