This review of the current status of distance education for adults in Wisconsin examines the concept of lifelong learning within the wider international and historical context, and discusses seven characteristics of successful distance education program design. It is proposed that these characteristics be used as criteria to evaluate current practices in Wisconsin: (1) a conscious and systematic approach to the design of learning materials; (2) use of a wide range of media and a variety of production and distribution systems appropriate to the various media; (3) a marked role differentiation of staff; (4) centralized design and production of materials combined with localized learning; (5) division of labor between those who design materials and those who give instruction through those materials; (6) two-way communication between learners and instructors; and (7) use of quasi-industrial processes of course design and distribution that require management structure and control different from traditional academic university administration. The relevance of the recommendations of the 1972 Governor's Commission on Education is considered, a model of a system for lifelong learning is described, and suggestions for further research are offered. Data on distance education institutions around the world and a chart describing life-cycle phases are appended. (MES)
COMMUNICATIONS MEDIA AND ADULT EDUCATION IN WISCONSIN
A Discussion Paper

Report to Mr. Paul Norton, Executive Director
Wisconsin Educational Communications Board (9/4/86)
The purpose of this paper is to report on my activities on behalf of the E.C.B. and to present a set of opinions and recommendations for your consideration.

In summary, I extended what was originally intended to be a two-week assignment into the five week period from July 7 to August 15. I consulted with personnel of the E.C.B., the Wisconsin Vocational, Technical and Adult Education System, and the University of Wisconsin System, regarding the present condition of the use of communications media in the education of adults. A calendar of my visits and the names of people consulted is attached as Appendix 1. More informal opinions were sought from the 15 participants in my U.W. seminar, many of whom are professionals involved on a day-to-day basis in education through the media in various parts of the state.

Ideas were developed in several other ways, especially at the Second Conference on Distance Education, of which the E.C.B. was a co-sponsor. My presence, and my keynote speech to the Conference would not have been possible without the support of the E.C.B. Work on the speech was concurrent with the investigation, and many of the ideas developed in this study were presented at the Conference -- though of course only in very general terms.

The focus of my discussions at, and on behalf of, E.C.B. changed in several respects during the period. In particular, a great deal more time than originally planned (about 20 hours) was asked for, and willingly given, to the W.H.A. Radio project aimed at producing courses under an Annenberg/C.P.B. grant. Eventually this should prove to be time well spent, because the project should act as a local, Wisconsin-based demonstration of the benefits of a systematic, integrated, multi-media approach to the design and delivery of a large-scale program of education for adults. I was involved in discussions leading to several important design decisions, and I have agreed, subject to funding, to lead a Penn State University team to evaluate the project.

What follows in this report is a personal view about the current status of distance education -- or the use of communications media to deliver educational programs -- to adults in Wisconsin. This view is derived from the discussions above-mentioned as well as my experience over the past 16 years of adult education in this state, and is influenced of course by my own practice and theories about distance education. It is my hope that these opinions might stimulate further discussion, which I would be pleased to join.

The paper begins with an acknowledgement of the role of the E.C.B. as coordinator of educational media use in Wisconsin, and is followed by a brief reference to the wider, international and historical background of the discussion. Next I introduce the idea of lifelong learning and suggest the existence of a much larger adult learning population than that which is catered for at the present time. This idea of lifelong learning suggests much broader guidelines -- in terms of message, content, and structure -- for adult education in Wisconsin. It also suggests a much bigger target audience with a number of characteristics which are different from those who normally use our educational services.

As an introduction to a discussion on issues of Program Design, seven characteristics of distance teaching by media are proposed as criteria by which to discuss current practices in Wisconsin. I then recall some of the recommendations of the 1972 Governor's Commission on Education (The "Open
School* report). These recommendations, which were perhaps too advanced in their time, may be helpful in understanding and dealing with our predicament today. I conclude with a very simple model of a system for lifelong learning by mediated instruction. I recommend more specific research to gather hard data to substantiate (or refute) my opinions. Most importantly, I suggest the E.C.B. facilitate one or more pilot, demonstration, or experimental sites in certain limited geographic areas in the state.

As will be seen from Appendix 1, discussions were held on eight different occasions at the E.C.B. Most of these consisted of mini-seminars involving Larry Dickenson and Gaizka Usabel. The view which is represented in this report was tested in those discussions and evolved there. I would like to express my admiration and gratitude to those two gentlemen. I only wish there had been time to interact more and to benefit further from their knowledge and creativity.

The Educational Communications Board.

It is especially appropriate that a study of the present condition of the use of communications media in Wisconsin should be undertaken under the auspices of the Educational Communications Board, for the Board is specifically charged and permitted (by Wisconsin Statute 39.11) to "work with the educational agencies and institutions of the state as reviewer, advisor, and coordinator of their joint efforts to meet the educational needs of the state through radio and television."(1) It is especially appropriate also that a study begins at this particular time, for two reasons. One is the anticipated change in the E.C.B.'s mission in future years. Current statutory language refers to the construction and operation of broadcast delivery systems. However, as explained in the E.C.B.'s ten-year plan (2), the F.C.C. recently approved expanded and commercial use by non-commercial broadcasters of telecommunications equipment, and the application of these new technologies to education will require the E.C.B. to become more heavily involved in narrowcast and other systems. Examples of newer expanded systems include: Subcarrier Communications Authorization (SCA); Instructional Television Fixed Service (ITFS); Vertical Blanking Interval (VBI); Multichannel Television Sound (MTS), as well as satellite and fiber optic communication systems. Three consequences of the development of new communications media such as these are especially significant to the adult educator. First, because many are "narrowcast" they offer the possibility of presenting programs which are more suited to the learning needs of particular communities or even individuals than is economically defensible with broadcasting. Second, as a result of deregulatory measures by the F.C.C., it appears that telecommunication technologies may now be merged, so that electronic data, voice and video services can be accommodated on the same transmission systems. This would suggest all kinds of new, and to the adult learner, more exciting multi-media configurations. Finally, and perhaps most importantly, is the possibility that new technologies such as cable, satellite and fiber optics, when integrated in a multi-media system, will facilitate more rapid student-instructor interaction. Until recently, the burden of communication from student to instructor in distance education has been carried by correspondence through the mail, with telephone conferencing as a subsidiary medium. While there will remain an educational need for written communication in many, if not most, educational subject areas, writing is often an unnecessarily slow
and pedantic form of interaction, and the advent of new, faster technologies should increase the effectiveness of educational programs and their attractiveness for many potential adult learners.

While a review of the use of communications media is timely because of the technological developments just referred to, this is a particularly appropriate time for the E.C.B. to exercise its responsibilities as "advisor and coordinator." There is absolutely no doubt that a critical factor in the successful design and delivery of education to distance learners is having media-program decisions made in an integrated and coordinated way. Two keys to successful distance education are "integration" and "specialization", as will be discussed later in this paper. At the present time the individuals I have spoken to, located in the various divisions, departments and program areas of their various institutions, appear aware of the benefits of, and need for, integrated program planning and delivery, and yet seem impotent to move out of their present institutional location and team up with others to achieve the very integration and specialization that they would benefit from.

In my conversations, brief though they were, I heard no expression of mistrust or disrespect for the E.C.B. (The most negative impression I formed was some people's very limited perception of the E.C.B.'s role.) I formed the opinion that the programming agencies would not only benefit from the E.C.B.'s asserting its coordinating role; but, provided it was exercised tactfully, such an initiative might bring relief to a hardworking, rather confused, even beleagured field, which is distance education in Wisconsin at the present time.


In more than twenty different countries outside the U.S.A., the 1970's and 1980's have seen the proliferation of a kind of educational institution unlike any that existed before. Known usually by such names as Open University, Open College, or Distance University, these are institutions that employ telecommunications technology to provide higher education for adult part-time learners (3). A list of some of these, together with an indication of their program areas and student enrollment can be found in Appendix 2. These universities, the British Open University in particular, and the worldwide movement that followed its founding, have their origin -- or at least one of their main roots -- in the state of Wisconsin. It was at the University of Wisconsin in Madison in the 1960's that Charles Wedemeyer worked out the concepts and practice of open education during his tenure as William Lighty Professor of Education, and as director of the Articulated Instructional Media project (4). Wedemeyer's applications of the Wisconsin Idea to the electronic age were welcomed in Europe, and from there spread to other parts of the world (5), (6). While it may be argued that Wisconsin's pre-eminence in the use of media in adult education is now no more than historical, leadership having been taken by institutions abroad, it is my view that for some time a new educational frontier has been presenting itself, one which gives this state a new opportunity to demonstrate national and international leadership. This new frontier is no less than that of Lifelong Learning. Lifelong Learning is a concept I would like us to look at more closely.
It is a phenomenon of our Euro-American culture, which has been exported around the world, a consequence in part of our inability to conceptualize more broadly, and also our reluctance to change our institutions, that our schools and universities are generally neglectful of adult learning programs, and are preoccupied with sustaining and studying school teaching and the work of professional teachers. Although education is about both learning and teaching, educational institutions have focused too much and for too long on the latter, on TEACHERS' INTENTIONS, to the exclusion, or at best subordination, of the equally relevant side of the educational relationship, INTENTIONAL LEARNING. One result of this neglect is that educators and their institutions grossly underestimate the numbers of people in adult education and the size and nature of the market for educational services. In U.K. estimates of participation vary from 15% to 22% (7) of the total population. In Canada it is about 20% (8). In the U.S.A. the first national study of adult learning, by Johnstone and Rivera in 1962, found 15% of the population were involved in institutionalized education. With some surprise they noted an unexpectedly large incidence of what they could only call "independent self-study." This was deliberate and planned learning reported by interviewees who did not use professional teachers or courses, classes or educational institutions (9).

One of the most important empirical studies of this non-institutional, informal kind of learning was Allen Tough's research in Canada. He focused his attention on the ways in which adults plan their own learning, and then went on to investigate how they actually "teach themselves", including ways in which they obtain advice, help and instruction from other people. He defined self-instruction as "a series of related episodes adding to at least seven hours. In each episode more than half a person's total motivation is to gain and retain certain fairly clear knowledge and skill or to produce some lasting change in himself" (10). Tough first conducted in-depth interviews with 66 adults, probing to help them recall their learning during the year before the interviews, and to remember how they had set about learning. From this and many subsequent studies in eight or nine countries (11) the following picture of adult learning has emerged:

1. That learning in adulthood is very common. About 90% of people could recall at least one major learning effort in the preceding 12 months. The typical person conducted five distinct projects taking an average 155 hours each. It is not only the academic, or the eccentric, or the attender at formal classes, who is an adult learner. Almost every adult undertakes one or two major learning efforts every year, with as many as eight such projects being common.

2. Most adult learning is self-motivated, either to achieve some practical objective, (75% says Tough) or for interest, curiosity or enjoyment; but not usually for a degree or certificate. The most common reasons for learning are associated with people's jobs, homes, families, sports and hobbies.

3. Most learning is planned by the learner who seeks help and subject matter from a variety of acquaintances, experts and printed resources. Only some 20-30% of learning relies on professional educators. 70% are planned by the learner alone.
Before this research, most educators paid little attention to non-institutional learning. They concerned themselves with those adults who came to classes and courses and assumed that since the majority of adults were not interested in what was offered there, they were not interested in learning itself. Following Tough, there should now be a greater willingness on the part of educators to find out what adults are interested in learning, and to provide help to this self-motivated, self-directed adult learning. This is a highly significant change in emphasis, for the "market" for adult education is virtually the whole adult population.

Especially interesting in my opinion are the learning needs which arise as a consequence of each individual's personal development through the various life stages, which have been identified by developmental psychologists. Psychologically speaking, the years of adulthood are years of ever-increasing individuation. In other words, as one gets older, one becomes more peculiarly oneself, and more unlike other people in one's perceptions, interests, attitudes, ways of thinking, perhaps even one's appearance. Every person is a unique being, growing in his or her own way, in a continuous state of change, from the primitive, most global condition at conception to the most highly differentiated state and the most fully developed self at the time of death. As we all experience birth, adolescence and death, we also experience other, though less dramatic, transitions throughout adulthood. The research evidence is by no means complete; but beginning with Charlotte Buhler's work in Germany in the 1930's, there have been a number of important studies, including those of Erikson, Neugarten, Havighurst and Kuhlen, and there is considerable agreement about the general nature of the main stages of adult development. A good summary will be found in Cross (12). The findings of these researchers have two extremely important implications for distance educators. First, we are becoming aware of the learning needs which accompany such developmental tasks as becoming a parent or facing the difficulties and opportunities of mid-life change. "Readiness," says Cross, "appears to be largely a function of the socio-cultural continuum of life phases. The implication is that educators should capitalize on the "teachable moments" presented by the developmental tasks of the life cycle" (13). For a summary of life-cycle phases, see Appendix 3.

While it is essential to keep our attention on the needs of the adult for continuing, vocational, professional and academic education, it does seem likely that this table indicates a vast new area of adult learning needs which might form the basis of an extensive range of new teaching programs. The second implication of this research is particularly significant for distance educators. It is apparent that the process of individuation of self means that the psychological context in which any person encounters any of these transitions will be different from that of anybody else. Paradoxically, life's transitions are common to all, yet experienced differently by each individual, and in turn contribute further to the uniqueness of each individual. Learning to cope with, and grow through each life stage is different for each individual, and educational programs to aid such learning must be designed to allow individuals to meet their particular needs. In practice this is best done by a combination of self-directed learning and a wide range of teaching programs, a range so wide it can only be accessed through distance teaching.
3. Program Design and Delivery.

When we look at the methods which our agencies now use to reach out to the general adult population, what criteria can we use to evaluate them? In a book which describes and analyses university distance education around the world, Rumble and Harry (14) list the main features of such institutions. By adapting their seven features, we can obtain the following criteria:

In modern large-scale distance teaching through media there should be:

1. A conscious and systematic approach to the design of learning materials;
2. Use of a wide range of media, and never one or two media alone, which requires a variety of production and distribution systems appropriate to the various media;
3. Because of the specialized nature of the media, there is a marked role differentiation of staff;
4. There is a centralized design and production of materials combined with localized learning;
5. There is a division of labor between those who design materials and those who give instruction through those materials;
6. Two-way communication between learners and instructors is required, and this is why access to telecommunication media is as important as the broadcast media;
7. The use of quasi-industrial processes of course design and distribution requiring a management structure and control different from traditional academic university government.

If these criteria are applied to Wisconsin's current efforts to provide education to the off-campus adult learner, I believe we begin to understand some of the problems that we are faced with.

Criterion 1: A conscious and systematic approach to the design of learning materials.

Obviously we have in Wisconsin a great richness and variety of communications media, and unequalled human resources within the University, the Department of Public Instruction, and V.T.A.E. systems. In reality, however, there is no overall system for using these resources for the education of adults. The media and human resources are located in three large educational organizations, and a number of others (for example, the library system, voluntary associations, and business and industry). There is little or no integration of planning among these organizations. The planning and delivery of programs is not even integrated or systematic within each organization. There is no systematic approach to needs assessment; programs are planned by constituent universities of the U.W. system, by V.T.A.E. Districts and other agencies, and by division and faculties and even by different program areas within faculties, all in apparent disregard for the
work of the others. These programs using media are produced by in-house facilities, in disregard for the economy and quality improvements that would arise from a more integrated approach; i.e., from a "centralized design and production of materials." A condition of near anarchy prevails in the design of learning materials at the present time.

Criterion 2: Use of a wide range of media.

It is obvious, but I believe necessary, to re-state that in the design of distance education programs we must not start by thinking about media. It is essential to begin by developing an understanding of who is learning and what is to be learned. Then we should select specific media to achieve those objectives which can be achieved more effectively and efficiently by that medium compared with all others. There is no one medium which meets all the needs of all learners in all subject areas. Specialists in no one medium can design a high quality learning program unaided. To meet all the needs of the learner, it is essential that when designing programs, the specialists in each available medium work in partnership, and in partnership with the academics and educational technologists. Because this is not done, we see consequences which are very familiar. Quite typically programs are offered on one medium which should be on another, while on the other a certain part of a different program which would be better on the first. Printed independent study courses are produced with no audio or visual components, or high quality audio materials are produced accompanied by mediocre printed study guides. Our students suffer the curse of what I call the single medium fixation.

Criterion 3 and 5: Specialization of staff.

In fledgling distance education systems which I see in Wisconsin, I see an unquestioned expectation that course content will be provided by competent academics; yet there appears to be an unquestioned expectation also that the same academic whose full-time job it is to keep abreast of the field of knowledge can simultaneously be an expert in distance program design. This is an unreasonable expectation. It is almost as unreasonable to expect this same academic to provide evaluation and instruction by correspondence. In the successful foreign models of distance education, both instruction and program design are separate specializations from the professing of an academic discipline. Of course academics develop some expertise, as they also develop expertise in broadcasting if they work often enough in a studio. However, as we would not expect an academic to be his own radio or television producer, we ought not to expect him to produce well-designed print, audio and visual learning materials without specialist support. The reason many academics are unwilling to provide learning objectives in their teaching program is because they do not understand their values or know how to write them. In distance education they are essential, and the institution must ensure expert help is given in their construction. Certainly some of the locally produced materials I have seen would be improved by the participation in the program development stage of a competent educational technologist and their use would be improved if instruction and learner support was managed by people who specialize in the study and practice of these arts.
Criterion 4: Centralized design and production of materials is combined with localized learning.

Since our research confirms what common sense suggests, that adult learners vary greatly in their motives, in the strength of their motives, in the way they learn, and the problems both academic and personal which influence their learning; since most distant education programs depend on materials which are mass produced and not all learners are able to adapt these materials to their own conditions, motivations and learning styles, the question is: should every distance education system make provision for some sort of learner counseling or some other kind of personal support for each individual learner in an otherwise mass education system? I believe there is a wide range of possible ways of giving support. I believe the answer to the problems of building a learner support system is like most distance education problems - one of reorganizing and restructuring the resources which are already available. The aim should be to use locally available resources to provide every learner who wants it with an understanding listener and an intermediary within the learning system. Problems which cannot be dealt with directly by the student in communication with the center of the distance education organization can be taken up by local advisors, or by the learner after consultation with local advisors. These advisors do not have to be professional counselors, nor in full-time employment of an educational organization. They merely have to be accessible to the learner and in close touch with the specialists at the distance teaching institution. Suitable arrangements between a central distance teaching institution and local partners can be created in such institutions as hospitals, vocational schools, public schools and colleges, work places and public libraries. I will go so far as to assert that whatever our learning system and content, learning will be more effective and learners will feel better served if there is a student support system of some kind. There is no organization that such a system could not be designed for. It should be regarded as an essential investment to ensure the proper exploitation of the much more expensive distance teaching materials.

I think there is a second important area of activity which must be carried on at the local level in a distance education system. If we go back to the time when the adult is just thinking of becoming a learner, that adult has become aware that some part of her or his life would benefit from learning. How and through what process this awareness originates is itself a very important question. When "the part of life" is in a place of employment, it is quite likely the awareness comes from the advice given formally in career development counseling. Apart from learning in employment, however, a raised awareness of need to learn is always a result of chance. The single greatest area of weakness in our distance education systems, closely related to the weakness in student support, is the almost complete failure to provide to the potential client and the entering client, an advisory service. Adult programs in general and distance education programs in particular, are planned either on the basis of what is of interest to the enthusiastic professor or what the institution feels must be good for the learner, or are planned in response to the demand of an articulate minority of the adult population. I suspect that at the present time our telecourses are addressing the needs of this articulate minority. Outside work, it is very rare for anyone to approach the adult to identify his or her needs to learn. Those who come forward do so either because they are experienced students, perhaps already in
a college program (and so we have the phenomenon of more educational resources being given to the more highly educated than the less well educated) or because they respond to an advertisement, or hear about our programs from a friend, or are persuaded to take a course by a family member, very often a growing child. Yet a great number of learner needs come from the adult's particular stage of development in the adult life cycle. Think of the need for learning of the new mother, the person returning to work or college in middle age, the child of a dying parent, the spouse of an alcoholic. We will not begin to maximize the use of our educational resources or begin to deliver services to more than the present minority until we establish a systematic local service for assessing needs and helping learners enter the system, and building new programs on the basis of the needs which are identified in the field. As I said before, the infrastructure of such a system is in place in the public library system, county extension office and the network of educators already employed by our agencies. What is required is a shift of emphasis in their roles away from being content specialists. They must learn to leave the content to the centrally located content specialist. The design of content is now better managed centrally, and its delivery can be through communications media. Several vital activities, however, can only be performed where the learner is. The first of these, vital for both learner and educational institution, is needs assessment. We must raise the awareness of our field staff and our teachers on this and train them to do it.

Criterion 7: Distance education includes quasi-industrial processes that require non-traditional management structures and control.

At the present time our systems are meeting the needs of only a very small proportion of the adult population. I have even heard of one telecourse in which only one student was enrolled. The enrollment in many of our courses at the state level can be measured in hundreds at best and often in dozens. It seems as if American distance educators are unable to advance from a stage of development reminiscent of the early auto builders, where a handful of craftsmen struggled with small amounts of capital and a low level of specialization to build a meager output of vehicles for distribution at high cost to an underdeveloped market. Distance education, which will meet the needs of large numbers of the population, requires some, though only some, of the applications of industrial techniques in education. These include centralized design and production with local marketing, systems design in course production, specialization of work among the staff, including division of labor between academic course writers and instructors. Wisconsin's educational institutions appear not unwilling to address the needs of adult learners. The idea of continuing lifelong education is widely talked about, if not fully accepted, though there is still wide misunderstanding and ignorance among academics about the adult approach to curricula and to learning. Nevertheless, it is not for lack of good intentions that we seem unable to fulfill the goal of meeting the adult's lifelong learning needs, but rather the inability to organize a system which will manage both the instruction of adults at a distance, as well as the generally younger person on campus at the same time. It is because conventional institutions were unable to meet the needs of adult learners on a large scale in other countries that in recent years the special kind of institution, the open universities, have grown up. In this country there is no national open university. The conventional institutions of higher and further education struggle to provide education for the same kind of learners they always served, the same kind of programs they
always provided, by the same kinds of teaching methods; namely, a face-to-face craft method with one person doing all the planning, all delivery, all interaction, all assessment. At the same time they try to expand their offerings through a similar approach into the different world of distance education; that of the adult learner with more specific learning needs, often concerning adult problems, community and social needs, as well as academic and vocational. At times the response of the conventional institution has been to try to restrict the development of distance education. The U.K. universities tried to stop the establishment of the Open University, saying they were already meeting the needs, and if given more money, could meet any that were still unmet. A similar response was heard to the proposal for a Wisconsin open education system in the early 1970's. There is a tendency I think still for institutions to claim either that the needs are not there; or if they are, they will meet them in time. The answer to the many needs of the adult learner is neither to deny their existence nor to construct a new super institution. The answer probably lies in various collaborative arrangements among the various agencies with interests in this area. We see now the development of consortia in which the member agencies specialize and produce for a market beyond the agency's traditional markets and beyond the agency's own state. There is a special need for collaboration in a state like Wisconsin, which has such a rich range of educational institutions. To achieve it, there remains, as was identified by the Open School Commission of the 1970's, the need for an extra-institutional coordinating system alongside the regular educational system. This should link up the educational specialists in each of the various state agencies, pool education resources and develop distance education expertise. It might also contribute to the coordination and integration of distance education delivery systems statewide.

4. The Open School

Among the questions which I was asked to address during this inquiry was the question whether the concepts, principles and theories which were developed by the Governor's Task Force on Education in 1970-71 (15) had any relevance under today's conditions.

My personal opinion is that through a combination of institutional short-sightedness and political accident, Wisconsin missed an opportunity in 1971 to turn a great vision into reality, a vision that might have set Wisconsin on the road to becoming the world's first Lifelong Learning Society. However, while the technologies of communication have changed dramatically, and educational technology to a lesser extent, neither the rationale of lifelong learning, nor the potential of Wisconsin's institutions to meet the adult's needs to learn have changed significantly during the past 15 years. Indeed, the proliferation of communication media and the wider involvement of faculty in extension-type activities makes the need for an Open School kind of arrangement both more needed and more feasible. The Open School should never have been conceived as a threat to established educational institutions. The market for adult learning is hardly tapped. Research in every country over many years shows that people who enroll in institutions of adult education are people who already have had good educational experiences. As a result of having education, people look for more. It is a profound misconception to believe that adult learning is a finite market, so that if people enroll in
one institution, they are captured from another. In fact, our aim should be to encourage enrollment in all or any program, confident in the knowledge that sooner or later persons who have started to learn will turn to use our programs too. There is an enormous potential demand for adult learning, and far from resisting an Open School approach, our institutions should welcome the assistance that it would give, as well as the stimulus to further enrollment that should result.

I would mention here three particular aspects of the Open School proposal that appear to me to have particular relevance at the present time.

1. The first is the definition of lifelong learning needs as a rationale for developing a different approach to education. The following are typical quotations from discussion papers at the Governor's Commission:

"There is strong conviction that individual and social needs are outgrowing the capacity of the conventional education apparatus as presently organized and financed, to respond effectively and economically. Part of the problem stems from rigidities of structure and practice of long-established institutions that are inherently conservative; part results from restraints placed upon current systems by a public that is often skeptical of proposals for educational change. Modern management, however, dictates bold measures to find and demonstrate improved ways to accomplish educational results." (16)

"The Commission recommends that the Open School design a balanced offering of credit and non-credit programs; that the programs develop a curriculum of learning as a lifelong experience; and that the programs be matched to people's needs and abilities as they emerge, not solely to their age or previous schooling."

"The quality of life for Wisconsin citizens is also dependent upon preparation for the essential life tasks of parenthood, citizenship, retirement and aging, tasks that will be quite different in the 1970's from those of a generation ago. Custom and tradition must now be supplemented by learning how to lead a happy and productive life. An abundance of art, music, literature, and history is available through the use of modern technology. The Wisconsin citizen needs the opportunity in his increasing leisure to introduce himself in a systematic way to these cultural resources. As work hours are reduced, personal status and daily satisfactions must come from personal fulfillments enhanced through educational opportunity." (17)

As we have seen, lifelong learning at the present time is learning which helps the adult through life's transitions and also enhances individual, community, and social growth. It is learning for recreation, and for the full use of leisure. It is learning for work, and learning that helps deal with the accelerating rate of change of work, and also learning that makes work more fulfilling. If, as appears from the Open School report, lifelong learning was considered of great importance in the 1970's, there seems little doubt that we are at the beginning of an era in our economic and social development when lifelong learning will be no less than imperative. In his book, The Uneasy Eighties, subtitled The Transition to an Information Society, Arthur Cordell, who was a science advisor to the Science Council of Canada,
writes, "In the transition to an information economy, change becomes the new constant. The pace of change today is unprecedented, and change itself has become a source of the stress that characterizes the uneasy eighties..." The prevalence of change and the dominance of the economy by information-related activities combine to give the new information technologies the cumulative force of a transformative technology...The advent of micro-electronics is rapidly and irreversibly leading to a major and fundamental transformation of Western society, with implications not only for the nature and organization of the economic infrastructure, but also for the quality of life, social organizations, and relationships among individuals, private institutions, and governments." (18) It seems that in the 1980's and 1990's there will be significant numbers of people who will no longer depend on jobs for necessary income. It would appear that in the future information society, learning is likely to be the main occupation of an ever-increasing proportion of our citizens. Cordell and most other futurists suggests a life of non-work for most of our citizens in the closing years of this century. What is to become of their time, of their lives? What experience will they have with new, yet to be developed, communications media? Will the media be employed to achieve the Greek ideal of the learning society, with slavery replaced by technology? Or are we to experience a different Brave New World of mind-numbing electronic pastimes and diversions? Individual community and social growth through learning, or mental atrophy, emotional decline and ultimately social extinction? These are questions that can be dismissed as fanciful, unrealistic and irrelevant, which in the short run is true. But now is the time, I suggest, to be thinking beyond the short-term. I also suggest that unless educators plan to use the telecommunications media for the purposes of Lifelong Learning, we will lose the media by default to the Philistines. Our history is not one to make us hopeful. Of all human inventions which have been more abused in the United States than the medium of television? As one views with disgust the junk-programs fed hour after hour and consumed by the people of the richest nation in history, one is appalled at the prospect that the control of more and equally powerful media should pass into the hands of the commercial anti-educators. Society as represented by the state surely has a right and a responsibility to plan for its own future and for its growth. In the future of non-work, telecommunications media will play more than a marginal part in the citizen's lives. The media will play a dominant part in their lives. The media must not be controlled by commercial interests therefore. The media must be under the firm control of public servants and others committed to the cause of lifelong learning.

2. I think it significant that the Open School was conceived as a system which would draw on the strengths not only of the conventional systems of publicly-funded formal education, but also on private agencies, voluntary agencies, and the resources of the general public. Here is a list of the agencies which it was proposed the Open School would work with:

a. Public and private academic and occupational training institutions. (includes job training, art and music schools)

b. Public and private non-academic educational institutions. (includes public libraries, art galleries, museums)

c. Public and private service agencies. (includes health, welfare, recreation depts. and agencies)
d. Voluntary associations on the local and state levels including business and industry. (includes associations of commerce, manufacturing associations)

Agricultural Associations
Historical Societies
Health Associations
Veterans Associations
Religious Organizations
Parents Groups
Alumni Associations
Labor and Trade Associations
Adult Education Assoc. and Councils
Mental Health Associations
League of Women Voters
Service Clubs
PTA and League of Home & School Assoc.

e. Private business (18)

It is as important today as it was in 1972 that we recognize the wide range of agencies which impact on the adult learner; and if we design a system for the future, we ensure the full participation of such agencies.

3. Regarding the delivery system of an open education system, the relevant recommendations include the following:

a. "The commission recommends that the Open Education Council establish a system to identify, coordinate, and extend those academic and communications resources whose mutual development will be of greatest educational and economic benefit to the state. The system recommended will consist of two resource coordination units: The learning resources center and the communications resources center, and one program development and delivery unit: The Open School."

b. "The commission recommends that the Open School develop a structure of program teams, delivery systems and access systems that involve specialists for planning content, learning, technology, counseling and student needs throughout each project."

c. "The commission recommends that the Open School implement a structure of local advisors, counselors and community volunteers to aid in directing students into programs and to aid in assessing needs at the local level."

It will be apparent that these recommendations suggest solutions to several of the key areas of weakness in our current system which were identified earlier: namely, the need for integrated and systematic program design, production and delivery; the need for greater specialization; the need for localized support of learners combined with centralized course production. How unfortunate that decision makers were unable to turn these ideas into reality in the 1970's. How much money and waste might have been saved. One last quotation from the Commission illustrates the opportunity that was lost:

"From a practical and economical point of view, the time to coordinate existing resources and land for new ones is before a great deal more expensive duplication takes place. As long as the media functions of Wisconsin's institutions continue to grow separately, each will not be well protected against having to 'reinvent the wheel' every time a new road is opened."
"It does not take much a look down the roads that are already open to see that such new media as electronic video recorders; microwave, satellite, and CATV broadcasting; telecommunications, computer banks, and a host of others will become as much a part of the State's educational technology as typewriters and duplicators are now. The Open System approach is well suited to provide the focus for statewide planning regarding the new hardware we will inevitably accumulate anyway."

It will be more difficult in 1986-87 than in 1972-73 to reorganize our resources of adult education. There has been duplication and a lack of planning, and there are now more pieces to put together. More importantly, though, there is wider awareness now of the need to develop a more systematic approach. The time may now be right.

Developing the System

What would a future system look like? At the present time the best distance education we have in Wisconsin could be summarized as follows:

Beginning with content specialists, a curriculum, or program is determined, usually as a result of consideration by faculty in the academic discipline, and sometimes, though not generally, following discussions with community opinion leaders. Then, an academic writes a program and:

a) Presents it through print, audio, video or other medium;
b) Reads and grades students' work;
c) Occasionally responds to students' inquiries;
d) Evaluates and awards accreditation.

This is done by numerous units within each agency while the agency goes about its main work of teaching youth.
An improved system would:

Begin with consultation with adult learners regarding their learning needs, to identify those needs that could be met by large-scale, multi-media education methods.

Then: assemble in a program development and delivery unit teams of specialists in content, educational technologies and communications technology, with substantial time and money,

To: design programs to be communicated on a large scale, across the whole state system, from a communications resource center;

And: supported by an infrastructure that made advice and counseling available locally for every learner,

And: providing specialist instructors on a tutor-student ratio that permitted individual instruction and evaluation,

With accreditation shared by the agencies providing the distance education team, not by individual academics.
6. **RECOMMENDATIONS**

Many of the individuals whom I have spoken with seem to have a sense of the large-scale of the tasks they are dealing with, and the inadequacy of their resources by comparison. I have no reason to think that most people would not cooperate with a project that aimed to obtain better understanding about the learning needs of the Wisconsin adult, and which also set out to test new collaborative schemes for meeting those needs. I am not sure that it would be wise to refer specifically to the Open School proposals. Not only might this raise unwelcome memories of past political fights, but we now have new and deeper insights into the education of adults through the media, and I see no great benefit in using a dated model. As a means of achieving ends similar to the Open School's, I propose that:

1. It is essential to undertake a research project to substantiate the claim that massive unsatisfied learning needs exist;

2. It would be enormously helpful to demonstrate on a limited scale the application of the program design and delivery model that has been proposed above, and which is so similar to the Open School approach. Our thinking so far has focused on the idea of locating a limited geographic area, say a Wisconsin county, and using it as a laboratory to test the delivery system which we have been discussing. The essential ingredients of the experiment would include:
   a. a small team of adult educators to work at the community level in needs assessment, learner support and program evaluation. I think such people could be identified through the University.
   b. a small program development team to design one or more programs in response to the needs identified at community level. Personnel should be sought from a range of agencies.
   c. an advisory committee of county representatives of the main agencies in adult education, including business and voluntary agencies.
   d. access to broadcast or narrowcast and other telecommunications channels.
   e. funding support, perhaps from a national foundation.

3. If a small team would be assembled and funded to undertake a demonstration, it would have the following additional goals:
   a) demonstrate the principle of inter-departmental and inter-agency collaboration;
   b) have a training effect on the individual members of the team;
   c) produce reports, workshops and conference materials which would serve to motivate further and perhaps more large-scale projects in due course.

4. The E.C.B. is probably the agency in the best position to give a lead in this regard. I have said very little in this discussion about
communications technology at the E.C.B., mainly because I do not think our problems are problems of communication technology. It is true that, as the Open School report predicted, there is a great deal of duplication in experimentation with such media as video, but what is most worrying about the media is its under-utilization for the education of adults. This is not a communications problem, but a program development problem, which is why my discussion has been focused on program development.

I suggest however that by asserting its advisory and coordinating role and especially by focusing on questions of community access and on the question of integration of media use, the E.C.B. might be the one agency with an influence wide enough to bring the various providers together to both assess needs, plan and deliver a program, in a local community, on a pilot demonstration basis.

If this is feasible, it is, I think, the best way forward. It will need, as an early first step, the organization of an advisory group and specification of the aims and objectives of the project. I have not attempted to spell these out specifically in this discussion, but if we moved beyond the current general level of exchange, would be glad to do so.
REFERENCES


2. Ten Year Plan p. 3


7. ACACE Adults: Their educational experience and needs. Leicester, U.K. 1982


11. Tough


13. Adults as Learners, p. 238.

14. Rumble and Harry, The Distance Teaching Universities.


16. Quotations from documents prepared for, and by, members of the Governor's Commission on Education, 1971. These are in the author's personal collection, but originals should be accessible in the archives of the State of Wisconsin.


19. Governor's Commission paper titled "Coordination."
Appendix I

Calendar of Meetings

June 19  Preliminary discussion at E.C.B. (3 hrs.)

July 7  a.m. and p.m.
July 8  Briefings, planning meetings, discussions at E.C.B. (15 hrs.)
July 10  same
July 14  same

July 9  WHA: (7 hrs.) Review distance education theory and practice with reference to WHA's Annenberg/CPB proposal

July 15  Interview Luke Lamb (2 hrs.
July 16  WHA (3 hrs.) Focus on current Annenberg/CPB project
July 17  Interview Sandra Carmen, VTAE, and Nancy Bauer, E.C.B. (5 hrs.)
July 18  WHA. Meet with Hilda Moskowitz, Annenberg/CPB project (2 hrs.)
July 21  Interview Tom Axtel (Milwaukee), channel 10/36 (6 hrs.)
July 22  Interview Jack Tiffany, U.W. Extension (2 hrs.)
July 25  E.C.B. Review progress (3 hrs.)
July 28  Interview D. Nowrasteh and M. Hernandez, MATC (1 hr.)
July 29  Interview Peg Guisler, U.W. System (2 hrs.)
July 31  WHA - Focus on program design (3 hrs.)

Aug. 1  E.C.B. Review progress (2 hrs.); WHA meet Pat Takemoto and Sarah Steele, Annenberg/ECB evaluation plan (1½ hrs.
Aug. 6  Interview Dean Baidey, U.W. Extension (1½ hrs.)
Aug. 6  Interview Dean Schmidt, U.W. Extension (1 hr.)
Aug. 13  WHA - Annenberg/CPB evaluation plan (3 hrs.)
Aug. 14  Preparation of oral report (6 hrs.)
Aug. 15  E.C.B. - Oral report to Larry Dickenson and Gaizka Usabel (3 hrs.)

Aug. 27-31  Four day writing report (24 hrs.)

Total about 84 hrs. or 21 hrs. per week
## APPENDIX 2

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution</th>
<th>1st Enrollment</th>
<th># Students</th>
<th>Academic Courses</th>
<th>Technical/Vocational Courses</th>
<th>Professional Courses</th>
<th>Community Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.K.</td>
<td>Open University</td>
<td>1971</td>
<td>108,000</td>
<td>B.A.</td>
<td>Teaching, Health Management</td>
<td>Community Education</td>
<td>Technology</td>
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<tr>
<td>SPAIN</td>
<td>Universidad Nacional</td>
<td>1973</td>
<td>62,000</td>
<td>B.A. Education</td>
<td>Nursing</td>
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<tr>
<td>CANADA</td>
<td>Tele-Universite</td>
<td>1974</td>
<td>20,000</td>
<td></td>
<td>Courses giving credit recognized by other universities</td>
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<tr>
<td>W. GERMANY</td>
<td>Fernuniversitat</td>
<td>1975</td>
<td>23,000</td>
<td>B.A.</td>
<td>Baccalaureate degrees</td>
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<tr>
<td>PAKISTAN</td>
<td>Allama Iqbal Open University</td>
<td>1975</td>
<td>65,000</td>
<td>B.A.</td>
<td>M.A. Education</td>
<td>Functional Education</td>
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<tr>
<td>ISRAEL</td>
<td>Everyman's University</td>
<td>1976</td>
<td>12,000</td>
<td>High school courses</td>
<td>Electronics</td>
<td>Public Health</td>
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<td>Accounting</td>
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<td></td>
<td>Drafting</td>
<td>tal studies</td>
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<tr>
<td>NIGERIA</td>
<td>University of Lagos</td>
<td>1976</td>
<td>4,760</td>
<td>B.SC. Science Education</td>
<td>B.SC. Business Administration</td>
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<td></td>
<td>B.SC. Accounting</td>
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<tr>
<td>AUSTRALIA</td>
<td>Deakin University</td>
<td>1977</td>
<td>3,478</td>
<td>B.A. Education</td>
<td>M.A. Education</td>
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<td></td>
<td></td>
<td></td>
<td>Master of Business Administration</td>
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<tr>
<td>CANADA</td>
<td>Open Learning</td>
<td>1979</td>
<td>11,300</td>
<td>Courses leading to B.A.</td>
<td>Dental Assistant, Nursing</td>
<td>English as a Second Lan-</td>
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<tr>
<td>Country</td>
<td>Institution</td>
<td>Year</td>
<td>Number</td>
<td>Degree(s)</td>
<td>Subject(s)</td>
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<tr>
<td>CHINA</td>
<td>Radio &amp; Television Universities</td>
<td>1979</td>
<td>½ million</td>
<td>B.A.</td>
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<td>M.B.A.</td>
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<tr>
<td>THAILAND</td>
<td>Sukhothai</td>
<td>1980</td>
<td>110,000</td>
<td>B.A.</td>
<td>Police Administration</td>
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<td>Banking</td>
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<td></td>
<td></td>
<td>Agricultural Extension</td>
<td></td>
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<tr>
<td>U.S.A.</td>
<td>International U. Consortium</td>
<td>1981</td>
<td>20,000</td>
<td>B.A. Awarded by</td>
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<td></td>
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<td>participating</td>
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<td></td>
<td></td>
<td>institutions</td>
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<tr>
<td>NETHERLANDS</td>
<td>Dutch Open University</td>
<td>1974</td>
<td>40,000</td>
<td>27 diplomas</td>
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<td></td>
<td></td>
<td>planned</td>
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<tr>
<td>JAPAN</td>
<td>University of Air</td>
<td>1985</td>
<td>30,000</td>
<td>B.A.</td>
<td>Elementary education</td>
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<td>planned</td>
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</table>
### Table 8. Descriptions of Life-Cycle Phases

<table>
<thead>
<tr>
<th>Phase and Age</th>
<th>Marker Events</th>
<th>Psychic Tasks</th>
<th>Characteristic Stance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaving Home</td>
<td>Leave home</td>
<td>Establish autonomy and independence from family</td>
<td>A balance between “being in” and “moving out” of the family</td>
</tr>
<tr>
<td>18-22</td>
<td>Establish new living arrangements</td>
<td>Define identity</td>
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<tr>
<td></td>
<td>Enter college</td>
<td>Define sex role</td>
<td></td>
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<tr>
<td></td>
<td>Start first full-time job</td>
<td>Establish new peer alliances</td>
<td></td>
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<tr>
<td></td>
<td>Select mate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moving into</td>
<td>Marry</td>
<td>Regard self as adult</td>
<td>“Doing what one should”</td>
</tr>
<tr>
<td>Adult World</td>
<td>Establish home</td>
<td>Develop capacity for intimacy</td>
<td>Living and building for the future</td>
</tr>
<tr>
<td>23-28</td>
<td>Become parent</td>
<td>Fashion initial life structure</td>
<td>Launched as an adult</td>
</tr>
<tr>
<td></td>
<td>Get hired/fired/quit job</td>
<td>Build the dream</td>
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<tr>
<td></td>
<td>Enter into community activities</td>
<td>Find a mentor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establish children in school</td>
<td>Reappraise relationships</td>
<td>“What is this life all about now that I am doing what I am supposed to?”</td>
</tr>
<tr>
<td>Search for Stability</td>
<td>Progress in career or consider change</td>
<td>Reexamine life structure and present commitments</td>
<td>Concern for order and stability and with “making it”</td>
</tr>
<tr>
<td>29-34</td>
<td>Possible separation, divorce, remarriage</td>
<td>Strive for success</td>
<td>Desire to set long-range goals and meet them</td>
</tr>
<tr>
<td></td>
<td>Possible return to school</td>
<td>Search for stability, security, control</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Search for personal values</td>
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<tr>
<td></td>
<td></td>
<td>Set long-range goals</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Accept growing children</td>
<td></td>
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<tr>
<td>Becoming One's</td>
<td>Crucial promotion</td>
<td>Face reality</td>
<td>Suspended animation</td>
</tr>
<tr>
<td>Own Person</td>
<td>Break with mentor</td>
<td>Confront mortality; sense of aging</td>
<td>More nurturing stance for men; more assertive stance for women</td>
</tr>
<tr>
<td>37-42</td>
<td>Responsibility for three-generation family; i.e., growing children and aging</td>
<td>Prune dependent ties to boss, spouse, mentor</td>
<td>“Have I done the right thing? Is there time to change?”</td>
</tr>
<tr>
<td></td>
<td>parents</td>
<td>Reassess marriage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For women: empty nest; enter career and education</td>
<td>Reassess personal priorities and values</td>
<td></td>
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</tr>
<tr>
<td>Settling Down</td>
<td>Cap career</td>
<td>Increase feelings of self-awareness and competence</td>
<td>“It is perhaps late, but there are things I would like to do in the last half of my life”</td>
</tr>
<tr>
<td>45-55</td>
<td>Become mentor</td>
<td>Reestablish family relationships</td>
<td>Best time of life</td>
</tr>
<tr>
<td></td>
<td>Launch children; become grandparents</td>
<td>Enjoy one's choices and life style</td>
<td></td>
</tr>
<tr>
<td></td>
<td>New interests and hobbies</td>
<td>Reexamine the fit between life structure and self</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical limitations; menopause</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Active participation in community events</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Mellowing</td>
<td>Possible loss of mate</td>
<td>Accomplish goals in the time left to live</td>
<td>Mellowing of feelings and relationships</td>
</tr>
<tr>
<td>57-64</td>
<td>Health problems</td>
<td>Accept and adjust to aging process</td>
<td>Spouse increasingly important</td>
</tr>
<tr>
<td></td>
<td>Preparation for retirement</td>
<td></td>
<td>Greater comfort with self</td>
</tr>
<tr>
<td>Life Review</td>
<td>Retirement</td>
<td>Search for integrity versus despair</td>
<td>Review of accomplishments</td>
</tr>
<tr>
<td>65 +</td>
<td>Physical decline</td>
<td>Acceptance of self</td>
<td>Eagerness to share everyday human joys and sorrows</td>
</tr>
<tr>
<td></td>
<td>Change in finances</td>
<td>Disengagement</td>
<td>Family is important</td>
</tr>
<tr>
<td></td>
<td>New living arrangements</td>
<td>Rehearsal for death of spouse</td>
<td>Death is a new presence</td>
</tr>
<tr>
<td></td>
<td>Death of friends/spouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Major shift in daily routine</td>
<td></td>
<td></td>
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</tbody>
</table>