Impact of Web technologies on student's self-confidence and self-reliance
ABSTRACT
According to (Masters and Wallace, 2010), Self-confidence is “The sense of personal strength and a belief that you are worthy and talented”. Reliance or self-reliance is the condition of relying on our resources as a people in order to accomplish any number of specific tasks and responsibilities that contribute to our liberation and independence (Bennett, 1877). In the history of the development of higher education, the relationship between the lecturer and the students has changed because of many different factors. Before the internet and web revolution, the lecturer used to be the main information source for his/her students. The web, as a modern source of knowledge, is now used universally and this spreading might affect the relationship between the lecturer and his students. Understanding the impact of this change appears to be important as it would be employed in improving teaching techniques. In this area, many studies have focused on the impact of using the internet and web applications on students and lecturers. These studies have widely investigated this impact on student’s achievements, attitude and also have shown how the role and performance of the faculty have changed. This paper aims to investigate the impact of using web resources as a source of knowledge on the students’ self-confidence and reliance. 1661 students from 30 universities/educational institutions participated in this research.

Keywords: Power, self-confidence, AEF, PASW and thematic analysis

BRIEF LITERATURE REVIEW
Academic self-confidence
Self-confidence is the sense of personal strength and a belief that you are worthy and talented (Masters and Wallace, 2010) (ref). Academic self-confidence refers to self-confidence in specific academic subject such as mathematical ability or skills to solve problems (Nelson Laird, 2005). Academic self-confidence can be influenced by personal factors like moods and situation or external factors such as mates, the internet, and media (Sellars, 1997). In this research academic self-confidence investigation focuses on the impact of internet websites which is part of the internet. It measures how students’ knowledge gained from using websites has impacted on their academic self-confidence and how this impact has influenced their relationship with their lecturer.
Students’ academic self-confidence has proven that it increases by having knowledge. Studies show that using technology increases students’ academic self-confidence in the classroom (Nelson Laird, 2005, Park et al., 2012, Chachra et al., 2009). The increase of academic self-confidence because of these factors are more among males(Kukulu et al., 2012, Chachra et al., 2009). (Alodiedat and Eyadat, 2008) found that internet websites have a positive impact on students’ academic self-confidence. However, it does not significantly impacts on student achievement.

**Academic reliance**

Self-reliance: “self-reliance is the condition of relying on our resources as a people in order to accomplish any number of specific tasks and responsibilities that contribute to our liberation and independence” (Bennett, 1877). Students rely on the lecturer’s knowledge as he/she is expected to provide them with necessary knowledge. Student academic reliance does not necessary link to the self-confidence that the student has. Students may have enough confidence on their knowledge, but they rely on and follow the lecturer’s instructions as s/he is the one who is grades them.

**METHODOLOGY**

A Simi-structure questionnaire was designed by using six items from Academic Engagement Form (AEF) instrument to measure how online resources have impacted on students’ academic self-confidence and one item was used for reliance. At the end of the instrument items two open-ended questions were added to allow participants to provide justifications and more information about their feelings, views and awareness.

The questionnaire was distributed to a wide range of students in higher education to gather data about their experience of using web technology in their education. In total, 1361 participations were accepted as valid. Out of these, 969 were males, 377 were females and 15 did not mention their gender. A further 300 participations were omitted due to incomplete questionnaire.

**ANALYSIS**

Data collected by using AEF instrument was analysed using SPSS (Statistical Package for the Social Sciences) which was recently renamed PASW (Predictive Analytics Software). PASW is a powerful statistical software package that is widely used in social studies (Coakes and Steed, 2009). For the open-ended questions, thematic analysis technique was used because it is the most suitable approach for this research due to its flexibility (Fereday and Muir-Cochrane, 2008, Bryman, 2012). Themes that were extracted from the analysis of the open-ended questions represent the reasons why students believe that online resources have improved/not improved their self-confidence and reliance. These themes were entered into simple excel sheet to present reasons in percentages.

**RESULTS**

Initial results show that the use of web pages for the purpose of study is very low among students of both gender as shown in figure (1). More than 60% of students use websites for only 1-5 hours or less per month. However, this low amount of the web usage has noticeably impacted on improving students’ self-confidence in the classroom. Also the small amount of time for accessing the internet websites for study purposes helps the student to rely on themselves.
Majority of students in both gender as shown in figure 3 and 4 believe that the in internet website information has impacted on their confidence in classroom. Females’ confidence (96.77%) is more influenced by internet websites information than males (89.69%). The students attributed the impact of internet websites’ information on their confidence to several reasons which were reflected in the open-question. 76.12% of students believe that internet websites help them to have more information that helps them in the class. In the same context, 10.45% of the students consider browsing webpages that related to their course as good preparation for lectures. 4.85% students of the students believe that through the internet websites, they contact other students and experts who can provide them with information which might be easier to use than what they have in classroom. Few students consider the reason of the impact to the limitation of the information that the classroom provides them with. They feel more confident when they have information that is not in the course contents which they can use to discuss with the lecturer and other students.

On the other hand, 8.08% male and 2.42% female claim that internet websites either do not improve their self-confidence or impact negatively on their confidence. They claim that the internet is mainly for entertainment and information that they might find online is not reliable. A small percentage of students were categorized whether they were influenced by internet websites or not.

**Academic self-reliance**

Figure 4 and 5 illustrate the fact that students become more self-dependent when they have access to the websites information. 69.61% of males and 78.37% of females feel that they are more able to rely on themselves due to the knowledge that they have as a result of the accessing internet information. 30.39% males, 21.63% females.
43.65% present of the students find that the internet information is easier to use than the lecturer's ways. They claim that other students and experts in internet websites, forums and blogs compete with each other to deliver better concepts to understand course contents. 18.23% claimed that the lecturer's knowledge is limited and does not always fulfil their desires. Furthermore, 12.47% of the students complained that the lecturer is not always available to give them help when they need it out of lecture time. Student-lecturer relationship plays a crucial role in students' dependence on the internet information. 2.16% of the students either shy away from asking the lecturer or feel that the lecturer does not like to be asked. 1.68% of the students relay on the internet websites to confirm the information that they have been given in the classroom.

Contrary to the above mentioned reasons why accessing internet websites has impacted on students' self-reliance, 5.28% of the students believe that gaining information from face-to-face lecturer is more appropriate. Further, 4.32% of the students believe that the information needed is not necessarily available on internet websites. They also believe that the internet content is more likely misleading rather than being a correct guide to the students. 2.16% of the students considered their lecturers as role models whose duty is to give support and guide the students as s/he is the person who is going to assess them.

DISCUSSION

In general the authors’ observations are that the results of this study provide a positive outlook towards the impact of web technologies on students’ self-confidence. Internet websites have a positive impact on improving students’ academic self-confidence in classroom. Further, the internet websites’ help them to rely on themselves. These two factors are important because they lead students to be self-reliant learners. This fact does not mean that the role of lecturer disappears. When comparing the impact of internet websites on self-confidence with self-reliance, it can be seen that students’ academic self-confidence is improving but students are still relying to the lecturer to guide and help them. The concern that authors have is about increase in the gap between students and lecturer. Some students blame their lecturers because they do not give them enough attention; this is the reason they seek help from internet websites. Internet contents are not necessary true. Only few students seem aware of internet caveats as opposed to views in existing information on internet websites. We suggest that lecturers should not provide students with tacit knowledge only. Lecturers should discuss different theories in the classroom that are related to the subject. Students might struggle to judge different point views if they do not have enough knowledge about the subject.

Brief biography

Dr Rupert ward, “Having studied for a MPhys (Hons) Physics with Theoretical Physics at the University of Manchester (graduating 1997), I studied for both a PhD in Atomic Physics at the University of Manchester (graduating 2001) and a PGCE in Further, Adult and Higher Education at Manchester Metropolitan University (graduating 2000), before completing a Masters in Business Administration (2010). I am currently completing an MSc in Technology Management focusing on aspects of higher education development in Africa. I am a Chartered Physicist of the Institute of Physics, as well as a Fellow of the British Computer Society, a Chartered IT Professional and a Fellow of the Higher Education Academy”, Mr Saeed Alshahrani has completed a diploma in computer science between 1993 and 1997. He worked in computing and information technology sector from 1997 to 2008. During this period he finished his undergraduate degree in information technology and computing at Open University in London (graduating 2007) and worked as a part-time teacher in Saudi Arabia. In 2010 he completed a MSc in Information System Management at University of Huddersfield. Currently he is a third year PhD candidate at the University of Huddersfield. His research is about how technology has impacted on student-lecturer relationship. He has published several papers discuss student lecturer relationship. Dr Martyn has been Head of Department for Post Compulsory Education and Training at the University of Huddersfield since 2001. He trained as a secondary school teacher with a first degree in history and social science, and an MA in history. During his academic career, he has taught in secondary, further and higher education. He started his career teaching history in secondary schools and community education, later becoming involved in teacher training in further education colleges and universities.
REFERENCES


