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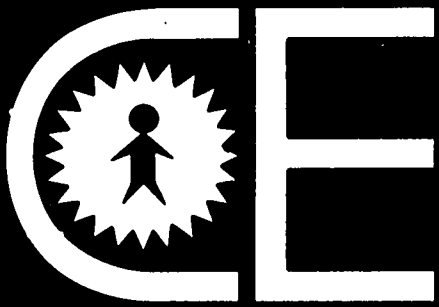
In January 1972, a national advisory and review curriculum committee met at the U.S. Office of Education to: (1) review a report which was to serve as the framework within which the secondary level public service occupations curriculum would be developed, (2) discuss the general concepts and related issues in preparing individuals and/or groups for employment in public service, and (3) hold discussions focusing on six generic questions concerning project implementation. As a summary of that meeting, this report provides project staff and consultants with insights into the problems of career development for public service occupations, as well as solutions to those problems. The report is organized around six key issues confronting project implementation. Also 36 specific recommendations and nine general recommendations have been identified to further assist in project management and implementation.
(Author/JS)

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PUBLIC SERVICE

OCCUPATIONS IN

CAREER EDUCATION



**Selected Excerpts and
Recommendations of the
National Advisory and
Review Committee, Public
Service Occupations
Curriculum Project**

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FOREWORD

The California State Department of Education, Vocational Education Section, under a grant from the United States Office of Education, is endeavoring to develop a nationally applicable secondary school curriculum for the area of public service education. As a part of this activity, a national advisory and review committee was formed. The members of the committee have a wide range of involvements spanning local, state and federal government, as well as secondary and post-secondary education.

In January, 1972 the project advisory and review committee met for the first time at the U.S. Office of Education in Washington, D.C. The objectives of the meeting were to:

1. Review an Analysis which was to serve as the framework within which the secondary level public service occupations curriculum would be developed
2. Discuss the general concepts and related issues in preparing individuals and/or groups for employment in public service
3. Hold discussions focusing on six generic questions concerning project implementation.

This summary report is an outgrowth of that meeting. The principle intent of this report is to provide project staff and consultants insight into the problems of career development for public service occupations as well as solutions to those problems.

Accordingly, this report is organized around six key issues confronting project implementation to which the advisory and review committee addressed themselves. Specific recommendations have been identified to further assist in project management and implementation. In addition, a brief introductory statement concerning the project's relationship to the U.S. Office of Education thrust in career education is included.

This summary report has been prepared by Dr. William E. Burns, State University of New York College at Buffalo who is a member of the Public Service Occupations Curriculum Project, National Advisory and Review Committee. We are most grateful to Dr. Burns and all the members of the committee for their participation.

Patrick J. Weagraff, Ed.D.
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USOE THRUST IN CAREER EDUCATION

Career education has recently emerged as a dominant theme in American educational reform. It is difficult to know where or when career education got its start. There is little doubt, however, that career education has developed rapidly in recent years. A number of school districts experimented with career education during the decade of the 60's. In 1970 the U.S. Office of Education committed nearly all of its exemplary funds from the Vocational Education Act of 1968 to career education for the next three years. There is not much doubt that career education was on its way to becoming one of the significant movements in education when Dr. Sidney P. Marland was appointed Commissioner of Education and declared that career education was one of his five major goals.

Commissioner Marland's speech to secondary school principals in Houston, Texas, several months ago highlighted the need for a career education system. He stated:

"Most of you are secondary school administrators. You, like me, have been preoccupied most of the time with college entrance expectations. Vocational-technical education has been a second-level concern. The vocational education teachers and administrators have been either scorned or condemned and we have been silent.

There is illogic here as well as massive injustice. How can we blame vocational educators for the hundreds of thousands of pitifully incapable boys and girls who leave our high schools each year when the truth is that the vast majority of these youngsters have never seen the inside of a vocational classroom? They are the unfortunate inmates, in most instances, of a curriculum that is neither fish nor fowl, neither truly vocational nor truly academic. We call it general education. I suggest we get rid of it."

In that same speech, he quoted Grant Venn's admonition from Man, Education and Work,¹ "If we want an educational system designed to serve each individual and to develop his creative potential in a self-directing way, we have work to do and attitudes to change." The commissioner went on to say:

"The first attitude that we should change, I suggest, is our own. We must purge ourselves of academic snobbery. For education's most serious failing is its self-induced, voluntary fragmentation, the strong tendency of education's several parts to separate from one another, to divide the entire enterprise against itself. The most grievous example of these intramural class distinctions is, of course, the false dichotomy between things academic and things vocational."

It is clear that the U.S. Office of Education envisages a system of career education which would rectify the injustices of our present school system, unify our fragmented programs, and provide a useful education for all students, whether they enter the world of work or continue to prepare for collegiate careers.

What is career education and how does it function? At present career education is merely a label for an evolving concept. Perhaps the best way to provide an overview of career education is to study Figure 1 which illustrates a comprehensive career education system.

It is hoped that thru this career education system students will develop awareness of possible careers and specific job skills by a systematic effort to bring career education into the school curriculum. This four phase system consists of:

¹ Grant Venn, Man, Education and Work, American Technical Society, Chicago, Illinois, 1964.

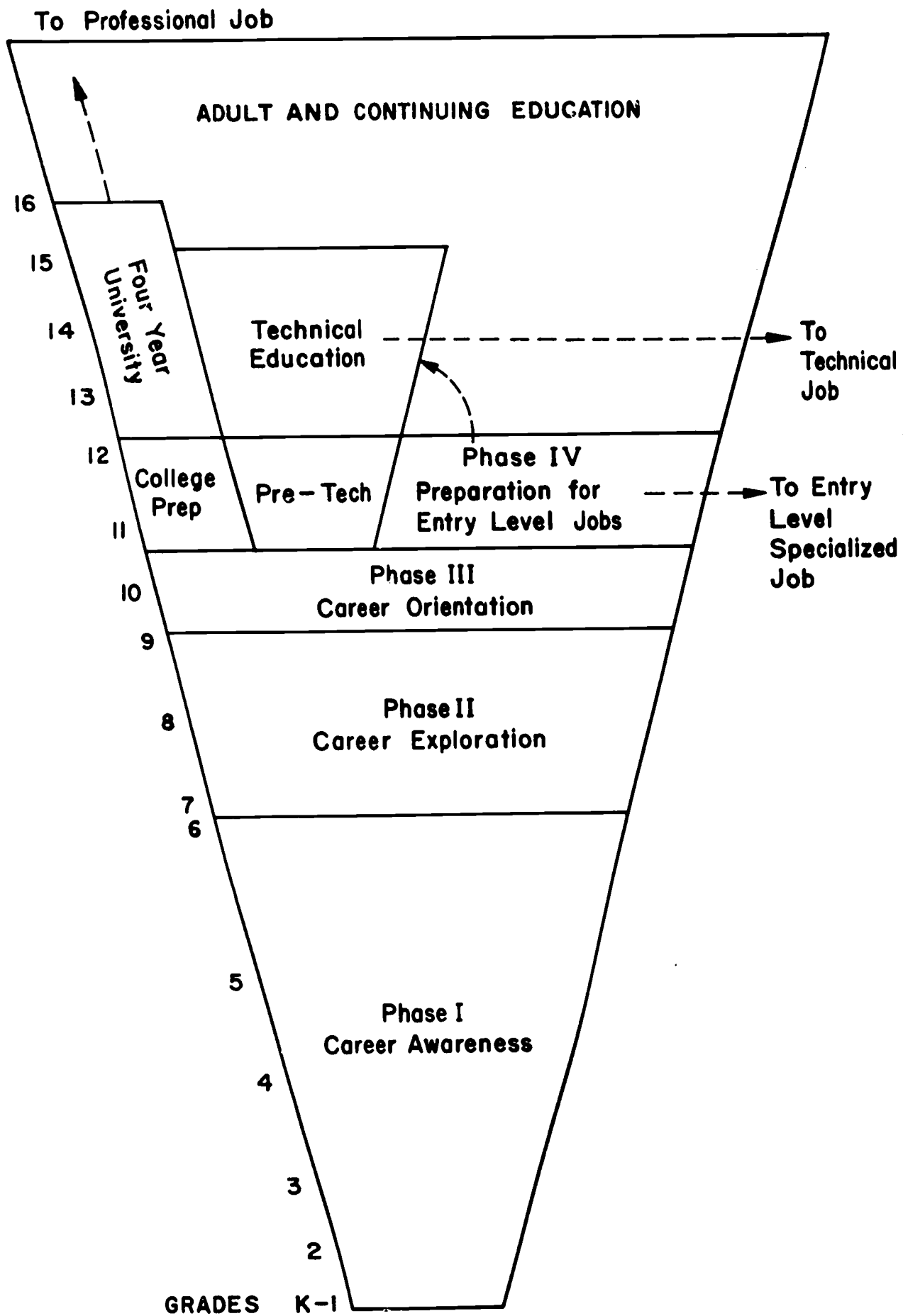


Figure I
 A COMPREHENSIVE CAREER EDUCATION SYSTEM

- Phase I (grades K-6) Career Awareness
- Phase II (grades 7-9) Career Exploration
- Phase III (grades 10-12) Career Orientation
- Phase IV (grades 10-16) Career Preparation for Entry Level Jobs

It is hoped that "all" students will be exposed to "all" careers, that they will specialize more and more as they move up the educational ladder, and that opportunities will be available to them to seek further job competencies thru further education and/or job experience throughout their careers.

PUBLIC SERVICE OCCUPATIONS PROJECT

The U.S. Office of Education as a part of its career education work has identified fifteen "occupational clusters" or "career fields." Six of these "Career Families" have been selected for curriculum development work. The California State Department of Education has been awarded a grant to develop curriculum guidelines for the public service occupations career field.

The California State Department of Education has a multi-stage program to accomplish its tasks. The stages are:

1. Analysis of the public service occupations
2. Delineation of the parameters of public service and content that should be included
3. Development of the curriculum guidelines for:
 - a. Phase III - orientation to public service
 - b. Phase IV - curriculum guides dealing with specific entry level jobs

4. Printing and dissemination of the phase III and IV curriculum guidelines.

While the project is only five months old, the phase I analysis has been completed. Over 400 persons were involved in the analysis, which resulted in the identification of 8 major occupational groups, and 39 major job families (Appendix B). Using the Dictionary of Occupational Titles² as a base, 304 entry level jobs were identified as falling within these "job families." However, only about 30 of these jobs met additional selected criteria for inclusion, which are: the job has a career ladder; the job is open to youth, age 16-20; the job is open to less than high school graduates; the job has a good employment outlook during the 1970's; the job opportunities are national in scope; and the jobs have D.O.T. designations of government service, libraries, education or recreation.

Six generic questions relating to the phase I analysis and general project implementation were discussed by the National Advisory and Review Committee. These questions centered on definitions, curriculum goals, problems and experiences of related programs, the tentative California analysis, identification of and the basis for entry level jobs in the public service occupations, and concepts and substantive areas to comprise the planned curriculum guidelines.

²U. S. Department of Labor, Manpower Administration, Dictionary of Occupational Titles, 3rd Ed., Washington, D.C.: Government Printing Office, 1965.

Following is a summary of the discussions and the committee recommendations for each of the six questions.

I. What is the consensus of this Committee on a definition of "Public Service?"

Questions immediately arose as to the breadth of the meaning of public service. Should this include firemen, police, or air controllers? Should it train people in the administration of public service at this or another level? Is there a distinction between tax and non-tax supported activities such as foundations, the Red Cross, etc.? It was pointed out that there are similarities between public administration and business administration for which educational programs already exist and that foundations attract people with existing job talents and transferable skills.

The definition of public service occupations used in Pennsylvania, which involves 76,000 persons being trained yearly in this general area, includes only those occupations that are tax supported, although there are a few exceptions, notably relating to volunteer firemen and policemen. It was felt that the same curriculum could be used by both professionals and volunteers in these occupations, although volunteers obviously are not career persons (Miller).

The committee agreed that public health and military careers are entities in themselves and should not be included in this curriculum. Dr. Frantz pointed out that there is a "need to please the professionals in this field and to use terms that they are familiar with." It was felt that the term "public service" was more appropriate than the term "government service" and that this terminology would not discriminate against people in foundation or volunteer work.

Recommendations of the committee were:

1. The public service definition used by the U.S. Office of Education, Bureau of Adult, Vocational and Library Programs, written by Donald Snodgrass, could be accepted, with some modification. The definition should read:
"Public service occupations are those occupations pursued by persons performing the functions necessary to accomplish the mission of local, county, state and federal government, except for military service. These missions reflect the services desired or needed by individuals and groups...and are performed through arrangements or organizations established by society, normally on a nonprofit basis and usually supported by tax revenues
2. The definition of "public" should exclude the military and/or uniformed services
3. If a question arises regarding whether a job is in public service, a key criterion is that the job should be "tax supported "

II. What are and should be the goals of a public service occupation education curriculum in secondary schools?

Dr. Weagraff mentioned that, based upon results of a nationwide survey, less than 15 secondary schools in the United States offer courses relating to public service occupations at the present time. To some extent this problem exists because youth age 16-21

cannot be hired for many jobs in public service due to age restrictions.

For what kind of public service jobs should secondary schools prepare youth? Mr. George stated that "kids do not understand local government, there are few textbooks, and some go into police work simply because they like the uniform." He felt that an integral part of a public service curriculum should provide the opportunity for students to analyze career opportunities, salary ranges, benefits, etc., so that they could make logical career choices. Mr. Beller reinforced this by pointing out that a great majority of the secondary level students are not aware of this type of information. He further indicated the basic similarity in skills needed by government, business, or employers in general and that people fail in jobs mainly due to their inability to get along with others. Employees need skills in listening, relating, articulation and interpersonal relationships.

Other points discussed were the overemphasis on attending college and the resultant frustrations and waste of human talent (George), the basic need to understand and accept oneself, to realize what one's interests are and where one's talents and abilities lie (Burns), and that there is an existing educational ladder and a career ladder but that the educational ladder needs closer articulation to the career ladder so that students exiting from high school have both job skills and the ability to continue up a ladder (Korim). Mr. Korim stressed the need to identify learning experiences that would enable a student to move into the public

service sector, and/or move up to higher education, with an emphasis on the "and/or." A beginning would be to define the kinds of tasks existing now in the labor market that could be performed by students, which then could become a determinant of the kinds of skills to be taught. Program goals for students at the high school level should naturally involve little planning and much "hands on" experiences or a functional skills approach, as contrasted to the university graduate level where skills would be more theoretical and less "hands on," as shown in Figure 2.

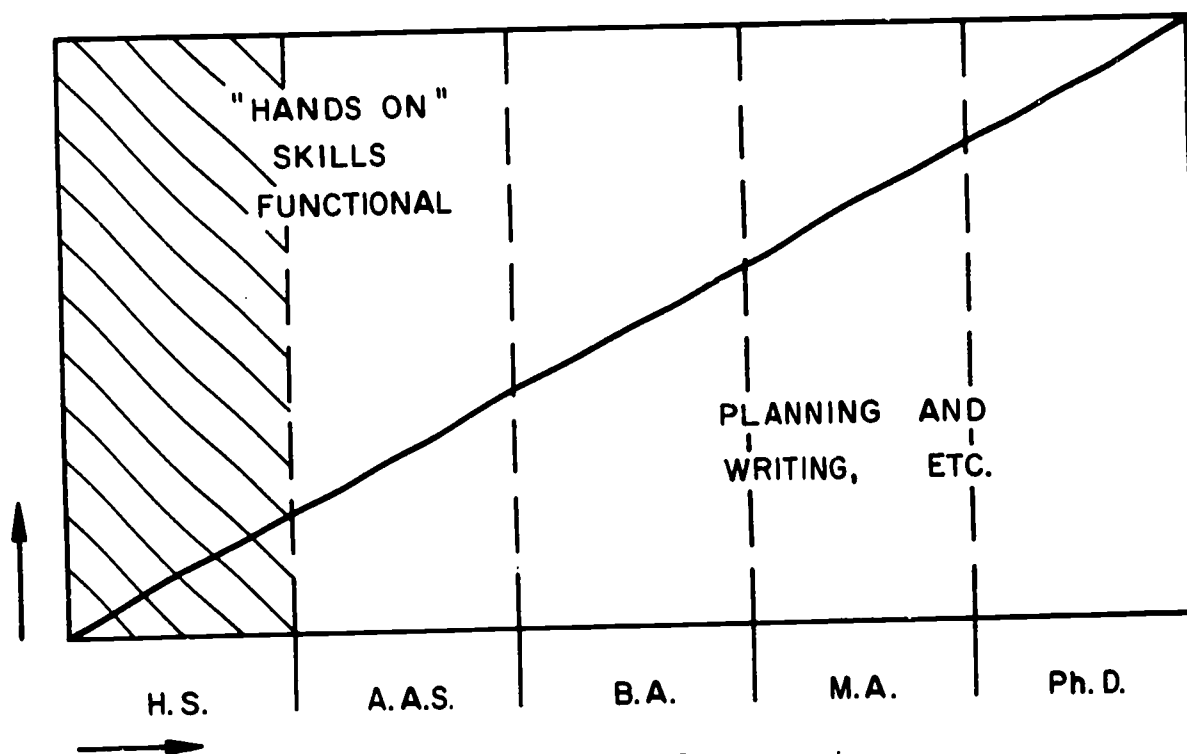


Figure 2

**RELATIONSHIP BETWEEN JOB CHARACTERISTICS
AND FORMAL EDUCATION EXPERIENCES**

As a person moves up the ladder he gradually specializes in one extreme or the other, although integration of these areas is currently a major problem. The secondary level program should have the goal of preparing a person for entry work in both areas. However, since the public service occupations project is directed toward secondary level students it must include ample opportunity for students to acquire specific job skills.

"Terminal jobs develop terminal people," stated Mr. Koch, whereas students should have the desire and initiative to go on and develop as far as their capabilities permit. Consequently, care must be exercised not to set curriculum goals too low or be content with jobs which do not have a clear career ladder.

There are entry level jobs with varying ingredients which can lead into advanced jobs, some of which call for highly unique skills. Therefore, appropriate goals for a secondary program might be to:

1. provide students with entry level skills
2. develop positive attitudes toward work by motivating students
3. recognize that employers will provide some degree of in-service training (Korim).

Terminology should be as clear as possible. If an existing job is identified as terminal, (Forestry Aide from the D.O.T. as an example) might this be understood to mean the end of a career ladder? Clarification of these terms should be included in the total curriculum guidelines (Frantz). Regarding this, it was pointed out that no experience can be required for an entry level job or else the job cannot be considered as entry level.

The phase IV curriculum guidelines for public service should specify that all jobs are not stable and clearly defined, but rather that they are continually evolving and changing. This requires flexible guidelines that permit continual updating. The guidelines must also show that the maturity level and age of students may discourage some employers from hiring them for certain jobs, due to certain inherent risks.

Projections of skill demand, manpower forecasts of job opportunities, the benefits, job security, growth potential and hazards involved in jobs, along with possible alternatives should be a part of the curriculum guidelines. This could minimize the over-specialization or over-abundance of workers now existing in some areas. In a career curriculum, the study of career opportunities and a career counseling program should go hand in hand.

In relation to the goals of the program, the committee recommended:

4. The guidelines should provide a student information about local, state, federal and special district government in terms of:
 - a. employment opportunities
 - b. salaries
 - c. projections of need
5. The program should expose students to systematic motivational development so they can gain positive work habits and attitudes

6. A student should possess a saleable skill upon the completion of Phase IV which will prepare him/her for job entry in public service jobs
7. Phase III should help students acquire interpersonal skills
8. A student should develop in Phase III individual ability for self-assessment, the realization of personal ambitions and the capability of making firm choices. Thus developing the ability to make a career choice
9. The program should be structured so that a student is prepared to make a career choice upon completion of Phase III
10. The program (particularly Phase III) should be interdisciplinary and cut across academic and vocational areas

III. What problems and experiences can be identified in recent programs to prepare people for public service jobs which should be considered in the planning and development of curriculum content and related practices?

It was brought out in the discussion that workers need to learn the very basics of their job function, i.e., laws, regulations, how to do even simple jobs properly and safely, and that people should learn by doing. The Civil Service Commission Project 250 report, although focusing on the training of drop-outs, does contain a discussion of strategies and pitfalls encountered in preparing people for public service jobs (Beller).

A common problem is that many job descriptions do not accurately reflect the actual job. Sometimes these job descriptions are too narrow in scope, but chiefly they are so broad in their requirements that they eliminate many applicants. A teacher also needs to know the tasks and job qualifications being studied. Therefore, these guidelines should include an outline of what the job family consists of and a gross task analysis of what the specific job is really about.

Although not practicable at this time, it was stressed that "learning packages" ideally should be prepared and placed in the hands of the student, as well as the teacher, with an emphasis on individuality and flexibility. This opens avenues for educating many citizens who would not necessarily be employed in public service occupations.

The committee recommends that the following major components be included in the curriculum guidelines:

11. The guidelines should contain and describe appropriate career ladders
12. The guidelines should include a task analysis for both major job families and entry level jobs
13. Descriptive material should be included in the guidelines to outline the employment potential, outlook, etc.
14. Appropriate resources for a teacher to implement the guidelines should be identified and included in the guidelines

15. There should be a planned format for the phase III and IV curriculum guidelines such as the example shown in Figure 3

Curriculum objective _____ Instructional objective _____			
topical outline _____	teacher management activity _____	student learning activity _____	resources _____

Figure 3

SUGGESTED FORMAT FOR CURRICULUM GUIDELINES

IV. What is the consensus of this committee regarding the analysis which identified eight major civilian occupational groups and thirty-nine major job families in public service?

A main concern expressed about the analysis dealt with the Phase IV entry level jobs. Some of the jobs listed from the D.O.T. are terminal in nature and hiring practices are somewhat limited (Appendix B). The criterion questions imposed by the analysis probably eliminates too many jobs.

The word "aide" to some implied the terminal step, while to others it meant the very first step up the career ladder. Mr. Nelsen said that "aide" typically means pre-professional and that a job with a career ladder can be climbed thru education and/or within a work situation.

"Any job prepares for something," according to Mr. Korim, although the existing labor market imposes restrictions, i.e., unions and professions entrance requirements. To the question of Dr. Weagraff as to whether we should deal with jobs that are now in public service or with those which may emerge in the future, it was suggested that the potential employment opportunities be examined and that it might be desirable to consider jobs which are emerging providing they are a part of a career ladder.

Mr. Wykle and Mr. Beller pointed out that some related jobs, such as clerical, are not covered in the analysis. This exists because of an apparent overlap between the fifteen "career families." This overlap should be resolved. In the federal government, clerical jobs are the largest single occupational category. If clerical jobs are included in the analysis, possibly 75 or 80 additional D.O.T. titles would be included.

There are also some differences between public and private sector jobs which students should understand. These differences in general have been included in the schools curriculum. There is a need to make such a distinction somewhere in the educational system, possibly by asking the students in which sector their interests lie (Korim).

The analysis is correct in that it is functional and based on major occupational groups and job families in public service. To shift to any other analysis basis would be inappropriate.

Recommendations of the committee are:

16. Entry level jobs included in the analysis should not be limited exclusively to those listed in the D.O.T.
 17. Immediately attainable and recognizable goals should be included for increased student motivation
 18. Both existing and emerging jobs should be examined for possible inclusion in the analysis
 19. Delineation and clarification of the overlap between the career families is necessary
 20. It should be accepted that job skills are entry level and that a worker will require some on-the-job training and/or orientation by the employer
- V. What entry level jobs should be included in phase IV and on what basis should they be selected?

The eight major occupational groups included here were derived from an earlier publication by Andrew S. Korim, Government Careers³ (see Appendix B). It was the consensus that these occupational groups should be descriptive and as functional as possible.

It should be noted that the allied health occupations were omitted intentionally since they are a part of a separate career

³Andrew S. Korim, Government Careers, Washington, D.C.: American Association of Junior Colleges, 1971.

field even though jobs such as public health nurse could fit into Social and Economic Services.

There was some theoretical disagreement with the fifteen U.S.O.E. career field designations and a feeling that there may be some inconsistency between career fields. Some appear to deal with what a worker does while others are concerned with where the work is done. However, it was accepted that there always will be some problems in grouping and defining inasmuch as groups and structures vary around the country.

It was suggested that although transportation is a separate career field, it should also be included in the analysis as a major occupational group. The career field designation has to do with the broad field of transportation whereas the public service designation confines itself to items that are government regulated, such as highway and airway regulations. The recommendation was made that the public service occupational group be titled "Transportation Management."

An examination of additional criteria being derived from other career fields may clarify the eventual make-up of the major occupational groups in public service. There may be job families that are not being included in other career fields which should be included in public service. The definition of "tax supported" may carry the notation that there is cross referencing between categories and the local school system then has the option of selection of topics and of how best to handle this.

It was generally agreed that there should be the eight listed major occupational groups and that the allied health occupations constitute a separate career field. Inclusion of the allied health area could cause too much overlap with the other career families. In addition, the feeling was that this project should be kept as simple as possible. There was no firm recommendation on the placement of the allied health occupations but it was suggested that health management training might be included as a major job family.

The public service occupations curriculum guidelines should be regarded as suggestive. Their use in a secondary level classroom should depend on local outcomes desired. Since all of the materials would not be used in all schools, the eight major occupational groups should be able to "stand alone."

Recommendations of the committee are:

21. The area of health management should be included as a major job family
22. The occupational group titled "Transportation" should be changed to "Transportation Management"
23. The function actually performed should be examined before placing a job in a family or occupational group
24. Overlap of jobs, occupations or areas can and should be controlled by a cross-referencing system
25. The guidelines should be flexible enough to permit any or all of the major occupational groups to be used
26. Jobs should be broad in nature and not as limited as in the present job analysis

27. D.O.T. classifications are somewhat restrictive inasmuch as 12,000 jobs now exist that are not included in it.

It is recommended that this project use D.O.T. designations and numbers whenever possible but not be limited to this source alone

28. Specific skill acquisition should be an integral part of Phase IV. Orientation alone is not adequate preparation

29. There exists a "core" of commonality in many jobs that needs to be investigated for Phase IV

30. Development of Phase IV should be started now even though it may not be completed in its entirety

31. Phase IV materials must deal with jobs that a student completing the program can obtain

VI. What concepts and substantive areas should be included in the Phase III (orientation/exploration) curriculum guideline?

Much of the discussion of the committee that is germane to this question is outlined in the narration on question 2. However, it was stressed that the Phase III curriculum guidelines should be undertaken first. They should serve as the basis to develop the Phase IV guidelines. It was also noted that career education undoubtedly will result in vocational choices by students at an earlier age.

Recommendations of the committee are:

32. Phase III is the pivotal point in the career field and is where the emphasis should be placed. Phase III should be developed prior to Phase IV

33. Orientation to career opportunities should be included in the phase III curriculum guidelines, including elements of guidance, job limitations, job hazards, job competition, future employment trends, and techniques regarding how to secure employment
34. The phase III and IV guidelines should contain guidance and counseling elements
35. There should be a readily identifiable career ladder for the jobs included in the guidelines. A definite career ladder should exist for the jobs included in the phase IV guidelines
36. Curriculum guidelines should lead from the general to the specific. They should spell out both career ladders and alternatives

GENERAL RECOMMENDATIONS

In conclusion the committee listed several general recommendations which the California State Department of Education or the U.S.O.E. should consider. These are:

37. There is a firm need to articulate this project with phases I and II as well as with the junior college level. The U.S.O.E. should provide means for total coordination of these phases
38. Plans for future coordination between the fifteen career fields in terms of validity, compatibility and the avoidance of duplication should be developed by U.S.O.E.

39. A means for evaluation of this project and the other five projects needs to be provided, as well as personnel to implement this
40. Plans for field testing should be made by U.S.O.E. in terms of:
 - a. facilities
 - b. staff
 - c. multi or single occupational approach
(exposure to one or multi occupations)
41. Methods for this project to be implemented in the schools in terms of when and by whom require clarification
42. Resolving the problems of overlap between career families, etc., needs to be completed by U.S.O.E. as soon as possible
43. The work of all contractors, in so far as possible, should be keyed to the Dictionary of Occupational Titles to assure a basic compatability of instructional products. However, they all should expand on the D.O.T. designations as needed
44. Provision needs to be made for both in-service training of teachers and teacher education if the guidelines are to be implemented
45. Guidelines should be developed for all four phases of career education as well as for adult or continuing education.

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U. S. Department of Labor, Manpower Administration. Dictionary of Occupational Titles, 3rd Edition, Washington, D.C.: Government Printing Office, 1965.

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APPENDIX A

APPENDIX A

USOE DESIGNATED DEFINITION OF TERMS

Career Education Field: Denotes the preparation for a category of occupations concerned with producing similar kinds of products or rendering similar services, e.g., construction, transportation, office. Included are groups of occupations which are not necessarily closely related with respect to similarity of work performed but the groups are composed generally of occupations which are affected by the same economic, social or technological factors.

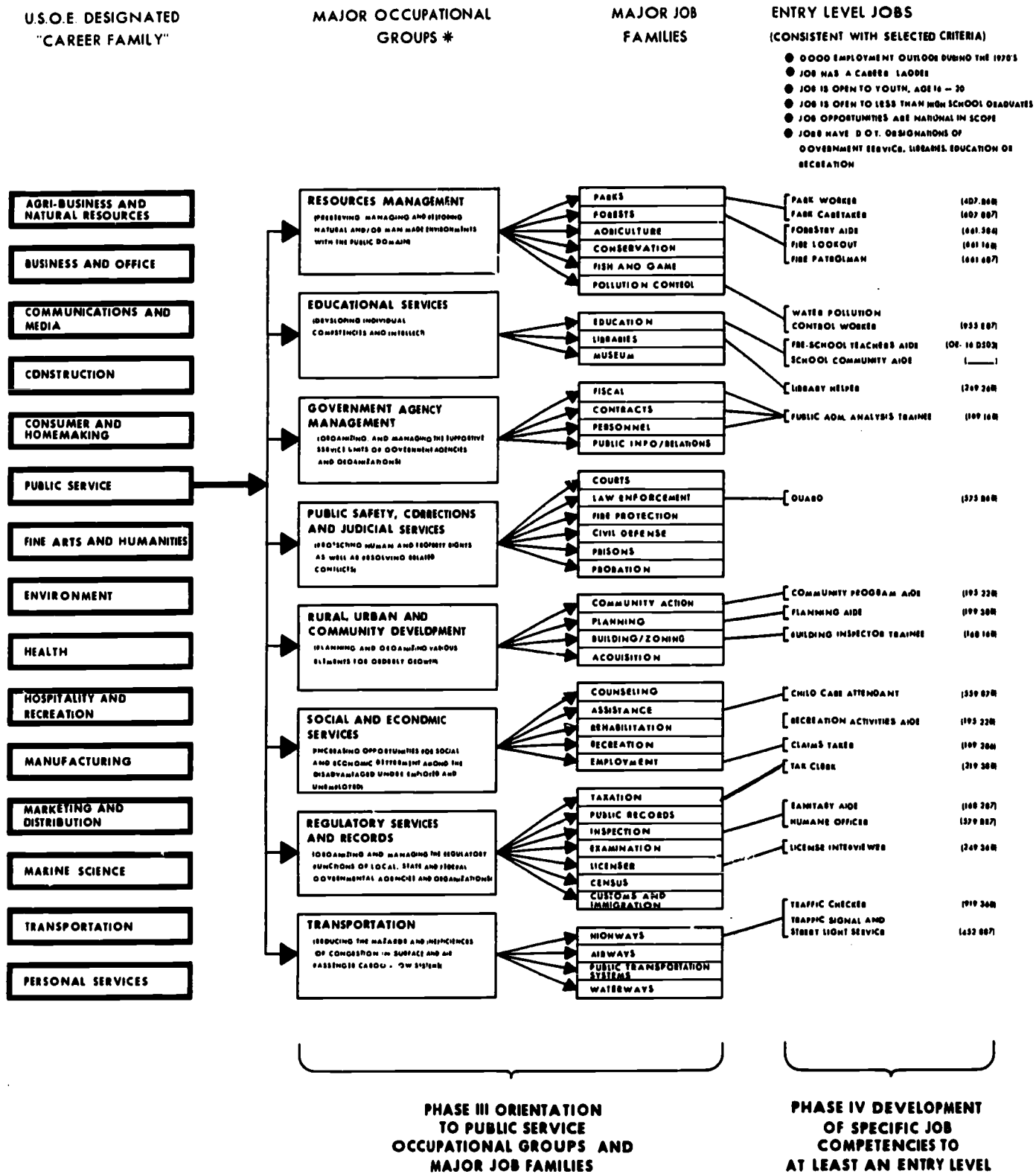
Occupational Field: Comprised of occupations characterized by the similarity of fundamental operations and skills, knowledges and aptitudes required to perform them. The occupations may occur in various occupational groupings but are related to a career education field on the basis of a similarity of broad performance factors associated with a certain type of work.

Job Family: A group of jobs related on the basis of common specific job or worker characteristics which are required for successful work performance, e.g., experience; training and education; skills; duties performed; tools, machines and other aids; materials used. The jobs may be concerned with processes or activities associated with more than one career education field.

Job: A job is a representation of a group of positions held by individuals with substantially the same duties, skills, knowledges and responsibilities.

APPENDIX B

MAJOR CIVILIAN OCCUPATIONAL GROUPS AND JOB FAMILIES IN PUBLIC SERVICE



* ADAPTED FROM CONCEPT BY ANDREW S. KOBIN, GOVERNMENT CAREERS, AMERICAN ASSOCIATION OF COLLEGE JUNIORS, WASHINGTON D.C., 1971