ASSESSING LEARNER READINESS ON THE USAGE OF LETURE PODCASTS

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ABSTRACT
This study focused mainly on the learners' perspective and experiences with regard to the usage of lecture podcasts as opposed to the researcher's perspective. To obtain the learners' perspective, hypotheses were formulated to guide the study. Quantitative methods were employed to collect data and perform statistical analysis. Four hypotheses were fully supported whilst only one hypothesis was rejected. The outcome of the study attested that generally, learners are very receptive to podcasting technology and that lecture podcasts helped to enhance learning and accommodate different learners. This practice led to improved test grades. However, learners also indicated that lecture podcast should complement the traditional lecture.
Keywords: learners' perspective, quantitative methods, hypotheses

INTRODUCTION

Previous studies (Fernandes 2009; Lau 2010; Walls 2010; Evans 2008; Zhu 2010; Lazzari 2008; Hew 2009; and Maharaj 2010) reported positive effects regarding the use of podcasting in higher education although a small proportion of researchers (Dupagne, 2009 and Bensalem, 2011) reported relatively negative effects in their study findings. It is therefore pertinent and significant that the learners' perspective be taken into account in an attempt to ensure that optimism is conserved and any negative elements that may hamper academic success rate are discovered and resolved scientifically. To this end, the study was undertaken to investigate the learners' perspective with regard to the usage of lecture podcast. The following hypotheses were formulated in that regard to obtain the learners experiences and perspective on the usage of lecture podcasts;

HYPOTHESES FORMULATION

- H1 - If lecture podcasts are used, learning will be enhanced.
- H2 - If lecture podcasts are used, different (bright and slow) learners will be accommodated.
- H3 - If lecture podcasts are used, learners will revise the work using podcasts instead of textbooks.
- H4 - If lecture podcasts are used, the learners' academic performance will be improved.
- H5 – Age, gender or ethnicity has no influence on the usage of lecture podcasts.

METHODOLOGY

The study employed a quantitative research approach. Quantitative research approach explains the phenomena by collecting numerical data that is analyzed using mathematically or statistically based methods. In this study, the learners' views or opinions were obtained through an electronic questionnaire that was based on the research hypotheses. The research strategy used in the study was a survey in which a five likert scale questionnaire was distributed to a stratified random sample of 75 learners who are enrolled for a diploma in Management Sciences at Tshwane University of Technology. The electronic questionnaire was distributed through the university's learning management system (LMS) called MyTUTOR (Blackboard). Apart from the questionnaire data, published literature on podcasting as indicated in the introduction section was reviewed. Online databases (e.g. Science direct, ProQuest, Emarald, Ebschost, and google scholar) were the main sources of data that was used in the study.

DATA ANALYSIS

Statistical data analysis was performed using Stata V12 Statistical Software. The five likert scale electronic questionnaire used the scale Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A) and Strongly Agree (SA). The codes (A1 to E3) that have been used in the frequency tables below represent the following variables which were used in the questionnaire in the quest to test the hypotheses enumerated above:

H1
A1: Using lecture podcasts has positively changed my learning approach
A2: Using lecture podcasts made learning easier for me
A3: Learning content delivered in the form of a lecture podcast is more understandable than studying from the textbook or notes
H2
B1: I have listened to a lecture podcast on a specific topic once only

B2: I have listened to a lecture podcast on a specific topic multiple times
B3: I prefer to use a lecture podcast to revise a lecture in a private setting (e.g. home)
B4: I prefer to use a lecture podcast to revise a lecture anywhere at any time (e.g. library, in transport, on the move)
B5: I listen to the entire lecture podcast every time

H3
C1: I study effectively when I use a textbook and notes only
C2: I study effectively when I use a lecture podcast only
C3: I study effectively when I complement textbook with a lecture podcast
H4
D1: Using lecture podcasts helped me improve my test scores
H5
E1: Indicate your ethnic group
E2: Indicate your age group (in years)
E3: Indicate your gender

FREQUENCY TABLES DERIVED FROM STATA V12

H1:

A1	Freq.	Percent	Cum.
A	19	26.76	26.76
N	2	2.82	29.58
SA	50	70.42	100.00
Total	71	100.00	

DESCRIPTION – TBL A1:
Table A1 depicts that 70% of the respondents strongly agree that using podcasts has improved their learning aspirations and attitudes whereas 27% just agreed. The remaining 3% selected the neutral response. None of the learners opted for disagree or strongly disagree options. This showed that a large proportion of learners (n=69) or 97% of learners support and appreciate the usage of the lecture podcasting in the classroom as a method of enhancing/improving learning.

A2	Freq.	Percent	Cum.
A	21	29.58	29.58
N	2	2.82	32.39
SA	48	67.61	100.00
Total	71	100.00	

DESCRIPTION – TBL A2:
Table A2 illustrates that 68% of the learners strongly agreed that using lecture podcasts has made learning easier for them whereas 29% just agreed. 3% of the learners selected the neutral option. Most of the respondents (n=69) are convinced that using lecture podcasts simplified learning for them. Only a small number of the respondents felt undecided about whether lecture podcasts assisted in simplifying their learning experiences or not. There were no “strongly disagree” or “disagree” options chosen on this variable.

A3	Freq.	Percent	Cum.
A	23	32.39	32.39
D	1	1.41	33.80
N	35	49.30	83.10
SA	12	16.90	100.00
Total	71	100.00	

DESCRIPTION – TBL A3:
Table A3 shows that only 17% of the learners indicated that they understand and prefer a lecture that is delivered in the form of a podcast as opposed to a textbook lecture. 33% of the learners just agreed whereas a large percentage of the learners (49%) selected a neutral option. Only a small percentage of learners (1%) disagreed.

On this variable, 50% of the learners indicated that they can relate to and understand a lecture podcast better than studying from a textbook whilst 49% of the learners are undecided. Only 1% of the learners disagreed.

H2:

B1 |	Freq.	Percent	Cum.
A |	16	22.54	22.54
D |	23	32.39	54.93
SA |	17	23.94	78.87
SD |	15	21.13	100.00
Total |	71	100.00	

DESCRIPTION – TBL B1:
In Table B1, it can be observed that 24% of the learners strongly agreed that they listened to the lecture podcast on a specific topic only once whereas 21% strongly disagree. 23% agreed and 32% disagreed that they listened only once to a lecture podcast.

B2 |	Freq.	Percent	Cum.
A |	18	25.35	25.35
D |	8	11.27	36.62
N |	7	9.86	46.48
SA |	19	26.76	73.24
SD |	19	26.76	100.00
Total |	71	100.00	

DESCRIPTION TBL – B2:
Presented in Table B2, it is viewed that an equal number of learners strongly agreed (27%) and 27% strongly disagreed to listening to a lecture podcast on a specific topic multiple times. The table indicates that 52% of the learners were provided an opportunity to attend (listen to a lecture podcast) multiple times or repeatedly to enforce understanding of the subject. 38% of the learners did not need revision on a specific topic and as a result they had a prerogative of deciding not to listen to the lecture podcast over and over again.

B3 |	Freq.	Percent	Cum.
A |	12	16.90	16.90
D |	24	33.80	50.70
N |	4	5.63	56.34
SA |	4	5.63	61.97
SD |	27	38.03	100.00
Total |	71	100.00	

DESCRIPTION TBL – B3:
Vied in table B3 is that 38% of the learners strongly disagreed that they listened to a lecture podcast in a private setting. 34% disagreed. Only 6% strongly agreed whilst 17% agreed. The remaining percentage (5%) opted neutral. The table shows that 72% of the learners used a mobile device to listen to a lecture podcast on the move "go" since they disagreed to have listened to a lecture podcast in a private setting like home. It can be further elaborated that 72% of the learners have utilized their time constructively because normally they would not have studied on the "go" using a textbook. Only 23% of the learners preferred to listen to a lecture podcast in a library or home.

B4 |	Freq.	Percent	Cum.
A |	30	42.25	42.25
D |	7	9.86	52.11
SA |	31	43.66	95.77
SD |	3	4.23	100.00

Total	71	100.00

DESCRIPTION TBL – B4:

Table B4 shows that 44% strongly agreed and 42% agreed that they listened to a lecture podcast in a public setting or "on the move" whereas only a small percentage of 4% strongly disagreed and 10% disagreed. Similar to the preceding table, the current table depicts that a large proportion of the respondents (n=61)or 86% of the learners have listened to lecture podcasts every time they got an opportunity regardless of the location they found themselves in. Only a small proportion of learners (n=10) or 14% of the respondents preferred to study in a private space.

B5	Freq.	Percent	Cum.
A	3	4.23	4.23
D	30	42.25	46.48
SA	3	4.23	50.70
SD	35	49.30	100.00
Total	71	100.00	

DESCRIPTION TBL – B5:

List in table B5, 49% of the learners strongly disagreed that they listened to an entire lecture podcast whereas only 4% strongly agreed. 43% disagreed and only 4% agreed. Most of the respondents (n=65) or 92% indicated that they have not listened to the entire lecture podcast (all the podcast episodes). This implies that 92% of the learners had freedom to choose what they had to or wanted to listen to or study. The remaining percentage of the respondents,(8%) have listened to all the podcast episodes. This shows that 8% of the respondents really needed to study all the podcast episodes and for this reason again the opportunity was provided.

H3:

C1	Freq.	Percent	Cum.
A	9	12.68	12.68
D	15	21.13	33.80
N	4	5.63	39.44
SA	4	5.63	45.07
SD	39	54.93	100.00
Total	71	100.00	

DESCRIPTION TBL – C1:

Presented in table C1, 55% of learners strongly disagreed that they study effectively when using only traditional learning mechanisms (textbooks and notes). 6% strongly agreed. 21% disagreed as opposed to 13% who agreed. 5% of the learners opted neutral. 76% of the learners have indicated that they don't study effectively when they are confined to using traditional mechanisms only. 19% of the respondents indicated that they still believe that traditional mechanisms are effective tools of learning whilst 5% of the learners is undecided (neutral).

C2	Freq.	Percent	Cum.
A	15	21.13	21.13
D	6	8.45	29.58
N	31	43.66	73.24
SA	14	19.72	92.96
SD	5	7.04	100.00
Total	71	100.00	

DESCRIPTION TBL – C2:

Highlighted in table C2, 20% of learners strongly agreed that they study effectively using lecture podcasts only, whereas only 7% strongly disagreed. 21% agreed as opposed to 8% that disagreed. 44% opted neutral. From this scenario, it is deduced that a large percentage (41%) of the learners are in favour of studying with lecture podcasts although 15% of the learners disagree. Although almost an equal number of students are in favour of lecture podcasts, 44% of the learners are not sure whether they prefer traditional learning mechanisms or lecture

podcasts.

C3	Freq.	Percent	Cum.
A	15	21.13	21.13
D	6	8.45	29.58
N	2	2.82	32.39
SA	45	63.38	95.77
SD	3	4.23	100.00
Total	71	100.00	

DESCRIPTION TBL – C3:
Outlined in table C3, a large percentage of learners (63%) strongly agreed that they study effectively when they complement traditional learning mechanisms (textbooks and notes) with technology (lecture podcasts) as opposed to only 4% that strongly disagreed. 21% agreed and only 9% disagreed. 3% opted neutral. The table indicates that 84% of the learners preferred to use both traditional learning mechanisms and lecture podcasts to study. 13% of the learners preferred to use either textbooks or lecture podcasts.

H4:

D1	Freq.	Percent	Cum.
A	27	38.03	38.03
D	2	2.82	40.85
SA	42	59.15	100.00
Total	71	100.00	

DESCRIPTION TBL – D1:
Presented in Table D1, a large proportion of learners i.e. 59% strongly agreed that the use of lecture podcasts helped them improve their academic performance (test scores). 38% also agreed whereas only 3% disagreed. This table depicts explicitly that the introduction and use of podcasting technology in the classroom has assisted learners to improve their academic performance as exhibited by 97% of the learners who agreed that their test scores have improved after studying with the aid of lecture podcasts. A very small percentage of the learners (3%) disagree that lecture podcasts assisted them to improve their test scores.

H5:

E1	Freq.	Percent	Cum.
African	33	46.48	46.48
Coloured	16	22.54	69.01
Indian	9	12.68	81.69
White	13	18.31	100.00
Total	71	100.00	

DESCRIPTION TBL – E1:
The sample ethnic distribution was as follows as seen in table E1, Africans (46%, n=33), Coloured (23%, n=16), Indians (13%, n=9) and White (18%, n=13).

E2	Freq.	Percent	Cum.
15 to 20	38	53.52	53.52
20 to 25	17	23.94	77.46
25 to 30	11	15.49	92.96
30 to 35	5	7.04	100.00
Total	71	100.00	

DESCRIPTION TBL – E2:
The age groups presented in table E2 is that of 15 – 20 years (54%, n=38), 20 – 25 years (24%, n=17), 25 – 30 years (15%, n=11) and 30 – 35 years (7%, n=5).

E3	Freq.	Percent	Cum.
Male	43	60.56	93.52
Female	28	39.43	39.46
Total	71	100.00	

DESCRIPTION TBL – E3:
In conclusion, in table E3, the gender distribution of the respondents ise presented. There were 43 male learners (61%) and 28 female learners (39%).

FINDINGS

H1 has been completely supported by 97% of the learners and only 3% opted neutral. Therefore H1 confirmed that the use of lecture podcasts had a positive impact and enhanced learning.
H2 was fully supported. Just over half of the learners (53%) indicated that they listened to podcasts on specific topics multiple times whilst others (47%) have listened only once. Learners (72%) also used their time constructively while they were "on the go" to study whilst others (28%) preferred to study in a private place like home. This shows that the lecture podcast accommodated different learners and catered for different learning needs because it allowed learners the autonomy to choose topics they needed to study from the index. Learners could also decide to lesson to specific sections of the topic or listen to the whole topic presentation.
H3 was rejected. 84% of the learners indicated that they prefer to complement lecture podcasts with textbooks and/or notes. Only 16% of the learners indicated that they prefer to use only lecture podcasts to study.
H4 is supported. 97% of the learners agreed that the usage of lecture podcasts assisted them to improve their test marks. Only 3% of the learners disagreed.
H5 is supported. All the age groups that were represented (97%) agreed that the usage of lecture podcasts in the classroom helped them to understand the content and improve their test grades. Only 3% of the learners did not agree. The ethnic groups have all responded positively about the use of the lecture podcasts and believe that it is a method that will assist them to perform well academically.

CONCLUSION

The study attested that learners are very receptive to podcasting technology regardless of age, gender or ethnicity. Through the use of lecture podcasts, learning attitudes are positively changed and learning is enhanced. This study has also affirmed that all learners (average, above and below average) have been accommodated by using podcasting technology in that learners could choose episodes to listen to from the indexes, choose a section from within an episode, rewind or fast forward the episode. Below average learners had an opportunity to listen to the same lecture multiple times as they wished whereas average learners indicated that they listened to a section of an episode once only. It is transparent that podcasting technology accommodated different types of learners. Learners reported that the use of lecture podcasts assisted them in improving the test grades. However, the study also reported that lecture podcasts alone are not sufficient to equip learners with the necessary information and knowledge. The traditional methods remain vital. Majority of the learners reported that they prefer to complement the lecture podcast with notes or textbook. Therefore, a lecture podcast should not substitute the traditional lecture but rather complement it.

Based on the findings and conclusions of this study, the researcher recommends that podcasting should be incorporated into blended teaching and learning environments in the quest to provide constant learner support anytime, anywhere and increase lecturer-learner contact time and accommodate diverse learners with various learning needs, consequently improving the learners' academic performance (learning outcomes).

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