Career education is a bold design for education effecting a blend of academic, general, and work skills learning so that individuals passing through the school system will be ready for economic self-sufficiency, for a personally satisfying life, and for new learning experiences appropriate to career development and avocational interests. The comprehensive model designed for career education is revolutionary; equally revolutionary will be the reforms to take effect in methodology, teacher-student relationships, administrative planning, and community participation. Realizing that these reforms will rely on trained staff, the Bureau of Adult, Vocational and Technical Education is committed to a comprehensive personnel development program for career education. Among the activities of the Bureau which support needed staff development are: (1) teacher-training grants, (2) special project grants, (3) Area Manpower Institutes for the Development of Staff (AMIDS), (4) curriculum development programs, (5) exemplary programs and projects, and (6) leadership development grants. (JS)
COMPREHENSIVE PERSONNEL DEVELOPMENT FOR CAREER EDUCATION*

PRESENTED BY

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INTRODUCTION

One of the exemplary projects being funded under Part D of the Vocational Education Amendments of 1968 uses "Four I's" to describe its parameters: Intervention, Information, Investigation and Involvement. These seem to provide a pretty good description of the intent of the U.S. Office of Education's top priority, Career Education, and the primary focus of the program of work of the Bureau of Adult, Vocational and Technical Education.

There is no need to dwell at any length on the tribulations of our current educational system. The heart of the discussion must be the children, young people and adults, who are involved in the system and find their life aspirations thwarted or denied. It is out of their intensive search for meaning and reality in learning, that the concept of Career Education has been evolving. It was from this frame of reference that U.S. Commissioner of Education Marland has called for educational reform and has issued the challenge for Career Education "to be the revolutionary instrument that the times demand."

What is Career Education? How simplistic (but also arrogant) it would be to set forth a definition and thus allay questions and terminate discussions. Boldness invites the open forum, seeks freedom of design, and sets a schedule that allows for development and maturation. What is Career Education? It is a bold design
and work skills learning so that individuals passing through the system will be ready for economic self-sufficiency, for a personally satisfying life, for new learning experiences appropriate to career development and avocational interests.

Many approaches to Career Education are already being attempted by the States and local districts, and the U.S. Office of Education is implementing plans to develop and test three models in real situations. Our Bureau has been most intensely involved in conceptualizing what we refer to as Model I - a plan to revitalize school-based education from kindergarten through grade 14. It is designed in pyramid style and articulates subject matter with the life stages of vocational development. These stages may be visualized in different ways but will surely include (1) seeing work as a part of life (early elementary), (2) seeing the relationship between school work and job clusters (upper elementary), (3) seeing how individual characteristics fit with specific occupational specifications (middle grades), (4) testing chosen occupations for interest and satisfactions (early secondary), (5) developing entry qualifications for job clusters (upper secondary), (6) refining and upgrading qualifications for specializations within job clusters (postsecondary).
The comprehensive continuum we have depicted for a career-oriented instructional program will indeed be revolutionary. Yet, we cannot help but feel that equally revolutionary will be the needed reforms in methodology, teacher-student relationships, administrative planning and community participation that will give support to and literally activate the Career Education concept.

Somehow this whole area of personnel education has too often been allowed to be shunted aside from the mainstream of considerations affecting occupational program decisions. This is not to say that any deliberate steps have been taken to omit it, but rather that serious exploration and assessment of teacher, counsellor, supervisor, teacher educator or administrator preparation and development has generally been lacking in the deliberations of decision-makers. This has tended to perpetuate inadequate coordination of resources, a dichotomy between State departments of education and institutions of higher education, poor utilization of available support from business, industry and the community and an imbalance in strategies selected to implement priorities.

Picture if you will a young person trying to maintain the focus of his career development plans while supported by a three-legged instructional stool. The curriculum-content leg sits squarely on the floor. So does the facilities and equipment leg. However, the manufacturer ran out of materials...
Our student will find it as difficult to learn as the educational practitioner will find it to support his learning motivation.

This is, of course, an oversimplification, but the point I would make is that we need to give personnel education equal visibility in our priorities and within our priorities if we would achieve the educational renewal so essential to the implementation of the career education concept. The spirit of personnel education must be to create, not defend; stimulate, not maintain; lead, not react. Our approach must be comprehensive, not piecemeal.

It is my purpose today to share with you some of the ways we, in the Bureau of Adult, Vocational and Technical Education, are looking at Comprehensive Personnel Development for Career Education. I propose, therefore, to discuss where we are, some of our concerns and some priority areas we feel need immediate attention.

INVEST ACTIVITIES IN PERSONNEL EDUCATION

The Bureau of Adult, Vocational and Technical Education combines under its administration personnel preparation and development authority remanded to it by the Adult Education Act, the Manpower Development and Training Act and the Vocational Education Amendments of 1968. It is thus in a position to view comprehensively much of the preservice and inservice professional education needs of personnel who will be the implementers of Career Education.
DIVISION OF ADULT EDUCATION PROGRAMS

The Division of Adult Education Programs is responsible for all program functions authorized under the Adult Education Act. Purpose of the Act is to establish or expand programs of adult public education so that adults can continue their education through completion of secondary school and have available the means to secure job training to help them become more employable, productive and responsible citizens.

Teacher-Training Grants

Personal training is carried out under each of the Act's major components. However, the greatest direct impact is made by means of Teacher-Training Grants to support training programs for adult basic education personnel and for persons preparing to work in this area of education. The U.S. Commissioner of Education awards grants to institutions of higher education, State or local agencies, or other private or public non-profit corporations to provide national, multi-regional, regional and special populations institutes. In 1971, there were 21 full-year and summer institutes in operation which served approximately 2,000 participants for an investment of $1,980,637. Awards have also been made for 35 institutes to provide inservice and preservice training this year.
it is estimated that more than 10,000 teachers, teacher-educators, administrators, teacher aides and counselors have participated. And many thousands of additional teachers have been trained by this core group of teacher-trainers and administrators in local and State settings.

Objectives of the institutes have included: training personnel to teach English as a second language; developing curriculum and materials for special population groups such as Indians, migrants, urban and rural adult basic education populations; and working with those with special physical handicaps and those in correctional institutions. Several institutes focused on preparing reading specialists and other personnel in improved techniques of teaching reading to undereducated adults; and all summer institute teacher-training programs have emphasized follow-up activities by institute personnel in participants' local sites.

Special Project Grants

Priorities under the Special Project Grants program are given to the promotion of comprehensive or coordinated approaches to the problems of adults who have not reached an eighth grade level of achievement. At least ten demonstration projects funded in FY 70 gave special attention to the development of professional personnel competencies
for example, was funded to improve staff training for Adult Basic Education teachers and administrators in Region IV of the Department of Health, Education and Welfare. The project aimed to increase the number of higher education institutions offering ABE teacher-training and to develop regional institutes, university consultant services and technical services to assist local ABE personnel.

Two other demonstration projects indicate the breadth of personnel reached under the Special Project Grants Program. Teacher awareness and counselor packages were developed in a three-year project and ABE personnel in the ten NRE regions were trained in the use of these adult guidance and counseling materials. The other demonstration project provided training and assistance to two teams of professional, paraprofessional and volunteer workers in programs for rural, disadvantaged adults.

Growth

The development of new teacher-training techniques has been a key objective in the administration of the Adult Basic Education program, and the Act provides considerable flexibility in achieving this goal. Better than 80% of ABE staff in the Nation received pre-service or inservice training in 1969 through teacher workshops or other forms of national, State
and local personnel training programs. It may be assumed that this rate still holds since the number of teachers, programs and demonstrated techniques for helping adult basic education populations has increased. We can say also that our Bureau staff has contributed importantly to this accomplishment through consultant services, site visitations, writing and administrative procedures.

DIVISION OF MANPOWER DEVELOPMENT AND TRAINING

The Division of Manpower Development and Training, on behalf of the Secretary of the Department of Health, Education and Welfare, administers all institutional training for trainee referrals under the Manpower Development and Training Act. Responsibilities include skill training, basic literacy, improved communications and computational skills, educational counseling and pre-employment orientation specifically directed toward the learning needs of unemployed and underemployed persons. Obviously, provisions for the development of staff to implement programs in the States is a concomitant administrative concern of the Division.

AREA

In addition, the Division has authority to carry out a national program of training and technical assistance which it accomplishes primarily through seven centers known as Area
Manpower Institutes for the Development of Staff (AMIDS). The majority of manpower training students, unlike students enrolled in ongoing programs of vocational and technical education, are victims of chronic and long-term unemployment, members of minority groups in redevelopment areas, individuals handicapped by physical, cultural and educational differences and persons in correctional institutions. Therefore, teachers, administrators, counselors, and others who have a responsibility for training and supportive services for individuals with latent but undeveloped talents require special skills in handling the learning and human needs of persons in manpower training and upgrading activities. The nationwide network of specially designed technical assistance and staff development programs provided through AMIDS is fulfilling this need.

The thrust of the AMIDS is toward techniques which will involve personnel and students in more meaningful and productive relationships of mutual sensitivity. Manpower teachers, counselors and supervisors; employers, public and private social agency personnel and representatives of training and career development agencies and offices are among the participants in AMIDS' assistance programs. All members of community teams who assist the disadvantaged and alien are eligible for in-service training.
year-round services to the six to ten States and territories within its geographical area of operations. AMIDS' staff conducts inter-agency conferences, satellite seminars workshops, and institutes and consultant visitations at headquarters or locations designated by the initiator of the request for assistance. It is estimated that the number of persons reached is fast-approaching 30,000. Cost to the Division for these seven instructional centers amounted to $2 million in calendar year 1970.

Other Staff Development Programs

Other staff development programs implemented by current NDEA funding grants are also upgrading the skills of leadership, instructional and support personnel. The Life Skills Education and Teacher Training Development Project is one example. Four Teacher Skills Units will be administered to experienced and beginning adult basic education teachers, revised as needed, and installed in a pre-service setting at Teacher's College, Columbia University and in inservice settings in the New York area. The units are designed to help teachers recognize individual differences, assess these differences, translate student goals and motivations into instructional objectives, and create lesson plans related to individualized objectives. The project also includes three, five-day training programs for teachers and teacher trainers.
been funded recently with the Oregon Board of Vocational Education in response to the need for better counseling and guidance services specifically for manpower programs. The project will focus on the development of a prototype method generalizable to other sections of the country. Participants will be assigned to manpower agencies and community colleges during training and also will be given high intensity orientation to counseling practices, the culture and language of the people served, responsibilities of agencies and manpower counselors. Practicing counselors in manpower programs and community colleges and persons who wish to become counselors in manpower programs are eligible for the program. Academic credit may be granted for demonstrated competencies.

The availability of expertise in managing manpower programs is an important aspect of WTA staff development programs. For example, a grant has been made to the University of Utah for the implementation of a Master of Manpower Administration curriculum. The program combines an academic requirement with part-day or full-time on-the-job administrative experience with manpower agencies, in or out of State.

A major project of the Division of Manpower Development and Training involves the Opportunities Industrialization Centers National Institute which is responsible for leadership and
technical assistance to OIC's organizations throughout the nation. This training program involves OIC directors and emphasizes the proper management of all funds under a bulk funding process.

The OIC National Institute also directs and supervises national and regional conferences and inservice institutes for teachers and counselors, and has staff expertise for technical assistance in newer forms of methodology, policies and procedures.

Another interesting inservice training program operating under an MDTA grant is designed to reach over 250 staff personnel of Service Employment and Redevelopment. This project involves counselors, instructors, and SR local board chairmen in programs designed predominately for Spanish-speaking clients.

State Direction and Supervision

A priority in MDTA supervision and direction budgets is instructor orientation and training. Extensive personnel development takes place through State inservice teacher training conferences and workshops and participation in AMIDS center programs.
The Division of Vocational and Technical Education has accountability for the general availability and quality of instructional programs preparing in-school and out-of-school youth and adults for satisfying careers. The accomplishment of this mission through State and local governments is the obligation of all personnel in the Division.

It is obvious that preservice and inservice vocational education for teachers, leadership, and ancillary and support personnel must be viewed as complementary to concerns for relevance in subject matter and opportunities for all who would profit to have access to occupational preparation and growth. Even without the specific thrust in vocational education legislation which commits to vocational educators responsibility for the development and implementation of policies and procedures to assure an adequate supply of qualified teachers and other personnel, Division staff would have to include planning for professional personnel as one of the components of the delivery system for vocational and technical education.

What then has been the dimension of vocational personnel education as stimulated and developed by the branches and units under the Division director's leadership? These may be separated into two categories: (1) activities related
U.S. Commissioner of Education, and (2) activities related to special programs and functions within vocational and technical education.

Curriculum Development Programs

At this time, the Division has awarded and is monitoring 35 contracts in areas of curriculum development eligible under Part I of the Vocational Education Amendments of 1968. Nine of these make significant provisions for personnel education. Three contracts are for guides to the preparation of support personnel for secondary or elementary teachers. Two-year post-secondary curricula and as are scheduled to be completed this calendar year in (1) Vocational Media Technology, (2) Library Technology, and (3) Teacher Aides. All the categories of paraprofessionals expected to expand significantly as educational reforms are implemented under the Career Education concept.

Another contract is directed towards assisting teachers of disadvantaged and handicapped students to develop or modify instructional materials or other media for use in programs of Career Education. The objective is to train a nucleus of vocational educators in each State to be used as resource people and instructor-trainers for new and experienced teachers working with special population groups in their school districts.
state directors of vocational education are being asked to fill their State's allocation for local instructors to participate in all three phases of this teacher education project.

Thirty-eight workshops will be held between September and the end of February, and consultant assistance through each of the seven AMINs (Area Manpower Institutes for the Development of Staff) service areas will be available on a continuing basis to those attending. Materials and media specifically developed for use with disadvantaged and handicapped students are being collected, inventoried and classified for use by the teachers.

A contract has also been negotiated which will provide the opportunity for administrative personnel to explore the Career Education concept as a design for educational redirection and to acquire skills and techniques for implementing the concept through dialogue and program innovations. The plans call for ten or more, one and a half-day conferences to be held throughout the country and the preparation of packets of audio-visual and printed materials reflecting philosophy, characteristics and evolving techniques in Career Education.

To these five contracts, Part I funds amounting to $88,755 were committed from FY 70 appropriations, and one million dollars from FY 71. In addition, two other contracts
related to teaching in areas of Environmental Occupations Awareness and Career Education in Natural Resources. The former calls for a series of 25 workshops for individuals charged with training teachers and counselors; the latter for one workshop in each DHEW region to develop teacher and counselor skills in the use of guides and plans for grades K-6, 7-8, 9-12 and post high school.

Finally, two additional curriculum development projects include considerations related to personnel education. In one, support materials will be developed to aid teachers in the use of machine-aided instruction for developing occupational awareness. The other has contingency plans for training local education agency personnel in the use of planning and evaluation guides following production of these materials through an Interstate Pilot Project involving Utah, Georgia, Oregon, Iowa and Wisconsin.

Exemplary Programs and Projects

Exemplary programs and projects funded by the U.S. Commissioner of Education under provisions of Part B of the Vocational Education Amendments of 1968 have been approved for all States and territories with the exception of Guam and the Virgin Islands. During the first funding period, grants totaled approximately $5,700,000, and supported projects giving emphasis to work orientation and career
In FY 70, 2.5% of total exemplary program expenditures were reported in teacher education. However, it is now estimated that 17% of these expenditures are in areas of personnel education.

All projects include inservice teacher, counselor and administrator education as an ongoing activity in program initiation and implementation. Personnel education is considered necessary support for the main program components. Project staff, guidance consultants, and elementary and middle school occupational education specialists appear to have the key role in holding seminars, conducting workshops, arranging field trips, and providing onsite assistance for personnel. Extensive involvement of ongoing vocational teacher education programs at institutions of higher education seems to be limited, suggesting inadequate availability of services or lack of acceptance of a partnership role by project or university personnel.

There are, of course, exceptions. Kansas has a contractual arrangement with Kansas State University for specified functions such as inservice teacher training, teacher workshops, seminars and institutes as well as curriculum development and evaluation services. Florida's project proposal makes teacher education one of five components to be emphasized. Several universities
in-service training to help teachers use individualized instruction to meet the needs of educationally disadvantaged or deprived students. Oregon, through its Teaching Research Division and in consort with Oregon State University, outlines a full program of orientation, preparation, problem-solving and methodology for a total school system, including occupational cluster teachers, counselors, Career Education Advisory Committee members, language arts and social studies block teachers, and work experience instructors.

Perhaps of most importance, however, are implications for comprehensive personnel development inherent in Career Education exemplary programs. These seem to fall into five categories: (1) staffing, (2) multi-media, (3) involvement of people, (4) facilities and (5) information services. For example, in one project individualized, prescriptive, self-pacing learning packages are being developed by a team including a vocational teacher and a basic learning skills teacher. Other projects use Indian and Spanish surname paraprofessionals or paraprofessional vocational technicians, floating, work orientation teachers to assist elementary teachers, or youth-tutoring-youth staff. These are some indications of new duties and qualification for instructional personnel.
Self-contained portable learning modules are being developed for exploratory offerings, and a teaching activity bank of occupational materials and lesson plans will be available to assist teachers and students. In addition, instructors will be expected to make effective use of educational television, programmed and computer-assisted instruction, and automated slide-tape programs.

There are new involvements also in which teachers, counselors and administrators will need to become experts. Industrial representatives will provide instruction and performance criteria and certify to entry-level skills or assume big brother roles, or enlist in a "workers on call" program to give students direct access to employed persons. Guidance personnel will extend their counseling activities to the whole family of a disadvantaged student or sponsor parent-pupil clubs.

As regards facilities, we find that an "Occupational Mall" will house diversified occupations and be used for observation and exploration by students. There will be mobile-type units and relocatable classrooms, separate educational centers housing teams of specialists; and, in one project, business enterprises will be leased or purchased. The traditional-type classroom is being joined by specialized sites for learning.
Different approaches to providing career information services to students will require new expertise, especially for guidance staffs. Dial-access retrieval and computerized information systems are being developed to assist in occupational orientation and placement. Area media centers will become available for storage and dissemination of career information; and packages are being developed in one State to serve as "Severance Kits" to assist students in making adjustments to the world away from school. Advocate, referral, placement, and follow-up functions will be new roles for many counselors.

Other Personnel Education Activities

In addition to functions performed in relation to the discretionary grant programs for curriculum development and exemplary projects, Division of Vocational and Technical Education personnel attempt to influence and implement comprehensive personnel education in several ways. The Professional, Teacher and Institutional Standards Branch (PTIS) has specific responsibility in this area, but other branches also include preservice and inservice educational concerns in their planning.

PTIS staff include in their functions: personnel development and utilization systems, analysis and design, personnel education program development, certification and reciprocity, and institutional and program accreditation. Their primary activity in FY 71 was planning, organizing and conducting a national workshop.
Based on the advice of outside consultants, Bureau and Office of Education specialists, the program dealt with the scope of professional personnel systems, change theory, State and Institutional approaches to systematic planning, the potential contributions of business and industry and professional organizations, and the evaluation process in personnel education systems.

Participants in the conference represented a range of client groups: teachers, State coordinators for Educational Personnel Development, business representatives, State occupational program supervisors, State Advisory Council personnel, Institutional teacher educators. They worked in heterogeneous and homogeneous groups, most for the first time discovering relationships and identifying possible interlacing roles within a comprehensive personnel development system.

The formal papers and findings of group discussions are being prepared for publication, and action recommendations are being incorporated into the Branch program of work. Plans now call for follow-up activities directed towards the systematizing of personnel education for Career Education.

This branch also advises with Division staff, maintains liaison with other bureaus in the Office of Education, reviews projects upon request and makes recommendations for funding, provides consultant services to States and universities insofar as staff time and budget allow, analyzes data and legislative
and designs proposals for implementing Division priorities, including Career Education. It also works with such organizations as the National Council for the Accreditation of Teacher Education, the Teacher Education Department of the American Vocational Association, the American Society for Training and Development and the American Management Association. It is the Division's focal point for services supporting comprehensive personnel education.

Significant contributions to preservice and inservice education are developed also by education program specialists in occupational clusters. Typical would be activities spearheaded by a meeting of a planning committee for transition in agricultural education. Funded from the Division budget, this meeting set in motion nine studies resulting in position papers, one of which establishes action steps for training and improving professional personnel for agri-business programs at elementary, secondary and postsecondary levels, with adult groups and with youth and young farmer organizations.

In consumer and homemaking and home economics related occupations, a nationally sponsored conference emphasized needed adjustments in certification requirements and preservice and inservice education. Consideration was given to helping teachers (1) work more skillfully with disadvantaged individuals and families, (2) use occupational-experiences effectively in
teaching for the dual role of wage earner and housekeeper and (3) provide individualized learning experiences with the assistance of paraprofessionals.

The health occupations field, stimulated by consultant services, has increased available opportunities for instructions personnel to be prepared through Health Careers Education to implement core and specialized allied health professions curriculums. In Distributive Education, teacher educators are utilizing the results of an Office of Education funded research project to analyze their course offerings and adjust curriculum design in line with desired teacher behaviors.

The Division also has given considerable priority to the management role in vocational and technical education. This aspect of professional education is revealed in the series of meetings held for administrative personnel on planning, data systems, Federal/State relationships, urban and rural programs. The Division, in addition, was responsible for planning and arranging for ten regional conferences to respond to the Secretary's request for an assessment of the status, trends and projections in vocational and technical education, particularly in relation to the need for reforms in education.
We may well ask ourselves, "Where are we quantitatively in personnel education?" State plan projections show a 6.5% increase in numbers of teachers for 1971 and an increase of almost 1% for the two-year period, 1969-71. Preservice and inservice enrollment reports for 1970 show 113,463 individuals in teacher-training programs and for the first time inservice participants outnumbered preservice enrollees. There were 60,880 inservice teachers reached and 52,783 preservice enrollees. Because of the implementation of new provisions in the Vocational Education Amendments of 1968 and the growing recognition of the relationship between quality instruction and the competencies of teachers and ancillary personnel, we may estimate that 1971 reports will reveal that approximately 125,000 persons have been involved in some type of professional preparation and development studies.

Federal, State and local expenditures for teacher education under Parts A-C of the Amendments totaled somewhat over $33 million dollars in 1970. This represented only 2% of all vocational expenditures less work study and construction. Federal support amounted to $13,238,000, about $1.00 for every $1.50 expended from State and local sources.
While the Bureau of Adult, Vocational and Technical Education has responsibility for programs under the three pieces of legislation cited, actually two parts of the Vocational Education Amendments of 1963, Part C of Title I and Title II, are administered by other bureaus in the Office of Education. These Parts include discretionary grant programs for the stimulation, improvement, redirection and implementation of vocational personnel education which is responsive both to national priorities and projected needs specified in State plans for the administration of vocational education. They must be included in any discussion of resources for a comprehensive personnel education delivery system to support Career Education programs.

The National Center for Educational Research and Development in 1969 contracted for 11 new and continuing research and training projects which were directly identifiable with pre-service or inservice vocational teacher education. Funded for $564,932 under Part C authority, these projects were in areas such as a regional teacher education program, a junior and community college curriculum for future teachers, new careers in educational services, innovative planning, occupational competency testing, developing
performed objectives and training teams of auxiliary and professional personnel. In addition over $1,788,000 was awarded for operation of the two vocational centers for research and development.

In 1970 specific vocational education research discretionary funding was not available, but continuation costs of vocational research projects and the Centers were picked up as possible under provisions of the Cooperative Research program.

Appropriations for Research and Training Programs in vocational education again became available in 1971 and are being used to support the Centers and projects directly related to design studies for Career Education models. Intensive staff-wide inservice training for personnel who will be implementing the school-based career education systems at the demonstration sites is planned for the summer of 1972.

Model II, an employer-based career educational system, also anticipates a personnel training component which may or may not involve public school teachers as well as other instructor-trainers. Continuation costs for the Appalachian Educational Laboratory and other ongoing projects are also being met.

Coordination with DVE. Several NCERD staff members worked closely with program officers in the Division of Vocational and Technical Education in identifying, stimulating and reviewing priority activities for Part C research administered through
Research before that Division was abolished. Those relationships and the inter-division committee for research are no longer active although the Chief of our Exemplary Programs and Services Branch is closely involved in the management of the Career Education Model I project. DVTE also maintains a research coordination section which provides guidance to State RCD efforts conducted under Part C of the Act and maintains liaison with NCFE.

DEPD

Title II of the Vocational Education Amendments of 1968 is titled, Vocational Education Leadership and Professional Development Amendment of the Higher Education Act of 1965. It authorizes a leadership development award program and assistance to States for the "training or retraining of experienced vocational education personnel." The Vocational Education Personnel Branch of the Bureau of Educational Personnel Development has responsibility for administering this title.

A key activity of the Branch, one with which all State directors of Vocational Education are familiar, is to provide assistance in preparing the Professional Development Supplement to the State Plan for Vocational Education. This supplement is reviewed in DESE regional offices by vocational and EPD program officers. Technical Assistance Grants were made to 21 States in FY 70 and to 15 in FY 71 to enable these States to develop or refine their personnel development planning system.
The Cooperative Arrangements Program with State Boards for Vocational Education also includes financial support for preservice and inservice education. Grants were made to 26 States and the District of Columbia last year. In addition, special developmental projects which are of national or regional significance were funded to 10 States in FY 70 and to 6 in the fiscal year just completed. These have focused on such areas of personnel development as evaluation and reorganization, issues and needs, techniques of curriculum building, the urban and rural instructional environment, the apprenticeship instructor and action programs.

In FY 71 enrollment in preservice and inservice cooperative arrangements projects was approximately 12,000. These grants for vocational educator training, technical assistance and special projects were funded at a level of $5 million.

The Leadership Development Awards program has 18 universities participating this year, seven of which are now in their first year of operation. At the last count 260 individuals were enrolled in comprehensive doctoral programs designed to prepare them for key roles in vocational education. Of this number 216 were Federally-supported and 44 were State-supported. The program is operating at a Federal cost of $1.9 million.

Coordination with DYTE. Professional review of some proposals and sub-projects submitted by the States and universities is provided upon request by staff members of the Division of
Vocational and Technical Education. Lloyd Briggs, EPD Branch Chief, meets regularly with the policy group of DVTE, and he was an advisor during the planning stages for the national workshop on comprehensive systems for personal education held in June 1971. The basis for a working relationship between the Bureau of Educational Personnel Development and the Bureau of Adult, Vocational and Technical Education was formulated in 1969.

**DHEW Regional Offices**

Another resource having a direct relationship to the comprehensiveness of vocational education personnel activities is the DHEW regional offices staff. The policy of decentralizing departmental services to bring them closer to those using these services makes possible a variety of regionally-focused activities to assist the States. We have noted the impact of their conferences and technical assistance and have valued their advice and suggestions for headquarters functions. Of particular interest at this time are: (1) plans Region VIII is making to emphasize inservice for her education for the levels of need identified with Career Education and (2) the teacher training institutes for teachers of disadvantaged ethnic groups in Region X's program of work.

**COMPREHENSIVENESS IN VOCATIONAL PERSONNEL DEVELOPMENT**

From the foregoing discussions, it is evident that we in Washington have some diffusion and coordination problems similar to those in the States! Yet we are assuredly in agreement that a comprehensive system of personnel development to activate Career Education must be developed. We propose to...
immediately three areas for action: Intervention, Involvement, and Information.

Intervention

How to make the greatest impact on directions in inservice and preservice personnel education is being studied. Efficiency and effectiveness (to say nothing about accountability for the Career Education priority!) dictate finding ways to coordinate and perhaps consolidate the allocation and utilization of all vocational personnel preparation and development resources.

We must put together a system that will (1) permit reforms to surface and be tested; (2) direct Federal financial support to finding solutions to the most urgent and critical issues; (3) be able to marshal to our cause specialists from any area of education, the economy, and society; (4) capitalize on the substantial expertise already present in our own personnel.

These will be among our primary intervention techniques. We commend them to your consideration.

Involvement

How to take advantage of the momentum already generated by ongoing programs in adult, manpower and vocational programs is another area under investigation. We would like to see a much greater involvement of the Career Education concept in personnel education activities already identified in programs of work developed to implement the purposes of the legislation which we administer. Career Education is not something separate and apart from existing programs. It adds a new dimension which provides broad opportunities...
the capabilities of all of our programs. We cannot afford to close any door to coordination or to fragment any programmatic aspect of personnel development for Career Education.

Involvement - planned, implemented, budgeted and evaluated - must be a matter of policy. We commend this policy to you.

Information

How to develop and utilize a service for providing informational and consultant assistance to the implementers and practitioners in comprehensive personnel development is a third area being examined. We want to bring consistency without rigidity to our discussions and materials. We want to avoid undesirable duplication by systematically focusing our professional judgments in ways which can best support the intent of Career Education. One objective will be to provide some sort of clearinghouse channel so that profiles of promising experiences, guides and printed aids, reports of meetings and studies and of progress in action steps related to personnel preparation and upgrading will find their way to decision-makers at Federal, State and local levels. And we must provide for feedback.

Information, properly packaged and delivered, can prime the pump, wash away misconceptions and clear the channels for constructive and productive action in personnel development. We hope you too will want to give priority status to the development of a comprehensive information system.

SOME NEEDS RELATED TO CAREER EDUCATION

Now let us turn from management responsibilities and look
briefly at some of the operational needs within a comprehensive personnel education system. I have selected three which I believe should be among the top several meriting special attention.

Career Orientation Personnel

Staff preparation and development for career orientation activities at the elementary and early middle school levels is in the headwaters of the Career Education stream. Properly structured and nourished by individuals who can accommodate their living and learning philosophies to newly-evolving life styles, it can become a moving force for career-oriented educational change.

Personnel development programs should be organized which will provide the basis for the philosophical acceptance of the Career Education concept by administrators, academic and vocational teachers, counselors, and ancillary personnel. Key vocational personnel will need to develop those special skills used to work effectively with young children and in elementary level learning environments.

By the fall of 1973, it is estimated that there will be 1,369,000 classroom teachers and other instructional staff in our public elementary schools. It is hard to visualize the magnitude of the task ahead of us as we develop our strategies for helping these teachers "vocationalize" their subject specialties and identify themselves with the start of the Career Education continuum.
While it might be a comforting thought to await the results of pilot studies and longitudinal research or even the spread of elementary school participation in our own States, the movement toward blending work awareness with skills for living and learning already is here. How much wiser would be the course of greeting it now with hospitality by making available to those who direct the learning experiences of elementary school children; opportunities to lead and become competent in the practices of career orientation programs.

**Career Exploration**

Career exploration activates perceptions of self, and work and societal roles, formed in career orientation studies and begins to expand the student's knowledge about the occupational clusters he has selected for exploration. Personnel development for functions in this aspect of Career Education, therefore, probably will be directed to middle or intermediate school personnel.

At this level we can see a more direct and active role for vocational educators trained in depth for occupational cluster interpretation and instruction. Cluster internships perhaps will be as important a part of their preparation as courses in the directly related disciplines. Other competencies qualifying these instructors will include: understandings of the career choice process, youth maturation, the interdependence of consumption, production and distribution; and skills in
multi-media and outreach techniques for utilizing business and community resources for achieving learning objectives.

All professional personnel participating in the exploration phase of the Career Education continuum must be able to create linkages between students' experiences in the social, natural and physical sciences, mathematics, language arts and history, and their planning for future careers, learning, and leading a well-rounded life. They must also be able to complete the transition process which will carry a student to work skills development programs, consumer effectiveness and personal employability.

We should not lose sight of the possibility of creating interdisciplinary capabilities between academic and vocational disciplines and among the vocational disciplines. In fact we could say, without being facetious, that the principles of career exploration might well be applied to the whole area of professional education for the implementation of Career Education.

Certainly Career Education will need to have much greater involvement of university and other vocational teacher educator staffs, especially from career exploration through skill development instructional activities. New types of teacher educators, new patterns for utilizing senior and lower division institutional capabilities, new arrangements for inservice and preservice training, and a revitalization of current relationships in
teacher education will have to be examined. And let us not forget adult basic education, GEDs and the training programs of private enterprise.

**Ancillary and Adjunct Personnel**

Also deserving of special consideration are the awareness needs and participation needs Career Education has for ancillary and adjunct personnel. The most obvious are guidance staffs and business and industry adjunct partners.

There are growing indications that many counseling personnel value work objectives as well as education objectives. They are ready to move more significantly into career-oriented activities, be they in the school, the community or the home. But they must be welcomed to the Career Education team and helped to find and develop their own inservice programs.

We need to identify what tasks Career Education guidance staffs will be expected to perform, where they will perform them, and how they may be expected to relate to the curriculum and to administrator, instructor and student expectations. Counselor educators also must be brought into these discussions so that 'prevention', as well as 'cure' approaches become a part of program implementation.

Perhaps we will want to look immediately at the student placement and follow-up roles which secondary and postsecondary schools will need to broaden. What should be the relationship of the placement specialist to teacher-coordinators for instructional
programs using cooperative education laboratories? Will our city schools need specialists for placement in job clusters? Will our area schools need job development and liaison specialists to open up placements for rural youth? If so, where in the personnel preparation ladder are the competencies they need best developed? Can these individuals be trained in existing coordination techniques courses?

Many employers and labor unions have participated in work experience, apprenticeship, cooperative education and other alliances with public education. However, the scope of educational reform envisioned by the implementation of Career Education mandates our attention to their special preparation as adjunct personnel.

About 12 years ago, a teacher educator in Virginia used the expression, "downtown teacher" to emphasize the training role of on-the-job sponsors for distributive cooperative students. We may wish to explore this concept more fully in relation to personnel development activities to support such a partnership in Career Education. It could profit both our schools and our business communities.

There may be need also to prepare adjunct personnel for teacher educator staffs. Many universities use adjunct faculty for specialized courses in business administration, engineering and medicine. Career teacher education depart-
ments may find it beneficial to develop the professional staff capability of corporate training directors and educational industry personnel. The same would be true for the other personnel education environments we use and have yet to create.

COMMITMENT

We began this paper by calling attention to "Four I's" - Intervention, Information, Investigation and Involvement. If we may be permitted a rather bad pun, we would say in closing, "We need "Four I's", the better to "C"!

"C" stands for commitment. If we are to regain the confidence of our youth and school patrons, if we are to fulfill the promise of Career Education, we must direct our efforts not only to curriculum building and to facilities and equipment. We must also commit ourselves to the immediate development and utilization of a comprehensive system of personnel education for Career Education. This will require commitment of people, of money, of time. It will require adjustments in priorities.

But it will also bring to our administrative decision-making renewed vitality as well as the satisfaction that we are fulfilling our responsibility for assuring the availability of personnel qualified to give direction to Career Education as it evolves in public education.

We pledge you our commitment. We ask you for yours!