

USING A TECHNO-SCEPTICISM FRAMEWORK TO EVALUATE THE PERCEPTION AND ACCEPTANCE OF A NEW ONLINE READING LIST

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ABSTRACT

There has been an exponential growth of e-learning in the UK Higher Education. However, there is a growing opinion that e-learning practitioners are not critical enough and that they should adopt a more techno-negative or techno-scepticism approach when implementing new e-learning tools.

In this paper we use a techno-scepticism framework to assess the evaluation of a newly implemented online reading list at our UK Higher Education Institution. In particular, we look at the 'The Myths about E-Learning in Higher Education' proposed by Njenga and Fourie (2010).

We present qualitative and quantitative evaluation data collected from the focus groups which shows that the students have a very positive perception of this newly implemented online reading list and believe that it will improve their academic experience. Furthermore, as the student focus groups also produced rich data which deal with the students' experience of e-learning in general, five of the myths of e-learning that relates to the student experience are used to framework these discussions.

KEYWORDS

e-Learning, Online Reading List; Student Experience; Evaluation; Techno-scepticism

1. INTRODUCTION

There has been an exponential growth of e-learning in the UK Higher Education (JISC, 2004; Bostock, 2007; HEA, 2009; HEFCE, 2009, UCISA, 2012) and Worldwide (Educause, 2012). For example, the Virtual Learning Environment (VLE) has become an integral part of the student experience of Higher Education (HRC, 2009; NUS, 2011; Quinsee & Bullimore, 2011, UCISA, 2012). This is not by accident; across the sector e-Learning has had a significant impact on Higher Education's economical and social dimensions and most importantly the pedagogical dimension (Chang & Tung, 2008; Hartley et al, 2011; Barber et al, 2013; Stubbs, 2013). As such there exist a number of organizations both nationally (Association for Learning Technology and Jisc); and internationally (International Association for Development of the Information Society IADIS) that promote technology in education.

Our higher education institution is currently going through significant change. At the institution, e-learning is playing a bigger role in improving the student experience (Quinsee & Bullimore, 2011). Parallel to this continuous investment in learning technologies, the Library is currently implementing a new 'online reading list'.

It is recognised by educationalists that reading lists are an integral part of a student's higher education academic experience (Stokes & Martin, 2008; Bartlett, 2010; Piscioneri & Hlavac, 2012). Reading lists are study tools comprised of lists of books, articles, journals, websites and other resources that students should read and refer to as part of their course, and are generally split into sections based on either their importance to the course, by subject, by time period (e.g. weekly readings), or a combination of all three.

Reading lists are therefore used by academics to communicate vital information about reading for their modules to their students and to other stakeholders; for instance, at our University, reading list's key stakeholders are students, academics, school administrative staff and library staff, particularly Subject Librarians, who are responsible for liaising with and building collections for specific schools and departments.

However, students are the primary stakeholders because reading list plays an important role in their academic experience at higher education. Considering the rapid change in the UK higher education sector, the student experience has never been more important. As such, any technology that attempts to facilitate this academic experience should be considered as an e-learning tool. This understanding is in line with UCISA's (2012) definition of Technology Enabled Learning:

“Any online facility or system that directly supports learning and teaching” (page 2)

Our new online reading list (branded Reading List Online or RLO in short), powered by Talis Aspire, allows academics and the library to manage academic reading lists online. The fundamental aspect of the tool is that it is online; meaning that students can access their module/ course reading lists anytime from anywhere. This cloud storage also means that Talis Aspire can create a community of reading lists across different institution so that students have access to reading lists beyond their particular institution. It is important to note that although, this tool has the potential to be ‘social’, it is *not* a social media tool at present.

Although there is an increasing number of UK universities that have adopted an online reading list with the purpose of improve the student experience (Talis Aspire, 2013), there is a growing opinion that e-learning practitioners are not critical enough when implementing new e-learning technologies. It is suggested that we should adopt a more ‘techno-negative’ or ‘techno-scepticism’ approach when implementing new e-learning tools. In particular, Njenga and Fourie (2010) argue that we should have a more critical and informative discussion on e-learning adoption in higher education.

As such, the focus of this paper is a case study of the implementation and evaluation of a new online reading list. The data is used to first present the students perceptions and acceptance of the technology and then textual analysis is applied to assesses five of ‘The Myths about E-Learning in Higher Education’ proposed by Njenga and Fourie (2010).

2. BODY OF PAPER

2.1 Myths of e-learning

Njenga and Fourie's (2010) opinion is also voiced by Kinchin (2012) who calls for ‘avoiding technology-enhanced non-learning’; pointing out that although the students academic experience should be the primary motivation for the implementation of a new e-learning tool, this is not always the case. e-Learning practitioners are themselves aware of this dilemma (Psocka, 2013), with Comrie (2013) recently asking: “So, how do we ensure learning exploits technology and not vice versa?”

In particular, Njenga and Fourie (2010) propose that there are ten prevailing myths about e-learning in higher education. A myth is defined as ‘an idea or story that is believed by many people but that is not true’ (Merriam-Webster, 2013). These myths are:

1. e-Learning is a saviour; its redemptive power is overreaching and every educational institution should adopt it
2. e-Learning can replace human interaction
3. e-Learning cuts the cost of education, for instance, e-learning courses are cheaper to deliver than the traditional face-to-face or distance learning
4. Providing numerous courses and an abundance of information is beneficial and can enhance learning
5. ICTs should become the primary medium of learning in higher education
6. Leisure (including playing and entertaining) and learning are separate activities

7. e-Learning will make HEIs more competitive and they must seize it or be declared institutionally redundant
8. Establishing the infrastructure (hardware and software) in e-learning is the most difficult part
9. e-Learning will see the demise of traditional campuses
10. e-Learning can decrease absenteeism and lower dropout rates among students

According to the authors, these myths are promoted by technopositivist but are not true to reality. They define 'technopositivists' as those people that repeatedly create and propagate a 'compulsory enthusiasm' about e-learning in higher education for personal motives and without exploring the dangers and rewards of an e-learning tool for teaching and learning.

The focus of our evaluation was the student experience of the new online reading list. More specifically, the aims of the evaluation were to:

- Discover if RLO is an useful and effective education tool for our students;
- Measure and predict students acceptance of RLO
- Understand how our students interact with their traditional paper based reading lists and significantly how this academic experience can be improved with RLO;
- Find out how our students interact with the library in order to obtain items from their reading lists and how the Library Services can improve this process;
- Gain access to insight that could be translated to tangible communication strategies to support the successful implementation of the software across the University.

We use five of the myths proposed about e-learning to assess the experience of our students. These five myths about e-learning and the student experience (Myths 2,4,5, 6 & 9) are first identified and we assess how they relate to the perceptions of our student data. We believe that by assessing the data through the myths, we can assess whether the myth is true in the case of our techno-sceptic approach. The remaining five myths (Myths 1,3,7,8, & 10) relate to the macro issues of e-learning in higher education and as this goes beyond our evaluation data, we do not assess these myths.

2.2 Online Reading List

The Library at our institution decided to implement an online reading list. RLO was made available to students in September 2012. The first year of the implementation is being referred to as a 'soft launch' where the system is made available to students at a 'beta' stage. At this stage traditional paper reading lists are being added to the 'cloud' continuously, until all reading lists from across the University are accessible to students. Wherever a lecturer has decided to use RLO, they inform their students of its availability. The students are either given a link to the open online reading list or the reading list is made available in the VLE as a 'Moodle Block'. Alternatively the students can search for their relevant module via the home page (<http://readinglists.city.ac.uk/index.html>)

From a Library perspective, online reading lists can be considered as a learning resource management and as a delivery tool as reading lists are a crucial stepping stone between the classroom and students' independent learning (Chad, 2012); harnessing new technology to support efficient and effective use of reading lists will help students to develop the information literacy skills needed to become competent library users and confident learners (Farmer, Maclean & Corms, 2012; Stokes & Martin, 2008). Furthermore, McCormick (2006) points out that reading lists produced by academics for teaching purposes are a valuable academic tool for different purposes, including: they are a lecturer teaching resource, a student learning resource and for librarians, a resource selection tool.

In addition, Piscioneri & Hlavac (2012) propose that issues related to students reading lists at higher education can be approached from at least three angles: skill development framework, such as useful reading strategies (e.g. skim reading), curriculum development perspective, such as looking at the design aspects of the reading list, and pedagogical perspective, which focuses on reading lists as a tool to improve the student education experience.

Taking into account all the student's perception of reading lists, a thematic analysis shows that our students do very much agree that reading lists are part of their academic experience in higher education. The students' definitions of reading list can be stated as follows:

"A recent and comprehensive composition of the most up to date sources as chosen by academics and given to students in a compact form, which acts as a beneficial and important precursor to the students education experience".

Part of the implementation strategy was to evaluate the technology; in particular, we were interested in understanding how this e-learning tool affects the student experience. Due to the changeable nature of the software, it was recognised that student feedback would support the further development of this e-learning tool.

2.3 Methodology

Twenty-one students participated across three focus groups with each focus group lasting approximately two hours. In order to encourage a high participation rate, students from across the University were invited to participate via Unitemps and they were paid for their time. The students (twelve females and nine males) were from a range of study disciplines, consisting of undergraduates, postgraduates (both Masters and PhD), and recent graduates, with all current students being full time. This method is an example of opportunistic sampling: the number of students participating from programmes varied depending on the level of interest from the particular individual that accessed Unitemps job website.

At the broadest level, focus groups are collective conversations or group interviews. Focus groups offer unique insights into the possibilities of critical inquiry as a deliberate, dialogical and democratic practice (Kamberelis & Dimitriadis, 2005). Focus groups have a number of advantages (Farnsworth & Boon, 2010) but we felt the most important advantage in using focus group was that the students discussed the topic of reading lists whilst being part of a group dynamic; participant interaction allowed students to share held truths whilst also co-constructing meaning (Belzile & Oberg, 2012).

There has been a considerable expansion of the use of focus groups as a method of data collection in social science research over the last decade (Peek & Fothergill, 2009). As such, for our purpose, we created an atmosphere that encourages spontaneous contribution by a) setting the scene through a number of premeditated considerations, such as layout of the room and creating informality and b) using space and time more flexibly, such as having group activities and providing refreshments (Morgan et al, 2002).

Each focus group was divided into three parts: in part one, discussions among students were facilitated to gather verbal evidence of students' perceptions about their experiences of reading lists and how they interacted with them in academic and social environments for their higher education degree. In part two, the students were shown a demonstration of RLO then asked to discuss their initial reactions to the online tool and how it could change their student experience. At the end of the focus groups, the students were asked complete an adopted version of the PUEU questionnaire (Perceived Usefulness and Perceived Ease of Use) (Davis, 1989).

Davies (1989) proposed that there are two key determinants of user acceptance: 'Perceived Usefulness' and 'Perceived Ease of Use'. He showed that these two factors could be measured through a reliable and valid questionnaire, the PUEU. Since then user acceptance of technology has been a critical part of the Technology Acceptance Model (Chuttur, 2009). The original questionnaire was adopted to reflect the RLO and higher educational context.

2.4 Qualitative Data: Perception of New Learning Technology

The students were overwhelmingly positive about RLO; once they were shown a demonstration of the online tool and had the chance to ask questions, they were in consensus that RLO will have a positive impact on their academic experience.

"Most of the problems are solved with this system. Like 90% of the problems you face when you have to find a book" (Focus Group 3 student)

A recent graduate from the University summaries his impressions by saying:

“I wish I’d had something like this when I did my Masters” (Focus Group 2 student) whilst another graduate stated that: "this whole system would have been a Godsend if I'd had it..." (Focus Group 3 student)

The students also gave specific reasons as to why they thought that this e-learning tool can improve their academic experience. By far the most important reason was the look and feel of the system. They stated that based on their past experience of traditional paper based reading lists, they find the RLO to be:

- Systematic: a tool that saves time, and increases accuracy of finding books. In particular, the students were very much aware that the RLO reducing the steps to accessing resources
- Efficient: the students recognised that the tool will decrease error of finding the correct materials as the students click directly to reading list material rather than having to type the information.
- Immediate: the list can be edited at any time by the lecturer and the changes would be visible by the students immediately.
- Accessible: the tool is online so it can be accessed at anytime from anywhere

Moreover, the students expressed that there are specific functions of the RLO that will improve their student experience. These include:

- The interface was perceived to be simple and easy to use
- The ability to export RIS files for use with referencing tools
- RSS feeds that inform students when a new resource has been added to their module reading list by the academic
- The ability to annotate reading list and save these annotations for later viewing
- Interlink with other e-learning tools, such Moodle
- External links to buy the books from online stores such as Amazon and Google Books

Notably, when discussing the multifunction of RLO, a student said that "that's so much more than I was expecting to be honest" (Focus Group 2 student).

Furthermore, the students were explicit that this tool will increase their engagement with their academic readings. The positive perception and evident ease of use, led to many of the students stating that the productivity of the tool will motivate them to read and access more reading list material given by their lecturers. One student summarised this feeling by saying:

“Yeah it kind of gives you more edge to it, you know motivation to actually read ... then when we’ve done all this work in one you just go click click and find out something more about it” (Focus Group 2 student). Whilst another student agreed that “you’ve put all that there and it’s so much easier just clicking on the link, getting the book, it’s like in terms of what I work through and efficient would have been just much more higher if we had something like that a few years ago” (Focus Group 2 student).

Finally, we also asked the students to describe how they feel about RLO in one word. The students used the following terms to describe their perception:

Table 1. Summary of one word description students used for RLO

One Word Description
Useful
Time-saver
Streamlined
Important
Efficient
Helpful
Quick
Magic
Easy

2.5 Quantitative Data: Acceptance of New Learning Technology

In addition to the qualitative data, statistical analysis shows that the twenty one students that were shown a demonstration of RLO perceive the RLO as both useful and easy to use and their results indicate that they accept the RLO as an information technology that will support their academic experience. As shown above, user acceptance of information technology is important to the adoption of the RLO and scores from the PUEU could be used to predict how likely these students are to accept the RLO as part of their studies. The mean scores for each item are shown below:

Table 2. Mean Score for each PUEU item

Mean PUEU Scores for each item		
	N	Mean
Using the Reading List Online in my studies would enable me to accomplish tasks more quickly	21	6.48
Using the Reading List Online would improve my academic performance	21	5.43
Using the Reading List Online in my studies would increase my productivity	21	6.10
Using the Reading List Online would enhance my effectiveness in my studies	21	5.86
Using the Reading List Online would make it easier to do my studies	21	6.24
I would find the Reading List Online useful in my studies	21	6.14
Learning to operate the Reading List Online would be easy for me	21	6.38
I would find it easy to get the Reading List Online to do what I want it to do	21	5.95
My interaction with the Reading List Online would be clear and understandable	21	6.05
I would find the Reading List Online to be flexible to interact with	21	6.00
It would be easy for me to become skillful at using the Reading List Online	21	6.38
I would find the Reading List Online easy to use	21	6.38

Measurement of perceived usefulness explores the tendency of individuals to use a particular system or a product, that is, the extent to which they believe it will help and enhance their academic performance (Adams & McNab, 2012). PUEU is a 12 item five-point Likert scale structured questionnaire. Responses to the statements were coded into 7 point scale, where one indicated unlikely and 7 likely. The higher the score in each individual scaled item would indicate more likeliness to agree with the statement. The mean scores from across the sample was be used to ascertain how likely the students are to accepting the RLO as part of their academic experience.

As can be observed, the highest agreement was with the statement: “Using the Reading List Online in my studies would enable me to accomplish tasks more quickly” with the students scoring the RLO 6.48 out of 7.

Although all the statements were scored high (above 5), the statement that the students least agreed with about this e-learning tool was: “Using the Reading List Online would improve my academic performance” with a mean score of only 5.43.

Furthermore, non-parametric statistical correlation of the two construct show that there was a significant positive relationship between the ‘Perceived Usefulness’ and ‘Perceived Ease of Use’, $r = .43$, p (one tailed) < 0.05 .

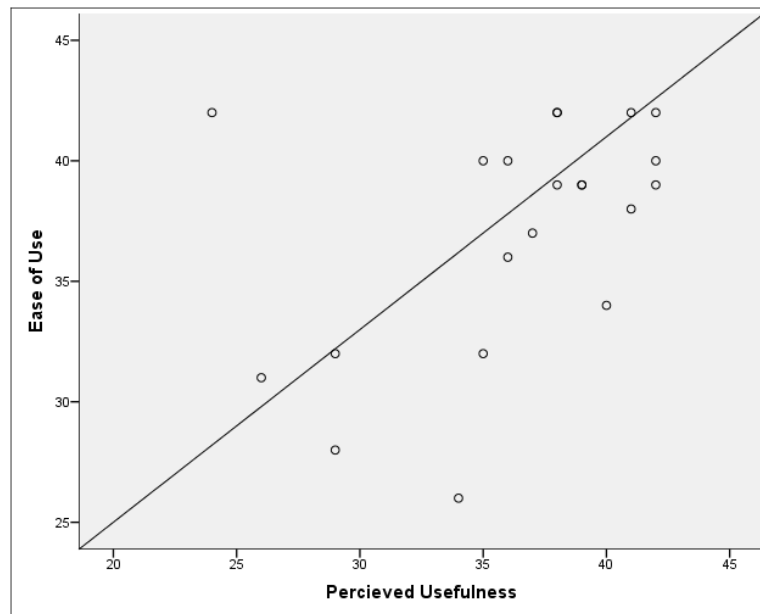


Figure 1. Scatter diagram showing the individual scores of each participants in PU and EUv

Table 3. Pearson's correlation for PUEU

Positive Correlation between Perceived Usefulness & Perceived Ease of Use			
		Perceived Usefulness	Ease of Use
Perceived Usefulness	Pearson Correlation	1	.464*
Ease of Use	Pearson Correlation	.464*	1

*. Correlation is significant at the 0.05 level (1-tailed).

Overall, the above quantitative data shows that the students perceive the RLO to be both useful and easy to use. Furthermore, the positive correlation between the two constructs indicates that these students are likely to accept the RLO as a technology that will support their academic experience at this higher education institution.

2.6 Applying a Techno-Sceptic Framework

Despite the overwhelming positive reaction to RLO, the students showed a great level of gravitas and realism when discussing the RLO as a replacement of traditional paper reading lists. In particular they shared their opinion on the wider implications of this online tool and their experience as students.

Of the ten myths of e-learning in higher education presented by Njenga and Fourie, five relate to the student experience. These myths relate to the student experience as they are about the pedagogy of e-learning and the impact it has on the students' relationship with the academia. These are:

Myth 2: e-Learning can replace human interaction

Myth 4: Providing numerous courses and an abundance of information is beneficial and can enhance learning

Myth 5: ICTs should become the primary medium of learning in higher education

Myth 6: Leisure (including playing and entertaining) and learning are separate activities.

Myth 9: e-Learning will see the demise of traditional campuses

From these myths, all but myth 6 deal with similar premises: Njenga and Fourie (2010) point out, technology is just one medium, a means to achieve something and not an end in itself. According to the authors, all four of these statements are fallacies that assume that e-learning can replace human interaction. As much as technology is important and it has become abundant in higher education, it is a myth that it can become the primary medium of learning in higher education and gradually lead to the demise of traditional campuses.

This techno-scepticism makes a particular note that just because more students can be taught at the same time does not mean human interaction can be replaced. They believe that this myth is perpetuated by the constructivist notion of transferring the responsibility of learning to the learners.

Our evaluation data would suggest that it is indeed the case that students are completely opposed to the notion of decreasing human interaction with the academics. They believe that human interaction is required for meaningful student learning to take place. In particular, the students' opinions about this e-learning tool were:

- it should enhance face to face learning, not aim to replace it;
- it has limitations, which should be constantly improved;
- it is only as good as the institution and academics makes it;
- this online reading list can play an important role in improving the students' experience.

These four myths also relates to a more popular myth of the 'Digital Natives'. The digital native theory (Prensky, 2001), states that students entering higher education today are all "native speakers" of the digital language of computers, videogames and the Internet. However, this notion has been criticised (Brown & Czerniewicz, 2010) as being just a myth. Based on our student data, we would also make a similar conclusion as students had strong preference for print format material. In fact when asked for their recommendations for improving the RLO, a prominent answer across the three focus groups were in regards to improving the printing function of the reading lists.

"It's more a question, but can you print the reading list easily?...That's good [that RLO allows for printing of reading lists], just because sometimes online things are really unfriendly to print so if you want to put it in your folder with your module so you can tick bits off you can't" (Focus group 1 student).

It becomes clear that the concept of digital native is a complex and contradictory. For example a number of students scan books and then print the scans rather than reading them online as pdfs. In conclusion, one student's quote summaries the general techno-scepticism trend across all focus groups:

"...in terms of reading lists I prefer to have the hard copy instead but [the RLO] would be more useful as it has more functions so I can easily have access to the books and resources...I can find it online, the consumer can buy it, see how much it costs and to see whether it is available in the library" (Focus group 2 student).

Myth 6 is that 'leisure and learning are separate activities'. According to the Njenga and Fourie, it is a myth that for the students, leisure and learning activities are separate. They argue that in fact these two are not separate, especially in the application of e-learning and that academics will have to adopt technology to meet the students' needs.

The discourse among our student sample was that although it is true that technology is pervasive in all our lives, they still make a clear distinction between technology for leisure and technology for learning. Our students were clear that they did actually differentiate between leisure and learning activities and as such they differentiate between the technologies that assist in them. The following discussion between the students in focus group 1 is particularly revealing:

Student 3:	I think the problem with that is it's not adapted for study yet, because the whole problem with e-reading and studying, it hasn't taken off and it probably won't for awhile until they have the capability for people to start writing and highlighting.... Students aren't really taking to it. A lot of people, when they get a PDF they'll print it out.
Student 4:	Some people find it really hard to do it on a computer, reading it from ...
Student 5:	It's just not the same.
Student 2:	It's really difficult to study on the computer. Right now I'm doing an analysis of the Leveson Inquiry so I have to go through the whole transcript...Now, when I close my eyes I'm just seeing transcripts in my head. It really, really messes with your mind. That's why books are so essential. Actually picking up a hard text now is like a relief now for my brain. It's really, really, really difficult to study on the computer.
Researcher:	But as you said, it could be just that society hasn't reached that point.
Student 3:	I think in a few years we'll probably all be using e-readers to study.
Student 4:	Agreed. Not our generation.
Student 6:	Even if I equally use my i-pad for uni as much as I ... it's still not going to replace the fact that I need to replace the fact that I need to study with books.

This is particularly surprising as all our students were 'generation y', the exact group of people identified by Njenga and Fourie (2010) to be the group that do not distinguish between leisure and learning activities. They seem to fail to take into account the complex interaction of the students' active use of information as opposed to its passive consumption.

3. CONCLUSION

In September 2012 the Library launched a new Online Reading List. While having a 'soft launch' of the new software, we took the opportunity to investigate the views of students on how reading lists relate to their academic experience in higher education. In particular, we wanted to understand the perception of the students towards the new e-learning tool.

The results were clear; the students had a very positive reaction to the online reading list. Moreover, their results on the PUEU indicated that they accepted the technology as a tool that can improve their academic experience at the higher education level.

Harnessing new technology to support efficient and effective use of reading lists will help students to develop the information literacy skills needed to become competent library users and confident learners. As reading lists play a central part in higher education, student learning, information literacy skills development and academic achievement, understanding the experiences and perceptions of students using and learning from online reading lists warrants this investigation from e-learning practitioners, such as that by Franklin (2012).

Furthermore, discussions in the student focus groups went beyond just this technology and touched into epistemology of e-learning. These discussions were presented through a techno-scepticism lens, in particular, applying five of Njenga and Fourie's (2010) myths that relate to the student experience.

Our data indicates that the students have much more of a techno-scepticism perspective of e-learning than practitioners sometimes assume. The students made it very clear that although e-learning tools such as RLO have a number of advantages that improve their experience, it cannot replace human interaction of a campus based University. As Njenga and Fourie (2010: 207) point out: "Understanding the human complexities, both of the educator and learner, would therefore ensure more effective e-learning adoption, and will ensure that the difficulty of its use is reduced if not eliminated altogether."

This research demonstrates that when educational institutions step back and reflect on critical questions regarding the use of technology in higher education, the results may be surprising. There are a number of myths around e-learning in higher education and understanding the student perspective adds our philosophical positioning and practical decisions.

Finally, the authors acknowledge that there are a number limitations to the research, including: 1) background of the students were not random and does not represent all students experience; 2) small sample for the quantitative analysis; 3) the focus group and questionnaire observe only a snapshot of the immediate reaction on the acceptance and not their reaction of using the tool as part of their studies in the long term.

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REFERENCES

- Adams, J. & McNab, N., 2012. Understanding arts and humanities students' experiences of assessment and feedback. *Arts and Humanities in Higher Education*, 12(1), pp.36–52.
- Barber, M., Katelyn, D. & Saad, R., 2013. AN AVALANCHE IS COMING: Higher education and the revolution ahead. *Institute for Public Policy Research*. Available at: <http://www.ippr.org/publication/55/10432/an-avalanche-is-coming-higher-education-and-the-revolution-ahead>.
- Bartlett, S., 2010. Resource list management – a system-based approach. *CILIP*, (June), pp.1–2.
- Belzile, J. a. & Oberg, G., 2012. Where to begin? Grappling with how to use participant interaction in focus group design. *Qualitative Research*, 12(4), pp.459–472.
- Bostock, S., 2007. *e-Teaching: Engaging Learners Through Technology* 119th ed. SEDA, ed., SEDA Paper. Available at: <http://www.keele.org.uk/e-t/>
- Brown, C. & Czerniewicz, L., 2010. Debunking the “digital native”: beyond digital apartheid, towards digital democracy. *Journal of Computer Assisted Learning*, 26(5), pp.357–369.
- Chad, K., 2012a. “Change will be relentless ”. *Library Management Systems*, (September), pp.20–23. Available at: http://www.kenchadconsulting.com/wp-content/uploads/2012/10/LMS_Change_will_be_relentless_CILIPUpdate_Sept2012.pdf.
- Chad, K., 2012b. *The disruptive approach...No more library systems!*, pp.1-4. Available at: http://www.kenchadconsulting.com/wp-content/uploads/2012/08/Library_Systems_vision2020_Disruptive_Innovation_challenge_Jan2012.pdf
- Chang, S.C. & Tung, F.C., 2008. An empirical investigation of students' behavioural intentions to use the online learning course websites. *British Journal of Educational Technology*, 39(1)
- Cheng, B. et al., 2012. The effects of organizational learning environment factors on e-learning acceptance. *Computers & Education*, 58(3), pp.885–899.
- Chuttur, M., 2009. Overview of the Technology Acceptance Model: Origins , Developments and Future Directions. *Working Papers on Information Systems*, 9.
- Clegg, S. et al., 2010. British Journal of Sociology of Education The Emperor's New Clothes: Globalisation and e-learning in Higher Education The Emperor' s New Clothes: globalisation and e-learning in Higher Education. pp.37–41.
- Comrie, C., 2013. Technology in education–new battle lines. *Jisc Blog*. Available at: <http://www.jisc.ac.uk/blog/battle-lines>
- Davies, F., 1989. Perceived Usefulness, Perceived Ease Of Use, And User Acceptance of Information Technology. *MIS Quartely*, 13(3).
- EDUCAUSE, 2012. *Game Changer: Education and Information Technologies* D. Oblinger, ed., EDUCAUSE.
- Fagan, M., Kilmon, C. & Pandey, V., 2012. Exploring the adoption of a virtual reality simulation: The role of perceived ease of use, perceived usefulness and personal innovativeness. *Campus-Wide Information Systems*, 29(2), pp.117–127.
- Farmer, V., MacLean, C. & Corns, I., 2012. “How can reading lists be effective information literacy tools?”: paper presented at LILAC 2012. *SlideShare*. Available at: http://www.slideshare.net/infolit_group/lilac-presentations-rgu-talis1
- Farnsworth, J. & Boon, B., 2010. Analysing group dynamics within the focus group. *Qualitative Research*, 10(5), pp.605–624.
- Franklin, G., 2012. *Staff Survey on Academic Reading*, Available at: http://www.lboro.ac.uk/media/www/lboroacuk/content/library/downloads/projects/StaffReadingSurvey_Report_Marc_h2012.pdf
- Guskey, T.R., 2010. Teachers and Teaching: Theory and Practice Teacher Change Professional Development and Teacher Change. pp.37–41.
- Hartley, P. et al. eds., 2011. *Learning Development in Higher Education (Universities into the 21st Century)*, Palgrave Macmillan.

- HEA, 2009. *Transforming Higher Education through technology enhanced learning*. T. Mayes et al., eds., Available at: <http://www.heacademy.ac.uk/assets/documents/learningandtech/transforming.pdf>
- HEFCE, 2009. *Enhancing learning and teaching through the use of technology: A revised approach to HEFCE's strategy for e-learning*. Available at: http://www.hefce.ac.uk/media/hefce1/pubs/hefce/2009/0912/09_12.pdf
- HRC, 2009. *Strategic Learning Environment Configurations in the Higher Education Sector in the UK and the US*. Available at: http://www.planning.salford.ac.uk/_data/assets/pdf_file/0006/20769/Strategic-Learning-Environment-Configurations-in-the-Higher-Education-Sector-Membership.pdf
- JISC, 2004. *Effective Practice with e-Learning: A good practice guide in designing for learning*. Available at: <http://www.jisc.ac.uk/media/documents/publications/effectivepracticelearning.pdf>
- Jones, N. & Lau, A.M.S., 2010. Blending learning: widening participation in higher education. *Innovations in Education and Teaching International*, 47(4), pp.405–416.
- Kamberelis, G. & Dimitriadis, G., 2005. Focus Groups: Strategic Articulations of Pedagogy, Politics, and Inquiry. In N. Denzin & Y. Lincoln, eds. *The Sage Handbook of Qualitative Research*. London: Sage.
- Kim, H.-J., Mannino, M. & Nieschwietz, R.J., 2009. Information technology acceptance in the internal audit profession: Impact of technology features and complexity. *International Journal of Accounting Information Systems*, 10(4), pp.214–228.
- Kinchin, I., 2012. Avoiding technology-enhanced non-learning. *British Journal of Educational Technology*, 43(2), pp.E43–E48.
- Mccormick, K., 2006. *Exploring the Value of Reading Lists to Academic Communities: an analysis of potential and perceived value to partners in reading list provision*. Available at: <https://dspace.lboro.ac.uk/dspace-jspui/handle/2134/2228>
- Merriam-Webster, Definition of “Myth”. Available at: <http://www.learnersdictionary.com/search/myth>
- Morgan, M. et al., 2002. Hearing children’s voices: methodological issues in conducting focus groups with children aged 7-11 years. *Qualitative Research*, 2(1), pp.5–20.
- Njenga, J.K. & Fourie, L.C.H., 2010. The myths about e-learning in higher education. *British Journal of Educational Technology*, 41(2), pp.199–212.
- NUS, 2011. NUS Charter on Technology in Higher Education. , p.1. Available at: <http://www.nusconnect.org.uk/news/article/6010/2489/>
- Peek, L. & Fothergill, a., 2009. Using focus groups: lessons from studying day-care centres, 9/11, and Hurricane Katrina. *Qualitative Research*, 9(1), pp.31–59.
- Piscioneri, M. & Hlavac, J., 2012. The minimalist reading model: Rethinking reading lists in arts and education subjects. *Arts and Humanities in Higher Education*.
- Prensky, M., 2001. Digital Natives, Digital Immigrants Part 1. *On the Horizon*, 9(5), pp.1–6.
- Psotka, J., 2013. How do lectures stand up against interactive learning environments? *Interactive Learning Environments*, 21(March), pp.1–2.
- Quinsee, S. & Bullimore, A., 2011. Creating the strategic learning environment at City University London. *Campus-Wide Information Systems*, 28(4), pp.275–288.
- Van Raaij, E.M. & Schepers, J.J.L., 2008. The acceptance and use of a virtual learning environment in China. *Computers & Education*, 50(3), pp.838–852
- Shang, R.-A., Chen, Y.-C. & Shen, L., 2005. Extrinsic versus intrinsic motivations for consumers to shop on-line. *Information & Management*, 42(3), pp.401–413.
- Stokes, P. & Martin, L., 2008. Reading lists: a study of tutor and student perceptions, expectations and realities. *Studies in Higher Education*, 33(2), pp.113–125.
- Stubbs, M., 2013. 5 top tips to enhance your students’ experience. *Jisc Blog*. Available at: <http://www.jisc.ac.uk/blog/student-experience>
- TalisAspire, 2013. Talis Aspire Community. Available at: <http://community.talisaspire.com/>
- Taşlı Pektaş, Ş. & DEMİRKAN, H., 2011. Experiences With Moodle As a Communication Tool for Design Teamwork: a Users’ Perspective. *Metu Journal of the Faculty of Architecture*, pp.227–241.
- UCISA, 2012. *Survey of Technology Enhanced Learning for higher education in the UK*. Available at: http://www.ucisa.ac.uk/~media/groups/ssg/surveys/TEL_survey_2012_final_ex_apps
- Ye, C., 2008. Users’ Personality and Perceived Ease of Use of Digital Libraries: The Case for Resistance to Change. , 59(January), pp.845–851.
- Yorke, M. & Longden, B., 2004. *Retention and Student Success in Higher Education*, Berkshire: Open University Press.