This report was intended to provide a basis and rationale for the organization and development of a multi-State consortium to produce catalogs of performance objectives and criterion-referenced measures in occupational education. Information is centered around two elements which are the major concerns: (1) The accountability phenomenon and its possible effect on occupational education, and (2) efforts of the States to cooperate on a formal basis for the improvement of occupational education in the public sector. It is noted that this report will be used to present to vocational educators and others who may be interested in the formation of a consortium the present status of efforts in this direction and the elements which specifically relate to the national movement toward accountability in education. After a brief introduction, information is presented under the following headings: Methodology; The Status of Occupational Education in the United States; Are We Ready for the Implication of Educational Accountability; The Accountability Movement—What's in It for Occupational Education?; Performance Objectives and Criterion-Referenced Measures—Possibilities forGetting Accountability to the Classroom?; The Educational Consortium—Another Exercise in Accountability, Or Is it an Answer?; and Findings and Conclusions in Putative Study—Or Putting It All Together. A bibliography and appendices are included. (HD)
Southern Association of Colleges and Schools
Commission on Occupational Education Institutions
795 Peachtree Street, N. E.
Atlanta, Georgia 30308

A Project for the Development of A
Multi-state Consortium for the Production of
Performance Objectives and Criterion Measures in
Occupational Education, Florida Department of Education
GRANT NUMBER S.D.E. 730-073

Second Report

A Status Report on Occupational
Education, Accountability, Performance Objectives,
Criterion-Referenced Measures, and Educational Consortia

March, 1973

by

Ben A. Hirst, Jr.
Project Director
ACKNOWLEDGEMENTS

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This research effort was supported by funds resulting from a contract entered by the Florida Educational Research and Development Program with the Southern Association of Colleges and Schools, Commission on Occupational Education. The primary thrust of the contract is to develop a multi-state consortium to produce performance objectives and criterion-referenced exercises in occupational education.
The chief purpose of this report is to provide a basis and rationale for the organization and development of a multi-state consortium to produce catalogs of performance objectives and criterion-referenced measures in occupational education. The status of occupational education in this report is treated in a cursory sense and only for the purpose of providing a development and operational rationale for the formation of the consortium. The current status of occupational education in the United States could produce many volumes of data and narration which would unnecessarily complicate and cloud the purposes of this report. Information in this report will be determined by two elements which are the major concerns: (1.) the accountability phenomenon and its possible effect on occupational education, (2.) efforts of the states to cooperate on a formal basis for the improvement of occupational education in the public sector.

The report will be used to present to vocational educators and others who may be interested in the formation of a consortium the present status of efforts in this direction and the elements which specifically relate to the national movement toward accountability in education.
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PART I. INTRODUCTION
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Education today finds itself in a paradoxical dilemma. It has been said that people (society) are asking education to do those things which once were considered the Provenance of God. In addition, the American people have held education to be the source of some mystical power which could provide everyone with the necessary ingredients to succeed in life. All that was necessary was to have sufficient fortitude, a liberal amount of will power, and the self-determination to overcome the educational barriers provided through years of educational evolution. The paradox begins when superimposed demands of the public call for more accountability on the part of education. It seems rather strange that the "giant educational enterprise" which is so reverently held could be so strongly challenged in the area of accountability. This is the case, however. There are many people who believe that education should be more accountable for the production of results from its many programs. They further believe that these results should be specific, measurable, and subject to broad public review. Further contentions suggest that every educational program should be able to provide a specific measurable result directly related to a given expenditure of funds. In its simplest terms, this could mean that a program in reading should be able to develop the ability to read in any given group directly proportional to the amount of funds consumed by the program. Any researcher
could identify numerous variables which might be introduced to alter the attainment of either the output or cause the input (money) to be considered inadequate.

All of these points are provocative and have been debated endlessly during recent years. This paper will present some of the current trends regarding accountability in education and will provide a rationale for multi-state cooperation for the possible solution of one large problem in occupational education.

One of the chief problems of occupational education (sometimes called vocational-technical education) has been to effectively articulate what the student is able to do in the school setting to those consumers of the product (sometimes called business and industry). The consortium for production of performance objectives and criterion-referenced exercises does loom as a possibility for the substantial improvement of articulation and evaluation. Information presented in this report will draw heavily from the works of Dr. Leon Lessinger, Dr. Ralph Tyler, Dr. W. James Popham, Dr. Robert Mager, Dr. Larry Hughes, Dr. Charles Achilles, and others. Materials were reviewed from the ERIC files and from reports of congressional committees, various pieces of federal and state legislation, and from reports of groups such as the U.S. Office of Education, The National Advisory Council on Vocational Education, and
the Second, Third, and Fourth Annual Survey of The Public's Attitude Toward the Public Schools by Dr. George Gallup.

A comprehensive list of materials, books, and publications may be found in the bibliography.
PART II. METHOD OF PROCEDURE
PART II. METHOD OF PROCEDURE

Research of the Literature Through ERIC

A thorough search of the literature in the ERIC files and through the VTE Clearinghouse was made. The materials found to be appropriate were further supplemented by a computer search using fourteen related descriptors. The search produced numerous listings of microfiche and listings of journal articles. One hundred and twenty-seven microfiche copies were made of materials which seemed appropriate and which might contribute to the study. After reading the abstracts of each possible source of information, all but forty-six pieces of literature were eliminated because of the nature of the material and/or its lack of appropriateness to the items being studied.

Research of the Educational Resources Index and the Dissertation International File

A review of the Educational Resources Index and the Dissertation International file was made to identify appropriate studies and articles related to the descriptors.

Several journal articles were reviewed and used in the study. Of the six dissertations abstracted, only one was applicable. A copy of this dissertation was obtained and did contribute to the section of the report concerning educational consortia.
Surveys of the Status of Curriculum Development in Fourteen Selected States

Surveys were mailed to state directors of vocational-technical education in sixteen selected states. The states asked to respond were Virginia, North Carolina, South Carolina, Georgia, Florida, Mississippi, Alabama, Louisiana, Texas, Tennessee, Kentucky, Oklahoma, Ohio, Missouri, Colorado, and Michigan. All the states responded. A portion of the survey was directed to the key curriculum development person in each state.

Interviews of Key Vocational-Technical Personnel

The states participating in the beginning phases of the consortium were visited. At the time of this report, interviews of eight of the fourteen who responded to the survey were used to assess the status of occupational education (particularly curriculum development). The results of these interviews and the general attitudes of the respondents were recorded in regard to performance-based instruction and the use of an educational consortium to solve these problems. The results of these interviews help to delimit the material included in the total report. During the process of these interviews, it became apparent that a thorough knowledge of performance-based instruction, criterion-referenced measures, and the purpose of a consortium for solving the proposed problem does not exist. In view of
this, the report was designed to address itself to some possible answers to a few of the vexing problems currently facing occupational education.
PART III. THE STATUS OF OCCUPATIONAL EDUCATION IN THE UNITED STATES --- ARE WE READY FOR THE IMPLICATION OF EDUCATIONAL ACCOUNTABILITY?
PART III. THE STATUS OF OCCUPATIONAL EDUCATION IN THE UNITED STATES --- ARE WE READY FOR THE IMPLICATION OF EDUCATIONAL ACCOUNTABILITY?

A. Where Are We In Occupational Education?

Occupational Education over the past decade has experienced considerable growth. The emphasis of the Vocational Education Act of 1963 and the amendments to this legislation in 1968 has provided the primary encouragement for growth. This federal money has stimulated an unprecedented growth in the amount of state and local money appropriated for occupational education. Figures from the U. S. Office of Education reflect an increase in federal support of occupational education from $157 million in 1965 to $396 million in 1971, an overall percentage increase of approximately 250%. Of note, however, is the fact that during the same period, state and local support for the program increased by 430%, or almost double the federal participation rate. The overall success of this growth has yet to be fully assessed; but, needless to say, the growth has been noteworthy. The legislation has produced new emphasis within the structure of occupational education.

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providing funds for the first time to build and equip facilities. These facilities were limited, however, to the area vocational school concept. Federal construction money used by the states was expended under a criteria which identified an area vocational school.

This development and growth has taken place during a period of great social change in the United States. The Vocational Education Amendments of 1968 reflect the changes in our society regarding the disadvantaged and handicapped. The programs of President John F. Kennedy and his emphasis upon space exploration and technological development provided the primary emphasis for this new legislation. Following President Kennedy, vocational education found itself in the middle of a multitude of special programs with emphasis upon training and manpower development. The "War on Poverty" with its emphasis on the socially and economically disadvantaged led to many changes in vocational programs, their design, and the general delivery system. Some of these new programs were moderately successful, especially when an analysis is made of the types of persons and their condition upon entering the programs. There were definite examples of gross failure to produce the desired results, evidence of corrupt administration, political patronage, and other closely related problems. Vocational education has managed to survive when some of these supposed innovative programs have proven
ineffective and complete failures. The National Advisory Council on Vocational Education seems to have hit upon the basic problem of why these programs didn't succeed. In many cases, the administrators and those delivering instructional skill and information were not properly prepared nor did they have sufficient work experience and technical knowledge to do an effective job. According to the National Advisory Council on Vocational Education, these programs concentrated on reducing the "pool" of the unemployed and underemployed. After the spending of several billion federal dollars on these so-called "band aid" programs, the "pool" still remains quite stable and has even managed to increase slightly. The Council has called for the federal government to concentrate money and effort upon reducing the "flow" of the people into the "pool" rather than going through "wasteful and inefficient practice of trying to reduce the pool."

Coupled with this kind of approach to manpower development is a public attitude assessed by the National Advisory Council on Vocational Education, which they say is a "national attitude toward vocational education as a system designed for someone else's child." In furthering this finding, they propose that work be accomplished to overcome

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the national pre-occupation with the college education and to help overcome the intellectual snobbery which has fostered this attitudinal development. The Department of Labor has pointed out that, in the years to come, there will be an actual decline in the labor markets of our nation for the college graduate and an increasing demand for technicians, skilled laborers, and persons working in the service technologies, all of which will require special technical knowledge and skill below the baccalaureate degree. The National Advisory Council on Vocational Education has been most critical of the U. S. Office of Education, its lack of imaginative leadership, its method of priority identification, and its general lack of support of vocational education over the years. Vocational Education has relied on its friends in Congress and other special groups to carry its requests to the halls of Congress for attention. This has been the mainstay of support over the years and appears to be the resource for continued growth and development of vocational education.

All is not well within the program of vocational education on a national basis. There continues to be a lack of unity within most of the states regarding a total program of vocational education. There are still those who cling to the "old" legislation for vocational education which provided funds for certain service areas, i.e., T & I, Agriculture, Distributive Education, Home Economics, etc. In addition
to this splintering, there are groups working independently of each other who are concerned with "secondary programs" and "post-secondary programs." The arguments and differences prevailing in this area are too numerous to mention for the purposes of this paper. In addition to these internal conflicts, there are a number of "set aside" programs. It has been said that many of these labels have been applied to dying or dead vocational programs which someone, for some reason, wanted to keep alive. Vocational education has the dubious reputation of starting programs in everything and stopping programs in nothing. The degree that this accusation is true still remains to be proven.

B. What Is Happening to Education in the United States?

In looking at this question, it is important to view education as a whole and the relative condition that it appears to be in today. Events of the last two to three years have produced a national concern over what is taking place in education. For many years, education has been regarded as the most important force working for the improvement and betterment of man and his society. This attitude still exists to a high degree, but there are increasing numbers of people who are displeased with the products of the educational enterprise as it operates today. This displeasure can be seen in an analysis of the present economic picture of our country. We have been operating a paradox which is indefensible. Over the past few years, the
college graduate has had increasing difficulty in locating satisfactory employment in line with his college preparation. There is a surplus of teachers, engineers, scientists, and other professionals. Such people are being forced to accept jobs well below their level of training and educational achievement. If one looks further, he finds the other element of the paradox, the numbers of jobs available which require technical skills and knowledge which do not match those of this same group of college-trained people. We have, then, the situation where men are searching for jobs and jobs are searching for men, neither of which can meet the requirements of the other.

This type of problem is extremely complex and is the result of years of misdirection, lack of long-range planning, and a general disregard for the labor market by the educational establishment. The concerned public is demanding accountability of the educational establishment and is asking it to relate its activities to the real needs of society. This position of education dramatically affects occupational education. Some see occupational education as an answer to some of the problems facing our nation; these same people also see a need for sweeping changes in financing, controlling, researching, and administering occupational education so that it is more able to meet this challenge.
Dr. George Gallup, in his *Second Annual Survey of the Public's Attitude Toward the Public Schools* has revealed many of the public's concerns for education. In this study, the subjects of accountability, relevance, financial support, student power, drugs in schools, sex education, and other related problems are treated. The third and fourth annual surveys tend to further support the findings of the second survey. The results point out some of the reasons why the public is acting as it is toward education. Dr. Gallup strongly suggests that decision makers in education take stock of these attitudes or suffer the consequences of lost public support, both financially and politically. Dr. Gallup cites statistics and other findings from the U. S. Office of Education:

Budgets and bond issues are being voted down in increasing number. Evidence of this trend is to be found in the results of the present study. The U. S. Office of Education reports that in the last year (fiscal, 1969) school bond issues were voted down by voters at a record rate. By dollar value, voters approved less than 44% of the 3.9 billion in bond issues put to the electorate. The 1.7 billion that passed comprised the lowest total since 1962. A decade ago 80% of such bond issues were approved.

He further cites the primary reasons for this voter concern as being the spiraling costs of education (thus

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property tax and other tax increases) and the rising concern for lack of discipline in the schools. Also of chief concern are the apparent inability of school administrators to effectively deal with student unrest and discipline. Some are saying that this lack of discipline is also affecting the overall morale and efficiency of teachers. Dr. Gallup points out that until recently the citizenry has been willing to accept statements of the board of education, school administrators, and teachers regarding how good the schools and their programs were doing. This is not the case now, according to Dr. Gallup. The interest appears high for national examinations which would permit comparison of programs and schools across the country. Other objective means of cost-benefit study are being proposed with the underlying purpose being to make education more accountable to the public it is supposed to serve. The questions which continue to appear in current literature on the subject of educational accountability are "What can we expect to obtain if a dollar is expended in an educational program?", "What will be the outcome in terms of student performance?", and "How do we assess whether the desired educational objective has been achieved?" Judging from the results of the Gallup study, it appears certain that the public wants to know in more objective terms the results of its expenditures in educational programs. This answers the question of to whom the schools are to be accountable if they continue to consume public tax money for programs
and if they continue to ask for more, then no doubt they must be accountable to the public from whence the money flows.

The public's concern over accountability can be reinforced by five questions presented by Dr. Gallup in his survey of the public's attitude toward public schools. The questions are as follows, and after the questions are the response percentages:

(1) Would you like to see the students in the local schools be given national tests so that their educational achievement could be compared with students in other communities?\(^4\)

The adult public approves this idea. In fact, the vote on this question was 75% in favor, 16% opposed.\(^5\)

(2) Would you favor or oppose a system that would hold teachers and administrators more accountable for the progress of students?\(^6\)

The results were very much the same. A total of 67% of the adults voted in favor, 21% opposed the idea, and the remaining 12% had "no opinion."\(^7\)

\(^4\)bid, page 4
\(^5\)bid, page 4
\(^6\)bid, page 4
\(^7\)bid, page 4
(3) Should each teacher be paid on the basis of the quality of his work or should all teachers be paid on a standard scale basis?

This question, of course, assumes that 'quality of work' of a teacher can be determined in an objective manner -- which many doubt. The principle of paying anyone on a standard basis -- and overlooking his individual efforts and success -- runs counter to the prevailing ethos of the nation, especially in occupations that are regarded as professional. The results of this question indicate that adults regard teachers as they do other professional groups -- 58% believe teachers should be paid on the 'quality of work' and 36% believe teachers should be paid on a 'standard scale basis.'

(4) Many states have 'tenure' laws which mean that a teacher cannot be fired except by some kind of court procedure. Are you for giving teachers tenure or are you against tenure?

In reply to this question, 35% of the adults said they favored tenure laws, 53% opposed them.

(5) Have teacher organizations gained too much power over their own salaries and working conditions?

The response throughout the nation was 26% 'yes,' 53% 'no.'
It becomes apparent when a thorough analysis is made of the Gallup study that all of education is in the same boat and that a study of the status of the part (occupational education) without a companion study of the whole (all of education) would be futile and would produce only a nebulous status study.

The review of the literature has resulted in one substantial finding -- the public expects education and all its multitude of parts to devise ways of assessing itself which can pinpoint by program those which are doing the job and doing it in measurable terms. This is the essence of accountability and seems to be the single most important force affecting the current status of occupational education. The following section of the study will treat the "accountability phenomenon" and some possible effects of this concept on occupational education.
PART IV - THE ACCOUNTABILITY MOVEMENT --
WHAT'S IN IT FOR OCCUPATIONAL EDUCATION?
PART IV - THE ACCOUNTABILITY MOVEMENT --
WHAT'S IN IT FOR OCCUPATIONAL EDUCATION?

Where Do We Stand?

This question posed is difficult to deal with because it requires us to first identify where occupational education appears to be today in the accountability movement. During the activities of this project, fourteen state directors of vocational education have been interviewed, as well as other key leaders in vocational education in each of the states. One observable and evident concern of this group of people was the accountability movement. According to these observations, accountability in education seems to be set forth on a continuum. The continuum, at its lower level, begins with little accountability and moves along the scale to a high degree of accountability. A graph could possibly be constructed using a verticle axis showing the various elements of education, i.e. fiscal, administrative, supervisory, instructional, etc., and relating the degree of their present status regarding accountability. This of course would be a difficult item to assess simply because accountability, for the most part, is just beginning to bring its effects to bear on occupational education.

There are people who say that vocational education and education in general has always been accountable and, to a degree, this is true. What is being called for by the
public, by the legislatures, by the President of the United States, and by Congress is a degree of accountability yet to be realized in any area of education. There have been efforts in Congress to attempt to put educational delivery on a basis of measurable results per each dollar expended. The movement in this direction is strong and probably will become stronger. Those in occupational education (sometimes called vocational education) who contend that they have always been accountable do have some basis for their allegations. Again, this has been by degrees. Vocational education (sometimes called occupational education) has, as a part of its legislation, been required to submit annual plans, projected activities, and evaluation reports, in addition to audits of expenditures by the United States Office of Education and the General Accounting Office. This has been helpful to vocational education and has resulted in a high degree of success in its programs when viewed in the perspective of its appropriations. The chief problem with this approach has been the lack of strong leadership in the development of a systematic accountability structure which includes the essential elements of competitive bidding, performance contracting, modern management technology, and third party assessment. The reports on projects, activities, and programs have been conceived by vocational educators, implemented by vocational educators (with a nebulous involvement of lay people as required by law), and the decisions which
have been made seem to be to continue the programs in the same way. This type of educational "incest" must be eliminated if vocational education is to achieve the full degree of accountability being asked for by the public and demanded in some sectors of government.

The question of "Where do we stand?" could probably be better stated as, "In what direction are we moving?"

Vocational education is moving and is making substantial changes which will make it more accountable to the public it serves. A review of the Reports On the Implications of the Vocational Education Amendment of 1968 presented to the General Subcommittee on Education of the Committee on Education and Labor, House of Representatives, United States Congress, November, 1971, will yield much information regarding the progress of the states. Most of the states have developed innovative approaches to administration, supervision, program planning, research, curriculum development, ad infinitum. There is evidence that new management techniques have begun to be implemented to improve vocational education. The Program Planning and Budgeting System (PPBS) and Management by Objectives (MBO) theories appear to be the most popular and are receiving attention by several states. At least two states, Florida and Colorado, have passed legislation expressly directing that education develop accountability systems for all aspects of its programs. The State of Virginia has passed
legislation which has changed its **Rules, Regulations, and Minimum Standards for Education** from the regulatory statements of minimums to goal-oriented performances that the state wants to achieve over a period of time. These goals or objectives relate to every aspect of education, including administration, supervision, finance, management strategies, pupil attendance, educational attainment, instructional performance, and other related elements.\(^1\)

Other states are working on and/or considering similar legislation.

A careful analysis of the movements, which have resulted in state legislatures taking the initiative to bring about change, could provide a point of concern for those who are not yet affected by such actions. Do we in education stand to the side and wait for accountability to be forced upon us or do we begin to mold and model new systems, new designs, and new programs which fully address themselves to a high degree of accountability? One thing does seem apparent -- education is going to become more accountable to the public it serves. The only question that seems to be left unanswered at this time is whether education is going to move ahead and address itself to the problem or stand

\(^1\)Standards of Quality For Public Schools in Virginia, July 1, 1971, General Assembly of the State of Virginia, Richmond, Virginia.
on the sidelines and watch as others, who may not be as well qualified, set the pace and the parameters of educational accountability? The dangers in the last alternative presented in the question are tremendous.

What Is the Status of the "Accountability Movement"?

A treatment of this question was begun in Part III of this report when reference was made to the Second Annual Survey of the Public's Attitude Toward Public Schools by Dr. George Gallup. This report is scholarly presented and statistically accurate. The integrity of the Gallup Organization and its approach to surveying is well known and highly regarded. If his findings are then accepted as a valid measure of what people are thinking and what people are wanting from the public schools, then those of us in the business should listen.

The "accountability movement" is calling for sweeping changes which appear to be needed in education so that it may once again enjoy a favorable image in the eyes of the public. Anyone who is attentive to what is happening in educational appropriations, bond issues, and taxes must logically come to the conclusion that the public is dissatisfied with our products. Bond issues are being voted down for education by record numbers, and appropriations which once were automatic and usually generous are becoming increasingly difficult to obtain. It is the general rule
that when increased appropriations are granted, they are based on a thorough and complete justification or rationale for the funds. Hearings on educational appropriations attended by the researcher have produced this question which is asked over and over again: What results can we expect from your programs if we provide the money you request, and how will you assess your success in obtaining these results?

Education is being required to develop programs and fund existing programs more in terms of "cost-benefit" relationships than ever before. This approach is a way to achieve more accountability and is certainly a step in the right direction. It is time we looked at a number of programs (sacred cows) in education and applied a strategy of "cost-benefit" analysis to them to assess their effectiveness. If they don't "measure up", we should have the courage to discontinue them.

President Nixon, in his message to Congress on March 3, 1970, concerning education reform, made several strong statements regarding educational accountability and the need for more effective assessment of the results of educational expenditures. He posed the question, "What makes a 'good' school?" The old notion, according to President Nixon, was that "high standards of buildings, equipment, a reasonable number of students per classroom, teachers with good college training and often graduate training, schools that keep up to date with new curriculum developments and are alert to
new techniques in instruction could be so judged." This was a fair enough definition so long as it was assumed that there was a direct connection between these "school characteristics" and the actual amount of learning that took place in a school." President Nixon further elaborated on this point when he said, "years of educational research, culminating in the Equal Opportunity Survey of 1966 have, however, demonstrated that this direct, uncomplicated relationship does not exist." President Nixon made another point for finding out what makes schools "good" and suggests a way of doing it through accountability. In support of this concept he said, "School administrators and school teachers alike are responsible for their performance, and it is in their interest as well as in the interests of the pupils that they be held accountable. Success should be measured not by some fixed national norm, but rather by the results achieved in relation to the actual situation of the particular school and the particular set of pupils." He went on to say that "educators have been too concerned with a fear of the development of "national standards" of which he said "there had been no major effort in this direction." What we have avoided, according to President Nixon, is "thinking of the productivity of schools." The primary statement made by President Nixon in support of accountability and our need to get on with the job was emphasized as follows: "Ironic though it is, the avoidance
of accountability is the single most serious threat to a continued, and even more pluralistic, educational system."

Governor William G. Milliken, State of Michigan, in a speech to his legislature (Fall, 1969) pointed out the need for new thoughts in the area of educational accountability. He admitted that there were many definitions of accountability but said, "The chief implication is that people are increasingly demanding to know how their children are learning, what they are learning, and why they are being taught whatever they are being taught." He further went on to say that, "the principle task of American education today is to create confidence where little or no confidence exists. We cannot create this confidence by reciting a litany of accomplishments... all the money we are spending, all the schools we are building, all of the new programs we have initiated. We can only create, or recreate, this confidence by eliminating our failures." To eliminate these failures, the Governor suggested vastly improved means of educational assessment.

This will require, according to the Governor, the outlay of more research and development money than the present one percent being expended. This small amount of research and development money is indefensible for an enterprise as large as education. Few businesses of any size could last an extended period of time in our present age of technological development without spending many times that amount for research and development activities.
The list of public figures who support accountability in education goes on and on. Here some basic ideas of accountability and where it appears to be today have been offered. The next question posed in this report is stated to identify the thoughts, activities, and observations of certain leaders as they have become involved in the educational accountability phenomenon.

What Direction Is Educational Accountability Taking and What Are The Leaders Saying?

Educational Accountability is apparently moving in two directions at once, each being opposed to the logic of the other. A careful review of the literature will present a view of educational accountability and will definitely show the focus to be toward the classroom and the teacher. Most people who are discussing and promoting the "educational accountability movement" are speaking in terms of the individual learner. This is as it should be. Everyone who is employed in education should be there for the express purpose of facilitating instruction of students (learners). We are either directly involved in the process of instruction or we are administering, supervising, researching, or evaluating the procedure in order to produce better "results". Before presenting the other direction educational accountability is taking, it would be beneficial to offer a definition of educational accountability. According to Webster, education is defined as "a science dealing with the principles and
practice of teaching and learning". Webster defines accountable as follows "liable to be called to account; answerable, capable of being accounted for; explicable". If we hold to the promise that we in education are responsible and answerable to those we serve, (the students), then what is being said about educational accountability and its emphasis on the classroom and the individual student certainly has merit.

What becomes apparent, however, when one investigates the reality of what is taking place, is that reports are still emphasizing the input items, i.e., numbers of teachers, their certification, their age, their height (in some cases), number of classrooms, location of learning labs, and other similar pieces of data. Instruction is still being measured primarily in terms of how well one student achieves when compared to another. We know that this type of measurement has its place in education. What is needed is widespread implementation of systems of measurement which relate to specific achievements of students closely associated with where he began and how far he has progressed in terms of the domain of the subject matter rather than in terms of his classmates.

There are few efforts which systematically analyze what happens to students and how they perform when they leave school. Many schools can tell you how many of their students go to college and to which colleges. They cannot answer the more important questions, such as how long did they stay,
what problems did they have in the college subject matter, in which courses did they do well, or in which did they show poor prior preparation? All of these questions are pertinent and should be answerable if accountability is really beginning in the classroom. A more important question and one with devastating implications is: "What happens to the 70 to 80% of students who don't go to college?" No one knows much about their failures and successes or their strengths and weaknesses. Their lack of knowledge about this group of people is probably the most pronounced shortcoming of our educational system. With a thorough knowledge of their plight, many innovative and productive changes could be made in education.

A more significant indication of the lack of real concern about what happens to the student is the process used to evaluate effectiveness of educational programs. The United States Office of Education evaluation forms and guidelines are strongly slanted toward input measures. The standards of the regional accrediting agencies still reflect strong inclination toward measuring such inputs as staff certification, number of volumes in the library, lighting levels in classrooms, quality of the building, and composition of the governing board. Such input items do have their place in evaluation, but it has been proven by educational research that no magical relationship exists between the presence of these inputs in measurable quantities and the actual production of a student body which can perform well above another given student body.
Accountability, it seems, will be a strong force in lessening our obsession with input and causing us to focus on what happens to the individual student and what might be altered to produce the desired learner performances.

Some leaders in education are proposing new approaches which have implications for improving the accountability of education at all levels. Dr. Leon Lessinger, acclaimed by many as the father of educational accountability, has offered, through his books and articles, some interesting and thought-provoking ideas regarding the introduction of a high degree of accountability to education. Dr. Lessinger calls this educational accountability "educational engineering". According to Lessinger, "when a program in the school is well engineered, it will meet several tests: It will require educational planners to specify, in measurable terms, what they are trying to accomplish. It will allow taxpayers and their representatives to judge the educational payoff of a given appropriation. It will stimulate a continuing process of innovation, not merely a one-shot reform. It will call forth educational ideas, talent, and technology from all sectors of our society, not only from within a particular school system. It will allow schools to experiment with new programs at limited risk and adopt the best of them promptly. Above all, it will guarantee results in terms of what students can actually do. In this sense, educational
engineering is not a single program, but a technique for the management of change."2

The implications of this type of management in education are interesting. What will be the effect of this approach on teacher education, the role of the administrator, supervisor, the local boards, state boards, the lay public and, most importantly, what will it mean to the learners? The need for change in the total education establishment is evident when you consider the plight of a large number of people in our society who have not benefited adequately from their education. Education has somehow not met their needs. This group, identified by the National Advisory Council on Vocational Education in its' Fifth Report, June 21, 1971, seems to belong to the part of our society to which no one in the educational establishment is listening. According to the Council, no one is "listening to":

The forty million elementary school children who need career orientation.

The seven and one-half million young people who seek employment after graduation.

The seven hundred and fifty thousand high school and college students who drop out each year, virtually all without marketable skills.

The unemployed, or soon to be unemployed, workers not expecting callback because of shifts in technology or shifts in labor market demand.

The highly motivated working poor stuck in low-skill, low-paying jobs who need to hold two jobs to earn enough income to cover their family needs.

The mothers of school age children who need and want to re-enter the labor market.

The older workers, involuntarily retired, who want to continue to work but need marketable skills.

The over three hundred thousand mental hospital patients discharged each year who need a marketable skill to sustain themselves.

The over two million veterans returning to civilian life.

The inmates in our prisons who need pre- and post-release skill training to cut down on the high rate of recidivism.

The taxpayer, as he votes down bond issue after bond issue on his local educational level.  

There are only a few of the symptoms which call for educational change. Campus rioting, youth unrest, manpower needs of a modern society are all indications of our failure

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to meet the real educational needs of our day. Accountability promises a better system. It may be the answer or it may be just a beginning point for better educational opportunities to cope with the even greater demands which lie ahead.

Dr. Leon Lessinger, Dr. Ralph Tyler, Dr. J. P. Wescott, and others are offering ways of becoming more answerable to those we serve. Performance contracting, independent accomplishment audits, management support groups, the use of risk capital for incentives, the use of quality control and quality assurance systems and modern participatory management concepts must become common practices if education is to become accountable. We must learn from industry, particularly from those industries such as the aero-space, aircraft, and other related industries which strive for "zero defects". The public should not expect any less, and education should not provide any less.

Past efforts toward the implementation of accountability in the educational establishment should provide the basis for further trials and experimentation. Performance contracting, independent accomplishment audits, program planning and budgeting systems, management by objectives, and other concepts yet to be born must be tried, modified, and tried again. There have been shortcomings in some of the early efforts, but results have been demonstrated which have also been measured. Early indications are at least favorable and hold a promise of improving education and in recovering the lost public image of the value of education. For the most
part, the earlier efforts have been more concerned with the control items such as administration, finance, and supervision. However, the backbone of educational accountability has to be those measurable changes which provide results in teacher performance, student performance, and the modification of the learning environment which contributes to these performances. This is when education and accountability will become correlated and positive forces.
PART V - PERFORMANCE OBJECTIVES AND CRITERION-REFERENCED MEASURES -- POSSIBILITIES FOR GETTING ACCOUNTABILITY TO THE CLASSROOM?
PART V - PERFORMANCE OBJECTIVES AND CRITERION-REFERENCED MEASURES -- POSSIBILITIES FOR GETTING ACCOUNTABILITY TO THE CLASSROOM?

A positive and promising movement is underway in education which may be one giant step in the direction of bringing accountability to the classroom. This effort is based on the development of sound performance objectives which would become an integral part of every teacher's course. In addition to these performance objectives (for the learner), there is a given set of criterion-referenced test measures (teacher assessment of the learner) which is carefully developed and tried for appropriateness and applicability. This approach is relatively new and is having difficulty getting off the ground. (Such is the plight of everything new in education.) Dr. Robert F. Mager is considered to be the contemporary father of the performance objective and has written several books and articles designed to help implement the concept. A performance objective, as identified by Dr. Mager, would provide at least three definite components:

First, identify the terminal behavior by name; you can specify the kind of behavior that will be accepted as evidence that the learner has achieved the objective.

Second, try to define the desired behavior further by describing the important conditions under which the behavior will be expected to occur.
Third, specify the criteria of acceptable performance by describing how well the learner must perform to be considered acceptable.

Over the years and through normal development of the concept, other components have been added to this early definition presented by Mager. The Florida Educational Research and Development Program has added components to statements of performance objectives which include Mager's, for a total of seven specific components:

1. Situation – The situation confronting the learner is clearly specified, including the mode in which stimuli are to be presented.

2. Action – The action required of the learner is unambiguously defined, including the mode in which responses are to be made.

3. Object – The object on which the learner is to operate (i.e., the object of the action), is clearly stated.

4. Limits – The particular limits associated with the activity expected of the learner are specified. (Limits may be placed on situation, action, and/or object.)

5. Measurability – The specified action is an observable rather than an inferred response.

6. Communicability – The objective is so stated that one, and only one, interpretation of the objective is reasonably possible.

7. Criterion – The degree of proficiency required as evidence of accomplishment by a student of

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the objective is indicated. (The criterion may be indicated implicitly or explicitly. If implicit, 100% accuracy is effectively designated. If explicit, may be appended parenthetically to the statement of the objective.)

Almost hand-in-hand with the development of the performance objective has been the development of the criterion-referenced measure. This measure of competence attempts to explain an absolute gain in terms of a required standard. Dr. Robert Glaser presented probably one of the more basic definitions of the criterion-referenced measures when he said that they were:

measures which assess student achievement in terms of a criterion standard, thus provide information as to the degree of competence attained by a particular student which is independent of references to the performance of others.

This definition was offered in 1963 in a paper delivered by Dr. Glaser. The concept has been developed to a higher degree and, as a result, the Florida Educational Research and Development Program now defines criterion-referenced measures as follows:

Criterion-Referenced Test Exercise: A criterion-referenced test exercise is an exercise based upon an objective and is designed to allow the determination


of whether or not the learner has accomplished the objective. It possesses each of the characteristics specified below:

a. Congruence - The task specified in the item corresponds directly to the performance specified in the objective, including the situation, action, object, and limits.

b. Comprehensibility - The item-specified task is so stated or portrayed that the learner clearly understands what is expected of him.

c. Objectivity - The exercise (including component items, if any), is stated in such a way that all competent observers (evaluators) can make a clear and unequivocal decision as to whether or not the learner has demonstrated an acceptable performance.

d. Integrity - The exercise is structured in such a way that an acceptable response to the exercise constitutes sufficient evidence, in and of itself, that the learner has accomplished the corresponding objective.

e. Equivalence - If two or more exercises correspond to a single objective, each exercise in the set would be a true alternate, in that a student who passes (or fails) one exercise on a given occasion would be expected to pass (or fail) any other exercise in the set.

There are still concerns about criterion-referenced measures, primarily because of the resistance of test experts who have not yet developed systems of validity and reliability. The conditions of variability which form the basis for norm-referenced measures are not present in criterion-referenced measures. Since variability is the

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basis for validity, reliability, item analysis, etc., used with norm-referenced measures and since these procedures do not readily apply to criterion-referenced measures, there is great reluctance to disturb the "business as usual" which exists in the domain of the test expert.

Work is being accomplished upon the analysis of criterion-referenced measures; however, Dr. W. James Popham and the late Dr. F. R. Huseck have been experimenting with statistical analysis of criterion-referenced measures in recent years. As a result of this work and the work of Richard C. Cox, Julie S. Vargas, and Roger O. Scott, a body of knowledge is being developed regarding analysis of the criterion-referenced measure. Dr. Robert L. Ebel, in his work on criterion-referenced measures, raises the question of whether these items must have measurable validity. He contends that if they successfully measure the performance desired of the learner as stated in an objective and are capable of repeatedly doing so, then perhaps this is a way of validating the criterion-referenced measure.

One observation that seems to be well-founded by the number of entries in the ERIC system is that much interest is being generated in performance objectives (sometimes called measurable objectives, performance criteria, behavioral objectives, etc.) and criterion-referenced measurement. It's greatest promise seems to be its ability
to place the student in a meaningful relationship with the domain of knowledge so that his progress can be measured based entirely on his individual efforts. This, then, does not compare him and his progress with other students or with some hypothetical national norm which has built-in errors of measurement and in no way can be considered absolute.

As the literature is reviewed, there are definitely two sides expressed regarding performance objectives and criterion-referenced measures. Some feel that this new method is a step toward more realistic accountability in the classroom. Others fear that this degree of accountability is dangerous and that it leads to indiscriminate evaluation of teachers. Albert Shanker, President of the United Federation of Teachers, expressed quite well how he feels teachers view accountability:

I think the first thing that needs to be said about accountability from the point of view of the teacher is that the concept is very much feared.  

He made this statement because of the many definitions which are being attached to the words "educational accountability". He sees forces in education and outside education who view accountability as a means of making children "machine-like" and monitoring their every school hour. There are

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others who feel that accountability, as it is being defined, is somehow dehumanizing and thus not good. Mr. Shanker, however, sees the development of measurable objectives as a positive force in the accountability movement as long as they are "not so narrow as to turn children into machines, but also not so broad as to make measurement impossible". 

More clearly stated and attainable performance objectives, measurable in terms of a criterion, seems to be more humane than the present methods. What is more humane than letting a learner know, in advance, what he is expected to know, under what conditions he will be expected to know, under what conditions he will be expected to demonstrate his knowledge, and the level or degree of acceptable performance he is to achieve. This kind of educational performance objective coupled with a criterion-referenced measure makes learning more "humane" for the teacher. Modern management theory indicates that people perform better if they know what's expected of them, what their working conditions will be, and how they will be evaluated as they perform their work.

In the early stages of the movement toward developing performance objectives and criterion-referenced measures, it was held that all teachers should be trained to develop, organize, and utilize them. Over the past several years, a more pragmatic direction has evolved which supports

6 Ibid., page 69
the development, validation, field testing, and cataloging of performance objectives and criterion-referenced measures by content and test specialists with the involvement of selected teachers, field test schools, and business and industry. After this development process (which does include very active participation of teachers), the objectives and measures are cataloged. The job of training the teachers to use them becomes one primarily of intelligent selection, organization, and modification to suit local educational conditions. This approach appears to be the prevailing direction and, on the surface, shows some economy of time and money.

The use of performance objectives and criterion-referenced measures seems to be gaining support, and their use is closely associated with bringing a higher degree of accountability to the classroom. Something needs to be done to accomplish this -- performance objectives and criterion-referenced measures may be one of the answers.
PART VI - THE EDUCATIONAL CONSORTIUM --
ANOTHER EXERCISE IN FUTILITY, OR IS IT AN ANSWER?
PART VI - THE EDUCATIONAL CONSORTIUM —
ANOTHER EXERCISE IN FUTILITY, OR IS IT AN ANSWER?

A Brief History

The history of educational consortia, in one form or another, can be traced back to the early beginning of the organized educational endeavor. The consortium concept has been called many things through the years. In reviewing the literature, the word consortium is used synonymously with educational cooperative, institutional cooperation, cooperative programs, and other modifications of these terms. Establishing a difference between the terms is not a purpose of this report. During the study of educational consortia, the change of the effort as it changed names through the years was an important consideration. The consortium or cooperative effort has developed to its present status through a similar process as other efforts in education. The consortium theory has grown from a real need to develop pools of expertise to solve educational problems, the sharing of research efforts and findings, the pooling of resources (financial) to bring about a greater impact on the solution of a problem and, finally, to facilitate shared services such as data processing systems and hardware, expensive research staff, facilities and equipment, expensive pieces in instructional equipment, and development of instructional software.

It was pointed out by Richard B. Lancaster in research on conflicts in consortia that the cooperative efforts often result for no apparent reason and that the institutions "do
not know why"¹ they join. He states that the primary reason appears to be that they join for the sake of cooperation. This point, of course, is not true of all consortia. It is apparent that some of them develop because there are problems or groups of problems which may be solved through a cooperative effort with a saving in staff time, effort, and, in some cases, at a reduced cost. Usually, the problem or problems are of such magnitude that the individual institutions or agency cannot solve them alone.

According to Lancaster, "there has been a great upsurge in inter-institutional cooperation during the past fifteen years."² He further predicts that this trend will increase significantly during the next fifteen years. When this prediction is viewed in light of current cut-backs in educational research funds and in developmental capital for education in general, the prediction does have merit. This point seems to be supported in an exhaustive and extensive study conducted by Dr. Larry Hughes and Dr. C. M. Achilles

¹Lancaster, Richard B., Conflict in Inter-institutional Cooperation, page 4, Loyola University, Chicago, Illinois, March 1, 1970.
²Ibid, page 4
and others. In the study appears the statement that "cooperation in education is a concept receiving considerable attention today with the more persistent reluctance of voters to support school bond issues and budgets." The statement is supported firmly by results cited earlier in this report from Dr. George Gallup's Annual Survey of the Public's Attitude Toward The Public Schools. Each year for the past three years, the Gallup Organization has surveyed the public sector and has revealed many interesting reasons why people aren't supporting educational programs as vigorously as in the past. The chief concern expressed by Dr. Gallup as he interpreted the data areas is that the public definitely is interested in the schools becoming more accountable. When the term "schools" is used, he refers to all aspects, the teacher, the administrator, the school boards, and others who make decisions and provide leadership to public education.

In view of this situation, the concept of educational consortium should be expanded with emphasis upon improving the quality of the organization, distribution of responsibility, and overall identification of the major objectives of the consortium, etc. Drs. Hughes and Achilles, in their interpretive study, identified large numbers of consortia or educational cooperatives which were in operation.

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In searching the literature, an effort was made to discover the number and location of consortia efforts between State Departments of Education or the states in general. The pattern seems to be that consortia tend to operate within state boundaries with the largest number consisting of school districts cooperating jointly in some type of formal arrangement. The few examples of state involvement in a recognized consortium effort appear to be through groups of higher education institutions which involve only token participation by the State Departments of Education. There are several examples of educational consortia operating in narrow subject-matter areas. The most prominent of these appears to be the Wisconsin consortium dealing with instructional materials in Distributive Education. Another active consortium effort which has probably the broadest state membership is the American Association for Vocational Instructional Materials. This organization has 36 member states. Its early efforts, beginning in 1945, consisted of developing materials in Agricultural Education. However, the organization has recently expanded its responsibility to include the broad field of Engineering Technology. The researcher could not find in existence consortia operating either at the State Departments of Education level or by major divisions within State Departments of Education.

Some Problems of the Consortium

This question was treated lightly in the preceding historical section of the report. It does deserve a more
in depth look, especially when considered in view of the current movement toward accountability in education.

One major weakness in the consortia effort seems to be the lack of well-defined responsibilities for its members and for the central staff. Lancaster contends that:

The central assumption of the research is that as cooperation creates interdependency, conflict and competition increase in the consortium. This is not something that can be prevented -- or should be prevented. No amount of good will, or best intentions, or nice guys can avoid conflict in an organization that is serious about cooperation. In an inter-organization of independent and autonomous institutions, conflict is characteristic -- a given of the association. Sociologists of the Talcott Parsons School tend to see conflict in an organization as dysfunctional or negative in its organizational effort. Most administrators view it this way also. In the typical monocratic hierarchical structure, harmony is the goal and consensus is administered from the top. However, in an interorganization -- a consortium -- conflict and competition may serve a positive function (e.g., defining boundaries, generating search behavior, providing a sense of independence), and should be accepted and legitimatized.4

Lancaster further said, based upon his research, two simple things about conflict and cooperation:

1. Cooperation leads to conflict.
2. Conflict should not be avoided.5

Lancaster pointed out in his study that there seems to be four central problem areas around which most consortium conflict develops:

1. Role and scope of the central office.
2. Distribution of limited resources of the inter-organization.
3. Heterogeneity of member institutions attempting to seek common goals.
4. Administrative procedures and management as the consortium develops.6

The Lancaster study certainly has implications for new consortium development. He found that conflict could be held to a "healthy" minimum if certain conflict management devices were employed. In the organizational structure and/or agreement forms there should appear a clear and complete division of labor, a system of internal checks and balances, development of coalitions with other agencies outside the consortium (tends to reduce inter-dependency), and the development of an ethos of voluntarism.

The conclusions reached by Lancaster bear quoting

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5 Ibid, page 5
6 Ibid, page 5
verbatim since they provide any new consortium effort with the realization of what is to come. The conclusions were as follows:

Certainly further research needs to be done with regard to these modest insights from one case study. The implication, however, is clear: conflict is a considerable factor in consortium life. For those who would administer a consortium, this raises the fundamental question of whether their task is best understood in terms of the corporate or the political model. The toleration of conflict accepted and legitmatized through appropriate structures is the essential difference between the corporate and political approach to understanding organizational relationships. In the past, higher education has borrowed insights and generalizations from the traditional corporate model — we all read our Bernard, Carson — but in view of this research the political model seems more appropriate to understanding the consortium.

Burton Clark has suggested that patterns of inter-organizational behavior lie "somewhere between the ways of concerting action that are commonly found in corporations and those found in the political arenas." He may be right, but too often we lean toward vain or romantic notions of our roles. This brings us back to the rational in higher education which we discussed at the beginning. Let me propose that the consortium presidency, like that of a college or university, is a political office. No one who lacks a zest for political action should accept the presidency of a consortium.

It appears that the consortium is much like other cooperative agencies made of autonomous units. Conflict

7bid, page 11
will arise, but the chief advantage will be in designing systems of conflict management early in the formation of the consortium. This would minimize the conflict and reduce its dysfunctional effect and, at the same time, sharpen the skills of cooperation among the group.

Why Have A Consortium?

Consortium efforts, like most any human endeavor, carries with it certain benefits and certain risks. It becomes the business of the group forming the consortium to determine whether or not the effort is worth the risk involved.

Public education, like many governmental activities, is under tremendous public scrutiny. A person could take either side of the argument of whether this scrutiny is just or unjust. In any event, it is with us and until we can perform in a better way the total business of education, it is likely to stay. Coupled with this public concern and increasing public interest in the management of education is a reluctance to provide research money to educational agencies and institutions. This would seem to support the need for more cooperation among the various agencies of education. It has been said that the consortium provides a means of pooling expertise, reducing duplicate efforts, providing for more grandiose efforts to researchable
problems, sharing use of expensive equipment and facilities, and, in some cases, even saving money (unheard of in education). The present research does not seem to yield overwhelming support to any of these claims, especially the saving of money. The most important and seemingly most apparent advantage of the consortium is that it permits a group of institutions, people, or agencies to "take on" problems of large proportion which could not be handled readily by any one of the members. The reasons for the individual inability could be equipment, facilities, expertise, or finances. In view of this, it follows that a careful study should be made when a consortium is proposed. The advantages and disadvantages should be weighted along with the enormity of the task. If economic savings in terms of money, staff efficiency, or time can be realized, then the consortium may be a step toward a higher degree of accountability in education.
PART VII. FINDINGS AND CONCLUSIONS OF THE STUDY — OR PUTTING IT ALL TOGETHER!
PART VII. FINDINGS AND CONCLUSIONS OF THE STUDY - OR PUTTING IT ALL TOGETHER!

During the process of developing this study, the researcher attempted to treat the current status of Occupational Education, the accountability movement and its effect on Occupational Education, the strong movement toward the use of performance objectives and criterion-referenced measures, and, finally, the states' activities in cooperating with the consortia efforts. The primary purposes of treating these topics was to identify the trends, to study the commonalities of the trends, and to determine whether the consortium proposed for developing performance objectives and criterion-referenced measures had support in these common trends.

Conclusions of the Study

1. Part III of the study attempted to deal with the status of Occupational Education. This was a complicated and broad area to assess for the purposes of this study. One point that did surface was that Occupational Education and any other aspect of education tend to rise and fall together. The problem of school bond issues and budgets vetoed by the public in referendum after referendum does not seem to have a particular target in the domain of education but appears to be directed at the whole concept of education and its present method of delivery. Dr. Gallup, in his Second Annual Survey of the Public's Attitude
Toward Public Schools, cautions educators to listen to what the public is saying and urges them to adopt new ways of delivering education and new systems of assessing its effectiveness. This report strongly supports Dr. Gallup's concern and the concern of other prominent critics both inside and outside the field of education.

2. In part IV, the question of the accountability movement is raised and its intensity is assessed as it relates to education. It seems appropriate to state that accountability is taking place across the board in our country. The computer, new management technology, studies of human behavior, and methods of predicting human behavior have all been advanced in recent years. There are few elements of human endeavor which are not feeling the affect of the accountability movement. The problem posed in the study dealt with accountability and its recent emphasis in the field of education. Certainly persons in education have felt the subtle movement taking hold. The chief concern when reviewing the literature was whether the movement is responsive enough to meet the apparent demands of the public. Based on the research in the study, the conclusion has to be that we are not moving fast enough; and what we are doing seems to be directed more toward the accountability of administrators and supervisors. What seems to be needed most to make accountability pay off is a means of producing
high degrees of instructional accountability for herein lies the essence of education.

3. During the study of accountability in education, one significant point kept emerging in the literature -- that somehow the accountability movement has been labeled by teachers as a "dehumanizing" effort primarily supported by administrators and policy-making groups for "questionable" purposes. This cannot and should not be the purpose of accountability in education. Any effort of this type carries with it implications for better identification of poor educational practices and processes. This, hopefully, will be welcomed by educators at all levels, particularly at the instructional or classroom level. Administrators who view accountability as a negative device don't deserve to be an administrator. All persons above the instructional level need to view themselves in supportive roles with the chief purpose of their existence being to facilitate better conditions for teaching and learning. Nothing could be more human than having teachers and learners know in advance what is expected of them, under what conditions they will be expected to perform, and the standards of performance they will be required to meet. Add to this the full knowledge of the method of assessment and aid that will be given to correct the discrepancies and a most "humane" approach to educational accountability will emerge. This appears to be what the public and the law-makers are asking for.
4. Part V relates to a strong movement toward a method which holds promise for introducing accountability to the classroom. The ability to select and implement meaningful performance objectives and to devise ways to accurately assess their effectiveness is a severely needed commodity in education. Many of the objectives being used today in classrooms across our country are much too general, nebulous, and immeasurable. In many cases, neither the teacher nor the learner can relate to them. A condition worse than not being able to relate to the objectives exists when neither the teacher nor the learner can say at what level they have become proficient. This condition must be improved. The performance objective and criterion-referenced measure, while probably not the panacea of accountability in the classroom, does hold promise for a workable compromise between "the business as usual" group and the "the accountability zealots" who wish to "dehumanize" education with the "factory-type mechanisms. The performance objective and criterion-referenced measure holds great promise of providing both the teacher and the learner with information on which they will base their activities. Again, regarding the teacher and the learner, the questions are raised as to what can be more human than knowing what you will be required to know or do, under what conditions you will demonstrate your knowledge or skill, and to what standard of proficiency you will be expected to achieve. This way of looking at teaching and learning does present new challenges and directions to teacher educators, to test
construction technologists, and to administrators and supervisors. Probably, if fully implemented, the implications could encompass the whole domain of education, providing it with dimensions for learning.

5. Part VI of the study attempts to present some of the trends toward utilization of the consortium approach to solving major educational problems. All has not been well in the efforts to cooperate on a large scale. The chief finding of the study is that a consortium is more likely to succeed if the group has some homogeneity and if the problems to be solved are clearly defined. A second finding has to do with the lack of well-conceived conflict management patterns in most consortia efforts. Thirdly is the apparent lack of a well-defined financial base upon which efforts can be continued and, if the need arises, be expanded to solve the problems. This does not exist among all the consortia studied, but it is apparent among many of them. Last, but by no means least, is the lack of responsiveness of consortia to solve the problems presented by its members. This appears to be a chief source of interorganizational conflict and one that should receive high priority in the development of a new consortium effort. Based upon these findings, it is concluded that any group planning to begin a consortium effort should clearly identify the objectives and problems to be solved, provide for inter-
organizational conflict management, i.e. role of policy-making body, role of central staff, role of director, etc. In addition, the group should be as homogeneous as possible to reduce the degree of organizational conflict. A sound financial base which will facilitate the achievement of the purposes of the consortium and provide a high degree of responsiveness by the central staff must be an important consideration. A legal agreement should be entered by all members with the consortium policy-making body. The agreement should address itself to these major considerations embodied in the conclusion.

6. The idea of a consortium approach seems to have merit for the production of performance objectives and criterion-referenced measures in occupational education. The reasoning behind this conclusion is that

a. The task is enormous and cannot realistically be undertaken by one state or even a small number of states.

b. There is a strong need for the establishment of valid, high quality performance objectives and criterion-referenced measures.

c. There is a need for coordination of present efforts among the groups of states visited to reduce duplication and to set priorities.

d. The initial cost of developing this type of material is high, and revising and updating the materials is also a problem.

e. The time required to produce the material makes it difficult for a state or small group of states to respond rapidly to changes.
in the occupational fields or to cover the occupational fields initially.

f. The homogeniety of the group proposing to develop the consortium would tend to insure success if the financial basis is sound.
BIBLIOGRAPHY

A. Books and Bulletins


Goals for Education in Florida, Department of Education, Tallahassee, Florida. (Bulletin)


Developing Attitudes Toward Learning, Feron Publishers, Palo Alto, California. 1968.


Plan for Educational Assessment in Florida, Department of Education, Tallahassee, Florida. (Bulletin)


Standards of Quality for Public Schools in Virginia, General Assembly of the State of Virginia, State Capitol, Richmond, Virginia.


B. Reports, Studies, Papers, and Speeches

Alvir, Howard P. How to Clarify Classroom Instructional Goals through Performance Objectives, ERIC Clearinghouse, ED #056-994, Ohio State University, Columbus, Ohio, 1971.


Hughes, Larry W. and Achilles, Charles M. Interpretive Study of Research and Development Relative to Educational Cooperatives, Final Report, University of Tennessee, College of Education. 1970.


Ledbetter, David A. Two Sides of Performance Objectives: One Tool in the Evaluation of Instruction, Seminar Paper, University of California at Los Angeles, Los Angeles, California. 1972.


Steiner, Florence, Performance Objectives -- Can They Serve Teachers?, Georgia State University, Atlanta, Georgia. 1972.


Accountability and Management, A Speech given before Southern Association of Colleges and Schools Annual Conference (Summer), Roanoke, Virginia. 1971.


C. Periodicals


"Third Annual Survey of the Public's Attitude Toward the Public Schools," Phi Delta Kappan, September, 1971, Gallop International, Princeton, N. J.

"Fourth Annual Survey of the Public's Attitude Toward the Public Schools," Phi Delta Kappan, September, 1972, Gallop International, Princeton, N. J.


"Inequality in America: A Problem Too Vast for the Schools to Overcome?" Carnegie Quarterly, Volume XX, No. 4, Fall, 1972, Carnegie Corporation, New York, New York.


APPENDIX A

PROGRESS REPORT ON PROJECT

MARCH 13, 1973

Part I and Part II

With the submittal of this report, work will be completed on these parts of the project.

Part III - Development of Proposed Agreement Form For Members of the Consortium

Preliminary work has been completed on the agreement form and organizational study. Information collected to date indicates a need for more extensive study of these aspects of the project. The agreement form developed and organizational structure to be recommended should be considered tentative until such time as the policy-making body can be presented an in-depth study of consortia activities and financial arrangements. Information included in this report regarding consortia was based upon a search for efforts by the states to cooperate. The agreement form and structure to be submitted about the middle or third week in March is based upon studies of several consortia and should serve only to guide the initial development and formation of the proposed new consortium. The project director and a consultant will be developing an in-depth study of the operations and structures of consortia and will present a study with a proposed model to the policy-making group after their formation. This proposed model may
then be reviewed, modified, and accepted by the policy-making body.

**Part IV - Interviews With Policy-Making Personnel in the States Forming the Proposed Consortium.**

Interviews have been completed with key personnel in twelve of the sixteen states contacted by means of the questionnaire. To date all twelve have given verbal and/or written commitment to the consortium, pending the development of an organizational structure and financial participation plan. The interest among the states visited has been extremely high. Most all see the job as one that needs to be done and feel that the Southern Association may well be the agency that can coordinate this large task.

In addition to the twelve states visited, the project director and Dr. Bob Childers have made calls on the U. S. Regional Office of Education, Dr. Elizabeth Simpson, Director of the Curriculum Center for Occupational and Adult Education, and the Aerospace Education Foundation in Washington, D. C. The reception to the idea was very good in the regional office and fair at the national level. The Aerospace Education Foundation has been actively supporting this type of effort for several years and is cooperating extensively on the development of a conference in April with the possibility of a follow-up conference in September.

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Additional trips have been planned to Michigan, Ohio, Colorado, and Missouri. The results of these meetings will be presented in a report of visits to the states. In addition, the project director will make a visit to the Community College of the Air Force in San Antonio, Texas, on March 15 and to Dr. Clifford Easton, project "Career" in Randolph, Massachusetts, on March 29, 1973. Estimated time of completion of the state visits has been moved from March 7 to March 29 because of the added involvement of Michigan and Colorado. In addition, Missouri and Ohio had to be rescheduled because of conflicts of appointments either in the states or the activities of the project director.

Details of the visits that have been completed or that are proposed can be reviewed in Appendix B, Calendar of Activities of the Project Director.

Part V - Organization and Management of a Conference of Proposed Consortium Members

The Program has been almost completed. Program participants have been contacted and have agreed to present papers on the following concepts:

Dr. Robert Mager - "Performance Objectives and Their Evolution To Date"

Dr. Wallace Hannum - "Criterion-Referenced Measurement In Occupational Education"

Dr. Clifford Easton - "Computerized Systems of Performance Objectives"
In addition to these people, one representative from the U.S. Office of Education is being asked to participate on the program. The U.S.O.E. has agreed to send someone, but the person has not been identified. The conference program will be presented and distributed in advance with copies available during the conference. Pictures and bi-data of the speakers will be included in the program. Southwide announcements will appear in the Southern Association of Colleges and Schools Newsletter, February Issue. Invitations have been sent to each of the State Directors of Vocational Education. The letter suggested that up to four key people should accompany the state director. It was suggested that the state directors attend and bring the key person in curriculum development, the head of the Research Coordinating Unit, and the head of the Curriculum Laboratory (if they had such). The remaining participant or participants was left open for the state director to select those he felt would benefit from the conference. The major part of the conference has been arranged and final
detailed are being worked out for space, lodging, and activities.

Part VI - Final Report of the Project

The status is unchanged since the last report.
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<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
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<td>Work on Research of Documents at RCU, Knoxville</td>
<td>Work on Research of Documents at RCU, Knoxville</td>
<td>Work in COEI Office on rough draft of Fla. project</td>
<td>Work on Florida Project</td>
<td>First report</td>
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<td>14</td>
<td>15 Work in COEI Office on Research Material for Fla. Project</td>
<td>16 Work on &quot;State of the Art&quot; Report</td>
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<td>Make Preliminary Visit to the Mis. Div. of Voc. Education</td>
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<td>Work with Aerospace Education Foundation, Washington, DC</td>
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<td>Meet with Dr. Roy Giehls, Dr. Ken Eaddy, Dr. Cliff East, Tallahassee, Fla. 8:30 AM</td>
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- **Lincoln's Birthday**
- **St. Valentine's Day**
- **President's Day**
- **Washington's Birthday**
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<td>1. Work on Second Report Agreement Form Organization &amp; Structure</td>
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<td>2. RCU Meeting and Study, Knoxville, Tenn. 8:30 AM</td>
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<td>Make Final Adjustments in Agreement Forms after Florida Review</td>
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<td>6 Clear up After conference details, payments, etc.</td>
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<td>Make Recommended Changes in Visit to the States Report</td>
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<td>Begin Work on the Study of Educational Consortia Management</td>
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<td>Work on Material for Final Report Get Tentative Agreement Forms Processed</td>
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Part I. State Director of Vocational Education

(Please check appropriate box for your response)

1. The state of __________ is not. __________ is interested in more information concerning the objectives of the consortium on Vocational Education.

   (If your answer is negative, please complete the survey anyway.)

2. The state presently is involved in the production of
   - [ ] 0
   - [ ] 1-3
   - [ ] 4-6
   - [ ] 7-10
   - [ ] 10 or more

   curriculum projects which are based upon performance objectives and criterion measures in occupational education.

3. Funding for these projects identified above are primarily from:
   - [ ] Local Funds
   - [ ] State Funds
   - [ ] Federal Funds
4. The state presently has

- 0
- 1-3
- 4-6
- 6 or more

full-time professional employees working in curriculum development for Occupational Education.

5. The state presently has

- 0
- 1-3
- 4-6
- 6 or more

half-time professional employees working in curriculum development for Occupational Education.

6. The state presently has

- 0
- 1-3
- 4-6
- 6 or more

full-time non-professional persons working in curriculum development for Occupational Education.

7. Do you desire to have the project director call on you and your key curriculum persons for more information about the consortium on Occupational Education?

- Yes
- No
If yes, list name of person(s) to contact and telephone number (include area code)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Address</th>
<th>Telephone</th>
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8. Will it be permissible for the project director to contact directly the personnel listed under question # 7?

[ ] Yes
[ ] No
[ ] Through the State Director's office only

Part II. Key Curriculum Person For Occupational Education
(Please check appropriate box for your response)

1. List by title the current curriculum projects underway in your state which are based on performance objectives and criterion measures.

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3. Please place a check by each major procedure that curriculum projects go through during development, validation, and implementation in your state. (Check all applicable blocks):

- Development of formal project proposals.
- Research conducted by the Voc.-Tech. Division of the state regarding material needs.
- Research conducted by agencies other than Voc.-Tech. Division of the state regarding material needs.
- A planned cycle of curriculum development including the following groups (check those applicable):
  - Teachers and instructors
  - Teacher Educators
  - Administrators
  - Curriculum Developers
  - Technical Writers
  - Draft Advisory Committees
  - Business and Industrial Workers
  - Management in Business and Industry

4. Estimate the cost of the current curriculum projects identified in question #1 by number and amount:

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<tr>
<th>Curriculum Project</th>
<th>Estimated Cost</th>
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2. Please check the appropriate square to indicate the present status of the projects listed above.

<table>
<thead>
<tr>
<th>Project Research Proposal Development Materials Presented to Advisory Committees</th>
<th>Validated by Field Testing Implementations</th>
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<tbody>
<tr>
<td>Number Stage Stage Stage</td>
<td>Stage Stage Stage Stage Stage Stage Stage Stage</td>
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(Note: project numbers listed for reference to question 2)