This publication contains two papers presented during a conference for research coordinating unit (RCU) directors. "The RCU's Role in Implementing the Career Education Concept" by R.M. Worthington, discusses several functions that can be accomplished by RCUs, including: (1) disseminating information about career education, (2) providing consultative services and technical assistance to local districts, (3) helping local districts design evaluation plans, (4) designing and sponsoring research and development projects to develop, test, and validate instructional materials and program components for career education, and (5) planning, coordinating, and managing the states' overall research, development, and pilot testing effort in career education.

"Vocational Education: Our Common Opportunity" by H.L. Hitt, traces the changes that have occurred in higher public education since the 1800's, argues that a great majority of students are poorly prepared for the standard college curriculum, and suggests that colleges and universities can either restrict their enrollments to those who demonstrate academic preparation and promise or can restructure their curriculum to provide for the needs of all students. (SB)
It is indeed a pleasure, and a distinct privilege, for me to address the nation's RCU Directors at their 7th annual conference. I have long believed that an RCU-type organization could play a vital role in providing continuous research and development which would lead to improving and expanding State vocational programs, and providing new directions for these programs to keep them in tune with the diverse and changing needs in each of the States. In the Spring of 1965, Commissioner Keppel of the U. S. Office of Education invited interested States to submit proposals for the establishment of Research Coordinating Units within their State vocational program. I am proud of the fact that New Jersey was the first State to submit such a proposal. I am also pleased that New Jersey was the first State to receive a grant for actually bringing an RCU into operation. Back in 1965, I believed strongly in the potential of an RCU-type organization to make significant contributions to the improvement of vocational education. Today, it is no longer necessary to speculate about the "possible potential" of an
RCU-type organization, because RCU's are now in operation all across the country, and have demonstrated clearly their viability and usefulness. Nearly every State in the Union now has an RCU, and many of these Research Coordinating Units have achieved enviable records in the identification of R&D needs, in the planning and conduct of research and development projects, and in the dissemination of R&D results.

As you will recall, the RCU's were started in the spring of 1965 with Federal financial assistance in the form of direct grants from the U. S. Office of Education, under the provisions of Section 4(c) of the Vocational Education Act of 1963. A few years later, Congress provided a specific legislative base and a designated funding authority in Part C of the Vocational Education Amendments of 1968. This put the RCU's on a firmer footing in regard to Federal support, and provided for their inclusion in the regular and continuing State programs of Vocational Education.

It is my opinion that the design which Congress formulated in Part C of the Vocational Education Amendments of 1968 is a sound one. The 50 percent of the research funding which is retained at the Federal level is available for large-scale use on vocational R&D problems of national significance. The 50 percent of the funding which is allocated to the States can be used by each State for precisely-targeted research projects aimed at the particular problems which are peculiar to each State. This provides for flexibility and for much more accurate pinpointing of vocational research on the specific problems encountered in the varying environments of the 50 States.
Since their founding in 1965, the State RCU's have made some very significant contributions to the research literature on vocational education. In addition to their contributions to the research literature, the RCU's have engaged in a considerable amount of developmental work, directed to the construction and validation of more effective instructional programs and better management systems for vocational education. Some of the priority areas to which the RCU's have devoted considerable R&D attention are: problems of disadvantaged students, cost-effectiveness and cost-benefit of programs and services, improvement of State and local administration of vocational education, program and system evaluation, new and emerging occupational areas, and vocational guidance. A simple scanning of the ERIC indexes will reveal the impressive scope and wide variety of the research studies and developmental projects which have been completed under RCU sponsorship.

So we now have in operation across the nation these viable and demonstrably effective State-level R&D agencies known as Research Coordinating Units. And concurrently we have emerging a highly significant new educational concept known as "career education." It is reasonable to ask, "What is the RCU's role in implementing the career education concept?"

In the first place, I think it is important to note that the RCU's themselves have been major contributors to the emergence and current blossoming of career education. Both the Florida and the Illinois RCU's have planned and launched major university-based R&D studies to develop
and validate career education programs for use in elementary schools. The Oregon and Ohio RCU's have carried out significant developmental work on career education programs at the junior high school level. The Illinois RCU, with its work on the "Computerized Vocational Information System," and the California RCU with its work on "Project VIEW," have made pioneering efforts in the improvement of career guidance at the high school level. And many of the RCU's have sponsored projects for the development and improvement of curriculums in a growing variety of career preparation areas at the high school and post-secondary levels.

Actually, these represent only a few examples which come to mind of the wide range of RCU-supported activities which have helped to provide the undergirding that makes possible the rapid advances in career education which we are now witnessing. As a matter of fact, a recent analysis indicates that the State RCU's channeled 63 percent of the State-level Part C research funding into R&D work on career education in fiscal year 1971. Thus, it must be recognized that the RCU's are far from being strangers to the career education movement, and this should be taken into account when speculating on the future role of the RCU's in bringing career education into full implementation across the country.

It might be useful, in this regard, to think of the "roles" in a plural sense, rather than in terms of a singular "role". Because actually there are a variety of roles which an RCU might play in implementing career education, and the nature and emphasis of these
various roles will vary from State to State and will be influenced by factors peculiar to each State. Certainly, one very obvious role which an RCU might be expected to play would be the simple dissemination of information about career education. Several RCU's, notably those in Tennessee, Oklahoma, and Florida for example, have developed extensive and sophisticated capabilities for the dissemination of R&D information on a Statewide basis. It is anticipated that the current Federal and State research and development efforts in career education will bear fruit at an increasing rate over the next several years. Many of the RCU's are in an excellent position, through channels which are already established, to gather the results and the products of the R&D work in career education and to disseminate these widely to local educators throughout their State.

Moving to a somewhat more complex role, RCU's should be in a position to provide consultative services to local districts, in order to help them plan and design effective career education programs based on the backlog of existing research and utilizing instructional materials and techniques emerging from developmental projects. Because of their linkage with the ERIC system, ARM, AIM, and other informational sources, the RCU's are in a good position to be aware of the latest research results and developmental products which would be useful to local districts engaged in planning and designing career education programs. Because of their intimate knowledge of conditions within their States, the RCU's are in a strategic position to help local districts tailor career
education techniques and materials drawn from elsewhere to fit the specific needs of their own local situations.

After helping local districts to plan and design career education programs, RCU's can move into another role: providing technical assistance to districts, on an ongoing basis, to help them actually implement their program. As a multiplicity of new materials on career education become available during the coming months, the RCU's, in their technical assistance role, can serve an important function in helping to build these new materials into ongoing programs, adapting and fitting them to unique situations in various local districts.

In still another role, RCU's can help local districts to design appropriate evaluation plans for their career education programs. In some cases, the RCU's might actually conduct the evaluation studies. In this way, both the RCU's and the local districts can gain insights as to the effectiveness of various approaches, and can use these insights for further revision and refinement of the original program designs.

Another role, which some RCU's have already been performing and which should be continued, is to design and sponsor R&D projects to develop, test, and validate instructional materials and program components for career education. Much of this kind of developmental work on materials and components need not be undertaken separately by each individual school district, but could better be done in one centralized project and then made available to districts throughout the State.
In States where the RCU plays a role in the planning and management of EPDA projects, the RCU staff can help to design and arrange inservice education activities designed to prepare supervisors, teachers, and counselors to function effectively in career education programs.

In addition to these specific, single-purpose roles which any RCU might play in varying degrees, I believe that there is a more all-encompassing, comprehensive role which can be very effectively undertaken by many RCU's. This comprehensive role places the RCU in the key position for planning, coordinating, and managing the States' overall research, development, and pilot testing effort in the field of career education. There is already ample evidence that an RCU can play such a role. For many years now, the RCU's in States such as New Jersey and Illinois have been responsible for managing very large-scale statewide programs of experimental, developmental, and pilot projects. More recently, as career education has come on the scene, the RCU's role has become one of focusing these experimental, developmental, and pilot projects around the career development theme. In New Jersey, the RCU is coordinating the Federally-assisted career education project in Hackensack, along with Governor Cahill's State-supported career education projects in Rahway, Camden, and New Brunswick and fitting these in with other parts of the Statewide career education effort. In Illinois, the RCU is supporting the development of career education materials in projects based in several State-supported universities, and is overseeing the pilot development of K-12 career education models...
in local settings such as Rockford, Peoria, and Chicago.

The Kentucky RCU has assumed a comprehensive role in the career education model-building efforts in Kentucky. In this State, six K-12 career education pilot projects are underway. One of these is supported with the Federal portion of Part D funds, one is supported with the Federal portion of Part C funds, two are supported under the State portion of Part D funds, and two are supported under the State portion of Part C funds. This provides a network of career education pilot projects, stretching across the State. The RCU is providing technical assistance to all of the projects, which includes bringing staff members of the six projects together at periodic intervals. At these periodic meetings, each project staff gives a verbal report of its progress to date, all the projects share their latest ideas and materials, and knowledgeable consultants from both within and without the State bring fresh viewpoints and new developments to the assembled project staffs. This cross-fertilization between the projects and the injection of new ideas from outside tends to hasten the developmental process and maximize the sharing, rather than the duplication, of effort. It is in the comprehensive role, illustrated in New Jersey, Illinois, and Kentucky, that the RCU can probably make its finest and most effective contribution to the furtherance of the career education movement.

Another aspect which RCU's should begin now to consider is their future role in the diffusion of tested career education components which
will emerge from the pilot projects and model-building efforts. The task of creating career education models in selected districts will have long-range advantage only to the extent that the components from the pilot projects are successfully diffused and installed in other districts throughout the State. The study of diffusion and adoption strategies, and the laying of plans for such activities in the coming months and years should be given high priority by RCU staffs. Only in this way can the RCU's insure payoff from their pilot projects and model-building efforts in career education.

A final role which I would like to mention involves the responsibility of each RCU for feeding back into the ERIC system the results of each State's research, development, and pilot projects in career education, so that all States, drawing upon the central ERIC resources, can benefit from the career education accomplishments in each of the other States. I would like to urge each of you, as significant new documents and materials on career education emerge from the efforts in your State, to send copies of such documents and materials to the ERIC Clearinghouse for Vocational and Technical Education at Ohio State University so that they can be classified, abstracted, and processed into the central ERIC collection. This is a professional responsibility which all RCU's should be expected to fulfill, and which is of special importance in a high-priority and fast-moving field such as career education.

All too briefly, I have attempted to sketch out nine important roles which I believe the RCU's can play in implementing the career
education concept. I think that the capability of RCU's to perform these roles has been amply demonstrated in various States, and it is reasonable to assume that they could be undertaken by the RCU's in almost all of the States. I realize that the situations vary from State to State, and that some RCU's will emphasize certain of these roles while other RCU's will place more emphasis on a different set of roles. But I believe that all of these roles, to some degree, can be played by nearly every RCU and that by performing an appropriate mix of these roles each RCU can contribute significantly to the development, refinement, and diffusion of effective career education programs for its own State.

I, for one, will continue to emphasize the importance of the RCU's as effective agencies for helping in the furtherance of career education, and I feel sure that in the coming months and years you will continue to demonstrate that my confidence in your capabilities is well-founded.

Thank you again for this opportunity to share with you a few of my thoughts during your 7th annual conference.
It is genuine honor to address this distinguished conference, and I am grateful to Dr. Paul Brown for extending me such an invitation. Paul seemed to feel that my experience in the field of higher education might have revealed to me some of the basic educational needs of our present day society, and that I therefore might have something pertinent to say about vocational technical programs, the type programs with which you are deeply concerned. I hope that he is right. In any event, I have done some thinking on the subject in recent years. My own campus problems have prompted much of this thinking. I have arrived at some personal conclusions. One of these is that your interests and my interests are very closely related.

The idea that education is a public responsibility is a relatively old one in our nation. Certainly it was acknowledged in the various states soon after they became states and were admitted to the Union. Democracy, after all, is supposed to be based upon the will of enlightened citizens. It helps a lot if those enlightened citizens can read and write.

The extent of this public responsibility has slowly increased over the years, as our society has grown more prosperous and more progressive. Most states eventually passed laws requiring all children to go at least through grade school, and by the early decades of this century it was generally agreed that most ought to go through high school. Few opposed the idea that the public should foot the bill.
As early as 1862, of course, Congress passed the Morrill Act, which provided land grants to the various states to encourage them in establishing colleges and universities. The A&M colleges were the chief result, for it was recognized that agricultural and mechanical skills were sorely needed in the development of our basic natural resources. These institutions offered opportunity to intelligent, motivated young men who genuinely wanted to study and to learn. It was not expected, however, that all or even a large percentage of the college-age population would take advantage of it.

For one thing, there were many alternatives to college for young men and young women when this was primarily a rural nation. There were many occupations, including those related to farming, for which higher education was not considered essential. Not many could afford to go to college, even to the public colleges, and certainly few felt really obliged to go. In a relatively simple society in which a good apprentice system was in operation, few felt the need of any formal schooling beyond high school.

But all this has drastically changed in recent decades. The change has been brought on by many factors. One important factor was World War II. World War II was a catalyst which accelerated the trend towards the general urbanization of our society. It also accelerated the development of modern technology. It gave rise to new industries and new activities demanding new skills and sophisticated training. The G. I. Bill at the end of that war offered educational opportunity to unprecedented numbers.

For twenty years after World War II, moreover, this country enjoyed a rather spectacular economic prosperity. Many lower-income families became middle-income families, and many middle-income families became affluent. Naturally, they developed
new social aspirations. They wanted their children to be better educated. They wanted them to go to college. The college degree became a general social status symbol while it was becoming something of an economic necessity.

The idea that a college degree was everyone’s right took root and grew. Established institutions vastly expanded their enrollment capacities, and new institutions were born. It became an accepted philosophy that every qualified young man or young woman should have the opportunity to go to college, regardless of his or her financial status. Educators spoke of the minds of our youth as our richest natural resource, and they bent every effort to lure all high school graduates into the colleges and universities.

In the year 1900, only 50,000 college-age Americans were in college. This was only 2% of the college-age population. In 1971, our total college enrollment was 8.5 million. This was more than 50% of the college-age population. Three out of every four students today are in public institutions. We have not yet reached the era of universal higher education, to be sure, but such figures suggest that we may be well on the way.

It would seem, then, that higher education has been a great success in the past quarter of a century. If it has, though, where is the evidence? Is our nation still enjoying an economic boom? Have we met with great success in solving our social problems? Do our colleges and universities today have the respect and support of the public? Are they functioning smoothly? Are our young people eager and inspired in the face of their unparalleled educational opportunity?

All of us know the answers. Our economy is sagging. The dollar is in trouble sporadically all around the globe. Social unrest flares into violence and borders on outright revolution. Our college campuses have been and still to some extent are the scenes of
confrontation, intimidation, and terror. Might we conclude that we have made some serious mistake somewhere? Is there reason to attribute our troubles to unsound educational philosophies, or to our failures and shortcomings in higher education?

Many studies have been made in recent years by individuals in the educational profession, by government task forces, and by endowed foundations, in an effort to find the answers to these perplexing questions. Various answers have been found and published, and various theories have been developed. Just a year ago I myself prepared a paper on this very subject for a Goals To Grow publication here in the city of New Orleans. I found much of interest, I recall, in a comprehensive report that had just been released by Carnegie Commission, under the auspices of the Carnegie Foundation.

One general conclusion reached by some of the closest observers and some of the best minds in the country is that there are far too many students on our college and university campuses who really do not belong there. The great majority of students, in fact, are poorly prepared for the standard college curriculum, are poorly motivated when it comes to academic work. They really would prefer to be somewhere else and doing something different. They are at college because of parental or social pressure, because of the threat of the draft, and because of the poor job market for the average high school graduate. They have finished high school, college is there, and it appears that there is nowhere else to go.

Some experts contend that not more than ten percent of any large group of college-age youngsters, in this or in any other generation, is truly interested in a genuine liberal education or is intellectually capable of excellence in a high-quality college academic program. This posed no great problem when a small percentage of our youth decided to go
to college. That small percentage, for the most part, consisted of students of an intellectual bent or with sincere academic motivation. Now, with so large a percentage entering college, and with the colleges still offering their traditional programs, failure and frustration are commonplace. Large numbers of students are dissatisfied on our college campuses. Their dissatisfaction breeds hostile attitudes and tends to promote disruption.

In this situation, two courses of action suggest themselves. Either the colleges and universities should adopt a selective admissions policy and accept only those students who demonstrate sound academic preparation and show high academic promise, or they should restructure their curricula in order to provide for the needs of an entirely new breed of student. If public institutions adopt the first of these options and restrict admissions, obviously some new institutions must be provided for those students who are not accepted. If the second of these options is adopted, there must be a move towards much more comprehensive college programs than we have attempted in the past.

We have often heard the argument that some college is better than none, in defense of open admissions. According to this line of reasoning, even the failure and the drop-out gain something from having attempted a normal college program, and in the name of equal opportunity every young man or woman ought to have a try at it. Equal opportunity, however, has its pitfalls. It does not mean equal satisfaction and success unless those who are afforded it are equally talented and motivated. In fact, it can broaden the gap between students of high potential and students of low potential. It can be psychologically upsetting since it removes an excuse for low achievement.

But we all will agree, I think, that if the public supports higher educational opportunity for those with superior academic talents, it should also support opportunity
beyond high school for those with different capabilities. This should include those who
do not enter college as well as those who fail to adjust to a traditional academic program.
Vocational and technical education would seem to offer the best solution to this problem.
Our society has a desperate need for persons with such training, while at the present
moment it seems to have difficulty providing employment for those holding academic
degrees.

If we could offer training programs for young people who are interested in the
technical and vocational areas -- either in special vocational schools, in comprehensive
community colleges, or on the college and university campuses themselves -- we would
come much nearer offering equal opportunity than we do today. In most parts of the
country, as in Louisiana, our higher educational system is top-heavy. It is geared to
the needs of the scholarly elite, perhaps, but it is not well geared to the needs of anybody
else. We are wasting tremendous sums of money, and we are purchasing vast quantities
of trouble and frustration. An overhaul of our thinking and a revision of some of our
social philosophies are in order.

We must discard the idea that the traditional college degree is the only certificate
of educational achievement. We must offer due respect to those who succeed in other types
of programs. Such a basic change in attitude would help assure the student of an honorable
social status based upon his use of his individual abilities. A good plumber, carpenter,
electrician, or medical technician is a far greater asset to society than a mediocre teacher,
lawyer, philosopher or doctor.

It used to be that the college graduate with a baccalaureate degree could anticipate
much higher lifetime earnings than the student who went to the vocational or technical
school. This still might be true in the case of the superior student, but it is less true each
year in the case of others. In fact, in many instances the situation has been reversed. Society is willing to pay for the services it needs.

The person who is successful in his occupation, who earns a comfortable living and enjoys self esteem, is far more likely to take a continuing interest in learning than is a person who has failed. He is far more likely to have what we like to call common sense than a person heavily burdened by frustration. More common sense would be very beneficial to our nation, I think, in these times of trouble and confusion. It would give us some welcome ballast. We could use more ballast in the face of the ranting accusations of would-be intellectuals, and in the howl of high-blown theory from embittered critics, seeking to explain their own shortcomings in achievement.

For the sake of the majority of our young people seeking to find their place and to gain their rightful share of our national wealth and production, and for the sake of higher education itself, I believe that we should direct a greater portion of our effort and a greater portion of our financial resources to vocational and technical education. No matter how quickly we do this, it will not be too soon.