

Annotated bibliography of data collection methods used in evaluating students' experiences of podcasts.

Sabita Menon, University of the West of England, Bristol.
October,2011.

New and evolving technologies are being increasingly adopted by educators in higher education. Podcasting, although not a new technology, is widely used by academics as a complementary learning tool due to some of its inherent pedagogic advantages (Cebeci and Tekdal, 2006). Universities are investing significant resources and money to develop podcasts and embed them into their various courses (Walls et.al, 2009). Disciplines as diverse as nursing (Schlaret , 2009 ;Meade, Bowskill and Lymn, 2011), business and law (Tynan and Colbran,2007), English languages (Scutter et al.,2010) ,information management (Fernandez, Simo and Sallan,2008) and tourism (Dale, 2007),have reported successfully using podcasts to support teaching and learning.

The basic advantage of podcasting in education is its portability which makes it convenient to access audio learning resources anytime and anywhere without requiring extensive technical knowledge (Cebeci and Tekdal, 2006). This creative freedom allowed by podcasts have led educators to adopt podcasting as a means of providing students additional support for their learning (Abt and Barry, 2007).Educational uses of podcasts have been classified into four areas by Harris and and Park (2008) as teaching-driven, service-driven, marketing-driven and technology-driven. Donnelly and Berge (2006) have identified three academic uses of podcasts as disseminating course content, capturing live classroom material, and to enhance and support studying.

Numerous studies have examined the pedagogical effectiveness of podcasting in improving the student learning experience (Abdous, Betty and Yen,2011; Evans, 2008 ;Lee and Chan ,2007 and Morris,2010).Researchers have found that using podcasts had several benefits including flexibility and deeper learning but most importantly gave students greater control over their own learning (Meade, Bowskill and Lymn , 2011) and that podcasting altered study habits of learners, as confirmed by findings of increased engagement with primary materials and study guides (Tynan and Colbran,2007).In a study involving nurses, Schlaiter (2010) concludes that 'nurse educators can leverage students' positive attitudes and technologic skills with minimal investment of dollars and no impact on class attendance, building high-

quality podcasts that align with students' unique learning environments and goals'(pg 532).

Researchers evaluating students' experiences of using podcasts in learning use a variety of quantitative and qualitative methods to elicit student experience. This alphabetically arranged annotated bibliography is an attempt to represent elements of data collection methods in research papers on student experiences of using podcasts for their learning. The data collection method for each source is described followed by a brief summary of the findings for each of the source. The different methods reported include on-line questionnaires, structured and semi structured interviews, focus group interviews (online and face to face), analysis of examination results and tracking web server logs for podcast downloading details. Some of the studies cited are large scale studies with a sample size of over 1200 students (Tynan and Colbran) while others had a small sample size of about 7 learners (Meade, Bowskill, Lymn, 2011).The general trend seen in most studies reported in this work is that most researchers have conducted an initial survey which serve as the first instrument to gather general background information about the learners and the way they integrate technology into their learning, about the learner background, level of competence and experience with working with technology. In the second phase, the survey is focussed on learner experiences with podcast, perceived benefits, usage patterns, mode of access to podcast and purpose of access. Online surveys using questionnaires that collect quantitative data along with open ended questions requiring more in-depth answers seems to be the most widely method used of data collection. Some authors have reported developing questionnaires based on previously published work related to evaluation of technological tools in teaching and learning. For example Fernandez, Simo and Sallan (2009) has drawn on the work of Breen et al. (2001) who suggested an interesting proposal for evaluating technological tools in university learning environments, through a feature list of sixteen attributes of technology-based teaching whilst Schlairet (2009) used a 'Student Podcasting Survey' developed by Forbes and Hickey (2008). Few studies mentioned here used performances in assessments based on pre and post test as a quantitative study-but these were largely mock examinations or based on pre and post tests and not the main examinations (Morris, 2010; Abt and Barry, 2007).

This bibliography is not intended to be a comprehensive survey of methodological advances or impact of podcast on student experiences. Rather it is compiled to be an introductory guide for researchers and those engaged in evaluating the learners' experiences of using podcasts by providing them with a resource that helps them to choose the appropriate data collection methods to be used in studies which aim to collect learner experiences of using podcasts. Finally, the annotated bibliography is not intended to be an evaluation of materials listed or of particular approaches to data collection.

DATA COLLECTION METHODS USED IN EVALUATING STUDENTS' EXPERIENCES OF PODCASTS.

Author/s & year of publication	Subject/ discipline of research	Sample size	DATA COLLECTION METHODS						
			Information derived from questionnaire based survey	Focus group interviews	Interviews	Server 'hits' log	Exams	Others	
Abt, G and Barry, T (2007)	Exercise physiology	50					Pre and post test in the form of mcq's		
Clark, S, Westcott, M & Taylor L (2007)	Management and Organisations	59	√		√				
Fernandez, V, Simo, P, Sallan, J(2008)	Information management System	60	√		√			Emails, discussion forums	
Gorra, A and Finlay, J. (2009)	Business Analysis and Practice.	177	Online +paper based survey	√				Additional comments on Survey	
Lee, M, J.W. & Chan, A. (2007).	Distance education in IT	18	Online					Two open ended questions included in the survey	
Meade, O., Bowskill, D and Lynn, J. (2011)	Pharmacology for nurses	7			Semi-structured				
Morris, N (2010)	research-led module on cognitive neuroscience	100	Online				Mock examination	Written comments to accompany the questionnaire	
Nathan, P. & Chan, A. (2007).	Business Strategy	23	√					Comments from participants on questionnaire	
Schlairet, M (2009)	Nursing	70	Online			√			
Scutter, S Stupans, I and Sawyer, T and King, S (2010)	Medical radiation programme	80	Online					Quotations from learners extracted from online survey	
Tynan, B and Colbran, S (2007)	Law	1244	Online					Four questions on the questionnaire seeking longer responses on main advantages and disadvantages of podcasting.	

