Reviewing the Evidence on How Adult Students Learn: An Examination of Knowles' Model of Andragogy

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The rationale for writing on this topic area came about from my experience with teaching adults on a variety of evening programmes. Students from a variety of backgrounds tend to enrol on business type courses that are accredited by the Institute of Commercial Management and Institute of Public Administration. In some cases, the students in these courses left education at a young age, often before they had completed secondary education, often due to not being comfortable with the teaching style that was adopted by the teacher in the classroom. Students felt that the teaching style did not promote learning in the classroom and that students were not allowed to question the material discussed in the classroom. When these students enrolled in evening programmes they were often surprised that they were allowed to contribute to discussions in relation to a variety of topics. The difference in the teaching style often encouraged students to further their education and to participate in more courses at a later stage.

While there may be similarities between adults and children in how they learn (such as language, interaction and communication), many writers argue that adult learners are different from child learners in a number of ways. The aim of this article is to review how adults learn through examining one particular theory of adult learning.

Adult learners need to know why they are learning new knowledge before they are willing to participate. In the context of evening courses such as those focusing on business subjects, employers seek to convince adult learners to participate in a course by emphasising the benefits of acquiring a qualification or learning new skills. This can be evidenced in situations where adults partici-

pate in courses that focus on management, marketing and accounting skills. Students are encouraged to incorporate what they learn in the classroom into their everyday work lives via a work-based project. If adults are aware why they are learning new skills, there will be a 'readiness' to learn and they will be more willing to participate in discussions in the classroom or learning context. Adult learners who have been given a 'second chance' at education might be more motivated to learn than children or secondary school students because they will be able to draw a connection between the material that is discussed in the classroom and what is happening in their own lives. Unlike children, adults tend to take responsibility for their own learning and they do not want to be directed by the lecturer during class.

Two conflicting learning theories, known as andragogy and pedagogy, have a particular relevance to the adult educator. The pedagogical theory assumes that the student will simply learn what they have been told. Some people would associate pedagogy solely with children, but surprisingly it can also be associated with adult learning. The majority of today's adult learners were exposed to classroom learning in previous educational experiences that promoted pedagogical practices. As a result of this experience adults may be unwilling to participate in an adult education type course later in life as they have the perception that the same style of teaching and learning is still in existence in today's adult classroom.

Of course in certain circumstances students come to a course without having any background knowledge of the field of study. For example, if a person was to attend an accounting course with no background knowledge of the area, the lecturer would have to use the pedagogical approach in which they would explain the basics of accounting to the student. As the course progresses, the student is asked to apply examples from their own interest or field of practice to the course so they can create a link between their own experience and the course material. However, by adopting this strategy it is very difficult to change direction and encourage the student away from being dependent to being independent learners because once the student is comfortable with the style that is being used in the classroom, they might fear a change in style of teaching.

Even though Knowles was a keen advocate of the theory of andragogy he noted that 'pedagogical strategy is appropriate at least as a starting point (when learners are indeed dependent) when entering a totally strange content area' (Knowles, 1998, p. 70). In a sense it is contradictory to what he said previously,

but in reality lecturers in many instances use a pedagogical style of teaching at the start of a course in order to ensure that students gain an understanding of a topic that they may not be very familiar with. However, pedagogy is not without its criticism.

Knowles et al (1998, p.61) stated that pedagogy is based on the following assumptions:

- Firstly, students only need to learn what the teacher teaches them. Students need only learn material that will be used to answer questions during an exam.
- Secondly, the pedagogical theory of learning implies that the adult learners experience is not necessary for learning so adults who have no experience in an area can gain entry onto a course and learn a new skill. For example, institutions that have courses in computers for beginners often state that it is not necessary for students to have previous experience to attend classes.
- Thirdly, according to Knowles et al (1998, p. 63), the 'teachers concept of the learner is that of a dependent personality.' This is true in the case of students who have no knowledge in a particular area and therefore they have to depend solely on the teacher to learn the basics.

They assumed that the teacher's job was to fill the students minds with their own information and the students were not encouraged to question what they were being taught.

The majority of today's adult learners were exposed to classroom learning in previous educational experiences that promoted pedagogical practices. Of course in certain circumstances students come to a course without having any background knowledge of the area. For example, if a person was to attend an accounting course with no background knowledge of the area, the lecturer would have to use the pedagogical approach in which they would explain the basics of accounting to the student. As the course progresses the student is asked to apply examples from their own background to the course so they can create a link between their own experience and the course material.

One learning theory that has attempted to overcome some of the negative aspects of pedagogy is a theory that was introduced by Malcolm Knowles known as andragogy. Andragogy according to Henschke (1998:8) can be defined as 'a scientific discipline that studies everything related to learning and teaching which would bring adults to their full degree of humaneness.' This theory tried to identify how adult learners learn and how to involve them in the learning process 'to free them from the oppression of pedagogy.' Unlike pedagogy, andragogy is centered on the idea that the lecturer does not posses all the knowledge and that students are encouraged to participate in the classroom by utilising their own experiences.

'Adult education is quite distinctive in its approach in that it aims to do substantially more than simply impart information to participants' (Connolly, 1996, pp. 38-39). The lecturer should act as a facilitator in the learning process. This can be achieved by asking students questions that they can relate to their workplace. For example, once students are taught the basic principle of a subject, they could be asked to apply those principles via a work-based project to their company. This will enable them to understand how the theory they have spoken about in class relates to a real life situation. The lecturer can manage this by asking students relevant questions pertaining to their workplace, which will require the student to think about what happens in their organisation on a day-to-day basis. This is further supported in research carried out by Laird (1998, p. 126) who stated that 'the andragogic model holds the view that the instructor should guide and not manage the content, which is the traditional approach in pedagogy.'

Andragogy might be classed under the category of cognitive theories in that adults are allowed to analyse the material given to them in the classroom and they learn to make connections between the material and their own life experiences. In contrast pedagogy is associated with the behaviourist stream of learning where the student takes for granted what is being said to them and they learn it word for word so that they can receive positive feedback from their lecturers. Laird (1998, p. 125) stated that lecturers who adopt the andragogical theory of learning will 'use more questions because adults do know a great deal.'

Andragogy is based on five key areas. Firstly, there is the issue that adults need to be made aware of the reason why they have to learn certain material. Knowles

has stated that it is important that students are informed of the benefits of covering this material and how it will benefit them when the course is finished. It is imperative that students are furnished with the learning objectives when they start their course (Knowles et al 1998, p. 63). For the majority of evening courses students are given the course outline and objectives of the course when they enrol in the course.

The second area is the learner's concept of himself or herself. If the learner is very self confident and what Maslow describes as having high self-esteem needs, then the lecturer has to ensure that they allow the student to discuss or present their views during the class session. If the lecturer starts out using a pedagogical method of teaching and encourages the student to become dependent on them for knowledge and then they are in essence creating a dependent student who will have low self-esteem, which will ensure that the student never questions what the lecturer says in class.

Thirdly, andragogy is based on is the experience of the learner and the role that it plays in the classroom. Andragogy assumes that the student has a bank of experience accumulated over their lifetime and that they would like to apply this 'experience' in the classroom so that they can understand the material that is being discussed in the session. Unlike pedagogy, andragogical learners resent having a lecturer's ideas forced upon them and as stated by Knowles, et al. (1998, p. 65), 'adults resent and resist situations in which they feel others are imposing their will on them.' Therefore, they want to be responsible for their own learning. The andragogical model states that adults need to be able to use their experience in the classroom if they want to learn.

Lecturers should encourage the promotion of dialogue in the adult classroom. The use of dialogue in the classroom aids the students' understanding of the material discussed in the class (Quilty, 2003, p. 63). Dialogue can be encouraged through the use of group work, where students are placed in groups and given scenarios or class studies that are relevant to the student's experience. This may also encourage the quieter students in the classroom to participate in the learning process and to air their views through the group.

Fourthly, students want to learn. Motivation plays an important part in adult learning, firstly, in that if students are not motivated to learn they may not participate in the classroom and therefore may leave the course. Secondly, as men-

tioned in the previous point, adult students may be more motivated to learn if the concept of groups were prompted by the lecturer. Maslow stated in his theory of motivation that people have a need to feel that they belong. Students are more motivated if they feel that they belong in the adult classroom and for most adult students they like to belong to a group that they can discuss both academic and personal issues.

Andragogy states that adults are motivated by both internal and external factors. Lecturers have to recognise that by praising and building on the selfesteem of students as it motivates them to learn. Tough found that 'motivation is frequently blocked by barriers such as negative self concept and time constraints' (cited in Knowles, 1994, p. 68). While adult learners may respond to external motivators such as bonuses from their employers when they attain a certain grade, it is the internal priorities that are more important to the learner. Fifthly, for andragogy to work effectively in the classroom the lecturer must promote a climate which provides a safe environment for the student. Abraham Maslow stated that students, especially those with low self-esteem, need to have a safe environment if they are participate in the learning experience (Knowles, 1994, p. 14). In the instance where students are encourage to discuss examples, they are praised for their contribution and not mocked by either the lecturer or other students for their views on a particular issue. Students could be further motivated in the classroom if they are allowed to participate in the planning of the syllabi for the course.

However, in reality, the majority of syllabi are designed by educational institutions or other accreditation bodies such as FETAC or HETAC, which result in both lecturer and student having very little input in what should be included in the syllabi for the course. However, it should be remembered that whether an institution or an accreditation body designs the syllabi students will learn more effectively if they can apply their experience to the subject matter being discussed in the session. Adults will learn material if it is presented in a way that relates to real life situations. Lecturers who use the andragogical method of learning should therefore consider using case studies or histories in class so that students can apply the 'theory' to a practical situation.

Knowles (1980, p. 54) held the view that adults 'tend to be problem centered in their orientation.' This is something that lecturers or facilitators need to take into account when they are planning their classes, as they have to allow

for problem solving as well as interaction with the student. Some adult students prefer to be problem centered but others want the lecturer to lead them through the course, therefore problems arise when adults suddenly find themselves in a situation that they have to think for themselves and participate in the class. Rogers (1989, p. 3) stated that when teaching (adults) the customer, not the subject, should comes first and is always right and the customer is the learner. This is often forgotten by colleges who see students as a financial gain and sometimes they are unaware of the method of teaching used by their lecturers in the adult classroom. Therefore, it is imperative that educational institutions should distribute a questionnaire at the end of a course to enable students to air their views on how the lecturer has performed on the course. Educational institutions such as the National College of Ireland ask students to complete questionnaires after each module on their front line supervisory management course.

Andragogy as with many theories is not without fault. Some adult educators are questioning whether it is really a theory. Hartee (1984, p. 205) suggested that Knowles was really presenting guidelines for 'what the adult learner should be like' in the classroom but it was not really a tried and tested theory of learning. Even Knowles (1989, p. 112) came to the conclusion that 'andragogy is less a theory of adult learning than a model of assumptions about learning or a conceptual framework that serves as a basis for an emergent theory.' Indicating that it is a 'conceptual framework', suggests that there are weaknesses with the model and that is it not academically viewed as a theory of adult learning.

Pratt (1993, p. 21) questioned whether andragogy could be classed as a theory of learning. He has admitted that it has helped adult educators understand how adults learn but in reality if andragogy was analysed more closely 'it has done little to expand or clarify our understanding of the process of learning nor has it achieved the status of a theory of adult learning' (Pratt, 1993, p. 21).

When Knowles designed this model of adult learning he assumed a number of factors such as students' desire to participate and learn. However, in reality lecturers are aware that this is not always the case. For instance, employers often send employees on training courses just to say that they are developing and training their students but in the majority of cases they do not investigate whether courses are suitable or of interest to students. As a result students attend classes that they have no interest in and since most courses are funded

by employees on condition the student passes the course, they are also forced to study for exams that they do not really want to sit.

Lack of interest may also indicate that the student will experience a lack of motivation. Knowles (1994, p. 14) acknowledged that 'adults tend to be more motivated to learning that helps them solve problems in their lives.' However, students who are forced by their employers to attend courses that have little or no relevance to what they are doing in the workplace, will feel that what is being discussed in class is not going to help them perform better in the workplace. Therefore these students often attend courses with little or no motivation.

Knowles' theory of andragogy is very much based on the fact that students want to participate in the classroom and in order to participate they must be motivated. However, according to Tough 'motivation is frequently blocked by barriers such as negative self concept and time constraints' (cited in Knowles, 1994, p. 68). Adults have often experienced negative events during their previous education and as a result they come to adult classes with low self-esteem. Rosenstock stated that 'adult education required special teachers, special methods and a special philosophy' (Knowles et al, 1998, p. 59).

Therefore, the theory of andragogy cannot work in the classroom if the lecturer is un-sympathetic to the fact that students may have low self-esteem and if they target them with questions that they may not be able to answer in front of the class. As a result, students may feel very uncomfortable and choose to leave the course rather than sit in the classroom with other students who think that they do not have the intellectual capacity to be in the course.

Another major factor associated with motivation is that fact that mature students, unlike children, teenagers and young adults, have time pressures such as family and full time jobs that often prevent them from attending classes. Often these pressures become so great that they are forced to leave a course and fail to return to education because they feel that they will not be able to finish the course the next time. Grace (1996, p. 386) acknowledged the fact that 'Knowles never considered the organisation and social impediments to adult learning; he never painted the big picture.' This would indicate that Knowles never really considered the constraints on the mature student in a social sense such as barriers to gaining entry into courses and family life. In Ireland those who are considered socially disadvantaged such as travellers, single parents and on low

incomes are often excluded from joining courses that require a fee to be paid. Knowles concept of andragogy is coupled with the idea that adults are 'autonomous, free and growth orientated' (Rodgers, 2000, p. 13). He stated that students should be allowed to use their past experiences to participate in the classroom. However, Quilty drew attention to the fact that Dewey stated that while 'there are experiences in adult education that are worthwhile there are those that are not' (Quilty, 2003, p. 62).

Some students may not be ready for their beliefs to be challenged and as a result they may feel threatened and not participate in future classes or their past experiences may hinder any new learning because they cannot accept that their previous beliefs are wrong. Knowles was not aware of the fact that some adults that attend night courses are what we term 'young adults.' These students are aged eighteen to twenty-five; they may not have accumulated sufficient knowledge to participate in class debates. In some instances these students may feel isolated in that they cannot take part in a class debate if they do not have the same experience as other students in the classroom. This may result in the student 'switching off' and becoming bored in the classroom, which in turn may lead to the student leaving the course early.

Knowles vision of andragogy presents the individual learner as one who is autonomous, free and growth oriented. However, Grace (1996, p. 383) and various other critics have argued the point that there is little evidence that states that adult students are influenced by their society and history and that in reality the educational establishment and awarding bodies set down standards of learning regardless of whether the student has certain life experiences or not. In theory it could be argued that the andragogical model would be the most suitable for the adult learner, but it fails to take into account that at times lecturers have time pressures to which they must adhere. If they were to allow students to discuss material at length they may not be able to cover the course in the allocated time, as they may have to deprive students of certain modules on the course. For instance, in some of the business courses, students have to study two modules each night for two nights a week probably over a period of twenty-four weeks. If it is a three-hour course it means that each module is allocated only one and a half hours, which does not allow the lecturer to discuss material in great depth.

Lecturers, especially in colleges where students pay for their courses, are likely to be under pressure to achieve certain grades at the end of the course. In some of the private second level institutions the grades that students achieve for their Leaving Certificate are advertised so as to attract students to the college. Similarly, there are instances where private third level colleges are now promoting the fact that students have achieved certain awards by external awarding bodies such as ACCA as a way of attracting students. This may place added pressure on lecturers to ensure that students achieve similar results. As a result, lecturers may revert to pedagogical practices to try and ensure high grades.

However, there are some lecturers who take the theory of andragogy to the extreme in that they are aware that mature students may be anxious and may have low self-esteem and with that in mind they adopt an extremely empathetic manner that often results in no learning in the classroom because the lecturer is afraid to challenge the student in case it would damage their self-esteem (Rodgers, 2000, p. 15).

Even though andragogy has numerous faults, Houle (1996, p. 29-30) was of the opinion that andragogy is the 'most learner centered of all patterns of adult education programmes.' Over the past two decades it has drawn adult educators' attention to the fact that they 'should involve learners in as many aspects of their education as possible and in the creation of a climate in which both they and the students can fruitfully learn' (Houle, 1996, p. 30). It has given adult educators the option of using an alternative style in the classroom.

By using the andragogical method they can encourage students to return to education and by allowing them to participate they are treating them like equals and the student is no longer dependent on them for learning as they would have been when they were children in primary and secondary school. This is very evident in the writings of Pratt who has stated that 'andragogy has been adopted by legions of adult educators around the world' (1993, p. 21). He was also of the opinion that in the majority of cases it is the starting point to which educators look when they start to teach adults.

Which theory is the most relevant for the adult learning in the classroom? Most teachers teach the way they learn. The majority of adult educators were taught using the pedagogical style during primary and secondary schooling and in the majority of cases their third level education was very much centered on a

lecturer again using the pedagogical style of teaching. As a result of this many adult educators are more inclined to use 'what worked with them' (Brown, 2003, p. 1). It is imperative therefore that they are aware of the theories that are associated with adult learning and it would make sense that all adult educators should be educated ABOUT adult learning principles in some shape or form. Crews and McCannon stated than once the adult educator is aware of the theories associated with adult learning principles they may implement these in the classroom making it a better learning environment for the adult student (cited in Brown, 2003).

Knowles stated that it is the 'job of the adult educators to move adult students away from their old learning and into new patterns of learning where they become self directed taking responsibility for their own learning and the direction it takes' (Knowles et al, 1998, pp. 66-69).

The question that adult educators must ask themselves is, should they allow students to participate during the lesson on a continuous basis or do they allow it when it suits them? It is important that educators are aware of what the adult student truly wants from their educational experience. It is imperative that adults returning to education encounter positive experiences that will encourage them to further their education. Lecturers must be aware that whatever learning styles and teaching methods are used in the adult classroom that adult education began with the basic education needs of learners. The learning needs of the adult have to remain centre stage otherwise we will have lost our way' (Vaughan, 2004).

Andragogy in essence aims to look at how learning in the classroom can be made more attractive for adult students. Therefore, it is imperative that lecturers/tutors are aware of the fact that adult needs are very different to the needs of children in relation to classroom learning. Thereby, the teaching style that is adopted in the adult classroom should be the focus of attention for educational institutions, and this should be monitored to ensure that adult students enjoy the educational experience.

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