

# **Research Report**

## **MSc in Applied eLearning**

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**15th November 2016**

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## **Introduction**

Traditionally, knowledge and skills gained in school were deemed adequate in order for children to adapt to adult life. However, due to advancements in technology and social changes, adults are now required to modify and add to their learning throughout their lives. This is referred to as lifelong learning and online learning today “can widen participation in lifelong learning” promoting opportunities for all citizens (DfES, 2003). However, adult learner participation in online learning has been significantly low in the further education sector in Ireland. Of the 376,521 learners who took part in further education in 2015, only 9,688 participated in online learning (SOLAS, 2016).

Many may assume that this is as a result of the digital divide but research implies that Irish adults are using the internet more than some of their European counterparts with e-mailing and social networking cited as top activities (Amárach, 2014). This implies that a resistance to online learning by adult learners may exist in the further education sector. This resonates with feedback from my own adult learners who voice their concern on their lack of self-directedness and the absence of face to face contact. On the other hand, literature indicates that adult learners are self-directed and notably should be involved in the planning process (Knowles, 1990).

This research will put theory into practice where adult learners will be involved in the redesign process of a face to face module to online. It posits the research question: How does adult learner participation in redesigning a module from f2f to online impact their perceptions of online learning? In particular, does it alter their views of online learning and their self-directedness? This will involve adult learners in the redesign of a career planning module from face to face to online. The following outlines a brief literature critique, the research design, an information management strategy and the proposed target journal.

## **Literature Critique**

Involving learners in the planning process of course design is not a new concept and reverts back to the 19<sup>th</sup> century where Dewey ascribed to democratic education recognising the importance of learner-centred approaches and experiential activities (Dewey, 1916). Carl Rogers further developed these ideas accentuating the contributing role the learner should play in the learning process (Rogers & Freiberg, 1969). As noted by Lindeman “in conventional education the student is required to adjust himself to an established curriculum; in adult education the curriculum is built around the student’s needs and interests” (Lindeman, 1926, p.4).

Freire’s banking concept of education regarded the teacher as the depository and the students as depositories. In lieu, he embraced the adoption of teachers and students as partners with joint responsibilities (Freire, 1996). Lindeman’s focus on adult education was highlighted again by Malcolm Knowles who formulated the characteristics of adult learners. As noted by Knowles adult learning principles consider the adult learner as the primary source for learning (Knowles et al, 1998).

Nonetheless, there appears to be a lack of research regarding the application of adult learner involvement in curriculum design in the further education sector. At the same time, copious amounts of literature exist on student participation in curriculum design in higher education citing “deeper understanding” and “enhanced engagement, motivation and enthusiasm” (Bovill, Cook-Sather & Felten, 2011, p.138). As the research question relates to andragogy, online learning and self-directedness it is important to review literature pertinent to these areas.

## **Andragogy and Online Learning**

The term andragogy is persistent in adult education research. Andragogy relates to helping adults to learn whereas pedagogy is more associated with teaching the young (Knowles, Holton & Swanson, 1998). According to Knowles adult learners are relevancy oriented, self-directed, have accumulated experience with a readiness to learn, are intrinsically motivated and have a problem-centred approach. Knowles postulated four principles of andragogy from these assumptions where adults need to be involved in the planning process, experience should be linked to activities, the subject matter must relate to them personally and they are drawn to learning that is problem-centred (Knowles et al, 1998). Furthermore, literature indicates that andragogical assumptions should be considered in online learning design for adult learners (Blondy, 2007). However, Pratt states that while andragogy has provided an analysis of the adult learner it does not elucidate the learning process (Pratt, 1993).

Pedagogical influences are apparent in curriculum design for online learning where systematic models are used. However, these models do not include the voice of the learner despite the wealth of experience the adult learner may have (Torres, 2013). Andragogy respects the involvement of the adult learner in the design process (Merriam & Beierema, 2014) and Olka contends that no elearning theory can be separated from adult learning theory due to collective tenants (Olka, 2007). Nonetheless, in most educational settings adult learners are not involved in the decision making process. On the other hand, adult learners may resist sharing their views in curriculum design and feel uncomfortable with the process (Blondy, 2007).

When formulating andragogy Knowles did not consider curriculum design. However, andragogy resonates with the romantic curriculum which promotes a more student centred approach where the student participates in defining their own goals and is treated as an equal (Jarvis, 2010). Macfarlane considered that the absence of a humanistic approach in curriculum design for adult learners hinders their learning and development (Macfarlane, 1978). However, Jarvis implies that learners with little subject matter experience may require a more teacher centred approach and vice versa (Jarvis, 2010).

Nonetheless, Macfarlane's views were constructed on the results of an adult literacy course where learners had little knowledge and found the learner-centred approach much more appealing. Other literature indicates that curriculum design for adult learners should be student-directed rather than teacher-directed (Egizii, 2015).

Lindeman recognised adult education as social education (Lindeman, 1947). However, does adult online learning facilitate this social aspect? Students should be encouraged to form a community, a place of interaction so that social education exists (Spencer, 2004). This echoes the work of Vygotsky where social interaction is essential in cognition development (Jordan, Carlile & Stack, 2008). The importance of interaction is also reinforced by John Dewey which in an online environment can be translated into dialogue and communication (Boetther & Conrad, 2010). Furthermore, studies imply that social constructivist instruction alters the perceptions of online learning positively and promotes self-direction (Ruey, 2010). This is relevant to the construction of the artefact for this research. Moreover, in an online learner centred environment the learners experiences are "honoured and woven into the academic experience through discussion and activities that provide opportunities for learners to lead" (Conrad & Donaldson, 2011, p.20-21). However, it cannot be assumed that all learners will willingly collaborate and participate online. Consequently, the following will discuss self-directedness.

### **Self-Directedness**

Self-directedness "involves a process of growth that takes place within an individual" (Brockett & Himestra, 1991, p.133). The assumption that the adult learner is self-directed persists in online learning which can be overwhelming and provoking for some learners. (Merriam & Beierema, 2014). Furthermore, content is posted with little direction and communication creating confusion for the learner (Stavredes, 2011). Self-directed learning has been defined as both a process and a context (Merriam & Beierema, 2014). It could be argued that in terms of context that the online learning environment may be new to many adult learners thus having a negative impact on their self-directedness? On the other hand, will their involvement in the design process alleviate this and make them more comfortable with the environment?

Not all adult learners are self-directed with some demanding a high level of direction (Robinson, 1992). From my own experience as an adult educator this is a valid point and can be further substantiated by their reversion to the passive learner role they were accustomed to in their schooling. Furthermore, adult career education is strongly associated with behaviourism (Merriam & Bierema, 2014, p.27). Literature implies that the role of the teacher in providing a climate where procedures and support are in place for the transition from passive to self-directed student are vital (Nesbit, Leach & Foley, 2004). External strategies such as critical reflection, rational thinking and using helping skills can enhance self-direction (Brockett & Himestra, 1991)

Literature implies that sharing power in the redesign process may be beneficial where adult learners will feel more comfortable with their decision on their level of participation (Kucukaydin & Cranton, 2012). However, passive learners having power may be problematic (Orwin & Bennett, 2012). While final decisions will be made by the researcher, creating an environment of mutual respect and understanding will, in my opinion, enhance opportunities for authentic and increased self-directedness and engagement. Therefore, will this participatory planning facilitate the transitional period required to transform from passive to self-directed learner and will it alter their views regarding online learning? Moreover, will it alter their views of online learning and self-directedness?

## **Conclusion**

Adult learners participating in online learning has been significantly low in the further education sector in Ireland (SOLAS, 2016). However, andragogy implies that online learning is suitable for the self-directed and autonomous learner. Furthermore, literature indicates that not all learners are self-directed (Robinson, 1992) and implies a transitional period from passive to self-directed learner (Nesbit, Leach & Foley, 2004). Seminal sources indicate that adult learners should be involved in the planning process (Dewey, 1916; Freire, 1996; Knowles, 1990; Lindeman, 1926; Rogers & Freiberg, 1969) and this research will capture the perceptions of the learner before and after their involvement. In particular, it will look at self-directedness and their views of online learning. In conclusion, the research will test the adage “Tell me, and I’ll forget. Show me, and I may remember. Involve me, and I’ll understand (Chinese Proverb).

## Research Design

According to Bryman action research is “an approach in which the action researcher and members of a social setting collaborate in the diagnosis of a problem and in the development of a solution based on the diagnosis” (Bryman, 2012, p.397). This postulates a collaboration between the researcher and individuals with a common purpose. The common purpose is to transform the career planning module to online but in doing so to gather the perceptions of the learners in order to answer the research question.

Mixed methods research will be applied integrating both qualitative and quantitative methods. A quan → QUAL approach will be implemented with qualitative taking precedence (Morse, 1991). Participants will be furnished with pre and post questionnaires to capture the perceptions of participants using Google Forms (See Appendix I). A short workshop and focus group consisting of approximately six to nine adult learners from an evening Training and Development course from Cork Training Centre will be conducted to gather more in-depth data. Whilst they may have basic instructional design knowledge they will be furnished with Viewpoints learner engagement cards during the workshop which are shareable under the Creative Commons licence (University of Ulster, 2012). These cards are used for constructive discussion on curriculum design in higher and further education in order to enhance student engagement. Learner engagement cards will be utilised as a method to inform the design process and learner interactions to be considered as illustrated in Figure 1.

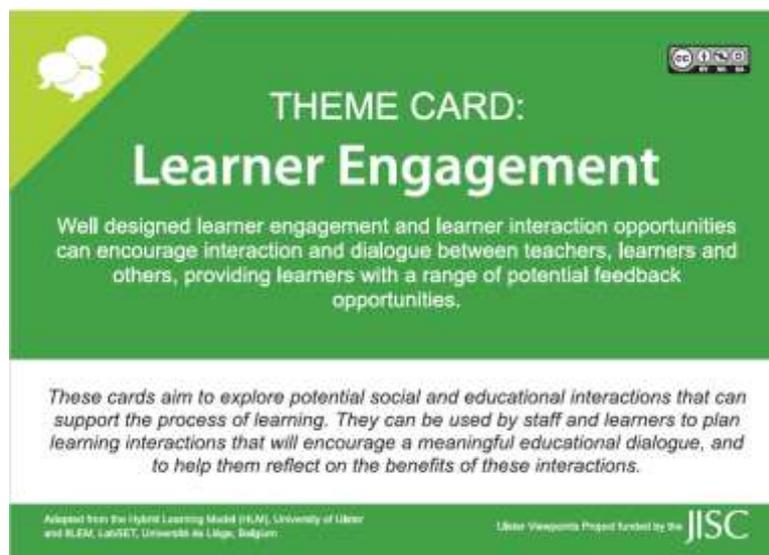


Figure 1

The project will consist of two Phases with Phase 1 commencing in December. The artefact will be developed by the researcher. The target users will predominately be unemployed adult learners. Transforming this module to online will promote lifelong learning enabling unemployed learners in all geographical locations to enhance their skills. The evaluation element of the action research will involve a pilot of the redesigned module. The participants from the focus group will complete the post questionnaire to evaluate the pilot and capture their current perceptions. This will inform the iterative process and changes implemented accordingly. Then phase two will commence with a new sample. This will correspond with a new Training and Development course due to start in January 2017.

Transcripts will be typed up and analysed using Microsoft Excel. Purposive sampling may prove the most beneficial in yielding rich data. Due to the hand-picked approach it places the research question at the heart of the research (Bryman, 2012). As the research question relates to perceptions of online and self-directedness it is important to include adult learners who do not feel self-directed and who have a preference to face to face education. Due to the participatory element it is fundamental to consider ethical considerations (See Appendix II).

The following table illustrates the research plan which has been moved forward to accommodate feedback from the research ethics committee.

## Research Plan Table

Research

Artefact

Milestone	Proposed Completion Date
<b>Phase 1 – Sample Group 1</b>	
<b>Proposal Submission</b>	24 <sup>th</sup> June 2016
<b>Create Online Questionnaires, Semi-Structured Questions for Focus Groups and Letter of Consent</b>	October 2016
<b>Pilot Online Questionnaire with adult learners and amend</b>	October 2016
<b>Review Research Ethics Feedback</b>	November/December 2016
<b>Distribute ViewPoint Cards to Focus Group 1</b>	December 2016
<b>Focus Group Participatory Planning Group 1</b>	December 2016
<b>Analyse Focus Group Results</b>	December 2016
<b>Create storyboard using Salmons Five Stages as a scaffold</b>	December 2016
<b>Literature Review</b>	November 2016
<b>Development of Online Module by Researcher</b>	December 2016
<b>Pilot Online Module to Group 1</b>	January 2017
<b>Distribute Online Questionnaires to Group 1</b>	January 2017
<b>Analyse Online Questionnaire Results</b>	January 2017
<b>Implement Changes to Online Module (If Applicable)</b>	January 2017
<b>Phase 2 – Sample Group 2</b>	
<b>Focus Group Participatory Planning Group 2</b>	January 2017
<b>Analyse Focus Group Results</b>	January 2017
<b>Implement Changes to Online Module</b>	February 2017
<b>Pilot Amended Module to Group 2</b>	February 2017
<b>Distribute Online Questionnaire to Group 2</b>	February 2017
<b>Analyse Online Questionnaire Results</b>	February 2017
<b>Full Data Analysis and Triangulation</b>	March 2017
<b>Research Writing</b>	April 2017
<b>Submit Draft Journal</b>	May 2017
<b>Submit Online Module</b>	May 2017

Table 1

## Information Management Strategy

Diigo will be used as a social bookmarking tool and Endnote web will be used for referencing and information management. Trello will also be used as a project management tool with a board designed outlining development on both research and the artefact (See Figure 2). Monthly reflections will be posted on the ePortfolio.



Figure 2

## Target Journal

The target journal has not been finalised as of yet. One journal I have shortlisted is the [International Journal of Adult Vocational Education and Technology \(IJAVET\)](#). This journal takes a global look at educational technologies for adult learners which specifically links to my own research.

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## Appendix I - Questionnaires

### PRE-QUESTIONNAIRE FORM

**Name:** Click here to enter text.

**Date:** Click here to enter a date.

**1. Have you completed an online course before?**

Yes       No

**If you have, what did you think of it?**

Click or tap here to enter text.

**2. In your opinion, what are the advantages of online learning?**

Click or tap here to enter text.

**3. As a student how would you rate your level of self-directedness? In other words, do you take control of your own learning as oppose to being dependent on the teacher.**

Poor       Average       Good       Excellent

Any further comments?

Click or tap here to enter text.

**4. Do you think that involving students in the design of a course is a good idea?**

Yes       No       Unsure

Any further comments?

Click or tap here to enter text.

**5. In your opinion, what are the disadvantages of online learning?**

Click or tap here to enter text.

**6. Are you comfortable with using computers e.g. internet?**

Yes       No

**7. If you had the choice of completing a Career Planning course online or in the classroom which would you choose and why?**

Click or tap here to enter text.

**8. Any other comments?**

Click or tap here to enter text.

## POST-QUESTIONNAIRE FORM

**Name:** Click here to enter text.

**Date:** Click here to enter a date.

**9. What are your views of the redesigned online module that you were involved in?**

Click or tap here to enter text.

**10. In your opinion, what are the advantages of online learning?**

Click or tap here to enter text.

**11. As a student how would you rate your level of self-directedness?**

Poor

Average

Good

Excellent

Any further comments?

Click or tap here to enter text.

**12. Do you think that involving students in the design of a course is a good idea?**

Yes

No

Unsure

Any further comments?

Click or tap here to enter text.

**13. In your opinion, what are the disadvantages of online learning?**

Click or tap here to enter text.

**14. Has your involvement in the design process changed your views of online learning?**

Yes

No

Unsure

**If so, how has it changed it?**

Click or tap here to enter text.

**15. If you had the choice of completing this module online or in the classroom which would you choose and why?**

Click or tap here to enter text.

**16. Do you think your involvement in the design process has changed your level of self-directedness towards online learning?**

Yes       No       Unsure

**If so, how has it changed it?**

Click or tap here to enter text.

**17. How would you rate this redesigned online Career Planning module?**

Poor       Average       Good       Excellent

Any further comments?

Click or tap here to enter text.

**18. Any other comments?**

Click or tap here to enter text.

## **Appendix II – Information Sheet for Research Participants**

**Purpose of the Study.** As part of the requirement for the MSc in Applied eLearning at DIT, I must carry out a research project. This research is concerned with the involvement of adult learners in redesigning a module from face-to-face to online. I will research views of online learning and self-directedness. This is as a result of low numbers of adult learners taking part in online learning in further education.

**What will the study involve?** The study will involve a short pre-questionnaire to gather your views. A workshop during your normal class hours will be held where your views on what you as an adult learner would consider good for an online Career Planning module will be discussed e.g. types of activities, technology used, learning outcomes etc. This will be gathered by recording the audio of the group discussion and will take approximately 1 to 1 ½ hours. I will create the online module and will e-mail you a link along with a short questionnaire in December/January to gather your views.

**Why have you been asked to take part?** You have been asked because as an adult learner you would be suitable to provide data for this study and as you are a student on the Training & Development course you might find it of particular interest to your studies.

**Do you have to take part?** No, participation is entirely voluntary. Also, if you do decide to take part you have the option of withdrawing at any stage without a reason and it will have no impact on your relationship with Cork Training Centre. If you do withdraw your data will be destroyed i.e. paper will be shredded and files permanently deleted.

**Will your participation in the study be kept confidential?** Yes. Your identity in this journal will be anonymous along with any quotes you may give.

**What will happen to the information which you give?** Data will be kept confidential and stored in accordance with the Data Protection Act 1998 and 2003. For the group discussion audio data will be recorded using a recording device and memory card which will be stored along with any collected data in a locked safe. This safe will be located in the researcher's residence with the researcher being the only person who can access the data via key. Questionnaires will be distributed via e-mail and will be encrypted with a secure password. Completed questionnaires will then be printed and stored in the secure safe.

Data may be shared with the research supervisor, Pauline Rooney in DIT, via email but full anonymity will be given and all documents will be encrypted with a secure password. Data will be held for a period of 5 years after completion and will be backed up to disc for preservation purposes

which will also be stored securely in the safe.

**What will happen to the results?** The results will be presented in the journal. They will be seen by my supervisor, a second marker and the external examiner. The journal may be read by future students on the course. The study may be published in a research journal. Again full anonymity will be applied.

**What are the possible disadvantages of taking part:** I do not envisage any negative consequences for you in taking part. If anything, you will find it an interesting process and may contribute to your Training & Development course.

**What if there is a problem?** If you have any problems, please feel free to discuss these with me in confidence using the contact details provided below.

**Who has reviewed this study?** Approval must be given by DIT and Cork Training Centre before studies like this can take place.

**Any further queries?** If you need any further information, you can contact me: Researcher: Yvonne Leahy, 087 998 1611, yvonne.leahy@gmail.com. Supervisor, Dr Pauline Rooney, DIT, 01 4027891, pauline.rooney@dit.ie

If you agree to take part in the study, please sign the consent form overleaf.

## CONSENT FORM

<b>Researcher's Name:</b> YVONNE LEAHY (use block capitals)	<b>Title:</b> MS
<b>Faculty/School/Department:</b> DIT Learning, Teaching & Technology Centre	
<b>Title of Study:</b> Involve Me and I'll Understand: Adult Learners Perceptions of their Involvement in Redesigning a Module from f2f to Online	
<b>To be completed by the:</b> <b>subject/patient/volunteer/informant/interviewee/parent/guardian</b> ( <i>delete as necessary</i> )	
3.1 Have you been fully informed/read the information sheet about this study?	YES/NO
3.2 Have you had an opportunity to ask questions and discuss this study?	YES/NO
3.3. Have you received satisfactory answers to all your questions?	YES/NO
3.4 Have you received enough information about this study and any associated health and safety implications if applicable?	YES/NO
3.5 Do you understand that you are free to withdraw from this study?	
<ul style="list-style-type: none"> <li>• at any time</li> <li>• without giving a reason for withdrawing</li> <li>• without affecting your future relationship with the Institute</li> </ul>	YES/NO
3.6 Do you agree to take part in this study the results of which are likely to be published?	YES/NO
3.7 Have you been informed that this consent form shall be kept in the confidence of the researcher?	YES/NO
Signed _____ Date _____ Name in Block Letters _____ Signature of Researcher _____ Date _____	

**Please note:**

- For persons under 18 years of age the consent of the parents or guardians must be obtained or an explanation given to the Research Ethics Committee and the assent of the child/young person should be obtained to the degree possible dependent on the age of the child/young person. **Please complete the Consent Form (section 4) for Research Involving 'Less Powerful' Subjects or Those Under 18 Yrs.**
- In some studies, witnessed consent may be appropriate.
- The researcher concerned must sign the consent form after having explained the project to the subject and after having answered his/her questions about the project.