

Impact of technology on higher education

Technology



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Abstract

Powerful economic, technical and social trends facilitated by the advent of the internet are revolutionizing traditional concepts of business, economics, education and learning (Feuer, Towne & Shavelson, 2002). The effects are more profound on higher education. This proposal seeks to examine the impact of technology in higher education in the UK. The research will employ a quantitative approach to data collection and analysis. The use of surveys will be utilized by the researcher. The study will be based on a survey of higher education institutions in the UK, drawn from HEIDI database.

Conclusion will be drawn based on the findings obtained

1. Introduction

1. 1 Introduction to the study

The widespread use of technology is changing the social, political, economic and cultural fabric of life. Technological innovation, long a hallmark of academic research, is now impacting on the process of teaching and learning in higher education. Once the domain of ground based classrooms is now occurring on-demand, synchronously or asynchronously around the globe. This can be seen in Warwick Business School (WBS), which has seen its annual intake grow a third since 2008 partly because of the rising interest from developing countries which value British Education and also due to a growing recognition that quality MBAs can be obtained through distance learning format (Kovel-Jarboe, 2010).

Education is now possible through electronic sources using outreach and in-house programmatic learning (Anderson & Dexter, 2005). The factual

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learning that once characterized post-grad professions such as engineering, law, medicine and business is now better taught by well-developed electronic programs. Sophisticated learning-management systems, distance education and the opportunity to collaborate with major research partners globally are some of the transformational benefits that Universities are currently embracing (Slavin, 2002). Undoubtedly, technology is changing the curricula and spawning rich forms of online research and collaboration (Anderson & Dexter, 2005).

1. 2 Problem statement

There is a growing consensus that higher education institutions in UK need reforms so as to meet the challenges of the knowledge society and its citizens. As part of an ongoing examination, the impact of technology on teaching and learning in higher institutions is under scrutiny. This proposal thus seeks to examine the impact of technology on higher education, in particular the use of technology as a learning enabler in higher institutions in UK.

1. 3 Research Objectives

The primary goal of this analysis is to answer the following question: what are the impacts of technology on learning in higher education. As a result the following are the research objectives:

Ascertain the various approaches through which technology has been integrated into learning in higher education

Examine to what extent technology has been used as a learning enabler in higher education institutions in UK.

To infer the correlation between technology effect on higher education and the overall performance of these institutions.

2. Literature review

Two major themes dominate existing literature regarding the impact of technology on teaching and learning in higher institutions. Firstly, an increased awareness on the changes occurring within the traditional education system. Secondly, recognizing the need for efficient management of these changes.

2. 1 Literature review summary

According to Foster et al (1999), the prime motivator for the integration of technology in higher education institutions is mainly the “ external forces”. These forces have the power to influence institutional decisions. Edwards (1997), whilst recognizing that change is inherent in many areas of the society, identified the library and information services as the most prone area to change due to technological advancement

Carlson (2000) cited the issue of integration of technology with instruction as the major challenge facing higher educations. Carlson (2000) stated further that academe was lagging behind the society at large in the application of some of the technology trends like personal digital assistant devices which higher institutions have not been able to integrate into their networks. He also identified e-commerce services as another area in which the academe was lagging behind the private sector in its use and application.

Ehrmann (1999) described three main revolutions that had occurred in education. He identified the third revolution as the technology revolution
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which was made possible by computing, video and telecommunication. This brought about more learners and inevitably changed the way in which higher education delivers its services.

Levine (2000) identified new technologies as the major driving force to the changes in university and college systems. Other forces cited in his article include: entrance of commercial organizations in higher education, shifting demographics, move from industrial to information society and the changing relationships between higher institutions and federal and state government.

Dickey (2005) conducted case studies of educational institutions. In one of the studies, Dickey (2005) used the Active World environment in an undergraduate business-computing course. While in another similar study, he used an object modeling course. From these case studies, Dickey (2005) concluded that the use of new technologies such as Virtual reality, social media, gaming and mobile devices presented with it various opportunities including self-defining the learning context, promoting collaborative and cooperative learning, and creating interactive experience with models or materials that may not be replicable in a traditional classroom. From what can be discerned, most existing literature emphasizes the imperative need of developing ICT in higher education.

2.3 Research question

As a result, this analysis has been inclined to answer the following two research questions:

What are the impacts of technology on higher education in the UK

To what extent has technology been used as a learning enabler in higher

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education institutions in UK

3. Research methodology

3. 1 Research philosophy

A research philosophy is a belief about the way data concerning a particular phenomenon should be collected and analyzed (Saunders et al, 2009). In order to understand and interpret the impact of technology on higher education institutions in UK, we certainly need ways to viewing it. The philosophical perspective that is to be deployed to inform the research approach in this analysis is the positivism philosophy.

3. 2 Research approaches

Two major paradigms are often employed in research analysis namely: quantitative and qualitative. The quantitative approach is a formal, objective and systematic process that utilizes numerical data in obtaining information. Generalizability, objectivity and numbers are features that are often associated with quantitative approaches. On the other hand, qualitative methodologies are of the view that the world is holistic and that there is not a single reality.

3. 3 Research strategy

In selecting the research strategy for this analysis, the nature of the perceived connection between the theory and research question, as well as the philosophical perspective will be influential as both the qualitative and quantitative research strategies differ greatly in this respect. Quantitative approach originates from a positivist perspective that holds that objective knowledge can be derived from direct observations or experience.

Whereas qualitative approach stems from the interpretivist philosophical perspective which is concerned with understanding and interpreting phenomena through meanings which people attach to them. Quantitative strategy will be chosen over qualitative strategy due to reliability, generalizability and the fact that quantitative results are often more accurate and perhaps more representative. The use of survey and a focus group will be employed by the researcher.

3. 4 Data collection

Data for this study will be based on a survey of higher education institutions drawn from HEIDI database. HEIDI comprises of an online database containing statistics on all higher education institutions in the UK. This database enables comparison of data for higher education institutions in the UK by allowing the researcher access to data on National student survey, UCAS data, Admission data, Universities UK pattern data, and HESA performance indicators data among others.

3. 5 Data analysis.

There is evidence of allocation of central resources to support activities that focus on aspects of teaching and learning which yield significant impacts in terms of improving access, effectiveness of teaching, and widening participation (Anderson & Dexter, 2005). Therefore, a strong emphasis on the development of new ICT related pedagogy and E-learning fueled by technological advancement is a big step of the universities in enforcing the professionalism.

3. 6 Reliability, validity & Generalizability

A survey generally gathers data at a particular point in time so as to establish the relationship that exists between events (Dillman, 1978). The importance of survey lies in its appeal to universality and its ability to establish a degree of confidence from a set of findings (Hutchinson, 2004). Its popularity is due in large to its utility on countless research situations.

However, the use of survey as a research instrument has been criticized with some researchers citing potential difficulties of survey administration.

Nevertheless, this study will adopt survey method as a tool for collecting its data. In order to improve on the content validity, the survey will be designed, formulated and implemented in a manner that follows recommendations from various authors. In particular, the recommendations on survey piloting, layout and questionnaire design by Churchill (1991), Dillman (1978) and Conant et al (1990) will be adopted.

3. 7 Ethical issues

The proliferation of technology in higher institutions is more likely to bring with certain ethical issues that need to be addressed. One of the scariest ethical issues is that technology allows ISPs to voluntarily disclose content and other information in situations deemed to be of emergency. Another anticipated ethical issue is that technology may open doors for law enforcement agencies to secretly install softwares via Trojan horse emails. These are but some of the ethical issues that may arise.

3. 8 Research limitations

Some of the limitations that might be encountered by the researcher are discussed in this section. There is no correct research method for determining what delivery method leads to one student becoming more engaged than another. Statistics alone do not reveal why one student prefers taking a fully online program while another prefers taking a ground class. Also the research will be limited to institutions within the UK.

4. Conclusion

With the above taken into account, it can be concluded that this research proposal is of paramount importance. This research will contribute to the profound analysis on the impact of technology on higher education in UK. Conclusion will be drawn based on the findings obtained from the study.

5. Time scale

Stages (Months)

6. Reference

Anderson, R. E., & Dexter, S. (2005), School technology leadership: An empirical investigation

of prevalence and effect, *Educational Administration Quarterly*, 41(1), 49-82.

Carlson, S. (2000), Campus survey finds that adding technology to teaching is a top

Issue, *The Chronicle of Higher Education*, p A46.

<https://assignbuster.com/impact-of-technology-on-higher-education/>

Churchill. G. A (1991), Marketing research: Methodological foundations, London, The Dryden press

Conant. J. S, Mokwa. M. P, Varadarajan. P. R & Cooke. R. A (1990), strategic types, distinctive marketing competencies and organizational performance: A multiple measures study, Strategic management journal, vol 11, pp. 365-383

Dickey. M. D. (2005), Brave New (Interactive) Worlds: A Review of the Design Affordances and Constraints of Two 3D Virtual Worlds as Interactive Learning Environments, Interactive Learning Environments, 13(1-2), 121-137.

Dillman (1978), Mail and telephone surveys: The total design method, New York, Wiley publishers

Edwards, C. (1997), Change and Uncertainty in Academic Libraries, Ariadne, Available URL: <http://www.ariadne.ac.uk/issue11/main/>

Bull, J. & Zakrzewski, S. (1997), Implementing Learning Technologies: A University -Wide

Approach, Active Learning. No. 6

Ehrmann, S. C. (1999), Technology's grand challenges in academe, Bulletin of the

American Association of University Professors, pp. 42-46.

Feuer, M., Towne, L., & Shavelson, R. (2002), Scientific culture and educational research.

<https://assignbuster.com/impact-of-technology-on-higher-education/>

Educational Researcher, 31(8), 4-14.

Foster, J, Bowskill, N, Lally, V, McConnell, D (1999), Preparing for networked collaborative learning: an institutional view, European Conference on Educational Research, Lahti, Finland, 22-25 September 1999. Available at: <http://www.leeds.ac.uk/educol/>

Hutchinson (2004), Effects of supervisory behavior: The role of individual differences among sales people, Journal of Marketing, vol 53, pp. 40-50

Kovel-Jarboe, P. (2010), The Changing Contexts of Higher Education and Four Possible Futures for Distance Education: Issues Challenging Education, University of Minnesota. Available URL:

<http://horizon.unc.edu/projects/issues/papers/kovel.asp>

Levine, A. E. (2000), The future of colleges: 9 inevitable changes, The Chronicle of Higher Education, pp. B10-B11.

Slavin. R. (2002), Evidence-based education policies: Transforming educational practice and research. Educational Researcher, 31(7), 15-21.

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