Edith Cowan University

Research Online

1-1-2014

Student motivations for studying online: A qualitative study

Melanie K. Henry
Edith Cowan University, mjohnst9@our.ecu.edu.au

Julie Ann Pooley
Edith Cowan University, J.pooley@ecu.edu.au

Maryam Omari
Edith Cowan University, m.omari@ecu.edu.au

Follow this and additional works at: https://ro.ecu.edu.au/ecuworkspost2013

Part of the Educational Psychology Commons, and the Online and Distance Education Commons

Student motivations for studying online: A qualitative study

Mel Henry, Julie Ann Pooley and Maryam Omari
Edith Cowan University
mjohnst9@our.ecu.edu.au, j.pooley@ecu.edu.au, m.omari@ecu.edu.au

The availability of online courses has continued to grow over recent years with more students now turning to online offerings. The flexibility offered through online learning is attractive to prospective students with some of the benefits including reduced costs, and the potential to increase and diversify the student body. Online courses provide the advantage of reaching those who may be 'too busy' for traditional study, and offer flexibility through anywhere, anytime access. While these benefits may attract prospective learners to the online environment there remains little empirical evidence for the reasons students actually make the decision to study online over more traditional means. Here, it is important to understand students' motivations for choosing an online course. Without this information universities cannot assess if their programs are effectively designed to meet students' expectations, or that students are sufficiently informed and prepared for instruction and learning in the online environment.

As part of a PhD, research is currently underway investigating what students expect when commencing an online course at Edith Cowan University (ECU). This paper discusses findings relating to the motivation and reasons why first year students decide to study a course online at ECU.

Introduction

The availability of online courses has continued to grow over recent years with more students now turning to flexible offerings to complete their undergraduate studies (Allen & Seaman, 2011). Online learning is attractive to prospective students, and universities have moved to meet this growing demand. While market research and instructor experiences have alluded to what may attract learners to the online environment there remains little empirical evidence for the reasons why students choose to study online over on-campus programs.

Researchers have highlighted the potential benefits of online learning to institutions in terms of reduced costs and increased savings (Twigg, 2003), as well as increasing and diversifying the student body (Brooks, 2009). Online courses provide the benefit of reaching those who may be 'too busy' for traditional study and offer flexibility through anywhere, anytime access (McAllister, 2009). A number of universities (e.g., Athabasca University, 2009; Edith Cowan University, 2010; Murdoch University, 2013; Swinburne University of Technology, 2013; University of Phoenix, 2010; University of Western Australia, 2013) promote online learning to prospective students as a suitable alternative for students who cannot attend a campus because of work or family commitments. The promotion of the benefits of online learning likely contributes to the formation of prospective students' expectations relating to what online learning may offer them, and would in turn impact their decision to enrol.

Student decisions regarding what and how they will study are based on their understanding and assessment of how a course might suit their needs and aspirations, in terms of learning outcomes, instructor characteristics, difficulty, workload and time demands (Kardan, Sadeghi, Ghidary, & Sani, 2013) . Students' expectations of what a course actually involves and the anticipated learning outcomes of the course are therefore pivotal to making an informed decision. Mupinga, Nora and Yaw (2006) found that students expected their online course to be challenging, but comparable in demand to on-campus courses. The apparent convenience of electronic participation may also prompt students to expect online learning to be easier and less time-intensive alternative to on-campus learning (Hyllegard, Deng, & Hunter, 2008; Moody, 2004). Research (Packham, Jones, Miller, & Thomas, 2004) however, suggests that many students actually find online courses more demanding and challenging than they had expected, and may withdraw as a result.

Lopez-Bonilla et al. (2012) identify that the most common motivations for course selection related to vocation and job opportunities. Kung (2002) also found that the most important factors in students' decision to take a distance learning course were subject matter, time flexibility, the chance to work with instructors in other locations and institutional/instructor reputation. This suggests that student expectations in relation to career and employment outcomes are significant in the decisions to enroll in a particular course, and students may decide to take a course online simply because they wish to access a particular program that is not accessible in any other way.

While not necessarily explicit motivators, the experiences of significant others and the student's own experiences at university and at high school may also play a role in forming student expectations of university (Brinkworth, McCann, Matthews, & Nordstrom, 2009; Buckley, Novicevic, Halbesleben, & Harvey, 2004; Licata, Chakraborty, & Krishnan, 2008; Walker et al., 2009). Brinkworth et al. (2009) for instance, surveyed students during orientation and found they expected university to be different to high school, but were unsure as to how it would differ. The decision to attempt an online course may therefore be based on basic assumptions about a course and its learning outcomes, but limited information relating to what the learning process might actually involve.

It is important to understand students' motivations for choosing an online course as without this, universities cannot be sure programs are effectively meeting students' expectations, or that students are sufficiently informed and prepared to learn in the online environment. Krause (2005, p. 9) further asserts that universities must investigate, monitor and manage students' expectations, particularly during first-year "as their early experiences of met or unmet expectations play such a significant role in shaping the rest of their experience". Furthermore, students' expectations can influence their perceived fairness and satisfaction with a university course, particularly in terms of grades (Cherry, Ordonez, & Guilliland, 2003). It is therefore important to understand, meet or adjust student expectations as appropriate.

Several researchers have acknowledged that some students may not be suitable or sufficiently prepared for online learning (Tanner, Noser, & Totaro, 2009; Milligan & Buckenmeyer, 2008). Students may be enticed to take a course online for the flexible learning opportunities it affords, but may not appreciate some of the other underlying differences involved in online learning. For instance, students may elect to take a course online as they are unable to attend on campus due to work or family commitments, and traditional students may be enticed by the thought of not having to attend classes on campus will eliminate one demand of their time (Moody, 2004). University study is in itself a substantial commitment irrespective of where it may take place. Some students may therefore underestimate or be unprepared for the time and resources required to complete a course online (Alexander, Polyakova-Norwood, Johnston, Christensen, & Loquist, 2003; Hyllegard et al., 2008; Packham et al., 2004).

In addition to the demands of the course itself, online students need access to, and knowledge of, the technology and systems they are required to use (Tanner et al., 2009). Trekles et al. (2008), found some online students did not actually own a computer and lacked the skills necessary to succeed in an online course. Mupinga et al. (2006), and Alexander et al. (2003), support this assertion and go further to advocate that online students must have access to timely technical assistance, course information and sample assignments, as well as flexible and understanding instructors. It is also vital that students have good self-efficacy and time management skills in order to manage their own learning within a flexible learning environment (Anderson, 2008). As a consequence, online students are often more likely to withdraw from their courses, especially where they experience technical difficulties, personal problems, work pressure or a lack of time (Hyllegard et al., 2008; Packham et al., 2004). It is unclear however, whether students are fully aware of these limitations when making the choice to study online.

While we may assume that students are attracted to the potential benefits offered by online learning, there remains little research that has sought to uncover why students make the decision to apply for a particular online course. This paper reports some of the findings of a broader (PhD) research project with particular emphasis on considering what students expect when commencing an online course at

an Australian university: Edith Cowan University (ECU). The specific question sought to be answered is: Why do first year students chose to study a course online at ECU?

Method

Participants of this research included 43 students enrolled in the first year of an undergraduate or Graduate Certificate/Diploma level program at ECU. The courses were expected to be delivered completely online, with students required to be connected to the Internet to engage with their learning and no obligation to attend the university campus.

The demographic and enrolment characteristics of participants are shown in Table 1. The sample included more female than male participants, though this is comparable to the ECU student body (Edith Cowan University, 2012). Most of the participants were residing in Western Australia, with the largest proportion in Perth, while 28 per cent were based interstate. Consistent with ECU enrolment patterns, just over two thirds of participants were enrolled in an undergraduate Bachelor Degree, and only small numbers in Graduate Certificate or Diploma programs, with the largest numbers enrolled in health or business-related courses. The majority of participants were also mature aged (aged 21 years and over), with only one school leaver. It is, however, noted that a greater proportion of participants were enrolled part-time (58%) when compared with the overall enrolment pattern of ECU students (approximately 25%), though this is likely representative of a more mature sample and of online students generally. While many students had some experience of university study, the majority were studying online for the first time.

Table 1: Participant demographic and enrolment characteristics

Participant characteristic		Number of participants	Percentage of participants
Gender	Male	14	33%
	Female	29	67%
Age	Mature age (21 and older)	40	93%
	School leaver	1	2%
	Undisclosed	2	5%
Residential location	Perth	17	40%
	Bunbury	1	2%
	WA Regional	12	28%
	Other metropolitan	7	16%
	Other regional	5	12%
	No fixed abode (travelling)	1	2%
Course	Bachelor Degree	33	77%
	Graduate Certificate	6	14%
	Graduate Diploma	4	9%
Field of study	Health (including psychology, social sciences, social work, nursing, public health)	23	53%
	Law	3	7%
	Technology (including computer science, security)	3	7%
	Business (including management, human resources, occupational health and safety, risk management)	13	30%
	Other	2	5%
Study load	Full-time	18	42%
	Part-time	25	58%
Experience	First time at university	16	37%
	First time studying online	28	65%
Total participants		43	100%

This study involved a case study analysis of in-depth interviews with first-year ECU students to ascertain their motivations for choosing to take an online course. Ethics approval was granted by

ECU's Human Research Ethics Committee (HREC) prior to commencing data collection. Students enrolling in online courses were invited to participate via a news item on the Student Portal, as well as through relevant online course coordinators, with a prize draw offered as an incentive. Interviews were conducted online using the synchronous chat feature within ECU's standard learning management system: *Blackboard,* or, where this was unavailable, through *Adobe Connect Pro (ACP),* prior to or upon students commencing a course.

The interview itself involved a discussion of students' expectations for their experience in the online course, where students were specifically asked "Why did you decide to study online?" Students were then prompted to further discuss their reasons for doing so. Each interview transcript was reviewed in detail with discrete ideas or concepts identified and coded using *nVivo 9*. The researcher's subjective interpretations and thoughts that arose during the process of conducting the interviews were noted and reviewed in order to recognise and separate any personal bias from the interview data itself. Coded statements were grouped into related themes, which were periodically reviewed as new data and transcripts were coded. Relevant and meaningful coded data were then selected and sorted into thematic codes. Major themes were arranged into logical groups, verified through review of individual coded statements and data re-coded as necessary.

Findings

Participants offered a range of reasons in response to the question "Why did you decide to study online?" The most salient motivations related to the convenience that online learning offered in terms of time, pace and place. Participants expected that learning online would provide the opportunity to manage their studies around other commitments and even disabilities. Participants were also drawn to particular courses because of applicable subject matter, institutional reputation, entry pathway or location. The personal benefits, including satisfaction, inspiring others and fulfilling career or employment goals, were also significant motivators for participants in pursuing university study.

Convenience and flexibility

The most salient of participant motivations for choosing online over on-campus modes of study centred on a perception that it would offer them greater convenience and flexibility. Participants were of the opinion that studying online would facilitate more time, place and pace flexibility, allowing more time to attend to family responsibilities and/or maintain students' desired employment arrangements while pursuing university studies, than would an on-campus course. Participants discussed the significance of their family and work commitments, suggesting that study would not be possible without this flexibility.

> I have 2 children not of school age so it is more convenient for me to study online (Male, Bachelor of Psychology & Addiction Studies student)

> I needed to a study method that still [allowed] me to stay working full-time and I didn't have time for contact hours. (Female, Bachelor of Business (HR Management)/Arts (Psychology) student)

> My degree has to fit around my family commitments and my work commitments. I am currently sitting in a donga on the gold mine in Boddington. (Male, Bachelor of Applied Science (Occupational Health and Safety) student)

Participants were enticed by the opportunity to study at more convenient times and at an appropriate pace for their needs and circumstances. Studying online offers a solution to the potential childcare and financial barriers to participating at pre-determined times, while also allowing participants to take control of their own learning and progress through the course as quickly or slowly as they needed to.

> I have two very young children and I have recently started back at work. Attending on campus classes once or twice a week is just to impractical as I require childcare and I lose valuable time due to travelling. (Female, Graduate Diploma in Public Health student)

> Being able to do things at my own pace is one of the big pluses of online study. (Male, Graduate Certificate in Risk Management student)

Participants appreciated the benefit of being able to take a course that was based at ECU without having to travel or relocate. Studying online would allow participants to take a desired course without significantly jeopardising their time, the needs of significant others, employment or accommodation circumstances. Some participants were residing close to an ECU campus however, despite choosing to study online, suggesting that distance from the university was not the only factor in their decisions to study online.

> Studying externally means that I don't have to move back down to Perth... I figured starting studying again would be enough stress without adding packing, moving, renting, and finding a new job to the equation. (Female, Graduate Certificate of Planning)

> Joondalup is an hour drive from here. And then looking for parking etc did not appeal. (Female, Bachelor of Social Work student)

> I live ... just down the road from ECU in Joondalup (Male, Bachelor of Nursing student)

Accessibility

Online learning also offers an accessible way for students with a disability to engage in university studies. Participants felt that their disability would have made it difficult or have prevented them from attending classes in person and/or learning in a classroom environment, and that online learning would better accommodate their needs.

> Immunity and sleeping problems... turning up to a 9:00 class is impossible for me, at least, cognitively speaking (Male, Bachelor of Arts (Psychology) student)

> I am hearing impaired and I don't like to rely on notetakers to get my information (Female, Bachelor of Business student)

Attraction to a specific course or institution

Participants were attracted to the particular course or provider, including specific aspects of the course subject matter, teaching methods and entry pathways which were not offered by other suitable providers. The course was felt to significantly meet participants' needs in terms of employment and career aspirations, as well as learning style and participants appreciated that the entry pathways took advantage of their previous experience or studies. Some also wanted to study at a university that was close to home so that they could feel more connected with the program or in case they needed to visit the campus.

> ECU was one of the few unis that had a course available which suits the current job I am in. (Male, Bachelor of Science (Security Studies) student)

> I also have heard the ECU is great for having practical degrees, not just theory. (Female, Bachelor of Social Work student)

> ECU also recognises industry experience so that helped me take a leap with my study. (Male, Graduate Diploma in Occupational Health and Safety student)

> I also liked that it was in the city I reside in (Male, Bachelor of Laws/Business)

In some cases, the selection of a particular course was so important that it overshadowed the choice to enrol online. The course itself was primary importance, with the decision to study online based purely on the availability of that course. Some participants went so far as to state they would have preferred to study on campus but were unable to do so in their current situation.

> Really, ideally I would like nothing more than to go on-campus (Male, Bachelor of Science (Security and Justice) student)

Ideally it would be fun to go to classes but I just couldn't see how it would fit with work. (Male, Graduate Diploma in Occupational Health and Safety student)

Benefits of university study

In addition to the motivations for choosing an online mode of learning, participants discussed the underlying reasons for pursuing university study itself. Participants learning motivations related to the personal benefits of education and completing a qualification, including becoming a role model, stretching their knowledge or abilities and achieving life-long dreams. A university course offers participants a significant opportunity to achieve personal, family, career and employment goals. The idea of achieving these goals provides inspiration and evokes a sense of pride for participants.

I hope it inspires my kids to work towards a difficult goal. (Female, Bachelor of Business student)

I wanted to do this 20 years ago and didn't get in for Psych I got sociology instead and declined so its been a long time coming (female, Bachelor of Psychology/Counselling student)

I see study as investing in myself (Female, Bachelor of Social Work student)

Participants saw their studies as an important step in their career. Pursuing university studies is hoped to enhance participants' career prospects and opportunities for employment or promotion, or even facilitate a career change. The opportunity to learn online added further educational value, building on participants' knowledge and experience in using and applying technology.

I really want a career/job I love and that I can continue to be useful and contribute and enjoy past the standard age barrier (Female, Bachelor of Arts (Psychology and Counselling) student)

This is the start of a new career for me (Male, Graduate Certificate in Occupational Health and Safety student)

Sourced [an] off campus style one as technology seems to be opening up resources to other areas (Male, Bachelor of Arts (Psychology) student)

Extrinsic encouragement

Participants were also encouraged to take on university studies or a particular course by significant others, their employer or ECU staff with whom they had shared their aspirations. Participants sought feedback from others during their decision making, and in some cases were prompted to consider university by their peers or employer. They value the advice of others who have experience of studying online/at university, and gained confidence through the support and endorsement from their employer and academic staff at the university.

Work has encourage me to do this (Female, Graduate Certificate in Strategic Risk Management student)

I had some initial discussion with the course coordinator who encouraged me to apply for the course. (Male, Graduate Diploma in Occupational Health and Safety student)

Discussion

The findings from this research provide evidence of students' individual reasons for choosing to enrol in an online course at ECU. The motivations presented by participants were influenced by their understanding of particular benefits offered by online learning with relation to flexibility and convenience, as well as the endorsement of family, friends, employers or university staff. Participants' subsequent decisions to undertake an online course considered how these benefits would meet their individual needs in relation to their personal circumstances, availability, location, family and work commitments, and career goals. In some cases, students actually sought out a particular course, which was only accessible to them as an online program, rather than actively choosing to study online.

Understanding these students' motivations affords valuable insights into the reasons students may decide to study online and offers opportunities for universities to explore how they might effectively manage the expectations of prospective students.

The motivations discussed by participants are consistent with the University's promotion of online learning as "... an option for students, who for reasons such as distance, domestic responsibilities, work commitments or disability would prefer not to relocate to study." (Edith Cowan University, 2010). Students choose to pursue an online course because of the convenience and flexibility it offers, with regard to time, pace and place. This reasoning corroborates the assertion that students' decisions to study online are influenced by university marketing that promotes the benefits of online learning. The fact students site the precise reasons promoted on ECU's website further supports research by Biswas, Perkins and Izard (2012), which identified university websites as the leading information source for students selecting particular institutions.

The assumption that studying online will enable students to participate whenever, and at a pace that is most convenient for them, however, may not always be accurate. Packham et al. (2004) and Hyllegard et al. (2008) warn that this apparent motivation of convenience may also present a challenge if the course turns out to be more demanding than expected. It is therefore important for universities to acknowledge this is an important motivation for online learning and to provide clear information about the commitment required to successfully participate in an online course, including any activities that must be completed synchronously with others, or within specified timeframes.

The motivation to access a particular course is determined by students' personal, family, career and employment aspirations. Students may specifically pursue online learning because it offers the best means to access a particular course or institution. The career-related motivations identified by participants support Kung (2002) and Lopez-Bonilla et al.'s (2012) findings for the importance of subject matter and expected vocational or employment outcomes, as motivators for course selection. The significance of institutional reputation is also evident in this motivation, consistent with Biswas et al.'s (2012) research, which found university academic reputation to be one of the most important factors in students' choice of institution. A student's decision to study online may therefore be motivated by the availability of their selected course at a chosen institution, rather than a specific desire to study online. In some cases, students may even prefer to study on campus, but are unable to do so in their current situation. An investigation into courses and subject matter that are most in demand would therefore help universities identify other on-campus programs that would benefit from online delivery and attract more students. Promoting the learning outcomes of particular courses in terms of personal, career and employment benefits furthermore, may entice students to pursue those programs.

The advice and support of significant others and experts also influences students' decisions to study online. Students may be encouraged by employers to undertake related studies and seek out the advice of significant others or university staff regarding their suitability for online learning or a particular course. Students may then proceed to apply for an online course on the basis of social endorsement. The socially-driven motivation for study described by participants supports prior research, suggesting that the experience of significant others and academic staff can influence students' decisions to study a course online (Brinkworth et al., 2009; Buckley et al., 2004; Greenbank, 2009; Heath, Fuller, & Johnston, 2010; Licata et al., 2008; Walker et al., 2009). Educating university staff about students' potential motivations and the realities of online learning may therefore aid in managing student expectations. Where open and accurate guidance is available to prospective students through the university, they will be empowered to make informed choices about their studies, thereby potentially enhancing enrolment and retention in online courses.

Concluding comments

The promotion of clear and realistic expectations about what is involved and required for successful online learning, in addition to the expected outcomes from online courses, is integral to ensuring students are able to select the most suitable study option for them, and to facilitate a satisfying and

rewarding learning experience. Understanding that some students may actively select an online program to enable them to participate at convenient times, locations and with the flexibility to study at their own pace, offers an important lens through which to design and evaluate online courses for student retention and satisfaction. It must be acknowledged nonetheless that this paper presents a case study of one group of students at one university. Further research which explores the motivations of different cohorts, including postgraduate or international online students, replicable studies at other institutions and quantitative research to assess the prevalence of the identified motivations for online learning would be valuable in gaining a deeper understanding of why students might choose to study online. In understanding students' motivations, we can then begin to adapt our selection processes and course design to best meet the needs of our students.

References

Alexander, J. W., Polyakova-Norwood, V., Johnston, L. W., Christensen, P. & Loquist, R. S. (2003). Collaborative developmeent and evaluation of an online nursing course. *Distance Education,* 24(1), 41-56. http://dx.doi.org/10.1080/01587910303046

Allen, I. E. & Seaman, J. (2011). *Going the distance: Online education in the United States, 2011.* BABSON Survey Research Group. http://sloanconsortium.org/publications/survey/going_distance_2011

Anderson, T. J. (2008). Conquering the fear of online: Advising students to successful online course taking. *Distance Learning,* 5(4), 73-77.

Athabasca University (2009). About AU - How does distance education work? [viewed 6 May 2010] http://www2.athabascau.ca/aboutau/distanceeducation.php

Biswas, M., Perkins, L. & Izard, R. (2012). Selection of universities by students in journalism and mass communication courses: Do criteria differ between Caucasian and minority students? *Journalism and Mass Communication Educator,* 67(2), 164-183. http://dx.doi.org/10.1177/1077695812440946

Brinkworth, R., McCann, B., Matthews, C. & Nordstrom, K. (2009). First year expectations and experiences: student and teacher perspectives. *Higher Education,* 58(2), 157-173. http://dx.doi.org/10.1007/s10734-008-9188-3

Brooks, M. (2009). The excellent inevitability of online courses. *The Chronicle of Higher Education,* 21 May. http://chronicle.com/article/The-Excellent-Inevitability-of/44251/

Buckley, M. R., Novicevic, M. M., Halbesleben, J. R. B. & Harvey, M. (2004). Course management and students' expectations: Theory-based considerations. *The International Journal of Educational Management,* 18(2), 138-144. http://dx.doi.org/10.1108/09513540410522261

Cherry, B., Ordonez, L. D. & Guilliland, S. W. (2003). The effects of expectations on fairness and satisfaction perceptions. *Journal of Behavioral Decision Making,* 16, 375-395. http://dx.doi.org/10.1102/bdm.452

Edith Cowan University (2010). School Leavers (Off-campus). [viewed 26 Feb 2010] http://www.ecu.edu.au//future-students/school-leavers/locations/online

Edith Cowan University (2012). 2012 Pocket Statistics Guide. [viewed 21 Oct 2013] http://intranet.ecu.edu.au/__data/assets/pdf_file/0009/439893/2012-Pocket-Statistics-Guide.pdf

Greenbank, P. (2009). Foundation degree students and their educational decision-making. *Education and Training,* 51(4), 259-271. http://dx.doi.org/10.1108/00400910910964557

Heath, S., Fuller, A. & Johnston, B. (2010). Young people, social capital and network-based educational decision-making. *British Journal of Sociology of Education,* 31(4), 395-411. http://dx.doi.org/10.1080/01425692.2010.484918

Hyllegard, D., Deng, H. & Hunter, C. (2008). Why do students leave online courses? Attrition in community college distance learning courses. *International Journal of Instructional Media,* 35(4), 429-434. http://connection.ebscohost.com/c/articles/36181465/why-do-students-leave-online-courses-attrition-community-college-distance-learning-courses

Kardan, A. A., Sadeghi, H., Ghidary, S. S. & Sani, M. R. F. (2013). Prediction of student course selection in online higher education institutes using neural network. *Computers & Education,* 65(July), 1-11. http://dx.doi.org/10.1016/j.compedu.2013.01.015

Krause, K. (2005). The changing face of the first year: Challenges for policy and practice in research-led universities. Paper presented at the *First Year Experience Workshop 2005*, University of Queensland. https://www.griffith.edu.au/__data/assets/pdf_file/0007/39274/UQKeynote2005.pdf

Kung, S. (2002). Factors that affect students' decision to take distance learning courses: A survey study of technical college students in Taiwan. *Educational Media International,* 39(3-4), 299-305. http://dx.doi.org/10.1080/09523980210166044

Licata, J. W., Chakraborty, G. & Krishnan, B. C. (2008). The consumer's expectation formation process over time. *Journal of Services Marketing,* 22(3), 176-187. http://dx.doi.org/10.1108/08876040810871147

Lopez-Bonilla, J. M., Barrera, R. B., Serrano, M. A. R., Lopez-Bonilla, L. M., Florencio, B. P., Rodriguez, M. C. R., et al. (2012). Reasons which influence on the students' decision to take a university course: Differences by gender and degree. *Educational Studies,* 38(3), 297-308. http://dx.doi.org/10.1080/03055698.2011.598690

McAllister, C. (2009). Teaching online: Growth in online education. *Distance Learning,* 6(2), 35-40. http://www.highbeam.com/doc/1P3-1903519801.html

Milligan, A. T. & Buckenmeyer, J. A. (2008). Assessing students for online learning. *International Journal on E-Learning,* 7(3), 449-461. http://www.editlib.org/p/24447

Moody, J. (2004). Distance education: Why are the attrition rates so high? *The Quarterly Review of Distance Education,* 5(3), 205-210.

Mupinga, D. M., Nora, R. T. & Yaw, D. C. (2006). The learning styles, expectations and needs of online students. *College Teaching,* 54(1), 185-189.

Murdoch University (2013). What is external study? [viewed 20 Sep 2013] http://our.murdoch.edu.au/Student-life/Get-organised/External-studies/

Packham, G., Jones, P., Miller, C. & Thomas, B. (2004). E-learning and retention: Key factors influencing student withdrawal. *Education and Training,* 46(6/7), 335-342. http://dx.doi.org/10.1108/00400910410555240

Swinburne University of Technology (2013). Swinburne Online. [viewed 20 Sep 2013] http://www.online.swinburne.edu.au/

Tanner, J. R., Noser, T. C. & Totaro, M. W. (2009). Business faculty and undergraduate students' perceptions of online learning: A comparative study. *Journal of Information Systems Education,* 20(1), 29-40.

Twigg, C. A. (2003). Improving learning and reducing costs: New models for online learning. *EDUCAUSE Review,* 38, 28-38. https://net.educause.edu/ir/library/pdf/erm0352.pdf

University of Phoenix (2010). Campus and online learning formats. [viewed 6 May 2010] http://www.phoenix.edu/online_and_campus_programs/learning_formats.html

University of Western Australia (2013). Online courses. [viewed 20 Sep 2013] http://www.extension.uwa.edu.au/page/63

Walker, S., Brownlee, J., Lennox, S., Exley, B., Howells, K. & Cocker, F. (2009). Understanding first year university students: Personal epistemology and learning. *Teaching Education,* 20(3), 243-256. http://dx.doi.org/10.1080/10476210802559350