

Andragogy and University Distance Education

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INTRODUCTION

A recurring theme in the distance education literature over the past 15 years has been the inadequacy of the dominant systems approach to course design for adult learners. Critics claim this approach limits learner choice and self-directedness, and thus creates passive learners who rarely venture beyond the prescribed course materials and learning activities (Brookfield, 1982; Farnes, 1976; Harris, 1976). To rectify this, several writers have proposed an approach to course design that is based on the principles of andragogy espoused by Malcolm Knowles (Burge, 1988; Fales & Burge, 1984; Jarvis, 1981; Taylor & Kaye, 1986).

This paper will attempt to answer the question: Is andragogy relevant to distance education course design in a university credit context? To do this the following issues will be examined: a) What are the benefits of using an andragogical approach according to its proponents and are they supported by empirical evidence? b) Are the andragogical assumptions about adulthood valid? c) Can a distance education unit adopt a philosophy of education that is not consistent with that of the university in which it operates? d) Is the individualized approach of andragogy feasible in distance education in light of its mass-production approach to course development.

The paper concludes by suggesting that andragogy is relevant, but only in certain clearly-defined situations; and that there are severe limitations to the adoption of andragogy in distance education course design. To begin with, however, the terms, *distance education* and *andragogy* are defined and the context is delimited.

DEFINITIONS

Like adult education, distance education is a field whose boundaries are somewhat vague and whose identity seems to be continually in question. For the purposes of this discussion, however, distance education is defined, to a large extent, by the limited context. This discussion is restricted to university-level credit courses offered by distance education in Canada's conventional universities. In this context, distance education refers to a formal educational situation in which teacher and learner are separated in time and space and in which the instruction is delivered primarily by the printed word, supplemented occasionally by the telephone and other media. In other words, in this context distance education refers to what is commonly known as the correspondence course.

Andragogy is a concept popularized by Malcolm Knowles in his 1970 book, *The Modern Practice of Adult Education*. The term itself was not new. European adult educators had been using it consistently to refer to both the practical aspects of adult teaching and learning and to the academic study of adult education (Burge, 1988). The two dimensions of andragogy as elaborated by Knowles are its assumptions about the characteristics of adulthood and the process elements of adult education

that stem from these characteristics.

According to Knowles (1980), the key characteristics of adulthood are as follows: a) self-directed, b) task or problem-centered orientation to learning, c) internally motivated, d) life experience is a rich resource for learning, e) readiness to learn develops from life tasks and problems.

The process elements of the andragogical approach are as follows: a) establishment of a relaxed, collaborative, informal and supportive climate for learning, b) mutual planning, diagnosis of needs, and setting of objectives by learners and facilitator, c) use of learning contracts and learning projects sequenced by readiness, d) use of inquiry projects, independent study and experiential techniques, e) criterion referenced evaluation by learner-collected evidence validated by peers, facilitators and experts.

At first Knowles presented andragogy as the dichotomous opposite of pedagogy. Andragogy was *the* model for the education of adults and pedagogy was appropriate only for the education of children. In the decade that followed the release of his book, andragogy was the subject of considerable debate and criticism. In response, Knowles revised his thinking and suggested instead that andragogy was just one possible set of assumptions and related educational processes for adults. He conceded they may not always be appropriate, that pedagogy may be relevant to adult education and andragogy to the education of children (Knowles, 1980).

THE BENEFITS OF ANDRAGOGY

According to its critics, the dominant approach to distance education course design is rooted in a behaviorist conception of learning and is characterized by a high degree of structure in which students are led through a predetermined sequence of learning activities (Evans & Nation, 1987). Once a student decides to take a particular course, few decisions are left to make, "what is to be learnt, the sequence in which it is to be learnt, the materials he is to study, when in relation to other materials he should read page thirty-eight...when and how to complete his assignments, and so on" have all been decided (Farnes, 1976, p.61). Some critics of this approach suggest that applying andragogy to distance education course design will allow adults to make more decisions about their learning and this will encourage them to become self-directed and independent learners (Burge, 1988; Fales & Burge, 1984; Hough, 1984; Taylor & Kaye, 1986). Unfortunately, none of these writers provide evidence to indicate the present approach is stifling the development of self-direction and independence or that the alternative approach actually produces increased self-direction and independence that transfers beyond the course in which it is promoted. Fales & Burge (1984) and Taylor & Kaye (1986) describe how andragogy was applied to several distance education courses and suggest that self-direction and independence were promoted as a result. But neither was a controlled study in any sense so it is unclear to what degree these characteristics were present at the outset and to what extent the students continued to exhibit them once they completed the course. Jarvis (1981) takes a more pragmatic view, suggesting that using an andragogical approach will make adult learning at a distance more efficient because "research into adult learning tends to indicate that mature students learn more efficiently when they are not required to memorize but problem solve" (p.28). However, he bases this conclusion on the results of one study dealing with teachers using teaching machines.

The arguments that have been advanced for applying andragogy to adult distance education are not empirical in nature. No deficiencies in the present approach have been demonstrated that would support the criticisms of it. Rather, the criticisms appear to be rooted in a philosophical opposition to behaviorist conceptions of learning and assumptions about the limitations of this approach. However

this should not lessen the importance of the issue. One's philosophical outlook is likely to influence strongly one's choice of instructional approaches. Despite the lack of empirical evidence it is still important to consider the relevance of the andragogical approach and to consider the issues surrounding its adoption.

ANDRAGOGICAL ASSUMPTIONS ABOUT ADULTS

One of the most important questions to consider in deciding the appropriateness of andragogy is whether its assumptions about the nature of adult learners are valid. The empirical evidence is inconclusive. Burge (1988), an advocate of the andragogical approach, reviewed research which tested the andragogical-pedagogical orientations of learners and educators, and analyzed the experiences of Canadian university students from an andragogical perspective. She concludes that, although adult learners generally preferred andragogical approaches to learning, not all did. On the basis of this review of the literature, she concludes, "no assumption, therefore, should be made that self-direction is an evident need or style of adulthood. Life experiences may be a resource for learning, but they may also act as hindrances, especially where adults are not confident about themselves as learners" (p.12).

Robinson (1992) surveyed students at Ryerson Open College in Toronto and found that some, but not all, andragogical assumptions were supported. Students were found to be intrinsically motivated, and drew on life experiences in their assignments, but were not interested in self-directed learning.

Loesch and Foley (1988) reviewed research on the learning preferences of adult students, primarily in the health professions. They found most preferred learning situations that were teacher directed, with clearly organized coursework in which assignments were spelled out in detail. Most preferred to work in groups and not independently. In two cases, Loesch and Foley found deviations from this pattern. In these cases, students who selected the independent study versions of a nursing and a pharmacy program were found to be more self-directed and independent than those students who selected the traditional version of these programs. Loesch and Foley's study comparing students in a nontraditional baccalaureate program with those in a traditional program produced similar findings.

Whether or not adults fit the andragogical characteristics is a separate issue from whether or not they prefer an andragogical approach to learning. In other words, the advocates of andragogy not only make assumptions about adult characteristics, they also assume that these necessarily imply a particular style of teaching and learning. Pratt (1988) argues that appropriate teaching styles are determined by situational, learner and teacher variables, that self-directing and autonomous learners do not always choose to take control of all instructional functions, and that having control of these functions does not necessarily imply self-directedness or autonomy. Robinson's (1992) study tends to support this by showing that while adult students may fit the andragogical model in some respects, they choose not to be self-directed.

Some advocates of applying andragogy to distance education support their argument on the grounds that andragogical assumptions about adults are valid (Hough, 1984; Jarvis, 1981). Clearly the empirical evidence does not support this. If andragogy is adopted on the strength of its underlying assumptions about adults, distance educators must be sure to validate those assumptions in their own contexts. Otherwise any benefits that may result from using this approach may be outweighed by the harm done to students who learn better in more directive situations.

ANDRAGOGY AND THE SUBJECT-CENTRED UNIVERSITY

A point that is often overlooked in the debate about distance education course design is the extent to which it must reflect the underlying philosophy of the educational institution. In other words, can a distance education unit in a conventional university adopt an approach to course design that is based on a philosophy of education which contradicts that of the larger institution. Canadian universities are subject-centered and are informed by liberal and utilitarian conceptions of education. The utilitarian orientation is manifested in the professional schools, the liberal orientation in the humanities and sciences. The andragogical approach is learner-centered and based largely on humanistic conceptions of learning in which the curriculum is organized to suit needs identified by the learner. Process, rather than content, is emphasized.

Can these fundamentally different views of education coexist in one institution? Distance education in Canadian universities has struggled to gain recognition and academic credibility. The extent to which it has achieved this is due largely to its rigorous adherence to the goals, regulations, guidelines and philosophical views of the institutions in which it operates (Black, 1992). To adopt an alternative approach such as andragogy would place this credibility at risk. In practical terms this means an andragogical approach could probably not be applied "across the board" by a distance education unit in a conventional university, but perhaps could be applied to those courses which tended to be more process- than content-oriented.

INDIVIDUALIZATION VS. MASS PRODUCTION

The final issue to be considered in determining the relevance of andragogy to distance education is a practical one: how to apply andragogy to an educational enterprise which operates according to what has been called an industrial model (Peters, 1989). Producing distance education materials can involve extremely high up-front costs. The only way these costs can be justified is if the same materials can be used to serve a large number of students over several years, thus bringing down the per student cost. It is difficult to see how this mass-production approach can be reconciled with andragogy which is an inherently more individualized approach to instruction and thus implies a more customized approach to course design. Certainly it is not impossible to use an andragogical approach, but it seems to contradict one of the fundamental organizational principles of modern distance education: the cost-effective production of materials.

In attempting to adopt andragogy, it seems there are two choices: customize course materials to suit individual learners or promote greater tutor-student interaction to counter-balance the uniformity of the mass-produced materials. Farnes (1976) supports the latter approach by downplaying the role of the traditional correspondence course package and instead suggesting students work directly with tutors to formulate a learning plan based on student interests. Taylor and Kaye (1986) report on a more pragmatic effort to modify an Open University Adult Education course by building into it much more flexibility and choice. Instead of providing a self-contained teaching text that all students were required to read, a wide range of readings with commentaries were included from which students could pick and choose. This was designed to encourage students to view the course as "open ended" and to go beyond the materials provided. In addition, flexibility in scheduling of study and assignment due dates was built in and 50 per cent of the course grade was based on a project determined by students. These hardly seem like radical features, but they are quite a departure from the traditional correspondence course which is highly structured, sequenced and self-contained. They are also much more practical than the suggestions of Farnes (1976). To replace the correspondence course package with individual learning plans worked out between tutors and students would place an enormous workload on tutors and would force students to find all the resources necessary to complete the plan

they had worked. While this might promote self-direction, it might also result in an enormous increase in the dropout rate. Many distance education students live in small communities without access to large libraries and other educational resources. In addition, most adult learners are working full-time or have other commitments which would make this highly independent style of distance education difficult to manage. Furthermore, the secondary role played by teaching at Canadian universities must be kept in mind. Distance education tutors are often performing their duties on top of a regular research and teaching load. It might be difficult to motivate them to devote substantially more time to teaching.

It is easy and tempting to dismiss alternative approaches to distance education course design on the basis of their incompatibility with the industrial approach of distance education. Clearly the current systematic approach is probably the most cost-efficient, but with a little effort, andragogical approaches can be adopted. Taylor and Kaye (1986) have provided some workable suggestions. Farnes (1976) suggestion, while more true to the aims of andragogy, would not be workable in most distance education situations.

SUMMARY AND CONCLUSIONS

The answer to the question posed at the outset (Is andragogy relevant to distance education course design in a university credit context?) is a qualified yes. The qualifications are provided by way of a summary of the issues discussed. To begin with it was argued that the andragogical assumptions about adulthood and the view that adult learners prefer an andragogical approach are not supported by empirical evidence. The suggested benefits of andragogy--more independent, self-directed and capable learners--are also not supported by empirical evidence. There may be a philosophical problem in attempting to apply andragogy to distance education units in universities which are based on liberal and utilitarian conceptions of education. On a practical level, applying andragogy to distance education is difficult because distance education often involves the mass-production of course materials and andragogy implies a more individual and customized approach. Besides the cost implications there is the potential to create more difficulties for students studying at a distance, thus resulting in higher dropout rates.

Despite these problems and limitations, andragogy does have something to offer distance educators. Its emphasis on needs identified by learners makes it an approach suitable for students who prefer to exercise more control over their learning. Its emphasis on the process of learning rather than content make it appropriate for courses that may not have clearly-defined content goals but in which cognitive and metacognitive skills might be the focus. It has the potential to balance the the rigid, subject-centered approach of current university distance education. However applying it in this context must be done with careful consideration. The following are some of the issues that should be considered if andragogical principles are to be applied to university distance education.

1. No attempt should be made to apply andragogy "across the board" unless it can be demonstrated that the distance education learners are significantly different from those on-campus in terms of their motivation, and learning styles and unless it is clear that the students prefer this approach.
2. Careful consideration must also be given to the implications this will have for the academic credibility of the distance education courses. Given the context in which most university distance education units operate, an across the board approach is not likely to be politically acceptable unless the distance education unit has a mandate that is distinct from the university.

3. Decisions to use andragogical approaches for specific course should be based on the type of course and the preferences of the students. For example, courses that tend to be more process- than content-oriented would lend themselves to an andragogical approach.
4. The application of andragogical principles should be moderate rather than radical. For example the design modifications outlined by Taylor & Kaye (1986) provide an effective balance between the structure and sequencing of the systems approach and the choice and flexibility of the andragogical approach. Besides the practical problems it would entail, Farnes (1976) more radical approach which eliminates the course package and forces students to construct their own course may be unacceptable to many students and could pose problems for tutors. However, it might be offered as an option for those students and tutors who expressed an interest.
5. As far as possible, students should be offered a choice. No assumptions should be made about their preference for the andragogical approach simply because they are adults. All adults are not necessarily self-directed and those that are do not necessarily want to take control of all instructional functions.

The principles of andragogy are relevant to the design of distance education courses in Canadian universities. However, distance educators must resist the temptation to jump off one bandwagon and on to another. As Harris (1976) points out, with the founding of British Open University in 1970, the educational technology or systems approach was considered to be the radical road to student-centered courses which "would forge the links between academic ideas, arguments, research findings and conclusions, and the everyday thoughts, the 'common sense', the concrete surrounding of working adults" (p.44). Since then, this approach has been accepted almost without question as the most effective way of designing distance education courses. What is needed now is not another radical shift to a new panacea, but a careful consideration of what is most appropriate in the circumstances. Before deciding whether or not to use andragogy, distance educators need to examine the mandate of their operation, the purpose and nature of the courses and the preferences and characteristics of their learners.

REFERENCES

- Black, E.J. (1992). Faculty support for university distance education. *Journal of Distance Education*, 7(2), 5-29.
- Brookfield, S. (1982). Independent learners and correspondence students. *Teaching at a Distance*, 22, 26-33.
- Burge, L. (1988). Beyond andragogy: some explorations for distance learning design. *Journal of Distance Education*, 3(1), 5-23.
- Evans, T. & Nation, D (1987). Which future for distance education? *International Council for Distance Education Bulletin*, 14, 48-53.
- Fales, A.W. & Burge E.J. (1984). Self-direction by design: self-directed learning in distance course design. *Canadian Journal of University Continuing Education*, 10(1), 68-78.
- Farnes, N. (1976). An educational technologist looks at student-centred learning. *British Journal of Educational Technology*, 7(1), 61-65.

- Harris, D. (1976). Educational technology at the Open University: a short history of achievement and cancellation. *British Journal of Educational Technology*, 7(1), 43-53.
- Hough, M. (1984). Motivation of adults: implications of adult learning theories for distance education. *Distance Education*, 5(1), 7-23.
- Jarvis, P. (1981). The Open University unit: andragogy or pedagogy? *Teaching at a Distance*, 20, 24-29.
- Knowles, M. (1980). *The modern practice of adult education: from andragogy to pedagogy*. Chicago: Associated.
- Loesch, T. & Foley, R. (1988). Learning preference differences among adults in traditional and nontraditional baccalaureate programs. *Adult Education Quarterly*, 38(4), 224-233.
- Peters, O. (1989). The iceberg has not melted: further reflection on the concept of industrialisation and distance teaching. *Open Learning*, November, 3-8.
- Pratt, D. (1988). Andragogy as a relational construct. *Adult Education Quarterly*, 38(3), 160-181.
- Robinson, R. (1992). Andragogy applied to the Open College learner. *Research in Distance Education*, January, 10-13.
- Taylor, E. & Kaye, T. (1986). Andragogy by design? control and self-direction in the design of an Open University course. *Programmed Learning and Educational Technology*, 23(1), 62-69.
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