The fourth force in American education is considered to be adults "beyond school age" who are participating in educational experiences. This is described by the following: education for the foreign born, life-long learning, basic education, community development, extension education, continuing education, community school, permanent education, or adult education. These terms reflect a gamut of educational experiences which "out-of-school" learners take part in through public education, proprietary schools, religious schools, and clubs. The National Opinion Research Center at the University of Chicago estimated that nearly 30 million adults were engaged in AE and predicted that the actual adult education audience would increase faster than the population in general. Subjects discussed relating to this general topic include Adult Education Responsibilities and Adult Education Programs. The estimate of the number of participants in AE will almost double between 1970 and 1976. The principal increase will probably be in programs conducted by business, government, unions, military services, correspondence schools, community organizations, and instructional TV. It is pointed out that since the ultimate goal of adult education is the improvement of self and community living, the curriculum and the methods by which adult education is taught should be functional to daily living--functional to the improvement of self and the community. (CK)
The interaction of Adult Education and General Education

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The key word in the title of this chapter is interaction. Interaction is defined as the play of mutually influencing forces. Adult Education (AE) is any form of structured educational experience for adults who are beyond the "regular" school age. General Education (GE) is education for young people from Kindergarten through secondary school.
I. THE FOURTH FORCE IN EDUCATION
DURING THE SEVENTIES:
A SETTING FOR INTERACTION IN THE UNITED STATES

A. The Fourth Force

Education in the United States follows Dr. Malcolm Adiseshiah's "educational continuum." Children start the educational continuum at the age of five or six (the first force in education), keep going until seventeen or eighteen (the second force in education), and there education ends for many. Of course, more and more adults go on to community colleges and four year colleges, universities, professional schools, and graduate schools (the third force in education). By then, the student is in his twenties and perhaps thirties, and education ends for many more. Not for everyone, of course, because there are the "professional students" who remain in statu pupillare in graduate school, for example, as long as possible—for a variety of reasons. Then too, there are the adults who go back to school in their twenties, forties, or sixties. These adults "beyond school age" who are participating in educational experiences are the periphery of education, the harder-to-classify, extramural part of American education. They comprise what I call the fourth force in American education.

This fourth force can be described by a lexicon of different terms: education for the foreign born, life-long learning, basic education, community development, extension education, continuing education, community school, permanent education, or adult education. Each of the terms has specific connotations; they are not synonyms. They reflect a gamut of educational experiences which
"out-of-school" learners take part in through public education, proprietary schools, religious schools, clubs, or on-the-job training which are sponsored by: Cooperative Extension Service, university extension, Laubach Literacy, the Ford Foundation, National Association of Educational Broadcasters, educational radio, the Corporation for Public Broadcasting, correspondence study, museums, libraries, or prisons.

A variety of professional AE associations (Adult Education Association of the U.S.A., the National Association for Public Continuing and Adult Education, the American Association of Junior Colleges, the National University Extension Association, Association of University Evening Colleges, Committee of Adult Education Organizations, the American Vocational Association, and the American Society for Training and Development), involve adults who, in turn, take part in educational programs which are not neatly circumscribed to nor limited to a five through eighteen or twenty-one age range, nor to semester hours, Carnegie units, or quarter hours. AE includes a great flexibility of scheduling: one hour lectures, ten minute programmed modules, twenty-four hour marathons, three week institutes, one year programs. Graduation exercises for adults are already an accepted annual event in many communities. The audience frequently includes husbands, wives, children, and parents of the graduates. Los Angeles, a city with 28 community adult schools, holds a combined ceremony in the Hollywood Bowl for more than 5,000 graduates. Statewide in California, the number of adults earning a high school diploma through public school adult education programs numbers nearly
20,000 per year.

The National Opinion Research Center at the University of Chicago, in a study completed during the early sixties, estimated that nearly 30 million adults were engaged in AE and predicted that the actual adult education audience would increase faster than the population in general. In fact, there may be more adults enrolled in adult education by the end of the seventies than all children and young people from Kindergarten through secondary school. Public AE enrollments total upwards of three and one-half million adults. The immediate top priority goal of public AE is to reach the 65 million or more adults who have not completed high school. Currently, 200,000 adults are enrolled in high school equivalency programs, and about 900,000 other adults are enrolled in high school diploma courses in the schools.

However, the education of adults has yet to intrigue the majority of educators. This is especially unfortunate because of the potential lessons to be learned by general education from adult education. Few enterprises are so varied as the fourth force in education. Consider, for example, the training programs of business and industrial firms, military organizations, or the Foreign Service Institute of the United States Department of State. Consider also the variety of purposes of participants in AE. Adults engage in studies to learn economic survival techniques, to raise their salaries, to refresh themselves intellectually and artistically, or to replace an outdated skill with one of greater market-value. Adults are subjected to the widest conceivable variety of teaching and motivation techniques. The history of AE
is the history of much that is innovative, imaginative, and humane in the learning process. In spite of this fact, AE has not yet come into its own.

B. Meeting Societal Needs

An example of innovative AE is ABE (adult basic education or literacy education). ABE helps adults increase their own competency levels and meet their educational needs. It can have useful side-effects for the children of ABE students by stimulating and motivating the children of the adult students to return or remain in school and, indeed, to do better in school. In fact, some have claimed that this correlative result of successful ABE programs may be more important that the primary purpose of teaching adults. An innovation of some ABE programs is the learning lab, an educational facility in which educational experiences are available from 8:00 a.m. to 10:00 p.m. Learning labs have been used to help ABE students to go from illiteracy to a third grade level in 150 hours, from the fourth grade to the sixth grade level in about 120 hours, and from the seventh grade to the eighth grade level in 120 hours.

Adults may vote, but they often do not. In the United States about half of the adults do not vote, even in a presidential election. Therefore, another kind of recurrent need for adults has been citizenship classes, both for citizens as well as aliens.

A breadwinner can expect five or more jobs during his working career. The training and retraining for these jobs is another kind of adult education. AE has instituted the "systems" approach to learning for adults to meet these needs. (A "system" is a
group of individuals, as well as interdependent elements, which operate as an integrated whole in order to achieve a certain product.) Instruction can be looked at as a system with the product a predictable student performance. The components of a system are the learners, the teachers, administrators, facilities, methods, materials, and support personnel. The end product is to help the adult develop competencies. In the words of the psychologist Robert Gagne, "Instruction becomes not primarily a matter of communicating something that is to be stored. Instead, it is a matter of stimulating the use of capabilities the learner already has at his disposal, and of making sure he has the requisite capabilities for the present learning task as well as for many more to come."

More education means more money for the educated, so adults attend AE classes to make more money. According to the United States Bureau of the Census, there is a direct relationship between years of schooling and level of income. College graduates earn twice as much in their lifetimes as high school dropouts and three times as much as grade school dropouts. The Bureau estimates the lifetime incomes for men in terms of the number of years of formal education as follows:

- Less than eight years of grade school = $189,000
- Eight years of grade school = $247,000
- One to three years of high school = $284,000
- Four years of high school = $341,000
- One to three years of college = $394,000
- Four years of college = $508,000
- Five or more years of college = $587,000

C. Adult Education Responsibilities

The central responsibility for AE in the United States lies with public education. All states have public AE programs. AE
adds to and extends F-12 education with courses (credit and non-credit, degree and non-degree), conferences, institutes, short courses, lectures, roundtables, workshops, independent study (home study, correspondence study), counseling and guidance, equivalency and proficiency testing, and community service programs.

The goals of the Maryland State Department of Education reflect a perspective of future needs in AE for the seventies from one state:

1. **Eliminate under-education and illiteracy:** The elimination of adult illiteracy really means the educating of all adults who are able, through the high school level, enabling them to become high school graduates or to earn high school equivalency certificates.

2. **Prepare adults for full employment:** It is important that all unemployed adults be made employable. In time, this would help to reduce the number of adults who need to be on welfare and alternately increase the number of adults who would be taxpayers.

3. **Adult education must also help to train under-employed adults so that they may find and hold jobs commensurate with their abilities.** The elimination of under-employment helps to eliminate discontent among workers and provides hope to our poor youth that today's unskilled job is not all that he will ever be able or allowed to do.

4. **Perpetuate and enhance democratic government:**

   Governmental problems, political turmoil, and public unrest are indicators that America has not adequately kept up on the level of citizenship education and adult involvement which is necessary to continue to enhance and perpetuate the democratic way of government. Technological development and rapid social change are making it increasingly important that every adult citizen achieve and maintain his and her full civic and political responsibilities.
5. Improve general living: Modern man needs educational assistance if he is to keep up to date on matters pertaining to personal health, general welfare, and family living. In order to maintain and increase the current standard of living, Maryland's adult education program must offer a wide variety of well planned, quality educational experiences. There is little question that much could be done to raise the general level of both mental and physical health in Maryland if adult education programs existed to assist the health professions in educating the general public for the prevention of disease.

6. Provide for continuing self-realization: In a complex and fragmented society, adults need more opportunities for self-realization so they may remain healthy and continue to develop feelings of wholeness and purposefulness.

If AE is going to fulfill its responsibilities in the seventies, the following programs, materials, and services will be needed:

1. Continuous learning programs for all adults, particularly the disadvantaged.

2. Fuller utilization of other available community resources outside the school.

3. Growing professionalism of the adult educator seeking more appropriate adult education methods and materials.

4. Broadening and enrichment of curriculum areas and guidance services.

5. Increased coordination with non-educational groups to provide more non-classroom activities and community services.

6. The use of individualized instruction machines and materials which can dispense facts and help the student correct his own errors and move successfully at his own rate of speed.

7. Implementation of the new evaluative criteria of regional accrediting associations which serve as the base for most state high school standards and graduation requirements.

8. Creation of plans for continuing education to solve problems of the displacement of manpower resources.
Will a traditional, or at least usual education system meet the needs of adults in this period of probably the most rapid changes in the history of the nation? As one community college president has said, "Most of us will live in an urban environment; cities will be survival environment, and knowledge the weapon for surviving." AE at its best gets out of the way of the learner—and lets him learn. AE is, in essence, challenging the way that children have been taught, as well as the way that adults have been taught. The best techniques of adult teaching and learning should be applied to teaching children and young adults. A set of contrasts between teaching children and teaching adults has been recommended by Dr. Robert Likins of the Adult Literacy Center (California). (See Appendix A Contrast Between Teaching Adults and Teaching Children.)

One way in which AE may be used in the United States to meet societal needs better was recommended by former United States Commissioner of Education James Allen, who advocated a National Center for Lifetime Learning which would interpret data on AE and develop a network of communications among AE programs. Such a center could provide opportunities for adults to join in local task-centered activities to seek solutions to community and human problems. In addition, it might become a key ingredient in the reform of education at other levels as well.

D. Other Adult Education Programs

In addition to the education program supported by the United States Office of Education, a variety of federal agencies conduct adult education programs: the Department of Defense, Department of Labor, Department of Justice, Office of Economic Opportunity,
Veterans' Administration. The Center for the Study of Liberal Education for Adults estimated one to two billion dollars is spent on the programs of adult education by these government agencies.

Moreover, not only in federal agencies, but in the business sector, major efforts in AE are being made. More than 7,000 business and industrial companies, for example, rely on correspondence courses. About 4 million adults study at "extension centers". The University of California, the largest of the extension centers, offers 6,000 courses to 200,000 adults in 276 centers.

Businesses have expressed concern about personnel being able to keep pace with rapidly changing social, economic, and political conditions and the complexity of the business itself in which the business operates. American Telephone and Telegraph, for example, encourages and facilitates AE courses for those employees who are interested and concerned about their own personal growth. It provides a tuition refund program to encourage participation. Only through creating an awareness of the continuing need for learning and personal growth does the company successfully cope with a rapidly accelerating obsolescence of knowledge.

Thus, AE becomes an aggressive management tool, a means for growth and development for employees of corporations so that they can stay abreast of trends and apply their newly acquired knowledge constructively. The means of learning may be closely controlled: problem solving, superior-subordinate counseling and decision making, or even the preparation of reports for internal distribu-

Research and development scientists and engineers in industry have conducted professional continuing education programs using three broad approaches: interaction modes (including meetings, seminars, lectures, and sabbatical leave), short courses, clubs, and laboratory activities. The programs arranged by employers consisted mainly of university credit courses and professional meetings, lectures, and seminars.

E. The Decade Ahead

The estimate of the number of participants in AE will almost double between 1970 and 1976, that is, from 44 million to more than 82 million. The principal increase will probably be in programs conducted by business, government, unions, military services, correspondence schools, community organizations, and instructional TV. (In a lifetime, an American adult will have spent 10 years in front of a television tube, although rather little time in front of an educational TV tube.) In addition, public AE enrollments will increase.

An example of the built-in provision for AE in educational planning is in the Wilmington, Delaware "educational park" with a career development center, an urban center for innovation and AE, an opportunity center for mentally handicapped, and a center for the creative arts. Public education teachers might well consider the implications for their own teaching from such developments whether they teach in elementary education, secondary edu-
cation, or in a university.

The young people of the nation are demanding quality education. Youth considers the kind and quality of education their own concern. A recent study of the leading concerns of ten thousand 16 to 20 year olds stated that education, the productive use of leisure time, and problems resulting from pollution (not the use of marijuana, premarital sex, clothing styles, or pornography), were their major concerns. Youth want higher teacher salaries for their teachers and increased counselor-student ratios, a twelve month school year, and more community centers. They recommended family unit programs (including sex education), neighborhood psychological counseling services, curriculum review committees (which include students), human relations commissions, and a parity of state employment between blacks and whites. They want to know the effects of providing financial incentives for family planning, liberalizing abortion laws, developing programs of voluntary sterilization, expanding cooperative vocational programs between school and industry where students on work-study curricula are required to return some of their earnings to the school to help finance the programs.

Since the ultimate goal of adult education is the improvement of self and community living, the curriculum and the methods by which adult education is taught should be functional to daily living--functional to the improvement of self and the community. As educational technologist Edgar Dale wrote, the "instructional problem, then, is to achieve a balance between a heuristic curriculum, one putting emphasis on learning by discovery (the
Eureka effect), and the algorithmic curriculum which is carefully systematized, skillfully sequenced, and related point by point to the stated objectives."

Unfortunately, much of the teacher training in the United States has not done this; it has also been limited to work with children and youth in a formal situation. Similarly, the conventional curriculum of elementary and secondary education has frequently been geared only to passing examinations rather than toward equipping the student to participate in community improvement. Therefore, it is suggested that the following educational positions be posited for the future:

1. That adolescents, young adults, and older adults who either have not gone to school at all or who have left school after two or three years instruction, can best learn if taught within the setting of their own needs to improve their economic position, social status, or meet other personal needs.

2. That the community school is seen on the part of both governmental authorities and individuals living in the community as a resource designed to aid in the development of the entire community, not merely the formal education of the boys and girls attending the schools.

3. That while the curriculum used must be within the principles approved by the appropriate governmental unit, through full cooperation of government officials and teachers—close identification with community life can suggest helpful or necessary modifications in existing curriculum policy.

4. That if learning by doing is an effective method of educa-
Actual participation by teachers in community life is one of the most effective means of adult education for teachers. The National Education Association of the U.S.A., the largest educational organization in the United States, holds "that education should be provided from early childhood through adulthood, be suited to the needs of the individual, be non-segregated, be offered beyond the traditional school day and school year, be offered at public expense, and be required through secondary school." Local education associations may insist that appropriate educational programs be developed for adults.

Robert A. Luke of the National Education Association has stated that:

Because of the increasing use of automated machines in industry, adult education is currently called upon to simultaneously provide increasingly more complex levels of technical training, while at the same time it must upgrade the general education of millions of individuals who did not obtain a basic education in their youth. Thirty years ago, the unskilled labor force in the United States exceeded the professional workers by almost three to one. Today the situation is practically reversed—with more than twice as many professional workers as laborers. By 1975, only four percent in the total labor force will be unskilled workers. And, to complicate the situation further, as an advancing technology wipes out old jobs, it creates new ones never heard of before—specialists, for example, in transistorized circuitry, ferret reconnaissance, gyro-dynamics, inertial guidance, micro-miniaturization, and data telemetry.

AE can present new opportunities for all education. It can be more than "catch-up" education or "make-up" education. It can help all educators learn to use the ideas we already have in order to work toward a reconstruction of knowledge, rather than a simple reproduction of knowledge. As the Educational Resources Information Center Clearinghouse on Adult Education put it: "Learning how to learn and acquiring a zest for the learning process are
just now being applied seriously to the elementary and secondary schools." Can the concept of lifelong learning, of *education permanente*, be caught by everybody? Should the "basic" ABE program, ABE, be predicated only upon a reading-writing program or should critical listening skills be the more important skills to be taught to adults who live in a media environment? How can AE be used to raise the status of the blue collar worker in a white collar oriented culture? What about making the "B" in ABE, "basic"; education for *everyone* in terms of his own specific basic needs; that is, ABE for everyone in the new leisure-directed culture of the seventies? (See Appendix B *The Leisure World*.) Can AE be used to develop comprehensive educational programs for communities? That is, how can education become a medium to change and restructure communities? To bridge cultural and age gaps? Or, can AE be thought of afresh as the development of "transition strategies" for adults?

How will AE respond to the following challenges of the seventies? How will AE itself help to *create* the changes?

1. By preparing two-year olds for a life-time of learning?

2. By using biochemical and psychological medication for learning?

3. By training the teacher to be a "learning clinician," one in an array of new AE positions: culture analyst, media specialist, information input specialist, curriculum input specialist, biochemical therapist, community contact officer?

How long will courses last? Where will people learn? Who will teach? What will be taught and who will decide how it will be taught? Will adult educators really become change agents?
What will be the relationship between job, leisure, and retirement? What will be the nature of a Learning Society, (post-industrial society, knowledge society, service economy), one which any adult can enter or exit at any time?

About one-third of the teacher training institution graduates never teach. Besides, one-third of the seventy percent who do teach drop out of teaching after one year. AE suggests an arsenal of alternatives to improve teacher training. Will AE be used by teacher trainers to hold teachers in the profession and help them catch the excitement of teaching—and of learning? Will AE become one of the "alternatives in education?" Hopefully, in the pluralistic mix of public and private education, teachers in each sector will use the best from AE, the fourth force in education, to improve the teaching and learning of both children and adults. Within the stimulating matrix of the fourth force in the 1970's, what can and should be the interaction, already alluded to, between adult education and general education?
II. THE INTERACTION

The importance of the interaction between AE and GE is highlighted by a portion of the 1972 report of the Unesco International Advisory Committee for Out-of-School Education. This report emphasized the significance of school educational systems taking part in adult education, not that the formal system absorbs adult education, but rather that the education of young people should be influenced, when appropriate, by contact with adult education, and that schools should not be content to be places where pupils come to be taught, but should themselves move outwards into the community. Note that for the first time, more adults were enrolled in AE (16.1 percent) than in full-time regular schooling (8.1 percent) in 1971.

Professor T. Husen corroborates the importance of the interaction of GE and AE:

Many current signs portend a shift of emphasis among the preprimary school, secondary school, and adult education. A growing body of opinion holds that the secondary school has "had its share" and that the time has come to give higher priority to the preprimary school and to adult education. Attention has already been called to studies that have demonstrated the crucial importance of preschool years to the pupil's ability to benefit from regular schooling. As to adult education, the available evidence indicates that most of the people who take advantage of the new opportunities for improved formal education or career-related training are those who are already solvent financially, whereas a section of the populace within the low-wage group, and the cultural outsiders, have remained beyond reach. Thus in Sweden, for instance, various possibilities have been discussed of investing in "searching-out" programs. Insofar as the idea of "recurrent" or "sandwiched" education is institutionalized, so that it becomes normal to tread on a guaranteed educational path after spending a number of years in the secondary school, the hitherto total dominance of the school in the educational system will be reduced.
In order to explore the interaction of adult education and general education, this section will focus on four different aspects of the interaction process:

A. **Opinions of Teachers on Awarding Credits to Secondary School Students for Adult Education Courses**

B. **Survey of Teachers of Adults and Administrators of Adult Education Programs**

C. **Bases for the Interaction**

D. **Examples of Educational Interaction**
A. Opinions of Teachers on Awarding Credits to Secondary School Students for Adult Education Courses

Should high school students be awarded credits toward secondary school graduation for courses taken in the adult education program of the public schools or community colleges? In some schools this is already taking place; in other schools the awarding of credit has been recommended.

The following seven opinions were factored from the responses of the educator participants in "Operation Retrospect: Principles of Adult Education Applied to Learning in Kindergarten through Grade 1," the first university-credit course considering the interaction of AE and GE. These opinions also suggest implications of the interaction between AE and GE.

OPINION ONE

The goals and objectives of adult education for the state of California are:

To help individuals develop civic responsibility and involvement in their community, realize their individual capacities and potential for personal growth, maintain effective human relationships and become more economically efficient.

To achieve these goals, adult education must actively seek out, as well as be responsive to, a wide variety of student and community needs. Adult education must be ready to provide the community with the leadership and educational resources needed for improving both the individual and society.

Why do we educate and give out high school diplomas? Is it not for the same reasons? If adult education classes are given to adults for credit, then why not for high school students? Some of the adult education and community college courses which are given for credit are not offered in high schools; if a high school student finds the time and can effectively learn what he
must know in order to fulfill requirements for a grade, then he should be given the grade and the credit which accompanies it.

Are secondary school students ready for adult education classes? Do they think in the same terms as adults? Are they capable of making their own decisions as to what they want? And is what they want now going to match their tastes ten years from now, or will they wish they had acted on the advice of a teacher or counselor? If a student drops out of high school and then comes back to AE classes to obtain a high school diploma, then what? The high school students who don't drop out should be able to get equal adult education credit as those who drop out and then come back (through adult education) to obtain credit for graduation.

That piece of paper called a diploma does not measure how much one knows, how much one can do, or how far one can go. Only the individual himself can prove that by his accomplishments. In order to accomplish goals, he must have more knowledge. Whether he gets it from books, people, the streets, the schools, his own experiences, self-discipline, practice, or adult education, he may find that the greatest knowledge he has cannot be measured in terms of units, credits, or degrees.

Yet, knowing all this, a person feels the need for a diploma because it opens doors--doors to better jobs, a better environment, and a better life. In order to get this diploma, the student needs credits. He should be issued credits according to his performance, not for that scrap of paper called a diploma, but for the things that the diploma will bring.
OPINION TWO

High school students should be awarded credit toward high school graduation for courses taken in adult education programs. However, they should first obtain permission from a principal and the courses should be approved by a teacher or counselor. Flexible scheduling not only will help them to accumulate elective credit, but will provide them with an opportunity to participate in instructional activities in a relaxed atmosphere, a setting which has proven to be beneficial to some students who have found the adult gestalt more relevant.

OPINION THREE:

It makes good sense to allow students at the high school level to take advantage of the adult programs offered at community colleges, vocational schools, and commercial schools. High school students who need extra classes at the adult level are unique; they are either over-achievers or under achievers at their high school.

Consider the over-achiever. Many students in their last year of high school may attend junior college classes and receive college credit for their work. Usually the subject material is an "enrichment-type" course. However, there are also third year students who would like to be able to take more courses than the daily five class periods will allow. Many students need to take typing, but dislike giving up a period to this in place of a course such as chemistry. These students could take an evening class in typing. Other useful courses are speed-reading, foreign languages, and many kinds of art.
Serious and talented art students often find their high school classes full of loafers and students of little or no artistic ability. If some standards of proficiency were used to progress to advanced courses, many art students could benefit greatly from the advanced instruction that is available in adult courses. High school students should be allowed and, indeed, encouraged to take advantage of the more advanced and specialized adult classes which could be made available to them.

The American system of education at the secondary level has done a good job of taking care of the needs of the college-bound student. Over-achievers are more vocal in their demands and so are their parents. But this is not the case for the under-achiever. He is not very vocal, and many of the parents of these students do not evidence much interest in the performance of their children. Can these under-achievers, the potential dropout students, benefit by taking some adult classes along with their regular high school work?

Vocational courses at the high school level are too short. The students do not have enough time to complete their work until it is time to clean up and hurry on to the next class. In contrast, the adult classes in vocational areas are longer. The adults who attend these classes are highly motivated to obtain knowledge that will be of practical value to them.

Many of the hard-core disciplinary problem students find themselves in a continuation high school where the hours of instruction are usually half the regular school attendance time. Too few of these continuation schools have vocational classes, and the shortened over-all time usually allows only time for the
required courses of history, English, and mathematics. Yet, these are the courses that have never held much fascination for the students who have rarely related in a positive way to the high school curriculum and atmosphere. Usually these students drift out of school and into the "last to be hired, first to be fired" segment of our population that eventually ends up on the growing welfare rolls.

There is a need for more and better counseling for potential dropouts, where they can be introduced to the possibilities of taking and benefiting from adult classes that are available to them. It is highly desirable to allow high school students to take advantage of the many adult classes that are available. Whether these classes are of an enrichment type for the above-average achiever, or the shop-type courses for the under-achiever, there is much to be gained by combining the resources of the adult classes with the regular high school courses.

**OPINION FOUR**

I must speak of the situation with which I am most familiar—a community college district which separated the adult education and occupational divisions from the school district and linked them with the city college. Academic courses required for high school diplomas are offered at all these adult education centers.

My experience has been mainly with foreign students in English as a Second Language courses where credits are given only in the advanced courses and with the high school academic subjects. The former classes are comprised chiefly of students eager to achieve an American high school diploma with the future goal of higher
education at a college or university. Since these students are almost entirely learning-oriented, there are relatively few attendance or discipline problems. Rather, the students present a challenge to the instructor to fill their needs in overcoming English language limitations. The classes are almost always stimulating, serious, and fruitful. Many of the adult students progress to the high school courses where they continue as achieving students. On the other hand, many classes in the high school academic subjects (primarily United States history, civics, and laboratory courses) are aimed at the dropouts and present a "last chance" for them to achieve goals which they failed in the past.

In the American society, a diploma, and now a skill, are demanded by almost all employers. In previous years, unschooled men and women were able to forge major enterprises through native intelligence and grit, but no longer. A generation ago a person could seek and find employment in some field that afforded economic security; but the young person today finds the job situation almost desperate unless he has had academic and technical training. Adult centers must help people to complete their studies to the point where they are employable or ready to pursue further education.

Adult education has managed to fill the need for many dropouts. Young men and women, often averse to the whole learning process, have found in adult classes an atmosphere they can accept and hopefully learn to enjoy. Many respond excellently, of course, but it is the "hard-core" that present the greatest demand to the teacher's ability; first, to get a student there;
second, to conduct a course that appeals to this type of student so that he will become interested in learning; third, see him through to completion of his studies.

An increasing number of employers are now accepting a General Education Development certificate in place of a high school diploma. The GED program meets the needs of many of our students who would probably never complete all the required high school courses, and has certainly been a boon in many ways. However, as the scene changes, so perhaps will the demands of employers. I feel that a student is much more secure if he has the regular high school diploma. To that end, it is my firm conviction that high school credit should be given to students in adult education, providing, of course, that they perform well enough to warrant the credit.

OPINION FIVE

High school students should be awarded credit toward high school graduation for courses taken in public school adult education classes or in the community colleges. By receiving credit from these institutions a high school student would have the opportunity to graduate sooner or carry a job while going to school. The student taking adult education courses would have a wider selection of courses to take and would perhaps be able to take more vocational classes which would enable him to get a better job when he finishes school. Some schools might even be able to provide job placement assistance.

I also think that the idea of having mixed ages of high school students and adult students would be excellent. The experience
which adults would add to the class would make classwork seem more relevant—a more realistic learning situation would be created. I also feel that all students would be more motivated by a more flexible scheduling; not only would there be more learning, but within these two groups there would be an interchange of ideas and, through this communication, understanding and enjoyment.

Another idea which should be explored more thoroughly is compulsory education. How much learning is really taking place in the schools where the student is forced to attend? Would it not be better to rethink some of the concepts on graduation requirements, as well as the scheduling used for high school and, instead, use an 8:00 a.m. to 10:00 p.m. schedule so that students could enroll anytime?

I believe that the 18 year age for compulsory education set by law is far too high. With some students, the last year of high school is almost a total waste. In addition, there is a lack of vocational training—training that would meet the requirements set by business and industry. Students now are not often prepared enough for the working world; much retraining has to be done by industry. This should be the age of alternative education, and adult education should be able to play a major role in preparing the youth as well as adults.

**OPINION SIX**

There are several educational breakthroughs that are occurring in adult education courses that may be applicable in teaching both elementary and/or secondary school students. Because adults have
more responsibilities, such as families and jobs, the adult class has to fit the adult need in terms of scheduling. A class can be given at an odd or unusual hour. An interesting type of scheduling is being carried out in Nevada. Nevada has the usual high school class scheduling from 9:00 a.m. to 3:00 p.m. There is an hour when the school is closed for the janitors to work. The school re-opens at 4:00 p.m. and remains open until midnight to fit the needs of employees in the gambling industry.

Why can't a variation of this type of scheduling be arranged in the elementary and high schools? Some people are day people and some people are night people. Some people learn more in the morning hours, some in the afternoon, and some even in the late hours of the early morning. In college, some students do better in classes before lunch. The "disadvantaged" ghetto or welfare child's parents may sleep late into the morning or early afternoon after being up late the previous night. The child may try to be attentive in class, but may be drowsy or fall asleep. Add to this that there may be no quiet place to study in the evening and you have a potential dropout. Why not a scheduling that parallels life-styles?

Three or six-week courses could be offered to the elementary and secondary student. Why does a student have to attend school for a full semester? Do all courses lend themselves equally well to the semester system? There needs to be more thought about the year-round school. School does not have to be closed for the summer vacation. The original purpose for closing school during
the summer was to enable young people to work in the fields and harvest the crop. Now with machines doing the greater part of the work, there is no real need for students to be out of school at this time. This is a very good example of cultural lag.

The elementary and secondary schools should be open continuously to parents and not just on Open House days. This is similar to the housewife who cleans her house only when she knows she is going to have company. Keeping schools open continuously would keep a desirable pressure on the teacher.

Letting adults attend the high school would have a positive effect on discipline. It would show parents what really goes on in the classroom. Many parents would be amazed and some would be horrified if they knew what goes on in the classroom under the title of learning. This would be another way of pressing teachers to do their best.

"Term schools" are another breakthrough in education. "Term schools" are schools in which local companies have mobile classrooms. They fill a particular need and when that need is filled they leave. Some districts are seeking out those adults who are "hard to reach and hard to teach"; forming an alliance of education, business, and industry to create and train for new jobs; providing bi-lingual instruction; offering classes in the neighborhood to be served through instant or mobile classrooms; actively working with neighborhood groups; and in other ways tailoring programs to meet the needs of adults.

Teaching and learning in adult classes tends to be enjoyable. Some elementary and high school teachers who have tenure and want a secure income have stayed with their jobs. They have
tended to live from vacation to vacation. This attitude of endurance spills over into the classroom and kills student motivation. On the other hand, in adult education, many teachers are enthusiastic about teaching. Vacation is often a time for preparation of additional learning materials. They do not necessarily train for the occupation of teacher of adults. They often enter the field by accident. But they seem to look forward to their jobs, rather than dreading them. They seem happy with their students and other faculty members they have met on the job.

The Telecture, an adaptation of a conference-call concept, enables groups of persons in far-flung geographical locations to participate simultaneously in conversations and discussions via special telephone installations.

The Electrowriter is a writing pad and stylus which can electronically transmit writing which may be widely used in the future. Impressions are instantaneously reproduced and can be projected onto a screen before groups which may be remote from each other.

In adult education, students are often grouped according to their skill levels and according to their interests. In the elementary and high schools, students are grouped according to age level. This does not allow for differences in rates of ma-
turity. We tend to think that all learning comes from the teacher and the textbook. In the adult classes the teacher and the student are often on an equal footing.

OPINION SEVEN

The Air Transportation Occupational Course is an adult education program. The students developed their own imaginary airline (a real airline footed the bill) and set up a regular business and ran it themselves. The program was designed to give students an opportunity to learn the skills necessary for running an airline. Jobs were assigned to each student—this along with job application preparation, public relations, and the written business communications which would accompany such a venture. Absenteeism dropped to practically zero; students could see reasons for learning, enthusiasm and interest soared and they were developing skills which would benefit their future. An occupational course such as this could be related to almost any industry and set up to be used in grades K-12.

Another idea which a few adult educators have considered is that compulsory education after the eighth grade should be abandoned and (the idea borrowed from AE) only those who really want to continue their education need to go to school. If students begin to realize that education is a privilege and leads to a better job, better community relations, and better life, they most likely would become their own disciplinarians.

Some educators say that we do need compulsory education but not compulsory attendance so some thought should be given to the idea that the number of hours in class should not count; it is what a student learns that counts, whether it takes him thirty
minutes or three hours. Many many schools sit idle in the evening and at night. The taxpayers have paid for these schools. Why aren't these schools opened to the adult educators who could well use the proper facilities (with blackboards, libraries, bathrooms, heat, ventilation, lights, etc.), instead of fighting the encumbering circumstances with parallel buildings not set up for education.

Some adult teachers have come to believe that the school building should be the center of all community activities--each school center, like the shopping centers, should be used at all times for town meetings, bridge clubs, festivals, and adult education. These community centers would be within walking distance for most all dwellers, young and old. A good place to start to school together--in the same classrooms--young and old. Maybe it would help the discipline problem, the generation gap, and the gifted as well as the dropouts. Parents might enroll in regular high school programs with their children. The atmosphere in the classroom would change appreciably--for the better.

B. Surveys of Teachers of Adults and Administrators of Adult Education Programs

1. Survey of Teachers

The following survey of teachers of adults (Cortright, 1971) points out specific areas of interaction between AE and GE. This survey was sent to adult educators to elicit attitudes about this practice.

In some school districts, high school students have been authorized to take courses in the afternoon or evening adult education program. The items and responses of 76 adult educators and of
adult education administrators follow:

a. I think it is appropriate for high school students to take adult education courses.
   
   Yes = 70  
   No = 6

b. 1. If "Yes", under what conditions?

   Special cases (19)
   (i.e., remedial training, pregnant students, as an incentive program, to prevent failure or separation from school)

   To enable students to participate in courses not offered in the regular day school program (9)

   No limitations (8)

   Upon administrative consent (principal or counselor) (7)

   If high school student participation in AE classes will not interfere with his regular day program or with adults enrolled in classes (6)

   For work-study purposes (4)

   To compensate for insufficiencies in regular day curriculum in respect to student's individual needs (2)

   For high school dropouts (2)

   In vocational classes only (1)

   As a supplement to regular curriculum (1)

   To maintain satisfactory standards (1)

   If the high school student can profit (1)

   2. If "No", why not?

   Prohibition by federal regulations (1)

   The day school program is adequate (2)

   Students may drop day program in favor of evening program (3)

c. Do you think that adult education has any experience, practices, or expertise that would be helpful to elementary or secondary education?

   Yes = 70  
   No = 6
d. i. If "Yes", why?

Individualized instruction methods, greater scheduling flexibility, informal voluntary education (25)

More relevance to student needs (7)

Better materials & methods (20)

Wider curriculum (4)

Meaningful learning experiences (5)

Focus on success and achievement (4)

Individual progression rates, independent study, programmed instruction (3)

Students treated with fairness and respect, i.e. adult educators are more student-oriented (2)

e. Are high school students permitted to attend adult education classes in your district?

Yes = 53    No - 23

f. Which classes are high school students permitted to attend?

All offerings (19)

Makeup classes, review (non-credit) (5)

Crafts classes, interest, non-credit enrichment (8)

Courses which are unavailable in the day program (8)

Graduation credit, high school completion (11)

All classes except GED (2)

g. Under what circumstances are high school students permitted to participate in adult education classes?

With administrative consent (16)

In summer classes only (2)

Under-age requirement stipulations (6)

For attendance in classes unavailable in day program (1)
Teachers of both AE and GE in the Rocky Mountain region of the United States were surveyed by V. Ganks in order to learn about the interaction of AE and GE as practiced in the schools of that region. Teachers were questioned about how their experiences while teaching adults have affected them and their work with elementary and secondary students. The results of the survey indicated that the effects have been positive and far-reaching for both teachers and students. The teachers surveyed emphasized that:

a. Teaching adults—most of whom are parents—provides a new and deeper understanding of children.

b. The teacher's ability to relate to the student can affect the student's capacity for learning and his feelings about himself.

c. Children need more training in interpersonal relationships.

d. Activities in the classroom must be relevant to the needs and abilities of the individual.

e. A teacher gains new insights into himself and his profession when he works with adults.

Respondents felt they have much more open and revealing discussions with parents in their adult classes, where adults freely discuss the problems they face as parents. One teacher remarked, "I have more appreciation of the children I teach since I know some of the problems their parents have." When they realize this,
Teachers in adult education programs are more sensitive to the immediate needs and goals of young people in their regular classes. Teachers of adults also develop fresh attitudes and new teaching techniques. An enthusiastic teacher felt she has benefited immeasurably from teaching adults. She finds that she is:

- less timid about trying new approaches in her high school classes,
- more aware of each individual student, no matter how large the class,
- better able to help teenagers in her regular classes with their reading problems—even though she has had little formal training in the teaching of reading,
- a more confident, more flexible person in any classroom.

Only after teaching adults have many teachers realized so keenly the indelible impressions left on their students by elementary and secondary school teachers.

In a study of its constituent members, the Committee on Adult Education of the World Confederation of Organizations of the Teaching Profession viewed adult education as a form of educational endeavor which could influence—and indeed change—educational programs established for children and adolescents. As adult educators continue to conduct effective programs in occupational education, this could widen and deepen the commitment of the educational authority to make occupational (career) education a more significant part of educational programs for children. Since adult education programs must inevitably serve the needs of the individual student in terms of his community life, adult education programs could encourage schools to self-consciously seek to exert a greater influence on the economic-social-political
development of the communities in which they are located.

The informal methods of adult education should be extended to the teaching patterns of schools; the need for all education—particularly adult education—to emphasize the interdependence that exists between adult education and community development; the need to stimulate increased use of television as a conduit for adult education programs; and the need for teacher training institutions to provide courses in the methods of working with adults to all teachers, including those who, at the time of their pre-service training, were expected to teach children.

2. Survey of Administrators

A survey of adult education administrators throughout the United States was carried out by T. Damon and J. Harper to assess the roles of AE administrators. Items 22 and 23 of the survey dealt with the interaction of AE and GE.

Are high school students permitted to attend AE classes?

- Yes = 356  No = 7
  a. Courses for graduation credit (248)
  b. Courses not available in day school curriculum (214)
  c. Take course, but without credit (155)
  d. May attend classes with parents (111)
  e. For other purposes (37)

Can elementary or secondary education learn from AE?

- Yes = 281  No = 79
  a. Flexibility, empathy
  b. Relevancy to student
  c. Closer student-teacher relationship
  d. More successful with disadvantaged students
  e. More realistic
C. Bases for the Interaction

Margaret Mead has pointed out that the members of each generation are immigrants in time: each generation of youth possesses knowledge that older people have not and will not possess. Similarly, each generation of adults has experiences at a given point in time which children have not yet experienced and which the children, perhaps, will never experience in the same form as the adults. Conditions have changed since adults were children. Can we predict, from the educational problems and remedies of adult populations which we now encounter, how we might better serve slow learners in the schools of today?

During the 1970 National Conference of the Association for Supervision and Curriculum Development the first program on the interaction at a national conference was presented. The following typology for the interaction of AE and GE was developed by E. Krumbien at the conference.

1. What and why is under-achieving?
2. Can anyone learn fast enough to be fully prepared for the knowledge explosion?
3. Education and excellence require continuing effort.
4. Conditions under which adult learning can be maximized:
   a. Five variables need to be reconsidered in order to encourage learning:
      for mastery
      aptitude
      quality of teaching
      ability to understand teaching
      perseverance
      time allowed for learning
   b. Choice-making
c. Taking experience into consideration
d. Taking age into consideration
e. Providing highly interesting, stimulating experiences
f. Providing short-term, middle-range, and long-range skills

5. Conditions which must be fulfilled in order to develop motivation and sustained performance:
   a. A high frustration tolerance must be developed
   b. One must develop an image of oneself in the future
   c. The approbation of significant adults is required
   d. One must have an appreciation and an understanding of one's own errors and guilt to be affected by criticism

6. How a humane environment for learning can contribute to the achievement of conditions which will promote continuing education and personal development in later years:
   a. Provide peace for the individual
   b. Provide students with opportunities for meaningful choice
   c. Utilize students' knowledge and experiences as major educational resources
   d. Provide regular discussion with individuals and groups of levels of attainment and aspiration of the students
   e. Develop regular evaluation with students on methods of teaching and learning
   f. Arrange classroom experiences providing small, measurable attainments which the students may recognize
   g. Provide opportunities for the regular attainment of small, additional refinements of older skills
b. Provide opportunities for regular expression of humor on the part of all classroom members, including the teacher, and for "blowing off steam"

c. Provide regular opportunities for the projective expression of hostility and for the understanding of these expressions by the individual and the teacher

7. Description of a supplementary counselling-tutorial approach to be utilized with under-achieving children, as part of a humane learning environment:

a. Hold meetings with students which are face-to-face, short, but very regular

b. Have adult and child discuss the present level of work

c. Help the child to identify alternatives and to make a real choice among them

d. Encourage the child to pinpoint one needed, and very basic area, where improvement in performance or behavior is needed

e. Help the student to select small but attainable goals so that he may attain some measurable satisfaction as soon as possible

f. Help the student to develop good habits of reality testing

g. Help the student to restructure his goals upward or downward, in the light of the goals he initially selected and his evaluation of his success

h. Help the student to verbalize his feelings concerning positive achievements

9. How can the faculty learn to participate and grow into a humane environment--what we have learned from adult education:

a. A diverse mixture of students and teachers enriches the learning environment

b. Teachers should regularly observe one another at work and discuss their activities in order to identify skills which they possess in common, but not individually, which they can share
c. Children teach one another very effectively

d. Cooperation is an under-utilized learning approach, competition is over-used

e. Removing pressure gives students and teachers an opportunity to reconsider plans, programs, and activities

f. Students and faculty should become involved together in formulating the on-going objectives and programs of study and evaluation of its success. Students who are consulted and whose advice is attended to, should be involved

g. Volunteers provide new skills, relief from tension, new perspectives and opportunities for new chemistry between children and adults

h. Teachers and students need consultants to give them perspective

During the Conference L. Nattress considered the AE/GE interaction as "Turning On the Turned Off Learner." In this context he identified four characteristics of the professional person:

1. He is service-oriented or other-directed
2. He uses a distinct vocabulary
3. He is the master of specific skills
4. He is responsible for his actions; that is, he requires little or no supervision

More emphasis should be placed in the following areas of K-12 education, using the best from AE:

1. Teaching of learning strategies
2. Making students dissatisfied with their present knowledge
3. Showing students the importance of helping each other
4. Developing a system of values
5. Helping students understand the importance of deferred gratification
D. Examples of Educational Interaction

1. University AE Programs

The following educational programs suggest kinds of AE programs which might be effectively adapted and used by schools.

Serving up a menu ranging from flower arranging for the elderly to biomedicine for displaced engineers, state colleges are luring millions back to school by expanding their adult education programs. For some, it is a determination to earn a college degree or the sheer joy of new knowledge that drives them back to the classroom. For others, it is the need to update outmoded skills or to acquire a marketable skill.

But besides each individual reason are the needs of people to cope with a changing world and more leisure time. During the recent massive cutback in the aerospace industry, California State College (Los Angeles) offered displaced aerospace engineers a program in biomedical engineering. The engineer works with M.D.'s and physiologists in areas of mutual concern. These include the design of artificial organs and limbs, the design of therapeutic devices, instrumentation for patient monitoring, and the use of computers in hospitals.

Florida Technological University at Orlando has moved to retrain unemployed space workers and developed programs to help these employees enter careers in environmental control. The University of Akron in Ohio offers a full schedule of adult credit courses leading to a degree, but also has a department of special programs covering a wide variety of subjects. There are no admission requirements, entrance examinations or application
fees to enroll in the informal non-credit courses. The non-credit approach to learning makes it possible for adults to continue to learn in an informal and non-competitive environment where interest in learning is the only consideration. Some colleges have begun to develop programs aimed at those 65 years of age and older. Eastern Kentucky University in Richmond offers 155 classes in continuing education, and persons 65 and older may enroll free.

2. K-12 Programs

Public dissatisfaction, videotape cassettes, vocal critics, computer terminals, rising costs, educational television, teacher strikes, independent study, and disgruntled students have one thing in common. Together they are resulting in experimental "education without walls." This is an example of a kind of AE already used by schools. A prominent example of this kind of program is Philadelphia's Parkway Program, now in its third year with over 800 young people enrolled, where high school students choose their own subjects of study and use the city's institutions and businesses as classrooms.

Similar programs have been organized, including Chicago's Metro High School and Edu-Cage in White Plains, New York. Generally, such efforts begin as an alternative means of education for teenagers who find conventional schools repressive, oppressive, and insensitive to what they want to learn. The rationale for these programs is that people learn only what they want to learn, not what someone else imposes on them, and that they learn best by grappling directly with the world around them.
A bedroom community outside Tacoma, Washington--whose elementary schools have a 53 percent pupil turnover rate--is reshaping school time on a shoestring budget. School doors are open year-round from 7:00 a.m. until late at night. Students can go to school as few as 124 days in the year or as many as 210 days. Franklin Pierce School District is a new suburb where military families account for a high rate of transience. Three years ago, Franklin Pierce Schools began to experiment with new ways to meet special needs of their students, both transient and stationary.

Flexibility in school time is used as a way of equalizing the needs of Franklin Pierce students. The school year is split into two long semesters and two interim periods of one month each. The school week is a basic four-day unit supplemented by a fifth day spent in ways suitable to the student's age. At the elementary level, children participate in non-competitive sports, arts, music, specialized areas of science, and remedial work. The name of the junior high school's program is "The Flip-Flop." Boys flip-flop into what have been traditional girl subjects, such as cooking; while girls flip-flop into such so-called "boy fields" as woodcraft. Students do intensive study during the fifth day. The one-month interim periods are also used for intensive education, with students dividing their time between two courses. Students can schedule a longer or a shorter school day. Learning centers and libraries are kept open for them and their parents at night.

Vital to the success of this program has been an adult/student ratio of 1 to 14 with the same cost of a 1 to 30 ratio in a typical school. Extra adult staffing has come from volunteer parents who
work one to two days a week; paid teacher aides who are trained for specific tasks; and teacher-trainees from nearby universities who work as long as two years within the system before getting teacher status. Flexible grouping has allowed individualized scheduling built around student needs. Up to 94 students work in a large multi-media room with only one teacher and an aide, while a computer records each student's response. Later, the group breaks into small groups which work with several adults.

Mandatory work experience and career training are part of the school life of all students; 70 percent of whom will enter the job market directly upon graduation. Children in K-12 have "cardboard carpentry." In the intermediate grades craft work is done using real materials and tools. In junior high school, students work independently in 13 occupational areas outfitted with industrial equipment. In high school, students are ready for their first work experience. To graduate they must have outside certification from an employer that they have learned to behave in a responsible manner on the job.

3. Public School Adult Education Programs

A variety of arrangements have been used in adult programs to motivate and teach adult students. Itinerant teachers for high school completion programs for adults are used in some communities. Long distance telephone has been utilized for individual and group learning when the best instructional resource is some distance from the learners. The local telephone is used by a community college to provide assistance and actual lessons for those pursuing certain course modules, some of which
are on magnetic tapes and are automatically keyed. The relaxation of the technical credential for operation of short-range FM radio stations holds great promise for future adult education programming.

The DeKalb Open Campus High School day program operates three fifteen-week sessions. A day student may enroll in one, two, or three subjects per fifteen-week session. The DeKalb Open Campus High School night program operates five ten-week sessions. A night student may enroll in one or two subjects per ten-week session.

The Georgia (state) Accrediting Commission requires a student to attend class 150 hours to receive an accredited unit or 15 quarter hours of credit. Each class at the DeKalb Open Campus High School is 150 hours in length, so it is necessary that each student attend each day. Absences, excused or unexcused, are not permitted; work must be made up within one week of the student's return to school.

A day student can earn one accredited unit per session per subject. A night student can earn one-third accredited night unit or one adult unit each ten weeks per subject. An adult diploma cannot be awarded in the day program unless special permission is granted by the administration. A night student can earn either an accredited or adult diploma.

A student living outside the DeKalb School District is not eligible to receive an accredited DeKalb high school diploma. However, he or she may transfer credits back to his or her high school and receive a diploma from that school if the principal is in agreement.
An accredited high school diploma may be obtained by completing eighteen units, in grades 9-12, distributed as follows:

4 units of English  
3 units of Social Studies  
   American history and government required  
1 unit of Biology  
1 unit of Math  
1 additional unit of Mathematics or Science  
7 Elective units

The adult diploma may be obtained by completing sixteen units of credit, distributed as follows:

4 units of English  
3 units of Social Studies  
   American history and government required  
2 units of Math  
2 units of Science  
   biology required  
5 Elective units

A major effort to use television and radio to both help adults become interested in meeting their daily problems and then equipping them with strategies of learning is being planned. The overall program is called the Adult Learning Program Service (ALPS) of the Corporation for Public Broadcasting, and the first segment of a multi-year plan with a target date of 1973-1974, is STRIVE, a project which would include:

1. a weekly hour-long TV series to improve adults' reading effectiveness, deepen their understanding of mathematics;

2. a weekly variety of short radio features to improve skills for solving family problems, create awareness of improved status of workers, and involve listeners in community participation.

ALPS is working with its affiliate public broadcasting stations and national education organizations in the United States as well as with industry, government, and community leaders in planning STRIVE.
As Robert D. P. Carlisle, ALPS Coordinator says, "Never before have the media supported this broad segment of the American community. With ALPS, public broadcasting can extend the horizons of men and women all too consistently ignored. Through ALPS public broadcasting can extend its own reach as a true public service."

The implication of this AE interaction with GE is enormous. The success of the television-learning series for children Sesame Street and The Electric Company indicate the potential effectiveness of good programming. ALPS would bring adult education through the media into millions of homes. In addition, adult teaching by TV would influence teaching in GE. For example, part of the program will probably include university credit courses with AE and GE teachers together to plan ways to implement ALPS programs locally. The implications for influencing the reform of teacher education is, therefore, probably the greatest corollary benefit of the service.

4. Trends

Throughout the 1970's several other developments in American education might well be watched in terms of the interaction of AE and GE.

The North Central Association of Colleges and Secondary Schools, the largest of the regional educational accrediting associations in the United States (covering nineteen states) has established a committee to create standards for adult high schools. Adult high schools are full-time operations for adults who wish to complete high school through an approved academic program. They are not "night schools" or adjuncts to day school GE programs for children and young people. Neither are they programs to help
adults pass the General Educational Development Test, a high school "equivalency" test. Rather, they are bona fide academic programs for adults who wish to obtain a secondary school diploma from a city or state.

When the standards are approved by the North Central Association, there is a good possibility that the kind of flexibility built into their standards could well influence the kind of program which will be authorized for GE high school programs, particularly by utilizing educational experiences in the following areas: credit for military service and job experience, independent study, and study from other schools, such as correspondence education. The rationale for this position is that adult high schools must meet the needs of adults, a non-captive audience, to survive. If the courses of study do not meet the needs of the attending adult students, they will fail. GE secondary school teachers and administrators could well explore the flexibility of adult high schools as they create new curricula for the decade.

Project Interchange was an educational program carried out by the Office of Economic Opportunity of the United States Government and the National Education Association. The project placed public school teachers for a summer or for an entire school year in Job Corps Residential Centers for potential high school dropouts. The interchange came about when the teachers returned to their classrooms in public schools and used the experiences gained from residential adult education. Although the project has been terminated, the concept of interchange might be continued. Other programs of this kind of interaction between AE
and GE may well be developed in the decade, particularly between the public schools and "non-educational" agencies of the federal government, such as the Department of Labor, the Department of Defense, or the Veterans Administration.

In the United States a major development since the mid-sixties has been the determination of teachers to take leadership in helping to decide the directions of American education, particularly in gaining salary and welfare benefits for themselves. The increased strength of teachers is reflected in the large enrollments in the leading teacher organization, the National Education Association, with nearly one million two hundred thousand members. The new direction which the teachers, calling themselves the United Teaching Profession, are taking is to use the legal power of professional negotiation to gain power to negotiate for curriculum and instruction. A new direction in negotiation is the negotiation for teachers of adults. The following guidelines have been suggested by the National Education Association for this purpose. Clearly, when teachers of adults negotiate for instruction and curriculum, their success can effect the use of the negotiation of GE teachers of instruction and professional development:

I. Teacher Rights

1. Positions in the adult education program shall be made available first to qualified teachers who are already regular employees of the school district. Consideration will be given to a teacher's area of competence, major and minor fields of study, and quality of teaching performance.

2. The announcement of openings for teachers of adults shall be posted by (date). Teachers who are employed will be notified by (date). Reasons for denial of employment will be furnished upon request.
II. Teaching Conditions

1. Adult basic education classes (except learning laboratories) and high school classes for adults shall have no more than 12 students per class, unless changed by mutual consent of the association and the board of education. Other classes for adults shall have no more than the number of students per class negotiated for in the usual day program without the consent of the instructor.

2. Adult education teachers shall receive such additional benefits and protection as is appropriate for employees who may work at night, including safety and security measures, heated and lighted classrooms, illuminated parking, and police protection.

3. In order to help meet social, cultural, and economic needs of adult students, full-time teachers of elementary (ABE) and high school completion classes for adults shall be granted up to four (4) hours per month with pay to meet with community, health, welfare, employment, and other resource specialists from business, labor, and industry.

III. Salaries

1. All teachers of adults teaching six (6) contact hours per week or less will receive one-tenth of one percent of their computed full-time base salary as an hourly rate. Teachers of adults who teach more than six (6) contact hours per week shall receive a prorated annual contract based on their training and experience. Those who are not day school teachers shall be paid at rates comparable to public school teachers, depending on their education and experience.

2. Full-time teachers of adults shall be paid for preparation time at a rate of pay comparable to other teachers. Teachers of adults whose classes do not meet because of administrative decision shall be paid for those classes lost.

IV. Professional Improvement

1. During the school year, at least twelve (12) hours of in-service educational programs in methods of teaching adults shall be provided by the board of education for full-time teachers of adults at no cost to teachers. Six (6) hours of in-service education shall be provided for part-time teachers of
adults. Teachers shall be paid at their regular rate of pay. In-service education programs shall be scheduled during the regular hours of the adult education program.

2. Full-time teachers of adults shall be granted released time to attend two meetings of professional organizations. Part-time teachers of adults shall be granted released time to attend one such meeting.

V. Advisory Committee on Adult Education

1. An Advisory Committee consisting of 10 members shall be appointed, one-half by the board of education and one-half by the association.

2. The Advisory Committee shall meet at least once a month in regard to:
   a. Day-to-day problems in adult education, including problems between "day school" and "night school" teachers.
   b. Administrative, curricular, and methodological considerations appropriate to adult education; planning and implementing innovative approaches to teaching adults and reviewing adult education programs at least once a year.
   c. Establishing standards and conditions for maintaining liaison with health, employment, and welfare agencies, as well as business and industry.
   d. Other appropriate topics concerning adult education.

3. The committee will make recommendations for strengthening the adult education program.

4. The recommendations will be made to the association and to the superintendent.

Various learning alternatives to traditional secondary schools have been tried, such as the mini-schools in New York City and Berkeley, California. The Syracuse University Research Corporation is undertaking an "external degree" program for teenagers in five counties in New York State with a potential high school population
of 100,000. University adult education programs have already, of course, experimented with external degree programs, such as at the University of Oklahoma, Brooklyn College, and Syracuse University. This AE/GE interaction is an example of university adult education influencing secondary education.

The new plan seeks to devise a plan for high school age students who prefer to learn, and perhaps, can learn more effectively, outside of the classroom--through a variety of independent academic and community programs, work-study combinations, or job internships. The program is aimed at potential dropouts from high schools, many of whom are academically superior. The goal is an education alternative of acknowledged quality. Surveys of sites such as businesses and banks, community facilities such as museums and hospitals, will be analyzed and the educational expectations of potential students will be considered.

The popular press appears ready to enter strongly into adult and continuing education. Generally, books in adult education have had a rather narrow readership. However, a 1972 publication by the New York Times, Guide to Continuing Education in America, suggests that popular and widespread publications in AE are now going to be widely available and perhaps eagerly received. Such publications may have a far-reaching effect on GE. The assumption is that the flexibility and empathetic nature of AE, once it is known by the general public, will then be demanded by the public for general education. In the decade ahead another signpost will be to watch the reception and use of books such as this one, as well as the number and proliferation of similar books on AE.
An outstanding service which the interaction of AE and GE can make in the decade is to help counter a variety of myths about general education.

Myth Number One

More money means better schools.

This is a myth hard to explain because increased funds for education are needed. The expectation of the public for the schools is leaping geometrically and with it is a "hardening of the concepts" about public education. Adult education has advanced, albeit modestly, with minor resources. This lesson can be made clear to K-12 colleagues.

Myth Number Two

The rigid ratio.

Do 20 students to one teacher provide optimum learning? It is said that this ratio was first promulgated in the Babylonian Talmud. Needless to say, it is not appropriate for the 1970's A.D., although perhaps for the 1970's B.C. The result has been the egg-crate style of school architecture. AE says: Use a variety of ratios.

Myth Number Three

That which is taught is thereby learned.

The contribution of adult education to de-mythologize this myth is to put the emphasis on learning, rather than on teaching. That is, what is important in the learning situation is the learner, rather than the teacher. What the teacher says, does, and thinks is only significant if the learner learns.
Myth Number Four

Learning outside of the school is useless, if not irrelevant.

AE advocates the bringing together of all learning experiences, and supports the notion that learning outside of school may be very well as important, if not more important, than learning within four school walls. Could 95 percent of all learning be outside formal teaching?

Myth Number Five

Learning comes in neat packages.

That is, a physics class or a home economics class or a Spanish class is the best or the only way in which particular learning can be packaged for learning. AE is trying to change this notion of a compartmentalized society. AE advocates interdisciplinary learning and a strong concern for human values. AE is interested in adults learning how to learn.

Myth Number Six

Real learning is oral.

Teachers often teach by talking. AE advocates the intelligent use of a wide variety of media tailored to individual learning. In fact, will the economy be able to support expensive public education which continues to use the word-of-mouth way of teaching?

Adult education advocates the following changes for all education in the 1970's:

(1) Greater recognition of the student as an individual. Look at the Street Academies, the Job Corps residential learning centers, or the College Level Examination Program (CLEP) of the Educational Testing Service.

(2) Greater coordination of community resources. Include commercial and instructional television, pre-
school programs, business and industry, with a Metropolitan Education Board including all relevant facilities of a community, not the schools alone.

(3) Better management and planning of human and material resources. Use accountability, performance contracts. Teach an opposition to rigidity of performance.

(4) Use a variety of courses for financial support. Rely not only on traditional tax structures.

Summary

Evidence from teachers and administrators in the United States clearly points toward acceptance of adult education work for high school completion—for the variety of reasons stated. This may be the most important aspect of the interaction of AE and GE, for it gives credence to the fact that AE is an integral part of public education. In addition, the variety of AE and GE programs described have broad potential for the interaction. The AE/GE interaction holds great promise for strengthened education in the United States during the Development Decade.
III. BIBLIOGRAPHY

The following selections are suggested as further reading on the interaction of AE and GE, using these criteria:

(1) usefulness of the selection in terms of current information on adult education or general education;

(2) relevance of the selection to the interaction of adult education and general education.


ERIC Clearinghouse on Adult Education in cooperation with Syracuse University. Continuing Education for Adults. See various issues, such as No. 163, August 1971. Syracuse, New York.


Gran, J. R. "A Follow-up Study of One Hundred Eleven Graduates—Class of 1969 of the Jackson County Adult Evening High School Completion Program. Undated.


<table>
<thead>
<tr>
<th>Children</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ample time</td>
<td>Little time available</td>
</tr>
<tr>
<td>a. Focused on the future</td>
<td>a. Focused on the present</td>
</tr>
<tr>
<td>b. Education can be a full-time occupation</td>
<td>b. Usually a part-time occupation</td>
</tr>
<tr>
<td>c. Few responsibilities</td>
<td>c. Many responsibilities</td>
</tr>
<tr>
<td>d. Do not expect quick results</td>
<td>d. Adults expect quick results</td>
</tr>
<tr>
<td>Limited experience and knowledge</td>
<td>Extensive experience &amp; knowledge</td>
</tr>
<tr>
<td>Gaps in knowledge</td>
<td>May need skill in organization of knowledge</td>
</tr>
<tr>
<td>Self-respect of a child is less vulnerable.</td>
<td>Self-respect of an uneducated adult is very vulnerable. One failure may make an adult resist further education.</td>
</tr>
<tr>
<td>Minor failures can be overcome.</td>
<td></td>
</tr>
<tr>
<td>Can put pressure on a child to keep learning.</td>
<td>Pressure can be disastrous. Wrong pressure may kill interest. Motivation very important.</td>
</tr>
<tr>
<td>Teacher/student relationship similar to father/son, mother/daughter relationship.</td>
<td>Teacher/student relationship similar to friend/friend relationship.</td>
</tr>
<tr>
<td>Teacher can serve as a model for a child.</td>
<td>Teacher seldom serves as model. Adult's way of life is fixed. Adult student is probably very different from teacher.</td>
</tr>
</tbody>
</table>
7. Ideas new to society are presented along with more traditional ones--attempts are made to harmonize them. New ideas presented as alternatives to traditional ones. Choices may require a rejection of old, which is difficult.

8. More willing to accept the abstract. Demand the concrete and practical application to own real problems.

9. Will study theory without relation to application. Will accept theory only by way of explanation of practical problems.

10. School serves an uncertain end or purpose often dictated by adults. Studies must point to some definite need or purpose.

11. Captive audience Voluntary audience

12. Wants demonstration, illustration, and explanation and to be able to work things out for himself.

Appendix B

COPING WITH LEISURE

For the past half century, the amount of leisure time available to Americans has been increasing rapidly and experts are predicting even greater changes—in the amount of leisure time and how we use it—in the next 30 years.

The following projections were made in a special editorial supplement of "Leisure Today" in the March 1972 issue of the Journal of Health, Physical Education, and Recreation:

- By the year 2000, retirement at the age of 38 may be commonplace. Many industries are already encouraging retirement before age 65.

- Normal and healthy life to the ages of 90 and 95 are within the foreseeable future and would create unusual demands for leisure activities.

- Sabbaticals, year-long leave long accepted in the educational community, may become an industry practice.

- The re-arrangement of work time to give greater priority to leisure is already taking place with some organizations testing 4-day work weeks and with the growing number of 3-day holiday weekends. Other possibilities include working half a year with the other half off. The average American now has nearly 800 hours available annually in terms of vacation and paid holidays.

- Work will become less the central goal in life. Once the source of fulfillment and self-identity, work is becoming less significant in these roles. More people see leisure as an opportunity for a "fuller life."

- New leisure occupations will undoubtedly evolve. While the work ethic is changing, people still have a strong urge to be creative and productive in the use of discretionary time.

- Leisure will create unusual (and perhaps impossible!) demands for recreation and on parks. Rapid change and excessive decision-making in
today's society are already causing millions to seek positive, temporary escape from an overstimulating man-made environment. Witness the great surge of popularity in camping, backpacking, hiking, and mountain climbing; the tremendous increase in attendance at national parks (198 million people--2/3 of the population will visit national park areas this year... 298 million by 1980. By sheer number, people may be deprived of the very experience of solitude they seek!.

- Americans' attitude toward ownership is changing rapidly. So many of the "things" in our lives are short-lived and disposable; convenience and use are becoming of greater importance than ownership. Experts predict an accelerated growth in rental business, particularly as it applies to recreation and leisure.

- Time will become the country's greatest new resource. How we use it will affect all mankind.

From Quality of Life, special news feature from the American Association for Health, Physical Education, and Recreation.