

EXPERIENCE THE DIFFERENCE : HOW EXPERIENCE PRODUCES PROBLEMS IN PROBLEMS-BASED LEARNING FOR ADULTS.

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Is Problem-Based learning suitable for Adult Learners?

Malcolm Knowles' theory of Andragogy postulates that the adult learner has a problem centred perspective towards his learning and that he has significant experiences that should be optimised for his learning. But how exactly does an adult learner's experience affect problem-based learning? This involves addressing several related issues.

Do adult learners learn effectively from problems they cannot relate their experience too? Should the experience of adult learners be used to formulate problems? Can the adult learner use his experience to learn from solving problems? Are there any instances wherein the experience of adult learners are miseducative?

This paper examines the role that the experience of adult learners can play in problem based learning from the perspective of Andragogy and suggests how the experience of adult learners can produce problems in problem-based learning.

INTRODUCTION

Is Problem-based Learning suitable for adult learners? Academics such as Engel (1991) claim that Problem-based Learning is “particularly suitable to support the conditions that influence adult learning.” (pg 25). However, what are the conditions that would influence adult learning? What does the theory of Andragogy, as postulated by theorists such as Knowles, have to say regarding the way adults can learn effectively from Problem-based Learning? To answer this question, we must first understand how andragogy seeks to illuminate how adults should learn effectively and the role that experiences play in the adult learner's learning.

Although the concept of andragogy has had its fair share of critics over the past decade, educationists such as Brookfield (1995) have conceded that andragogy has been the most popular idea in the education and training of adults. Even its critics such as Davenport (1997) acknowledged andragogy to continue to be an important (albeit a controversial) topic in adult education.

ANDRAGOGY: WHY ADULTS SHOULD LEARN DIFFERENTLY

The term andragogy was first coined by Alexander Kapp, a German teacher, in 1833 to describe the educational philosophy of Plato (Davenport, 1993 page 109). However, it did not achieve any form of prominence until Malcolm Knowles came upon the concept in 1967. Knowles' article "Andragogy Not Pedagogy" published in *Adult Leadership* in 1968 is generally acknowledged as his earliest written pronouncement on andragogy. Whilst the term, andragogy was not invented by Knowles, he is acknowledged as the individual who has given it wider currency than any other writer in adult education (Squires, 1997)

The term andragogy was defined by Knowles in contra-distinction to pedagogy as the art and science of helping adults learn (Tight, 1996). In doing so, Knowles sought to emphasise the difference in which adults and children learnt in two ways. Firstly, by promoting andragogy as a distinct field (and hence a distinct term), Knowles sought to elevate the position of adult learning theorists. This strategy has been appreciated by academics such as Brookfield (1995) who attributes the popularity of andragogy as a concept partly for the way the term has given educators of adults a sense of their distinct professional identity.

Secondly, the term andragogy emphasises the difference between the way children and adults learn by way of semantics. The term pedagogy, as traced from its Greek root words, can be transliterated as the art and science of teaching children. As Davenport (1997) rightly pointed out, the term andragogy should then be similarly understood as "the art and science of teaching adults." (page 114). Knowles (1996) however chose to use the term "andragogy" to mean the "art and science of helping adults learn" to emphasise the fact that whilst children may be taught effectively, the focus of adult learning should not be how to teach adults but how to assist their learning. (Davenport page 114)

The distinction between how adults and children learn is likewise appreciated in the context of Problem-based Learning, Drinian (1991) for example warns that age and experience differences amongst students are important barriers to efficient and effective Problem-based learning.

WHAT IS THE SIGNIFICANCE OF THE ADULT'S EXPERIENCE TO HIS LEARNING?

Having set out the importance of the age variable to Problem-based learning, we turn our attention now to the significant role that the experience of adult learners plays in his or her learning. In seeking to do so, we must first understand the assumptions which underline Knowle's assertion that adult learners must learn very differently from non-adults.

Knowles (1996) premised andragogy on 4 crucial assumptions:

- (a) The adult learner's self-concept moves to being a self directing human being.
- (b) The adult learner accumulates a growing reservoir of experience that is an increasing resource for learning.
- (c) His readiness to learn is oriented to his social roles.
- (d) He needs to apply knowledge immediately and his orientation to learning is one of problem centeredness.

(Knowles, M. 1996)

I must add that Knowles did not merely view the adult learner's experience as a useful resource. Instead, Knowles understood an adult in terms of his experience. Hence, Knowles views the experience of a child as something that happens to him whilst an adult's experience is him. The adult learner, according to Knowles, defines himself in terms of his experience and thus he has a deep investment value in it. Rejecting the adult learner's experience to Knowles was tantamount to rejecting the person.

HOW CAN THE EXPERIENCE OF ADULT LEARNERS BE USED TO FOR PROBLEM-BASED LEARNING?

Knowles's concept of andragogy has two important implications on the significance of experience to the adult learner in problem-based learning.

Firstly, in dealing with the adult learner's experience, we are confronting not so much a resource for learning just as a person's learning style may be a recourse or a factor to be considered, but we are giving effect and attributing significance to the adult learner himself. In other words, using the individual adult learner's experience for his learning does not only serve the purposes of learning, it serves to enhance and consolidate the adult learner's self identity and self esteem. Using the adult learner's real life experience to design problems therefore celebrates and affirms the worth of the adult learner's identity and demonstrates the ideal that the adult learner can continually learn from personal aspects of his or her life.

Secondly, Knowles's treatment of experience can be understood in the context of the other three assumptions he makes about the adult learner. An adult learner's prior experience is therefore related to his self concept to being a self directed learner. Hence, experience should not be used to achieve some abstract notion of learning. Experience instead should be used to enable the adult learner to direct his or her own learning experience in problem-based learning.

Likewise, an adult learner's experience can be used to orientate or prepare him for the social roles he has to perform. Learning from problems containing his or her experience therefore has

the objective not only of making sense of his prior experience (and learn something, anything, from there) but to prepare him for his future experiences.

The last of Knowles' assumptions is that the adult learner needs to apply his knowledge immediately and this means that his experience must be used to solve his problems or that what he learns from his experience must be realised quickly. It is submitted that problem-based learning offers him such an opportunity.

If we accept Boud's (1985) idea of problem-based learning as having the starting point for learning to be a problem, a query or a puzzle that "the learner wishes to solve", then we will agree that problems for problem-based learning must be designed in such a way that the learner is intrinsically motivated to want to solve the problem. Given the view of andragogy that the adult learner's experience is not just a useful resource for learning, but an essential source for learning, it is submitted that designing problems by using the actual real life experience of adults is essential to ensure that adult learners are motivated to learn from their problems in problem-based learning.

CAN THE ADULT LEARNER USE HIS EXPERIENCE TO LEARN FROM SOLVING PROBLEMS?

Designing problems with the experience of adult learners in itself will not ensure that adult learners will benefit from Problem-based Learning. The critical point which all adult learning theorists agree on is that honouring and celebrating the adult learner's experience itself is not enough and that critical analysis is what turns experience into adult learning. Knowles (1996) himself acknowledges the need to help adults to examine their habits and biases and open their minds to new approaches. Likewise, Brookfield (1995) identifies the value of adult education literature in its reminder to us that critical reflection is an adult learning process and any effort to help individual adults become reflective must always be grounded in the simple injunction to treat them as adults.

In the context of Problem-based Learning, Drinian (1991) cited the importance of reflection on and conceptualisation of any experience as being important in order for the adult learner to challenge and rethink their present experiences. Hence, whilst we should appreciate that problem-based learning needs to acknowledge the individual and collective experience of its adult learners, we should also remember that adults learners need a deliberate reflective opportunity in order to learn from their experiences. Problem-based learning offers that opportunity for adult learners to revisit, reflect and learn from their experiences in a structured way.

ARE THERE ANY INSTANCES WHEREIN THE EXPERIENCE OF ADULT LEARNERS ARE MISEDUCATIVE?

It is timely to consider the obstacles that the experience of adult learners may pose to learning. Dewey (1996) for example warned that experience and education should not be viewed as synonymous for experience can be "miseducative" (page 246) if for instance it has the effect of

arresting or distorting the growth of further experience. Likewise, Weil (1997) warns of the effect of miseducation as arresting the growth of further experiences which would undermine the sense of the adult learner's identity.

The miseducative potential for experience has been identified by other writers with different terminology. Martinko (1981) refers to its outcome as a state of "Learned Helplessness" (page 23) whereby the experiences of adult learners with prior, uncontrollable adverse circumstances interfere with later learning. Even Knowles, the great optimist of adult learning, implicitly acknowledges that adults have negative experiences which in turned required an "unfreezing experience whereby adults are helped to look at themselves objectively and to free their minds from preconceptions". (Knowles 1996, page 90).

CONCLUSION

Hence, we must be circumspect in selecting appropriate experience of adults to formulate problems in problem-based learning. At the same time, we must ensure that adult learners are given the opportunity to critically reflect on their experiences which are re-created in the form of problems in problem-based learning. If we fail to do so, we may unwittingly perpetuate or immortalise the negative life experiences of our adult learners. That would be a problem adults should not be made to experience in problem-based learning.

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