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Systems analysis has been extensively used in education, particularly in the administration of institutions and in the structuring of learning sequences for computer-assisted or other forms of programmed instruction. While this approach might theoretically be used in any educational situation, its complexity has caused its major application to be made in large-scale and expensive enterprises. It is well suited to the direction of a national adult literacy campaign but less useful as a guide to handling a single literacy class. Meanwhile the opponents of the practice of systems analysis, as distinguished from its theory, have charged that it is too rigid, centralized, prone to a simplistic treatment of complex problems and practices, and likely to treat the individual teacher or learner as a faceless unit in a system. While defenders of systems analysis maintain that such difficulties can be overcome, no way has yet been devised for adapting its highly sophisticated approach so that it can be used as a daily guide by the learner or the educator.

Andragogy

In continental Europe, some variation of the English word pedagogy is often applied to the study of the education of children. When adult education appeared as a distinct field of inquiry, a parallel term (translated into English as andragogy) was coined in Germany as early as 1833. In the ensuing century and a half, it never became prominent but had sufficient staying power to be borrowed in several other countries, including England, Switzerland, and Venezuela. Its fullest flowering occurred in Yugoslavia where it was established as an academic discipline, at least until the dismemberment of that country in the 1990s. Few studies of the meaning of the term are available in English, and there is little evidence that it implies any consistent patterning of method.

The term was introduced into the United States by Malcolm Knowles. From the mid-thirties onward, he had had a career in adult education that was unparalleled in its scope, variety, and influence. His theoretical reflections were first presented in an early work, *Informal Adult Education*, published in 1950. In the 1960s, as the creator of an academic department of adult education at Boston University, he found that he needed a name for the new discipline he was trying to create. He discovered it in Yugoslavia, introduced the term in a journal article in 1968, and made andragogy the central theme of his influential work *The Modern Practice of Adult Education*, first published in 1970. Its original subtitle was *Andragogy versus Pedagogy*.

In the quarter-century since then, andragogy has proved to be widely popular. It has been taken up with enthusiasm in many settings, and the results of the ensuing projects have been extensively publicized. Almost immediately, critics of Knowles and his ideas were heard, and debate about the theoretical soundness and practical utility of the new term became recurrent, reaching a zenith in the late 1980s. Knowles kept evolving, enlarging, and revising his point of view and therefore became something of a moving target, particularly since he was intimately involved with many projects at every level of magnitude in both customary and unusual settings all over the world; he could bring to discussions and debates a wealth of experience that his opponents could not match. Moreover, some of his followers developed variant conceptions of andragogy, thereby enlarging the discourse.

The fluidity of Knowles's theories makes it difficult to summarize them; the following account draws primarily on *Andragogy in Action* (1984). He regarded the child as having a dependent personality, with little experience on which to draw, whose motivation is supplied by pressures from parents and teachers and is centered on advancement through the schools' system of grades. The child has only a subject-centered orientation to learning. Knowles acknowledged that such a characterization might sound like caricature, but he believed that it expressed basic reality. In contrast, the adult is self-directing, has much experience on which to draw, learns because of a felt need or aspiration, wishes to orient his or
her education toward life experiences (not subject matter), and feels most deeply rewarded by such outcomes of learning as greater self-esteem and a sense of personal actualization. The andragogical program designer must (1) establish a physical and psychological climate for learning, (2) discover how to involve the learners in mutual planning with those who hope to aid them, (3) help the learners diagnose their own needs and desires, (4) assist learners to formulate and carry out both objectives and lesson plans, and (5) guide the learners' evaluation of what they accomplish.

The foregoing bare-bones summary of andragogy does not convey the richness of many of the concepts involved, the fervor with which they were expressed, or the awakening sense of mutual trust and companionship often produced in those situations in which the followers of andragogy explored a new frontier. The new ventures were also aided by the fact that in much of the world, and certainly in Europe and North America, learner-centered education (as espoused by Comenius, Rousseau, and others) had long been familiar. Dewey, the chief modern exponent of such ideas and practices, had had a great impact in the United States in the previous half-century. The quotation from him given earlier would have to be modified only slightly to win acceptance as a description of "andragogy versus pedagogy," though at that point he was actually contrasting two forms of pedagogy.

When Knowles and his colleagues realized that their ideas appeared to have as much application in childhood as in adulthood, the reason for using the term andragogy to refer only to the latter seemed to disappear along with the assumptions that had made it necessary. It also became apparent that the division of life into two stages was not in accord with what appeared to be the emerging thrust of the field, as expressed in such terms as lifelong learning, recurrent education, and permanent education. Both childhood and adulthood include successive major steps; in rough categorization, they are infancy, childhood, adolescence, transition to adulthood, early years of established maturity, middle age, early years of old age, and later years of old age. Developmental psychology helps educators understand each of these stages and the differences among them; program building is significantly influenced, and perhaps determined, by them. Tennant and Pogson (1995) summarize the literature dealing with the stages of what they call the life course as it has been analyzed by various investigators; they also point out the strengths and the limits of such theorizing so far as the practice of adult education is concerned.

In another respect as well, early points of view about andragogy came to seem less important. A sense of marginality had long been felt by many adult educators as they sought support in an educational world heavily dominated by institutions serving children and youth. For example, Knowles (1990) refers to the adult learner as a neglected species. Andragogists felt that they had a battle on their hands to alter prevailing systems. They advanced their position with vehemence, used strongly colored terms of discourse, and wrote in language that could be interpreted as questioning the intelligence or goodwill of any reader who did not instantly accept the new ideas. An evangelistic approach may have been required to attract attention and bring about change. Yet as one practical success in the field followed another, the rhetoric of attack and defense could be modulated into one of calm exposition. In the 1980 revision of The Modern Practice of Adult Education, Knowles changed his subtitle to From Pedagogy to Andragogy. Fifty years earlier, Dewey (1938) had followed the same pathway. In setting up his own dichotomy, his language was heavily loaded both positively and negatively, and he made it clear that he regarded his system as "education" and others as "miseducation." As he moved forward into the statement of his basic ideas, however, Dewey no longer felt it necessary to set up dichotomies of theory and practice and differentiate them in heavily emotional terms.

The presently prevailing view is that education is fundamentally the same wherever and whenever it occurs. It deals with such basic concerns as the nature of the learner, the goals sought, the social
and physical milieu in which instruction occurs, and the techniques of learning or teaching used. These and other components may be combined in infinite ways as, throughout life, the individual embarks on self-directed inquiry either alone or with others, benefits from the individual guidance of a tutor, or takes part in formally structured group or institutional activity.

Andragogy remains as the most learner centered of all patterns of adult educational programming. Distinctions between childhood and adulthood are unnecessary; indeed, references to pedagogy seem irrelevant. Those who wish to do so can wholly contain their practice in the ideas expressed by Knowles and others, establishing appropriate physical and psychological climates for learning and carrying forward all of its processes collaboratively. Far more significantly, andragogy influences every other system. Even leaders who guide learning chiefly in terms of the mastery of subject matter, the acquisition of skills, the facing of a social problem, or some other goal know that they should involve learners in as many aspects of their education as possible and in the creation of a climate in which they can most fruitfully learn.

Other Systems

Many other comprehensive systems of program planning have now appeared, most of them since 1970. In a celebrated study, Sork and Buskey (1986) analyze ninety-three books and essays that described complete adult educational program models. Eighty-three of these publications presented models explicitly in narrative or graphic form, and ten implied models but did not spell them out. A complete program-planning model was defined as “a set of steps, tasks, or decisions that, when carried out, produce the design and outcome specifications for a systematic instructional activity” (p. 87). Sork and Buskey have developed a complex framework by which to describe and evaluate the models; the results of this analysis are presented for the fifty-one book-length descriptions of such models that are included in the study.

To some extent, the models build on and borrow from one another. Boone (1985, pp. 20–37), for example, presents in depth a comparative analysis of nine programming models advanced between 1958 and 1981. Throughout his book, he makes clear his own use of various elements of design drawn from a wide-ranging literature. However, Sork and Buskey believe that most models are presented in too great an isolation from one another. They report a general “lack of cross-referencing and absence of cumulative development within the literature.” They also note “a low degree of theoretical explanation,” too great a reliance on a few steps rather than dealing with an entire process, a tendency to focus attention on a few contexts or settings rather than on all adult education, a bias toward group instruction, and a failure to address adequately the roles played and the proficiencies required by adult educators who engage in planning processes.

Sork and Caffarella (1989) build upon the Sork and Buskey analysis but go well beyond it to include additional models. They present a brief but exceptionally well-reasoned summary of six elements or stages that the authors believe should be included in comprehensive systems of program planning. Sork and Caffarella identify as a major problem of the literature its failure to deal adequately with the relationship between theoretical systems of programming and the processes actually carried out by workers in the field. Caffarella (1994) bridges this gap by presenting a full-scale, eleven-component model supported at all points by case studies, charts, exhibits, and lists, some of which could be applied with slight adaptations in a large number of diverse settings.

The relationship between theory and practice is a central topic of Cervero and Wilson (1994), who describe how it varies from one program-planning system to another. They divide all such systems into three large groups in terms of the viewpoints of the system proposers. The classical viewpoint is based on the bedrock of Tyler's thought. The systems included in this category use his terms and follow his procedures, though they may devalue some elements (most commonly, objectives or evaluation) or develop some steps
List of Terms

ability  See skill.

accomplishment  A discernible achievement, here used to indicate one of the two major ways of stating objectives, the other being principle.

act  A specific and relatively brief learning or teaching event.

activity  A specific educational action or succession of actions occurring in a situation.

adjustment  A way of harmonizing an educational format with the milieu in which it is to occur or with the lives of the learners or educators involved; usually requires some change in either the format or the milieu.

adult  A person (man or woman) who has achieved full physical development and who expects to have the right to participate as a responsible homemaker, worker, and member of society.

adult education  The process by which men and women (alone, in groups, or in institutional settings) seek to improve themselves or their society by increasing their skill, their knowledge, or their sensitiveness. Any process by which individuals, groups, or institutions try to help men and women improve in these ways.

aggregate  A cluster of educational activities (either related or unrelated to one another) occurring in the same span of time in the life of an individual, a group, or an institution.

aim  See objective.

analyst  One who tries to understand the nature of an educational activity by examining its parts or basic principles. An analyst may be a learner, an educator, or an independent observer. The term is most frequently used here to signify the observer.

andragogy  A system of program design centrally based on the nature, wishes, and participation of the learner or learners, particularly those who are adult.

appraisal  A subjective judgment of how well educational objectives have been achieved, often based in part on the results of measurement and akin to measurement as a part of evaluation.

aspiration  A desired perfection or excellence based on an ideal. It can exist in the absence of a plan of activity, or it can establish the broad value inherent in an objective.

association  A structured body of members who join together, more or less freely, because of a shared interest, activity, or purpose and who, by the act of joining, assume the same basic powers and responsibilities held by other members. The collective membership elects its officers, giving them temporary authority. An association usually has its own members as its beneficiaries. It is distinguished from a group largely by size and complexity and may in fact be a constellation of groups.

category  A set of similar situations in which educational activities occur.

change theory  A system of individual, group, institutional, or community improvement. It involves a relationship in which a change agent enters into a helping role with a client or client system and by various means (some of them educational) seeks to alter performance and stabilize it at a new level.

clearance of design  The degree of understanding of an activity by those taking part in it or analyzing it.

community development  Any organized effort by which those sharing a defined territorial area (as a base for carrying out a major share of their activities) can work collectively to try to solve a common problem.
group study. Some are book-length descriptions of specific programs; others are collections of cases. All are marked with the notation CS. Many additional references include case studies to illustrate their presentations.

The remaining works included in this listing of references are the sources of citations made in previous pages, works that have special reference to topics considered, and outstanding books on program development published since my 1992 bibliographic essay.


Englisht, M. F. College in the Country. Athens: University of Georgia Press, 1959. CS


Houle, C. O. "The Relevance of Research to the Preparation of Professional Adult Educators." Adult Leadership, 1972, (208), 305–308.


Johnson, L. S. (ed.). Reading and the Adult Learner. Newark, Del.: International Reading Association, 1980. CS


King, D. Training Within the Organization. London: Tavistock, 1968. CS


Learning Behind Bars: Selected Educational Programs from Juvenile, Jail, and Prison Facilities. Pittsburgh, Penn.: QED Communications, 1989. CS


Ogden, J., and Ogden, J. These Things We Tried. Charlottesville: University of Virginia Extension, 1947. CS

Oppenheimer, R. "The Added Cubit." Encounter, 1963, 12, 45.
Paulston, R. G. Other Dreams, Other Schools: Folk Colleges in Social and Ethnic Movements. Pittsburgh, Penn.: University Center for International Studies, University of Pittsburgh, 1980. CS


Rumble, G., and Harry, K. (eds.). The Distance Teaching Universities. London: Croom Helm, 1982. CS


Stewart, C. W. Moonlight Schools for the Emancipation of Adult Illiterates. New York: Dutton, 1922. CS


References

