

Trends of the recorded lectures at An-Najah National University from the staff faculty perspectives

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Abstract. This paper tries to shed light on the trends of recorded lectures, an interdisciplinary research, by the E-Learning Centre, and Faculty of Education and Teacher Training, methods of teaching English from An-Najah National University. Since the whole research is about one of the teaching pedagogies that can match almost all learning styles, thus, it seeks to find out the trends of recorded lectures at An-Najah National University from the faculty perspectives and how they help students from all faculties learn better. It also aims to identify the effect of gender, faculty and academic degree on the faculty responses. To achieve these aims the researchers conducted a survey via which they distributed questionnaire among 114 staff members at the university along with a focus group to complete the data needed for the purpose of the study. The study revealed that the general perception about pre-recorded lecture is ambiguous and requires more awareness, assistance and training basically for the faculty members who never got the chance to experience this new way of instruction. 68.4% of the whole sample do not have any experience with recorded lecture and (56.4%) do not want to record lectures which is explained by the high rate of rejection. Results also showed while male faculty members think that the pre-recorded lectures make things more interesting, the female faculty members think the opposite. In the light of these findings, the researchers recommended adequate training on how to record when to record and what to record.

Keywords: Recorded lectures, faculties' perspectives, An-Najah National University.

INTRODUCTION

B'Tselem (2015) stated that the Israel's restrictions on the Palestinians' freedom of movement in the West Bank are enforced by a system of fixed checkpoints, flying checkpoints, physical obstructions, roads on which Palestinians are forbidden to travel, and gates along the Separation Barriers. The restrictions enable Israel to control Palestinian movement throughout the West Bank as suits its interests, in a sweeping breach of Palestinians' rights. This, of course, hinders all aspects of life including regular university attendance. In an attempt to help learners who, miss lectures, the researcher conducted this study.

E-Learning Centre is the only center at An-Najah National University that provides the technical support

and the upload of all the e-courses as well as the blended ones for all the faculty members in the university (Affouneh and Raba, 2017). One of the many projects that benefit all students is the use of recorded lectures.

Based on the assumption that online recordings of lectures provide students with anytime-anyplace access to lectures, the researchers presented this study with an aim that understanding of the way the academic staff are seeing these recorded lectures will enable the university to develop current and future recorded lectures and help in ending the sufferings of the check-points' passers from students by helping them listen to the material when they are even at the checkpoints. As Schulkin and Raglan (2014) and Klass (2003) showed that humans are social,

and gain much of their initial understanding of others through visual and auditory capacities.

Based on this assumption, the researchers tried to answer the main question "What are the trends of using the recorded lectures at An-Najah National University from the faculties' perspectives?"

An-Najah National University started using pre-recorded courses during the first semester of the academic year of 2009-2010. E-learning center conducted a survey in order to evaluate the current experience from the faculties' perspective, thus opening up the door to enhancement and innovation. As a result, the researchers chose to work on an explorative approach as the objective of this paper is to evaluate the current experience pre-recorded lectures in An-Najah National University which would help policy-makers to develop this learning approach. It is also important to know the scope of involvement of the university instructors. Are they willing to work or not, before and after the filming? Some instructors might be interested to go beyond the recording process to use the video as a real e-learning material with their students; some others might only record it without having a purpose to create a continuous follow-up.

LITERATURE REVIEW

Bravo *et al.* (2010) showed that there are three general types of educational video: demonstration, narrative, and recorded lecture (the type targeted by this research). Prevalence of lecturing has been criticized, although it does not lead to any significant change. More Universities, An-Najah National University among them, have chosen to use recorded lectures as a second support to students, giving them the ability to have more control over their schedules and learning, and to review lectures at their own pace and at a time and place of their choosing (Gorissen *et al.*, 2013). The researchers try through this literature review to build the theoretical framework for video technology in education, with a focus on recorded lectures, the current format used in An-Najah National University. Meanwhile, they noticed through reading that there is a lot of variations in the technical / instructional terminology. As an example, they found that in some research they refer to recorded lectures as captured lectures, which is a different concept: a recorded lecture is a traditional face-to-face lecture captured by a video camera, then streamed through the web. A captured lecture is a lecture made by a Desktop recording application which record instructor's on-screen activity, which also could be a kind of video tutorial (like what we see in YouTube) and not a formal lecture recorded inside a university. There is also always a new denomination to designate the same concept like Screencast which is derived from podcast, and have the same meaning as captured lecture. To avoid any poly-semantic issue, the researchers sometimes refer to video

- recorded lectures as streaming-video since the type concerned by this paper is the pre-recorded videos which can be viewed and streamed online without a prior downloading.

Video streaming concept in learning and instruction

Streaming video can be used for live instructional broadcasts or recorded instructional activities and can grab learners' attention and present information that is easy to absorb. Streaming media is also highly effective in motivating, training, and instructing. Learners can view small portions of videos, which do not take too much time to download or the load remotely (Hartsell and Yuen, 2006:33).

Streaming video includes text, images, sound and speech, that when integrated effectively, form a powerful teaching and learning tool can be motivating and effective. When a student processes and later reprocesses information, the role of each medium will be complementary, while adding to the authenticity and reality of the learning context (Guohua *et al.*, 2012). In this regard, Zhang *et al.* (2006) try to link video streaming to Constructivism which conceives that learning is a formation of abstract concepts in the mind to represent the reality where every student has to construct internal representations for his unique version of knowledge.

As the researchers mentioned before there is a theoretical framework for video or multimedia which is the cognitive theory of multimedia learning as explained by Mayer (1999) that humans have two separate visual and verbal limited - capacity information processing system. Thus, learning happens when learners choose suitable information, categorize it into a coherent representation followed by the connectivity of visual and verbal representations and prior knowledge as shown in Figure 1.

Flipped-classroom strategy

Due to the fact that video production and consumption are exploding, that is, every minute, approximately thirteen hours of video are uploaded to YouTube, educators and learners tend to use video streaming in Flipped Classroom. Clintondale High School, just north of Detroit, became the first "flipped school" in the US. Students watch teachers' lectures on their smartphones, home computers or at lunch in the school's tech lab. In class, they do projects, exercises or lab experiments in small groups while the teacher circulates (Bergmann and Sams, 2012). In fact, Video Streaming Technology nowadays enables instructors to be more effective in Classroom by flipping paper and routine work (homework and lectures) to do it at home; meanwhile they concentrate on class on skills development, Lab's experiment, Technical Training, and Projects. As indicated

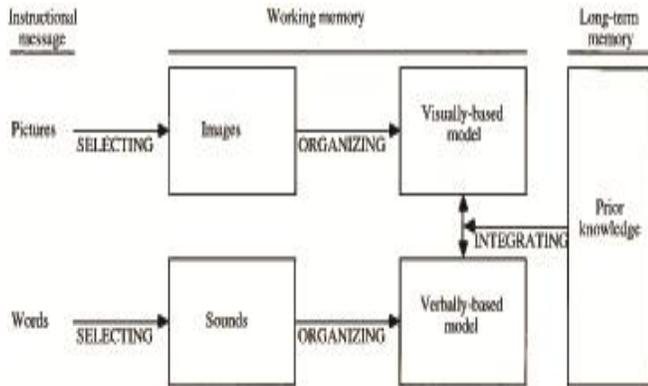


Figure 1. Mayer (1999) cognitive theoretical framework for video or multimedia.

by Henseler (2014) it also enables students to watch the videos and try to understand different complex concepts at their own pace, they can also repeat the video lecture as much as they need to grasp the idea.

Impact of video technology in education

To come back to subject of this study, Johnston *et al.* (2013) stated that students have greater flexibility, opportunity to review content on demand and the improved academic management of increasing class sizes without significant increase in physical infrastructure. In this regard, learners will have the ability to engage in a self-paced and self-controlled learning, the ability to multi-task using tablets or smartphones, by listening to lectures while on public transport or during other periods of downtime. The potential benefits from recorded lectures can be obtained by students who decide not to attend lectures and also by students who do attend but use the recordings as a study aid in addition to actual attendance. In the Palestinian contexts, recorded lectures can be helpful to those who could not attend lectures due to Israeli military blocks and checkpoints. As indicated by Williams and Fardon (2007) recorded lectures enable more students to have access to higher education and they open up a wide range of educational possibilities such as Long-life learning for people who need to work hard and long hours to meet family commitments.

As proved by Williams *et al.* (2012) and reassured by Dweikat and Raba' (2018) some lecturers find that recorded lectures, an opportunity to improve their teaching practices represented in increasing students' academic achievement and making lectures more interactive so that those who do attend obtain an additional benefit from that attendance. In this respect, classroom atmosphere becomes conducive as it contains a lot of flipped issues that enhances thinking and increase motivation (Raba', 2018; Raba' and Harzallah 2018).

As showed by McGrath (2015) and Karnad (2013) students use recorded lectures so as to understand only

complicated parts through recorded lecture, help them to prepare for examination, access video from anywhere and at any time. In addition, students refer to recorded lectures when they are in medical rest and when they can't arrive in-time for lectures. In the area of the correlation between attendance and the quality education and as argued by Chang (2007), Gorissen *et al.* (2012), Buratti (2014) and Pursel and Fang (2012) recorded lectures through offering a very flexible way to study, which in turns, results in students' absence, does not affect the quality of education students' receive, Thus, recoded lectures and videos were substitutional to lectures attendance.

Unlike Fardon (2003), who proved the opposite picture saying that recorded lectures are not alternatives to traditional face-to-face lectures as there are more senseful human aspects that you can employ in your study than virtual learning of recorded lectures.

METHODOLOGY

Overview

Pre-recorded lectures in An-Najah National University are still in the experimental approach fully supervised by the E-learning Center. As in any initial stage concrete quantitative and qualitative data are needed in order to proceed into mid-course evaluation, then to be able to predict the future needs/trends by the instructors. The researchers used a retrospective (upstream) approach to build the research methodology based on an in-depth web curation, parallel experience in other institutions, reviewing current pre-recorded lectures streamed throughout the website, and the field experience as instructors using Moodle platform to facilitate the learning process using multimedia including video technology. The researchers chose to work on a three-step approach, starting with an in-depth literature review about evolution of video technology in the World Wide Web in general, and more specifically in the education field. They also reviewed in parallel some pre-recorded videos in the university where the researchers work, so they have a *status quo* perspective on what have been done so far. This first encounter of the subject helped in the later building of the online survey. The second step is a quantitative approach whose main objective is to put figures behind instructors' current practice, methodology, and future perspective. The third step is a qualitative approach which the focus groups questions which will be based on the feedback got from the online survey of the second step.

Design phases

This part includes the current situations, the on-line survey and the focus groups.

Table 1. The six-category of the online survey.

Section	Description
Personal information	i) Asked surveyed personal info. ii) Asked surveyed general questions regarding pre-recorded lecture.
Evaluation of pre-recorded lectures	i) Questions regarding the personal experience lived by the instructor (only ones that already recorded lectures). ii) Questions regarding pedagogy and how pre-recorded lectures are used inside the teaching methodology of the instructor.
Mechanism of development	i) Questions regarding the organization of the recording session. ii) Questions regarding proofing and Quality. iii) Evaluation of the recording and feedback from viewers.
Instructor's perspective towards pre-recorded lectures	i) Questions about effectiveness of pre-recorded lectures. ii) Pre-recorded lectures encourage students to adopt computer in their learning process.
Support level	i) Questions about recording condition. ii) Questions about technical support
Difficulties	i) Questions about the required time to make a pre-recorded lecture. ii) Students' attitude when recording a lecture.

The current situation

The researchers started designing this study by doing a literature review about the subject. This review enabled them to draw a better picture of video technology in education. They looked into past and parallel experiences and/or research paper about the subject in order to determine measurable criteria which can use in our online survey (next step). In addition to that they reviewed some pre-recorded video to determine a main line the current trend of the instructors towards pre-recorded videos. This helps to classify current trends and see which ones can be developed in the near future.

Online survey

As there is an important number of instructors to be

reached out by this survey, the researchers decided to send it over the internet using Google form, which reduced drastically the amount time required for data entry. The researchers built the online survey based on six categories and Table 1 shows the result.

The researchers created the survey to include both instructors with or without prior experience in pre-recorded lectures. Instructors without this experience would take an alternative route to respond to this online survey. After the finalization of the draft copy, the researchers sent it to many instructors to have their feedback on the written questions. Besides, they did some try-outs with them to see how they would react to the survey. They entered the final copy of the survey on the Google form application so we can send it to all instructors in An-Najah National University, via the general mailing list. As the average reactivity towards online survey is generally weak. The researchers did an

extra effort to follow-up with instructors' case-by-case. They waited one week after the survey was sent before starting to contact instructors by phone or going to their offices, in order to reduce the average of abstention.

Focus groups

Based on quantitative and qualitative data returned from the online survey, the researchers decided the main guideline for the focus groups. The researchers used more interpretive methods to complete their investigation inside the survey, using narrative analysis to focus on the experience of each instructor included in this process. The main objective is to find overlapping information with what they have already found in the survey. The aim of the focus group is to be able to take in consideration the instructors' needs.

Population and sampling

The sample of this study consisted of 114 faculty members out of whom only 34 were ready to record lectures. The population of interest for this study is the instructors who are involved in recording pre-recorded lecture for their courses. Later, as the researchers were brainstorming about the scope of this study, they also think it would be more accurate if they also join the instructors who would like to record lecture in the future. In more specific terms, the researchers adapted an approach to include the staff members who were in accordance with these situations: Have previously recorded a lecture, intend or wish to record a lecture in the future and/or never heard of it before.

From the tables issued by ELC, the total current number of pre-recorded videos is 6623 videos distributed in 265 courses, and involving 166 instructors (from a total of 871) since the first semester of 2009-2010 academic year. Table one showed the total number of pre-recorded lectures in each faculty, correlated to male/female distribution since the beginning of the process of pre-recorded lectures in the fall of 2009-2010. The following tables show the results.

RESULTS AND DISCUSSION

The results of the main study question which is: What are the trends of using the recorded lectures at An-Najah National University from the staff members' perspectives? Tables 2 to 4 revealed the study results along with discussion are integrated.

Tables 2 and 3 show that the survey was answered by 114 faculty members, from which only 34 had a past effective experience with pre-recorded lectures in ANU. The sample includes 70.2% male, 29.8% females. In

terms of faculties, ITC faculty participated with a percentage of 23.7%, followed by Science with a percentage of 19.3%, while Humanities participated with the percentage of 15.8%, followed by Economics and Social Sciences with the percentage of 12.3 while Medicine and Medical Sciences participated with the percentage of 9.6 and Educational Sciences and Teacher Training with the percentage of 8.8 while the lowest percentages of participation belong to the faculties of religious sciences (4.4%) followed by the faculties of Agriculture and Veterinary with the percentage of 3.5 while the faculties of law participated with the percentage of 1.8% and finally the faculties of Arts participated with the percentage of .09.

As it is noticed most feedback came out from ITC faculty followed by Sciences faculty then by Humanities which can be explained by the fact the ITC faculty members are more willingly interested to this question as they already have hands on new technologies, while sciences instructors need to use videos and animation to explain a lot of complex processes in biology and physiology. While the lowest percentages of participation belong to the faculties of religious sciences, faculties of Agriculture and Veterinary, faculties of law and faculties of Arts respectively. Mostly of the surveyed persons are Assistant Professor (46.5%), while the rate for Associate Professor is 14%, 2.6% for full professors, and 36.8% for faculty members holding a Master Degree and this means that the most positive feedback comes from assistant professors, followed by MA holders, then associate professors and the least feedback came from full professors. This could be attributed to experience which, according to the present study, shows negative attitude towards recording lectures.

As our targeted population include instructors with and without prior experience(s) in pre-recorded lecture. Table 4 shows that the instructors without prior experience with recorded lecture form (68.4%) from the whole sample. They were asked about their general perception toward pre-recorded lecture and their future intention regarding the subject-matter, while the instructors with a prior experience with recorded lectures form (31.6) and they were asked about all the circumstances that they encountered during the preparation and recording phases. Based on the result obtained from the online survey the researchers found that the general perception about pre-recorded lecture is still ambiguous and needs further awareness, assistance and training mostly for faculty members who never got the chance to experience this new way of instruction who form (68.4%) and this shows high rate. Although, we did not find any significant variations in the opinions based on the ranking (academics degree), faculties, or gender, the percentage of willingness to record lectures is still higher than the percentage of those who are willing to record. The percentages are 56.4 and 43.6, respectively. In terms of future perspective, 88.9% of faculty members agreed

Table 2. Distribution of sample according to the study demographic variables.

Variable	Class	Frequency	Percentage %
Gender	Male	80	70.2
	Female	34	29.8
Faculty	ITC	27	23.7
	Sciences	22	19.3
	Agriculture and Veterinary	4	3.5
	Economics and Social Sciences	14	12.3
	Religious Sciences	5	4.4
	Medicine and Medical Sciences	11	9.6
	Humanities	18	15.8
	Educational Sciences and Teacher Training	10	8.8
	Arts	1	.90
	Law	2	1.8
	Academic degree	Instructor	38
Lecturer		4	3.5
Assistant Professor		53	46.5
Associate Professor		16	14.0
Professor		3	2.6
	Total	114	100.0

with further training while 36.1% of the same population remained without a clear position about that. A last observation from the analysis of the sample included only two female faculty members with prior experience with divergent point-of-view regarding pre-recorded lectures which is also proportional to the total number of female faculty members (20 females). Further observation throughout the focus groups could lead to explain the low rate of female faculty members in this process. Mostly of the surveyed persons are Assistant Professor (46.5%), while the rate for Associate Professor is 14%, 2.6% for full professors, and 36.8% for faculty members holding a Master Degree?

The results of the second question "Are there any statistical significant differences at ($\alpha = 0.05$) between the

staff members' perspectives in regard to using the recorded lectures at An-Najah National University attributed to gender, faculty and academic degree? To answer the second question, t-Test for Independent Samples and One Way ANOVA tests were used, and Tables 5, 6 and 7 show the results.

Table 5 shows that there are no statistical significant differences at $\alpha = 0.05$ level of staff members' perspectives in regard to using the recorded lectures at An-Najah National University attributed to gender in favor of females.

Table 6 shows that there are no statistical significant differences at $\alpha = 0.05$ level of staff members' perspectives in regard to using the recorded lectures at An-Najah National University attributed to faculty. The

Table 3. Distribution of recorded lectures in each faculty.

Faculty	Male	Female	Subtotals	No/rec courses
Faculty of Education and Teachers' Training	15	6	21	28
Faculty of Art	32	7	39	45
Faculty of Sciences	29	1	30	48
Faculty of Engineering (including IT)	31	0	31	39
Faculty of Law	4	0	4	6
Faculty of Fine Art	3	2	5	5
Faculty of Health Science & Medicine	5	2	7	7
Faculty of Economics	24	2	26	34
Faculty of Sharia'	3	0	3	5
Subtotals	146	20	166	265
The total number of instructors	166 instructors		In 265 courses	

Table 4. Distribution of the Sample According to their response regarding the recorded lectures

Variable	Class	Frequency	Percentage %
Did you record lectures before?	yes	36	31.6
	no	78	68.4
Recording Room Location	Old Campus	14	38.9
	New Campus	22	61.1
Wish to Record Again	yes	18	50.0
	no	18	50.0
Have you watched recorded lectures?	yes	71	91.0
	no	7	9.0
Do you want to record a lecture?	yes	34	43.6
	no	44	56.4
Total		114	100.0

significant difference was 0.832 which is more than 0.05.

Table 7 shows that there are no statistical significant differences at $\alpha = 0.05$ level of staff members'

perspectives in regard to using the recorded lectures at An-Najah National University attributed to academic degree. The significant difference was 0.728 which is more than 0.05.

Table 5. Independent two sample t test due to gender.

	Gender	N	Mean	S. D	t	Sig.*
Total degree	Male	80	3.68	0.61	0.423	0.683
	Female	34	3.84	0.55		

*. The mean difference is significant at the 0.05 level.

Table 6. One way ANOVA test due to faculty.

Staff members' perspectives in regard to using the recorded lectures at An-Najah National University	Sum of Squares	Df	Mean square	F	Sig.
Between groups	0.057	8	0.028		
Within groups	.048	105	0.150	0.189	0.832
Total	1.105	113			

*. The mean difference is significant at the 0.05 level.

Table 7. One way ANOVA test due to academic degree.

Staff members' perspectives in regard to using the recorded lectures at An-Najah National University	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	0.229	5	0.114	0.332	0.728
Total Within Groups	2.407	108	0.344		
Total	2.635	113			

*The mean difference is significant at the 0.05 level.

CONCLUSIONS

Although the number of the teaching staff wishing to record and videotape their lectures is still inadequate, there is a strong call from the researchers to all staff members to have this great treasure as one of the means of persisting the Israeli occupation via allowing all students from the different parts of Palestine to receive good learning via well-prepared recordings that contain high quality information.

Students' suffering from the Israeli check points represented in missing lectures or losing important parts of lectures was an incentive for the e-learning center to design recorded lectures of rich content to help them overcome or minimize the Israeli challenge of the fixed or flying checkpoints.

ANNU E-learning recorded lectures project will produce a strong learning community which transcends a solid level of education. It might open up a space and place for all learners to contribute in their challenge a good

education capable of challenging the present sophistications of life. Providing an alternative resource of receiving information in a range of rich videos, and lectures can scaffold the poor Palestinians who cannot provide their sons and daughters with money for fees and transportation.

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