MSc Research Project

Project Proposal

Richard Wilkinson

MSc Computing: Project Proposal

Table of Contents

Title	2
Abstract	2
Aims and Objectives	4
Aim	4
Objectives	4
Project Philosophy	5
Research Methodology, including any resources required	5
Research Questions	5
Keywords	6
Ethical Consideration, showing how the Research will adhere to the	
university Research Ethics requirements	6
Supervision	7
Time plan with key deliverables identified	7
Support Required	7
Skills Audit	8
References	9
Annandicas	12

Title

How Can Technology Be Used To Motivate Learners In Higher Education?

Abstract

As a current advanced teaching practitioner in the IT arena, this paper will be looking at the use of technology in teaching and learning from both the learner and teacher perspectives. The specific area of interest is the motivation of learners, from a motivational research perspective and how technology can be used in the teaching process. This paper will also explore how technology can be used to reinforce prior learning both in classroom and remote learning scenarios, be that distance learning or additional studies, aka 'homework'.

This paper will look at the ways technology can be used by the two main stakeholders in the education process, namely the teacher perspective and the learner perspective.

Teachers can use technology to add to and aid their teaching, and learners can use technology in their day to day learning, often improving their learning experience as well as reinforcing further additional learning outside the classroom environment. However there can also be negative connotations to the use of technology, which also need to be researched and critiqued.

As Armitage et al (2003) write:

"Recent years have witnessed a dramatic increase in the impact of IT both in the production of teaching and learning resources and on the nature of those resources themselves. This is no doubt partly because of the potential IT possesses for improving the quality and effectiveness of learning resources as well as the obvious virtues of automation, capacity, interactivity and 'provisionality' (the relative ease of changing a learning resource). However, there must surely also be a case for IT being seen as a means of delivering learning to yet greater numbers of students, in a

more flexible and cost-efficient manner. Preliminary research (e.g., the 'TILT' (Teaching with Independent Learning Technologies) project) indicates that IT can be a valuable learning resource in particular subject areas rather than all aspects of the curriculum."

Much of the motivation theory available today comes from a very business centred stand point with the likes of Maslow, McGregor, Mayo and Herzberg all working with motivational theory in practice in the workplace. Additional to this a lot of the works previously carried out have come from a transatlantic (American) standpoint. However, this paper will work on the premise that 'people are people' and students have the same substantive needs for motivation that workers do in business environs; at least in the western world.

The education specific theorists, such as Reece and Walker, Armitage et al, Rebolledo-Mendez et al and Petty, believe that all of these business founded motivational theories (in conjunction with each other) can also apply to the motivation of learners. However the critically reflective teacher must seek to constantly learn how best to use existing theory on motivation, classroom management and learning styles for the specific needs of the learners being taught on a day-to-day basis. This is now more and more including the use of technology to support learners and learning.

Aims and Objectives

This research project and subsequent paper will look to address the following aim and objectives.

Aim

The aim of this project is to research and critically compare specific areas where technology can be used to improve the motivation and retention of students within a Higher Education setting.

Objectives

The objectives of the project are to:

- Review the current academic literature pertaining to the motivation of students
- Identify areas of the learner journey where technology can play an active and important role in motivation and retention of learners
- Identify technologies that can be utilised to support and enhance the learner journey
- Develop primary research tools to ascertain where and how technology can be used to support and enhance the learner journey
- Undertake primary research and evaluate the results of said research
- Make further substantive recommendations for where and how technology can be best used to support and enhance the learner journey

Project Philosophy

The rational and philosophy behind this project is that of a practicing Higher Education lecturer. This report will look specifically at the uses of technology to support and motivate learners in a Higher Education setting with a view to implementing findings to aid greater participation and/or successful progression from Higher Education courses into sustainable and meaningful employment. There is a potential current issue of motivation and participation of learners in Higher Education in the UK, and in particular those from more deprived educational and socio-economic groups.

Research Methodology, including any resources required

This research will look at existing writings on the subjects of motivation and participation within the Higher Education sector, along with primary research undertaken at a new Higher Education establishment.

The Primary Research will consist of survey questions to be responded to by students currently learning in a Higher Education establishment, enrolled on both Foundation (Level 3) and First Year Undergraduate (Level 4) degree programmes.

The Primary research is also expected to include face-to-face interviews with several lecturers currently employed in the Higher Education sector.

Research Questions

The primary research question to be answered is;

How can technology be used to motivate learners in higher education?

In order to explore this question, secondary questions will be asked including;

- 1. In which areas of the learner journey can technology be used?
- 2. At what points during the learner journey can and should technology be used?

- 3. What are the feelings of current students and teachers to the use of technology to support learning?
- 4. What issues are there around the use and accessibility of technology during the learner journey?

It is also expected that as this research project progresses these questions are likely to change and/or be added to.

Keywords

Keywords: Motivation, Motivational Theory, Technology Supporting Learning (TSL), Learner Journey, e-Learning, Online Learning, Virtual Learning Environments (VLEs).

Ethical Consideration, showing how the Research will adhere to the university Research Ethics requirements

Primary research will be undertaken on a voluntary participation basis, and all names and personal information will be removed before publishing any research findings. However identifiers pertaining to socio-economic groupings will remain where relevant.

All care and attention will be considered at all times so as to not bring any establishment or persons into disrepute. Any conflicts of interest will be avoided and nullified.

Supervision

This Masters' Project is to be supervised by Dr. Thomas Lancaster

Time plan with key deliverables identified

Project Start	Monday 14 January 2013 at 2pm
Literature Review Reading and	From week commencing 14 January
Drafting	2013
Project Selection Deadline	Thursday 17 January 2013 at 2pm
Creation of Primary Research Questions	Week commencing 28 January 2013
Project Proposal Deadline	Thursday 31 January 2013 at 2pm
Release of Primary Research Questions	Week commencing 11 February 2013
Collect Research Answers	22 February 2013
Collate Research Answers	Week commencing 25 February 2013
Draft Of Project Report (optional)	Thursday 25 April 2013 at 2pm
Project Report Deadline	Thursday 16 May 2013 at 2pm
Viva Examination	To be arranged during week starting Monday 20 May 2013

Support Required

This project will be done with the support of both supervising staff from BCU along with the staff and students at Coventry University College, in responding to research questions.

Support materials and MSc project training from **Professional Skills and Research Methods** along with previous research projects undertaken during the writer's PG Cert Ed and PG Cert Adult Literacy will also be utilised.

Skills Audit

Skill	Evidence
Technical	Report writer has 9 years' experience in teaching
competencies in	and learning in Post Compulsory Education. Along
education and	with being a certified e-Guide, and previous teaching
technology	teachers, Technology to Support Learning (TSL).
Secondary academic	Previous Post Graduate research projects during PG
research	Cert Ed (PCD) and PG Cert Ed (Adult Literacy),
	identifying and critically reviewing sources.
Primary academic	These need to be learnt and honed during the
research skills	process of undertaking this project. Seminars on this
	subject will be attended during first two months.
Academic writing	Extensive academic writing skills gained during first
	degree, two previous Post Graduate degrees and
	current Masters' degree.
Interpersonal and	Gained during first degree and honed during working
communication skills	life as a sales manager before nearly ten years of
	teaching practice and experience.
Team working skill	Many years' experience in team working through
	gainful employment, in both the Post Compulsory
	Education sector and private sector Sales
	Management (Telecommunications).
Statistical analysis	A-level Mathematics, along with experience of
	managing in education dealing with statistical
	analysis on a regular basis (i.e. Achievement,
	success, retention, attendance, progression data).
Academic	Report writer has taught academic skills, including
referencing	Harvard Referencing and Plagiarism.
Time-keeping skills	Excellent skills in working to project deadlines,
	reinforced with Prince2 TM certification.

References

Armitage et al. 2003. Teaching and Training in Post Compulsory Education. 2nd Edition. Buckingham: Open University.

Baylor, A & Ritchie, D. 2002. What factors facilitate teacher skill, teacher morale, and perceived student learning in technology-using classrooms? [Online] Available at: www.elsevier.com/locate/compedu [accessed on 29/1/2013].

Blumenfeld, P et al. 1991. Motivating Project-Based Learning: Sustaining the Doing, Supporting the Learning. Educational Psychologist, 26(3 & 4), p369-398. Michigan: Lawrence Erlbaum Associates, Inc.

Calvo, R, D'Mello, S. 2011. New Perspectives on Affect and Learning Technologies (Explorations in the Learning Sciences, Instructional Systems and Performance Technologies). London: Springer.

Cellan-Jones, R. 2012. iSchool - can tech really deliver education? [Online] Available at: http://www.bbc.co.uk/news/technology-20667870 [accessed on 12/12/2012].

Collins, A. n.d. The Role of Computer Technology in Restructuring Schools. s.l. s.n.

Coughlan, S. 2012. UK universities in online launch to challenge US [Online]. Available at: http://www.bbc.co.uk/news/education-20697392 [accessed on 14/12/2012].

Gibbs G. 1988. Learning by Doing; A guide to Teaching and Learning Methods, Further Education Unit, Oxford Polytechnic, Oxford.

Goldman, R & Starr, R. 2005. Learning together online: research on asynchronous learning, London: Lawrence Erlbaum Associates.

S12763849 9 Richard Wilkinson

Harvey, J & Watt, H. n.d. Using Learning Technology to Suppor Student Study Skills. From LT And Student Study Skills (Ch6). LTDI: Implementing Learning Technology. s.l. s.n.

Hasselbring, T & Williams Glaser, C. 2000. Use of Computer Technology to Help Students with Special Needs. The Future of Children: Children And Computer Technology Vol. 10 • No. 2 – Fall/Winter 2000.

Heafner, T. 2004. Using technology to motivate students to learn social studies. Contemporary Issues in Technology and Teacher Education, 4(1), p42-53.

Hein, G. 1991. Constructivist Learning Theory [Online]. Available from: http://www.exploratorium.edu/IFI/resources/research/constructivistlearning.ht ml [accessed on 25/01/2013].

Herzberg, F, Mausner, B and Sydenham, B.B. 1959. The Motivation to work, 2nd Edition. New York: John Wiley and Sons.

Jere, B. 2004. Motivating Students To Learn (2nd Ed) Hew Jersey: Lawrence Erlbaum Associates.

Knowles M. 1984. The Adult Learner; A Neglected Species, s.l.: Gulf Publishing.

Liu, M. 2005. Motivating Students Through Problem-based Learning. s.l. s.n.

Luckin, R. 2010. Re-Designing Learning Contexts: Technology-Rich, Learner-Centred Ecologies (Foundations and Futures of Education). Oxon: Routledge.

S12763849 10 Richard Wilkinson

Mayo, G. E. 2004. The Hawthorne Experiments [online]. Available at: http://www.accel-team.com/motivation/hawthorne_02.html [accessed on 25/01/2013].

McGregor, D. 1987. The Human Side of Enterprise, Harmondsworth: Penguin.

Moos, D & Honkopp, B. 2011. Adventure Learning; Motivating Students in a Minnesota Middle School. Journal of Research on Technology in Education: Spring 2011: Vol 43, No 3, p231-252.

Norman, D & Spohrer, J. n.d. Learner-Centred Educations. Apple Computer Inc. s.l. s.n.

Petty G. 1998. Teaching today, A Practical Guide, s.l.: Nelson Thornes Ltd.

Reece I & Walker S. 2003. Teaching, Training & Learning, A Practical Guide. s.l.: Business Education Publishers Ltd.

Rebolledo-Mendez, G.; de Freitas, Sara; Rojano-Caceres, J.R.; Garcia-Gaona, A.R. 2010. An empirical examination of the relation between attention and motivation in computer-based education: a modelling approach. s.l. s.n.

Selwyn, N. 2011. Education and Technology: Key Issues and Debates. London: Continuum.

Sharpe, R. 2010. Rethinking Learning for a Digital Age: How Learners are Shaping their Own Experiences. Oxon: Routledge.

Visser, L, Plomp, T, Amirault, R & Kuiper, W. n.d. Motivating Students At A Distance: The Case Of An International Audience. s.l. s.n.

S12763849 11 Richard Wilkinson

Webster, J & Hackley, P. Teaching Effectiveness in Technology-Mediated Distance Learning. 1997. Academy of Management Journal, Vol 40, No 6. 1282-1309. Available at: http://amj.aom.org/content/40/6/1282 [accessed on 25/01/2013].

Webster, J & Hackley, P. Teaching Effectiveness in Technology-Mediated Distance Learning. 1997. Academy of Management Journal, Vol 40, No 6. 1282-1309. Available at:

http://www.jstor.org/discover/10.2307/257034?uid=3738032&uid=2&uid=4&sid=21101578436743 [accessed on 14/12/2012].

Wilson, L and Corpus, D. 2001. The Effects of Reward Systems on Academic Performance, Middle School Journal Research Articles. s.l. s.n.

Winn, W. 2002. Current Trends in Educational Technology Research: The Study of Learning Environments. Educational Psychology Review, Vol 14. No3. p331-351

Appendices

Appendices will contain collated primary research data.