

Full Length Research Paper

Challenges of using audio-visual aids as warm-up activity in teaching aviation English

Mehmet Şahin and St. Şule, Y. E. Seçer

Faculty of Education, Yıldız Technical University, Turkey.

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This study aims to find out the challenges encountered in the use of video as audio-visual material as a warm-up activity in aviation English course at high school level. This study is based on a qualitative study in which focus group interview is used as the data collection procedure. The participants of focus group are four instructors teaching Aviation English to 10th graders in a state high school in 2005 to 2006 academic year. Despite the fact that the use of video as an audio visual aid is a proper modern technology tool to motivate the learners, it prevails a set of challenges in the stages of selection, preparation, and demonstration as well. According to the analysis of the data collected using focus group interview, the challenges, encountered in the use of video, are concluded to arise from curriculum design, technical constraints and video selection.

Key words: Audio-visual material, MLE, teaching English, warm-up activity.

INTRODUCTION

Mediated learning environment and the use of video

Feuerstein (1980, 1990) shared the common opinion that in modern language classroom, the issue of how to engage students in learning activity becomes even more important than what material to teach. In other words, it is shifted from what to teach to how to teach. It also means that no matter how accurate the subject matter selection of the teacher is, if he does not employ appropriate and effective methods and techniques to teach it, he eventually cannot fulfill his instructional aims. Furthermore, according to Feuerstein (1991), the child is exposed to two types of learning situations: direct learning that includes an unmediated interaction between learning material and the child's mind, and mediated learning that 'depends on the activity of an initiated and

intentioned adult who interposes him/herself between the child and the world'. In other words, Feuerstein (1991) defines the term "mediated learning experience" as the process through which teachers help learners develop the capacity to adapt to their learning environments.

Mediated learning becomes more crucial especially when 'the child's mind does not know how to accept the material, cannot identify its meaning, or does not know how to respond' (Feuerstein, 1991). In mediated learning environment, the teaching tool or variable teaching techniques or activities such as the appropriate use of video as audio-visual material, chosen by the teacher, can take the place and the mediational role of teacher between the learner and the subject matter. Furthermore, the selection of the teaching tool and the way the language teacher chooses to use that tool is very

*Corresponding author. E-mail: sahinmehmet033@gmail.com.

important as Feuerstein (1990) puts the emphasis on the problem of reduced cognitive modifiability when mediation is not appropriate for the learners' needs which can be defined as the lack of mediated learning experience.

Different learning styles

Beyond three general categories in which people learn, which are visual learners, auditory learners and kinesthetic learners, the theory of multiple intelligences was developed by Howard Gardner, Professor of Education at Harvard University. Among these intelligences, 'related to a person's unique aptitude set of capabilities and ways they might prefer to demonstrate intellectual abilities', Spatial-visual intelligence can be accepted as 'the capacity to think in images and pictures, to visualize accurately and abstractly' (Gardner, 1983). When it comes to teaching Aviation English, especially at high school level, both the instructor's ability to appeal different learning styles of his students, and his talent in enriching the selected aviation context with appropriate visual aids boosts the students' capacity to visualize the subject matter accurately and abstractly, this therefore lead to more meaningful and permanent learning.

Use of video as information and communications technology (ICT)

Within the latest trend of the immense use of ICT in language teaching, the internet is considered a key-factor in enhancing the learner's motivation for both language learning and linguistic proficiency (Lee, 2000). The use and integration of ICTs in language learning environment also provides learner with a brand new learning experience that has rich digital textual, graphic, audio, video and other interactive features (Muehleisen, 1997). However, as the success or failure of in language teaching and learning rests, to a large extent, on the effort and competence of teachers, they have a huge responsibility to upgrade or familiarize themselves with the most appropriate and effective application of ICT in classroom setting (Shetzer and Warschauer, 2000).

The success or failure of a teaching and learning situation in language acquisition rests, to a large extent, on the teacher. However, it has been discovered that many teachers are yet to upgrade or familiarize themselves with ICT and its application in the classroom setting (Morse, 1972). In addition, Stempleski (2002) emphasizes the importance of teacher in 'success' or 'failure' of video used in language classroom as follows:

The teacher plays a key role in the success or failure of any video used in the language classroom. It is the teacher who selects the video, relates the video to

students' needs, promotes active viewing, and integrates the video with other areas of the language curriculum. Any video's chances of achieving the important goals of motivating students' interest, providing realistic listening practice, stimulating language use, and heightening students' awareness of particular language points or other aspects of communication can be improved or destroyed by the way in which the teacher introduces the video and the activities which the students carry out in conjunction with viewing.

Moreover, any use of ICT does not automatically improve the quality of language teaching and learning. As it is stated in Australian Department of Employment, Education, Training and Youth Affairs (1996), "Information technology can only contribute substantially to the improvement of schooling if it is appropriately embedded in powerful and interactive learning environments, established within the broader context of supportive pedagogy, curriculum and school organization'. In parallel with this approach, Orlova (2009) recommended that video recording of micro-teaching lessons should be done on a voluntary basis so trainees will regard it not as a means of punishment or criticism but as a useful tool for their successful professional development. Additionally, Bolandifar (2013) states, in his study on teachers' attitudes toward the use of ICT, that lack of internet access, lack of computer and internet facilities, insufficient computer skills, and lack of time were the barriers that were expressed by these teachers.

Challenges encountered in the use of video

The integration of video in language education remains as a controversial issue mainly due to the adversity of video content, especially provided in internet. Viatonu and Kayode (2012) claims that all forms of information and communication technologies' providing benefit to language education is 'incontrovertible' because internet includes not only an enormous content but also an equal amount of junk and obscene sites which may cause moral corruption if not adjusted beforehand.

Aim of the study

The present study is actually based on a previous study by Seçer et al. (2015) on the positive effects of video use on students' motivation and participation. With the analysis of the data collected in that former study (2015), the findings on the positive effect of video use on students' motivation and participation, observed by the instructors at classes in contrast to these challenges were analyzed. This study's focus is on the challenges, encountered in the use of video that arise from curriculum

design, technical conditions, instructors and students. Therefore, this study specifically aims to analyze the challenges encountered in video use as audio-visual material in warm-up stage, in Aviation English course at high school level in the viewpoint of instructors of Aviation English.

MATERIALS AND METHODS

This is a qualitative study, and it aims to analyze the challenges encountered in video use as audio-visual material in warm-up stage, in Aviation English course at high school level in the viewpoint of instructors of Aviation English. The data was collected using focus group interview. Focus groups are group discussions which are arranged to examine a specific set of topics (Kitzinger, 2005). A successful focus group discussion relies heavily on 'the development of a permissive, non-threatening environment within the group' where the participants can feel comfortable to discuss their opinions and experiences without fear that they will be judged or ridiculed by others in the group (Hennink, 2007). The participants were four instructors of Aviation English, teaching 10th graders in a state high school. The participants were colleagues who knew each other for a long time and working in the same atmosphere, and doing the same office. This is important because focus group discussions are more akin to natural social interaction among participants, and thus, the environment of focus groups may be more comfortable and enjoyable for the research participants (Jowett and O'Toole, 2006; Liamputtong, 2009).

Data collection and participants

The data was collected using focus group interview. One of the researchers of this study has been teaching in Aviation English course at high school level. Due to the special status of the course, the instructors working at such courses are supposed to be limited. The instructor (one of the researchers) formed the focus group with the four colleagues teaching 10th grade students using short video clips related to the subject matter of English classes as warm up activities in the beginning of every unit, through out the second term in 2004 to 2005 Academic Year. Therefore, they could construct their personal opinions on the effect of use of video over students' motivation and participation in Aviation English course. The participants were willing to participate in the interview, and they can be regarded as the experts in teaching Aviation English.

The first participant, coded as T1 is the course book writer who also prepared a DVD, including additional video materials related to the subject matter of each module in course book. Hence, he knows the content of the course book, included the additional video materials, the best of all. Second and third instructors, coded as T2 and T3 defined themselves "inexperienced" in teaching Aviation English. Because, this lesson is their first chance to give Aviation English course. In contrast, they had their MAs in Education. The last instructor, T4 defined himself 'experienced and independent' in Aviation English lessons as he had been giving Aviation English course for years. All the instructors were males. The researcher also facilitates four participant focus group discussion.

In order not to distract the respondents and avoid them from focusing on the discussion, the meeting room was quiet and physically comfortable. The facilitator aimed to create an informal and sincere discussion atmosphere to help the participants feel free in expressing their personal opinions. In addition, the facilitator let the participants talk equally and did not make any personal judgments on participants' opinions in order to remain neutral and fair during the discussion. The sessions were tape recorded and

transcribed after the meeting. All the participants checked the texts in turns after the discussion. The irrelevant data gathered from the participants was ignored in this study. Both this careful and detailed transcription of the complete interview and the facilitator's democratic and fair attitude towards each participant during discussion are deliberate factors to maintain the validity and reliability of the study.

Data analysis

The focus group interview, recorded on tape was carefully listened and transcribed by the researcher. The names of the participants on the tape recording were omitted and coded as T1, T2, T3 and T4 in the transcript.

Then the researcher scanned the transcript to locate the reoccurrences of the key words and concepts. The transcribed texts were presented to the participants so that they could agree or disagree with what they said in the discussion to provide validity and reliability. After that, the key concepts were grouped and categories were formed. The formed categories and theme were confirmed with the help of three external experts. The central themes of discussion were derived and the following findings were generated.

FINDINGS AND DISCUSSION

The analysis of the data collected through the focus group interview reveals the challenges, encountered in the use of video that arise from curriculum design, technical conditions, instructors and students. The challenges of the use of video refer to a group of problems and constrains in the language classroom. Some are as follows:

1. Curriculum design which leaves no room for any additional activity besides the course book, therefore, causes a considerable amount of workload and stress for the teachers who try hard to add the short video sessions, which are in fact a sizable component in total, to the stuffed curriculum.
2. Technical constraints in the learning environment which refer to the challenges in using video due to unreliable internet access, low computer capacity, poor maintenance of other technical facilities such as electricity, phone lines, technological gadgets such as computer drivers, low standards of language and computer laboratories, and the incompetence of instructors in using technical facilities.
3. The factors arising from video selection which refer to instructors' hardship in selecting proper audio-visual materials, appropriate for the subject matter, students' linguistic competence and students interests.

With the specific analysis of the data collected through the focus group interview, the challenges in the use of video can be grouped and discussed under the following themes, which are given in accord with the three causes stated earlier.

Time allocation due to stuffed curriculum

Based on the data collected from the focus group interview, time allocation due to the stuffed curriculum and tight schedule is one of the challenges, encountered in using audio-visually, stated by all participants. All participants remark that in Aviation English course, they are all bound to a stuffed curriculum and a tight schedule causing a critical lack of time which is for them the most important challenge in utilizing video. T2 and T3 who define themselves 'inexperienced' as it is their first time to teach Aviation English, state that even though they had the additional audio-visually for warm up practice, which are readily selected, downloaded, and prepared on a DVD, they spend more time and effort to revise, modify, and fit the material to the designed program before using. Being an experienced instructor of Aviation Course, T4 also mentions time constraint as 'the biggest challenge', he encounters during lessons and states:

'This is my fifth or sixth time to give this course. Of course with different course books, and audio-visual aids. But, honestly speaking, I'm still facing difficulties using each and every video, on DVD. It's just because of I'm critically lacking time to cover all the units in accordance with the curriculum'. T1, the course book writer, who compiles all the audio-visually, even says 'I have hard time utilizing the videos that I myself select, download, design the related exercises, and get prepared for'. He also lists the reasons for it as; 'Because we have a very limited time for each unit because there is no separate section for video activities in the course book. And because the curriculum leaves no time for any extra activity besides the course book'.

The participants also state that when there is a selected movie, appropriate for the subject matter, they can only use a five minute snapshot of it to warm their students up as they have very limited time for following chapters and other skill practices on the course book. T4 gives the selected video of Unit 7, 'The Space' as an example and says 'We could only show the trailer of the movie 'The Gravity', which I thought would really excite the students and drive them into the heart of the subject matter. And we said the students that would like to see the whole movie could watch more of it after the class.

The findings of the focus group interview about time allocation as a challenge in the use of video are all in parallel with Bolandifar's (2013) views on the lack of time as a common barrier encountered by teachers using ICT.

Poor maintenance of technical facilities

The data reveals that all participants, including T4, who states that he is very experienced in overcoming technical problems, are sometimes discouraged and

defeated by the constant occurrence of technical problems due to poor maintenance of school's technical facilities. The teachers state that sudden occurrence of technical problems about the computer, the driver in the computer; the DVD or electricity can disrupt the proper use of video and demotivate them in using video in lessons. T2 states

'The first thing that comes to my mind when I cannot handle a technical problem is to google the subject matter in video form and stream or download the shortest video'. Then, he says a further problem in internet connection may possibly occur.

T1, T2, and T3 report that they can sometimes use language laboratory instead of classrooms and spare whole lesson for the demonstration of flight videos, downloaded on lab computers or review of previous subject matter in English learning websites on Internet. In language laboratory, they report, they encounter other technical problems such as overused headphones, computers with low performance and capacity, or lack of internet connection. Because of these problems, T4 states that:

he does not prefer to have the lesson in language laboratory which, he thinks a full waste of time. T1 and T2 mention that there are technicians that they can ask for help in overcoming technical problems but all of them admit that it is again very time consuming to call the technician, wait for him to come and cope with the problem. If they cannot handle the problem, they commonly say that they have nothing to do except skipping the video and going on the lesson with the further practice on the course book without any proper warm up activity.

All the participants also report about technical problems that they use similar ways to deal with the technical problems such as applying to Google and internet, having the lesson in language laboratory, or calling the technicians for help.

Furthermore, the findings of interview reveal that time allocation and technical problems are the challenges generating from stuffed curriculum and school's technical facilities and support in accordance with what is stated by DEETYA (1996) as powerful and interactive learning environments can only be established within the broader context of supportive curriculum and school organization'.

Incompetence in using technical facilities

T2 and T3 confess that in the beginning of the term, they have a hard time utilizing video materials due to their incompetence in the use of technology. T2 says:

'I still remember my excitement in my first lessons, when I

know almost nothing about how to get use of technical devices'. In addition, T3 confesses that he sometimes quits trying to utilize audio-visuals when he faces an insistent technical problem and turns back to course book activities.

They commonly state that they usually ask for the help of students who, they think, are more familiar with technology and better at overcoming technical problems. Despite their incompetence, teachers stated that they do not feel stressed, in contrast, feel comfortable using technology to find and conduct interesting and enjoyable audio-visual materials.

In parallel to the view of Shetzer and Warschauer (2000) that the learning rests, to a large extent, on the competence of teachers and their responsibility to upgrade or familiarize themselves with effective application of ICT, both of the instructors share the common idea that it is their responsibility to win over their lack of experience and incompetence in the use of technical aids.

The problem of video selection

In the focus group interview, one of the issues that all the participants share a common opinion on is the vital importance of video selection appropriate for the subject matter of the current lesson, for the interests and needs of the students, and for their level of English. To begin with, all the teachers agree that the problem or workload of selecting an appropriate audio-visual material occurs when they cannot or do not always prefer to use the readily downloaded podcasts or video clips on DVD of Aviation English course. The participants all report that besides the video activities in many different course books, internet is the mere and the most available source of various video materials for them. They also commonly state that when it comes to video selection on internet, it is a huge workload and responsibility that lay merely upon language teacher because of following reasons.

First of all, the selected video should be appropriate for the subject matter of the lesson in order to be used as a proper supplementary material in teaching the objective vocabulary, reviewing the grammar point, or reinforcing the comprehension of the content. T4 says:

'It sometimes takes my hours to find a piece of video that has parallel content with our lesson for only a five-minute warm-up activity'. T2 also adds 'That's why, not all the videos on internet are readily prepared for the purpose of teaching English, teaching aviation, or teaching specifically your subject matter'.

In addition, the selected video should be appropriate for the interests and needs of the students. T1 points out:

'As here is an occupational high school specialized on

aviation, the students in general are eager to watch, try to comprehend, and talk about aviation videos'. T4 interrupts and says 'But not all of them, not always, especially not in the first lesson, very early in the morning'. T3 agrees with him and adds 'There can also be other distractions for a teenager at this age that avoid his interest in every video content and his participation in every activity'. Moreover, T2 emphasizes that each student is a unique individual, having different interests, preferences, and different learning styles and adds 'It is almost impossible to select an audio-visual appealing to whole class, it is okey for me, if I can wake up most of the class with the video material'.

Finally, the selected video should be appropriate for students' level of English. According to all participants, the audio-visual should not be above or below the linguistic competence of the students. If it is too easy, T3 says:

it cannot be challenging enough for students to participate in the activity. T4 also adds that the video material can be too much discouraging and demotivating for the students if is too difficult to comprehend. T2 emphasizes another important point and says 'We cannot ignore the fact that all the students in a class cannot be at the same competence level in English. So when the video, we selected is comprehensible for some students, it may also be very difficult for others'. They all admit that it is also their responsibility to simplify and make the audio-visual material comprehensible for the false level students in class. In spite of the fact that selecting appropriate audio-visual materials on internet is a huge responsibility and additional workload for all the participants, they all agree what T1 says; 'Once you achieve finding a video perfectly fit to your class, it is a joy to start your lesson with it, since it serves as a wonderful ice breaker and a practical tool for your students' motivation'.

The teachers all agree that free English as a second language (ESL) podcasts on internet are the most appropriate materials which are not only easy to reach for the teachers, but also very easy and enjoyable to comprehend for the students, as well. The participants also point out that their work is not complete with video selection. For them, after selecting an appropriate material, they should pedagogically and creatively work on it and turn it to a complete class activity that can appeal to all class. They feel that it is their success if the selected audio-visual can awake students, drive their attention to subject matter, and arouse interest, excitement and willingness among their students.

Similarly they admit that it would be their own failure if the lesson is still dull and their students are unconcerned even after the use of audio-visual as warm-up activity. It can be obviously considered that the views of the participants in the focus group interview are all in parallel

with Stempleski (2002) who emphasizes the key role of the teacher in 'success' or 'failure' of video used in language classroom by claiming that the way language teacher 'introduces' and 'modifies' the video material can either 'improve or destroy communication' in class. In spite of the fact that selecting appropriate audio-visual materials on internet is a huge responsibility and additional workload for all the participants, they all agree what T1 says:

'Once you achieve finding a video perfectly fit to your class, it is a joy to start your lesson with it, since it serves as a wonderful ice breaker and a practical tool for your students' motivation'.

Conclusion

With the analysis of the data collected through the focus group interview, it can be clearly concluded that the challenges encountered in the use of audio-visual materials in Aviation English course generate from time allocation due to curriculum design, technical problems due to poor maintenance of school's technical facilities, and the problem of video selection in accordance with the subject matter of Aviation English lesson and students' linguistic competence, needs, and interests.

RECOMMENDATIONS

The following recommendations below can be given to minimize the challenges encountered in the use of audio-visual materials in teaching Aviation English and to reinforce the positive effect of the use of audio-visual materials on students' motivation and participation:

1. The curriculum of Aviation English course should be redesigned, therefore it includes the video activities and provides adequate time for the use of audio-visual materials in the beginning of units. This revision in the curriculum can offer a solution to the problem of time allocation.
2. The audio-visual materials, selected and prepared on DVD should be revised by a commission of Aviation English course instructors and student representatives. If students' recommendations are taken into consideration in video selection, it can help the audio-visual activities to be performed on a voluntary basis, as recommended by Orlova (2009). Moreover, in this way, current and up-to-date audio-visual materials which are more appropriate for the course content, students linguistic competence, needs, and interests can be selected. It can reduce the workload of overloaded instructors as there will be no need to search, select, and download additional videos.
3. The pre-, while-, and post- video activities should be prepared beforehand by a group of volunteer course instructors and added to the content of the course book,

'English in the Air'. It requires a revision and re-print of the book within all units and chapters but it will definitely reduce the workload of instructors and help students to learn better throughout the term.

4. School's technical facilities should be maintained, revised and improved: computers and their drivers can be upgraded, internet connection can be renewed. Therefore, the current problems can be solved and some technical precautions can be taken in order to avoid technical constraints and to increase the quality of lessons.

5. The instructors, on a voluntary basis, should be given a technical course in order to improve their competence in using technical and technological gadgets to use more efficiently in lessons.

Conflict of Interests

The authors have not declared any conflict of interests.

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Sahin, Mehmet; Sule, St.; Seer, Y. E.

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Descriptors: [Video Technology](#), [Audiovisual Instruction](#), [High School Students](#), [Grade 10](#), [Focus Groups](#), [Qualitative Research](#), [Secondary School Teachers](#), [English \(Second Language\)](#), [Second Language Instruction](#), [English for Academic Purposes](#), [English for Special Purposes](#), [Learning Activities](#), [Cognitive Style](#), [Aviation Education](#), [Barriers](#), [Teaching Methods](#), [Technology Uses in Education](#), [Educational Technology](#).

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