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AUTHOR Hamilton, James B.; Harrington, Lois C.
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ABSTRACT

In developing modules for training vocational educators in nondiscriminatory practices, the authors of this paper saw a need for a new approach to competency identification--one that would enable teachers to use skills generalizable across many areas. A detailed review of the literature, from which twenty major project studies in competency identification were chosen for closer analysis, revealed problems in this area. Many competencies identified, for instance, lacked specificity: there was a high level of duplication of competencies across special needs areas, yet none of the lists encompassed all the special needs groups now appearing in vocational classrooms. Hence, the authors' approach to module development included the following: (1) competencies were identified from scratch using the DACUM (Develop a Curriculum) method and adopting a national perspective; (2) the 384 competencies identified, at a high level of specificity, were clarified and combined to produce a single list for teachers working with all special needs students; (3) the list was submitted to verification panels to be ranked; (4) the competencies were grouped into major areas of application. Each of the fifteen modules to be developed covers a skill applicable across special needs (and "normal") groups. The vocational teacher can be assisted in serving all students, mainstreamed or not, individually and effectively by acquiring these skills, such as "Instructional Planning," "Student Evaluation," "Promotion of Peer Acceptance," "Materials Selection/Development," or "Special Instructional Techniques." (Summary abstracts of the twenty studies are appended.) (CP)

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REVIEW AND SYNTHESIS OF TEACHER COMPETENCIES
TO SERVE SPECIAL NEEDS STUDENTS

James B. Hamilton
Lois G. Harrington

The National Center for Research in Vocational Education
The Ohio State University
Columbus, Ohio

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and Special Needs Section
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Vocational educators are obligated to ensure that their programs are equally accessible, accommodating, and fair to all groups of students. The Education Amendments of 1976 and Title IX of the Education Amendments of 1972 require that education programs (including vocational programs) must not discriminate against students of either sex. Section 504 of the Rehabilitation Act of 1973 and its guidelines require that access to education be provided for handicapped students and that accommodations be made for their physical impairments. These are but three examples of legislation that impact on vocational education's responsibility to provide quality education for all.

Unfortunately, few vocational education teachers have been trained to meet the new demands put upon them. They need to acquire additional teaching skills to meet the special training needs of students who are enrolled in programs nontraditional for their sex, who are physically impaired, who are members of minority groups, or who are members of other emerging groups such as the aged and the incarcerated.

Not only are our vocational teachers unprepared to meet the special needs of students showing up in their classes, but teacher educators often lack the expertise needed to meet the challenge.

Based upon his experience in building a national network of institutions of higher education for the dissemination of resources and practices for mainstreaming, Maynard Reynolds of the University of Minnesota made the following observation:

...there are no adequate arrangements for the necessary time, resources, or incentives for the teacher education job that seems to be required. Somehow, we have never negotiated successfully for the essential resources to conduct either the preservice or inservice education of teachers. Furthermore, the college professors who might be called upon to help in the training are not usually competent in these emerging areas.

How many teacher educators are expert in new measurement systems for teaching individuals? in consultation practice? or in parent counseling?

Staff on the performance-based teacher education module series project at The National Center for Research in Vocational Education first became interested in the competencies needed by vocational educators in order to work with students with special needs during the development of the 100 PBTE modules based on the 384 competencies identified by Cotrell et al. Late in the module development process, staff realized that some of the 384 competencies were becoming outdated, that events over the past ten years had changed the role of the vocational teacher, and that at least two areas of competencies were missing from the original list: those competencies dealing with serving students with special needs, and those dealing with the development and implementation of competency-based instructional programs at the secondary and postsecondary levels.

This past year, as one of the studies designated by the U.S. Office of Education, the National Center for Research in Vocational Education initiated the project, "Development of Performance-Based Teacher Education Modules to Impact on Training Vocational Educators in Nondiscriminatory Practices." As part of this project, a complete literature search was conducted to identify prior related studies. The search was conducted through computer-access to the Lockheed Information System, using the ERIC and Council for Exceptional Children data bases among others. A number of competency-identification studies were located and reviewed. In addition, other projects were identified which included implied competencies within their findings.

For the purposes of this audience, abstracts of approximately twenty of these project^s, studies, or papers are appended to this paper. Within each of

these studies, specific competencies have been identified or implied, training content areas have been specified, learning modules have been proposed, training objectives have been developed, or solutions have been offered. The level of competency specificity varies widely as does the number of competency statements identified. You will find that the number of competency statements ranges from four to 187.

Each abstract provides the project title, the type of student population addressed, the type of student program, the project objective, a description of the methodology utilized in competency identification, the purpose of the competency identification, the bibliographic citation(s), and a partial listing of the competencies identified or implied.

You may also note in the upper-right-hand-corner an indication of the state from which the population was studied or whether the study was national in scope.

In general, what staff discovered was the following:

- Prior to 1975, there was little in the literature related to the training of vocational teachers to deal with special populations. What existed was training of (1) special education teachers to incorporate vocational (or prevocational) training into their special education programs, or (2) special coordinators to work with vocational education personnel who had students with special needs in their classes.
- Prior to 1975, there was little interest in competency identification in this area.
- In 1975 and subsequently, there was a proliferation of competency-identification studies in the area of special needs, mostly in terms of vocational teachers who would be teaching separate classes for special students.
- Only recently have studies addressed the needs of the vocational teacher with special students mainstreamed into the regular vocational classroom. This can be attributed to recent legislation concerning the provision of the least restrictive environment for students with special needs.

- The term "special needs student" has generally referred only to the handicapped, the disadvantaged, and the mentally retarded.
- Most competency identification efforts have been conducted at a state level, for a specific special needs group (e.g., the educable mentally retarded). Most competency lists have been adapted from previously existing lists (e.g., Cotrell et al., 1971) and many dealt with the total role of the vocational teacher rather than with the specific competencies needed for dealing with special populations.

Based upon our review and synthesis of the teacher competency literature, several problems were revealed regarding the current "state-of-the-art" in teacher competency identification:

- Competencies do not encompass those needed to serve all of the special needs groups who are showing up in regular vocational classes--adults returning for retraining (displaced homemakers, technologically displaced, mid-life career changers, ex-offenders), students enrolled in programs nontraditional for their sex, the gifted and talented, and students with limited English proficiency.
- Many of the competencies identified thus far lack the specificity needed to give direction to teacher training or for the development of teacher training materials
- There appears to be a rather high level of duplication of competencies across the various competency listings, regardless of which special population is being addressed.

Based upon these observations regarding the state of the art in vocational teacher competency studies for special needs students, listing a series of recommendations may be somewhat redundant at this point. Rather, we will briefly describe approaches and courses of action being pursued by our staff which embody the recommendations which we would make at this time.

Other ongoing projects may also be utilizing similar approaches.

For the purposes of the current work of the National Center in developing modules to train vocational teachers to provide vocational education programs that are equally accessible, accommodating, and fair to all groups of students--nondiscriminatory practice--it was necessary to go beyond the efforts

made in the studies identified in the literature. For one thing, much of the information in the literature indicated that one of the most powerful elements working against the successful accommodation of students with special needs into vocational classes was the teacher's fear of the unknown. Vocational teachers, many of whom were perfectly adept at individualizing instruction and working effectively with a wide range of student abilities, were apprehensive about their ability to work with the handicapped, the mentally retarded, etc., because of their perception that they lacked the special training necessary to do so.

Consequently, we decided not to develop modules geared to different special needs groups (e.g., "Provide Vocational Training for the Handicapped"). Such an approach implies that the vocational teacher is expected to become a special educator, a specialist in the area of the handicapped...the mentally retarded...the emotionally disturbed. Instead, we decided to capitalize on the strengths and interests and skills of the vocational teacher, and to provide modules targeted to skill areas ("Identify and Diagnose the Special Needs of Students in Your Classroom"). Such an approach is designed to cut across special needs areas. In other words, instead of worrying about becoming a specialist, the vocational teacher is learning to use skills which are generalizable across special needs areas, and which apply equally well to students with "normal" capabilities. Instead of attempting to categorize the students in his/her class, the vocational teacher is learning to apply techniques appropriate to all students, including those with special needs. It was hoped that this approach would be far more useful and anxiety-free.

Second, due to recent pressures from the legislation and the lobbying of special groups, we decided to broaden the definition of "special needs" to

include most of the groups with different needs which could today be found in the regular vocational classroom. After much consideration, the following groups were selected:

- Mentally Retarded
- Sensory and Physically Impaired
- Gifted and Talented
- Rural and Urban Economically Disadvantaged
- Persons with Limited or Non-English Proficiency
- Racial/Ethnic Minorities
- Persons Enrolled in Programs Nontraditional for Their Sex
- Adults Requiring Retraining

The next step was to identify teacher competencies. The competency-identification process to be used differed from that used by the studies shown in the appendix, specifically--

- The competencies would describe the skills needed by the vocational teacher to accommodate students with special needs in the regular vocational classroom--mainstreamed rather than separated out into special vocational classes.
- The competencies would be identified from a national, rather than state, perspective.
- The total role of the vocational teacher would not be addressed. Instead, the focus would be on only that which the teacher would need to do differently or more in order to accommodate students with special needs. In other words, given our 100 PBTE modules, what additional skills are needed, and which of those 100 skills are of especial importance in working with students with special needs?
- For the purposes of module development, the competencies would be delineated at a very detailed level of specificity.
- Since we are concerned with the skills that are common across special needs groups--as well as those that are unique--the competency-identification process was structured to (1) identify the teacher skills needed for each special needs group, and then to use that information to (2) identify the teacher skills common and unique across special needs groups.
- Instead of adapting previously established competencies, the DACUM process was used to identify competencies from scratch.

The DACUM (Developing A Curriculum) process is a modified brainstorming process used with small groups of expert practitioners to analyze an occupational area and reach consensus on the skills needed. In this case, it was used as follows. For each of the eight special needs groups identified, a DACUM panel was formed. Thus, for example, the panel for the mentally retarded was comprised of eight persons, some of whom were vocational teachers with expertise in working with the mentally retarded and some of whom were supervisors or teacher educators with expertise in the needs of the present as well as a grasp of the ideal skills of the future.

Each of the eight panels met separately in the spring of this year, and each spent two full days analyzing the role of the teacher in serving the special needs group they represented. First, the group specifies the broad competency areas needed (e.g., "Instructional Planning), and then, for each competency area, the group specifies the competencies required (e.g., "Develop an IEP"). Since this is a consensus process, as each competency is suggested, it is vigorously discussed, dissected, and debated. When a competency--and the preferred phrasing of that competency--is finally written on a card and placed on the wall, it has the support of the total group.

After all eight DACUM panels had met, staff looked across all eight lists at the broad competency areas specified. Basically, each group had come up with the same broad areas, although each broke them out in a slightly different way. Staff then specified their own broad competency areas, consistent with those of the panels, but allowing for the different lists to be considered together. The competencies from each list were then combined under the

appropriate broad areas. One member from each of the panels was selected to participate on a commonalities panel. This panel met to review the combined list. The panel considered the competencies under each broad competency area, looking for overlap and repetition. Like items were combined. Unclear items were clarified and restated. Poorly worded statements were refined. This panel met for two days and, based on the direction they provided, staff continued the effort. The result was a single list of competencies needed by vocational teachers working with students with special needs.

At this point, the competency list was compared to other existing lists to determine if any critical competencies had been overlooked. Approximately 25 lists of stated or implied competencies located in the literature were reviewed, competency by competency, to ensure that each competency was included on our list of competencies. Only six competencies were discovered that (1) were not on our list in any form, and (2) seemed substantially important. These were added to our list.

In addition, another project at the National Center had been completed, the objective of which had been to develop a list of educational strategies that may be employed by vocational practitioners to meet the needs of disadvantaged, handicapped, and limited English proficiency students. The list of strategies had been derived from visits to model programs and reviews of the literature. Each of their 161 strategies (or competencies), except two, were somehow covered in our list of competencies. Those two unique competencies were added to our list, making a total of 384 competencies.

An instrument was then developed using this list of 384 competencies. For each of the original eight special needs groups, a verification panel of ten

persons (vocational teachers, supervisors, teacher educators) was selected. Each group of ten persons had expertise in the skills needed by vocational teachers to work with a single specific special needs group in the regular vocational classroom. The instrument was sent to each of these 80 persons. Their task was to review each competency on the list and to rate each competency according to its importance (of little or no importance, important, very important) to the vocational teacher of the special needs group they represented (e.g., mentally retarded).

Thus, for each special needs group, ten persons verified the importance of the competencies for teachers of their special needs group. The data for each of the eight groups were summarized (mean, mode) and synthesized onto a single chart of competencies. Thus, for any one competency, you could look across the chart and see the mean/mode for each of eight groups. It was immediately evident which competencies were important across all areas and which were unique to specific groups only.

The verification panelists also provided a ranking of the importance of the sixteen broad competency areas. They were asked to select the four most important areas and rank them "1"; the next four most important and rank them "2"; the third most important and rank them "3"; and the fourth most important and rank them "4". These rankings were totalled within each group, and ranked accordingly. They were then totalled across all groups to provide the final overall rankings.

Currently, the data synthesis is being used to determine the instructional modules needed and the order in which the modules will be developed. As presently conceived, fifteen modules will be developed.

The topics of those fifteen modules are as follows (the topics are listed in the order of their rated importance by the verification panels):

- Instructional Planning
- Preparation of Students for Employability
- Materials Selection/Development
- Special Instructional Techniques
- Counseling/Student Self-Awareness, Self-Concept, Self-Image, Self-Actualization
- Identification/Diagnosis of Students
- Communication/Language/Vocabulary
- Development of Students' Career Planning Skills
- Student Evaluation
- Program Evaluation
- Professional Development
- Development of Students' Life-Role Competencies
- Modification of Learning Environment/Physical Setting
- Promotion of Peer Acceptance
- Program Promotion

As you can probably see from the module topics, with the exception of the module on the modification of learning environment/physical setting--which is specifically geared to the sensory and physically impaired--each module covers a skill which has applicability across special needs (and "normal") groups. By acquiring these skills--whether by modular instruction or by other delivery modes--the vocational teacher can be assisted in serving all students individually and effectively.

APPENDIX

Project: Project ACTIVE (Attaining Competence for Teaching in Vocational Education)

Student Population: Disadvantaged and Handicapped Students

Type of Student Population: Enrolled in vocational education programs; not mainstreamed (?)

Project Objective: To identify the professional competencies and assessment criteria for teachers and administrators working with disadvantaged and handicapped students in vocational education programs in Florida.

Method of Competency Identification: Based on a literature search of existing competency lists (including Cotrell), a preliminary list of competencies was developed for vocational teachers serving the handicapped. This was submitted to a jury of experts for preliminary "validation" (revision, additions, deletions). Based on this validation, the list was revised, compiled on a survey instrument (90 statements), and sent to a sample of practitioners (vocational and technical teachers, administrators, supervisors, researchers, career education specialists, and teacher-coordinators) for ratings as to importance. All but three competencies were rated important or higher. Specific objective assessment criteria were written for each important competency.

The same process was followed in developing the competency list for vocational teachers serving the disadvantaged.

The competencies for the teacher of the disadvantaged are clustered into eight categories:

- Program Planning, Development and Evaluation
- Instructional Planning
- Teaching Methods - Media
- Student Evaluation
- Management
- Guidance
- School, Community and Student Relations
- Unique Competencies

The competencies for the teacher of the handicapped are clustered into ten categories, the two additional categories being Student Organizations, and Instructor's Professional Role and Development.

Purpose of Competency Identification: Learning materials were to be developed based on the competencies and criteria.

Bibliographic Citation: Robert E. Andreyka (Project Director). Exemplary CBVTE Project: Disadvantaged Component. Series No. 8. Tallahassee, FL: Florida State University, Program of Vocational Education, 1976. ED 131 251

Handicapped Component. ED 131 231

Partial Competency List:

Handicapped: 90 total competencies

3. Collect occupational data which considers the handicapped.
8. Identify needs, interests, of the handicapped student.
38. Present information through an illustrated talk.
54. Design valid and reliable measurement instruments.
56. Maintain equipment.
60. Maintain current student records.
62. Establish communications with potential employers of the handicapped.
70. Organize student vocational organizations.
71. Participate in workshops to compile and discuss ideas and student needs.
75. Motivate students.
80. Assist students in developing the ability to manage time.

Disadvantaged: 95 total competencies

9. Identify students who are not succeeding in vocational education due to a learning disadvantage.
10. Recruit disadvantaged students into vocational programs.
12. Develop/adapt curriculum materials for use with disadvantaged students.
35. Present information through an illustrated talk.
54. Use non-grading types of student evaluation.
60. Manage and maintain the vocational laboratory.
64. Refer students to appropriate professionals.
68. Involve parents in instructional programs for disadvantaged students.
72. Present information in step-by-step fashion.
77. Accept disadvantaged students as potential successful learners.
85. Help student develop positive self concept.

Project: Competencies and Assessment Behaviors for Vocational Specialists Coordinating the Education of Handicapped Learners in the Vocational Education Awareness Program

Student Population: Handicapped Learners (sensory and physically impaired, EMR)

Type of Student Program: Enrolled in VEAP; prevocational, mainstreaming, co-op ed, follow-up

Project Objective: To identify a list of pedagogical competencies and evaluative criteria based on the performance requirements of the vocational specialists who coordinate the education of handicapped learners in Georgia's new secondary level Vocational Education Awareness Program (VEAP).

Method of Competency Identification: The "Cotrell method" was used: (1) introspection and interview to derive performance objectives; (2) verification; (3) identification of core competencies; (4) importance ratings by a task force.

A literature search was conducted to identify existing competencies (Cotrell et al., 1971; Johnson, Shearron, Stauffer, 1968; Scott, 1975). The 399 competencies from the University's "Enabling Competencies Study" were considered. And, based on the established job description for VEAP vocational specialists, 10 roles were derived and, from these, 187 competencies were established and checked against the other studies.

The ten roles were:

- Establish VEAP program.
- Incorporate administrative strategies for program.
- Formulate instructional design.
- Select and apply instructional strategies.
- Evaluate learner performance and progress.
- Perform guidance and counseling functions with learners, parents, and teachers.
- Participate in public relations activities.
- Establish cooperative training stations.
- Evaluate local programs.
- Maintain and improve professional competencies.

Purpose of Competency Identification: Development of a training program for VEAP vocational specialists.

Bibliographic Citation: Freeman D. Eads (Project Director). Competencies and Assessment Behaviors for Vocational Specialists Coordinating the Education of Handicapped Learners in the Vocational Education Awareness Program. Final Report. Athens, GA: University of Georgia, Division of Vocational Education, 1975. ED 131 244

Partial Competency List:

187 total competencies

- Select learners to be served by program.
- Value learners as individuals.
- Value rapport and empathy for learners.
- Diagnose individual learner's handicapping condition(s).
- Be devoted to honest and fair teaching practices.
- Determine individual learner's educational needs.
- Prefer a positive attitude in relationship with learners.
- Design learner referral methods.
- Formulate individual personalized instructional prescription.
- Employ immediate feedback techniques with learners.
- Select strategies which enable learners to develop self-awareness.
- Develop training plan.
- Feel strongly about participating in local school system meeting.
- Analyze the verbal and non-verbal cues of learner behavior.
- Apply team teaching technique.
- Select vocational advisory committee members.
- Formulate a proposal for additional funding.
- Develop safety procedures for learners.
- Formulate classroom routines for learning.

Project: The Development and Validation of an Inservice Program for Vocational Teachers of the Disadvantaged

Student Population: Disadvantaged Students

Type of Student Program: Enrolled in regular and special vocational programs

Project Objective: To develop and implement an inservice education program designed to improve teaching effectiveness of vocational teachers of disadvantaged students in vocational programs.

Method of Competency Identification: A planning conference was held with project staff and eight selected vocational teachers (4 special vocational program teachers and 4 regular classroom teachers). Problem areas were identified (six) and possible solutions to these problems (13) were proposed. Implicit in the solutions are teacher competencies needed.

Purpose of Competency Identification: See project objective above.

Bibliographic Citation: Norman D. Ehresman et al. The Development and Validation of an Inservice Program for Vocational Teachers of the Disadvantaged. Final Report. Bowling Green, KY: Western Kentucky University, Center for Career and Vocational Teacher Education, 1976. ED 142 709

Implied Competency List:

13 solutions

1. Courses that offer varied entry level skills should be available to the academically low student.
2. Teacher's attitude should be adjusted to meet the needs of the students (academically low as well as academically high).
3. Teachers should communicate with academically low students on their level and accept their social behavior.
4. Home visits could help teachers better understand students with special needs.
5. Teachers should be a "friend" to students--yet command respect.
6. Teachers should make an effort to develop a close relationship with those students having special needs (take them on errands).
7. The use of rewards helps motivate academically low students.
8. Students with special needs should be taught something useful and easily comprehended.
9. The term "special education" or "disadvantaged" should be avoided due to the negative connotations of such labels.
10. Teachers need to get together and share ideas and techniques on dealing with classes that consist of students with varying academic levels.
11. Teachers should be aware of what students need and what is available from other teachers in the school so efforts can be coordinated.
12. Communication with special needs students is the best form of individualized instruction.
13. Students should be grouped--no way a class of students with varying academic levels can progress at the same rate.

Project: The Development and Implementation of Pre-service and In-service Occupational Teacher Education Programs Designed to Meet Certification and Baccalaureate Degree Requirements

Student Population: Disadvantaged and Handicapped Students

Type of Student Program: Enrolled in occupational programs; not stated whether special programs or mainstreamed

Project Objective: To identify and validate across-the-board occupational teacher competencies, and provide an effective teacher education program

Method of Competency Identification: Using Cotrell's 384 competencies as a starting point, 137 competencies were identified as being needed by occupational teachers working with the disadvantaged and handicapped. The list was revised based on feedback from students in the Occupational Teacher Education Program.

Purpose of Competency Identification: To serve as a basis for development of training programs (preservice and inservice) to prepare occupational teachers to work with the disadvantaged and handicapped.

Bibliographic Citation: Daniel E. Vogler and Gregory Patton. The Development and Implementation of Pre-service and In-service Occupational Teacher Education Programs Designed to Meet Certification and Baccalaureate Degree Requirements. Ann Arbor, MI: University of Michigan, School of Education, 1974.
ED 099 567

Partial Competency List:

137 total competencies

- Write a lesson plan.
- Determine student needs and goals.
- Formulate essay test items.
- Demonstrate a manipulative skill.
- Employ reward techniques.
- Formulate a system of grading consistent with school policy.
- Express a philosophy relevant to the basic goals of the teaching profession.
- Evaluate the student vocational organization.
- Present information with filmstrips.
- Illustrate with models and real objects.
- Examine own feelings about people who differ from oneself (in social class...in race...in background).
- Examine interpretations of situations from differences (in background...in subculture).
- Demonstrate an understanding of what it is like to live in the inner city.
- Demonstrate respect for students as individuals.
- Consult local sources to obtain information on employment prospects for graduates of inner city occupational programs.
- Identify personal habits of individual students.
- Identify personal attitudes of individual students.
- Obtain information regarding student's environments.
- Identify the services rendered by metropolitan area public service agencies.

Project: Empirical Role Definition of Local Special Needs Personnel in Vocational Education

Student Population: Handicapped and/or Disadvantaged Students

Type of Student Program: Enrolled in vocational education; separate special classes (?)

Project Objective: To lay the groundwork for inservice training for persons who, at the level of the local educational agency, are responsible for programs of vocational education for handicapped and disadvantaged students.

Method of Competency Identification: An expert jury of nine people (professionals in the fields of vocational education and special education) submitted written lists of proposed competencies. Staff reduced the list to 135 unduplicated competencies, in standardized format. Expert jury convened for one day to refine (delete, merge, add, edit) statements; reduced to 65 statements. This list was mailed to jury members for review; two members were dissatisfied. Expert jury convened for half day to further refine statements; reduced to 44 statements.

Second Stage: Importance of competencies on the job was rated by 33 incumbent coordinators ("not needed"; "useful"; "important"; "essential"...to the conduct of the job). Received 100% returns, with most competencies rated important or essential. (Ratings varied partly because of differing job descriptions for same role.)

Purpose of Competency Identification: Recommended using the competencies to develop an individualized, modular, competency-based program for coordinators of special needs.

Bibliographic Citation: Richard Weatherman and Gordon Krantz. Coordinators of Special Needs Programs: Forty-four Competencies. St. Paul, MN: University of Minnesota, Division of Educational Administration, 1976. ED 130 478

Partial Competency List:

44 total competencies

2. Maintain a current knowledge of research, trends, and new developments in special needs programming.
4. Provide and/or secure inservice training regarding special needs, for special needs and regular vocational staff.
5. Lead a multidisciplinary team meeting regarding a student with special needs.
9. Design a system for vocational evaluation of students, using real or simulated work as a medium.
10. Assist vocational instructors to modify their programs to meet the needs of handicapped and disadvantaged students.
11. Develop an individualized prescriptive program plan with an individual student who has special needs.
13. Effectively organize and use advisory committees.
17. Assist students with special needs to solve problems in interpersonal relations with peers, teachers and family.
21. Select and acquire instructional materials that are appropriate for use by students with special needs.
22. Design and implement a process that will identify students who may have special needs, and will determine their eligibility for special needs services.
25. Make a determination of the nature of a student's needs and potentials, using referral information, interview, and measuring instruments for assessment of the student's vocational interests, aptitudes and potentials, and learning characteristics.
27. Plan specific modifications in vocational curriculum and methods to make them appropriate for students with special needs.
33. Design and conduct a follow-up study of students with special needs.
35. Design a student evaluation that will indicate student progress in a vocational program.
43. Provide remedial and developmental instruction in basic skills, such as reading and math, to students with special needs.

Project: Development and Implementation of Program Models for Assisting Vocational Teachers in Dealing with the Educationally Disadvantaged, Handicapped, and Minorities

Student Population: Handicapped, Minorities, Educationally Disadvantaged

Type of Student Program: Enrolled (mainstreamed) in vocational education

Project Objective: To develop and evaluate pre- and inservice models for the delivery of informational services to vocational teachers of special needs youth.

Method of Competency Identification: Relied on existing delivery systems, and adapted from these (1) a two-day workshop, and (2) resource packets. Competencies needed are implicit in the workshop objectives.

Four two-day workshops were conducted for a total of 120 teachers in Nebraska. Evaluation was accomplished through a pre/post-test using a "Special Vocational Needs Attitude Scale."

Purpose of Competency Identification: See project objective above.

Bibliographic Citation: Gary D. Meers. Development and Implementation of Program Models for Assisting Vocational Teachers in Dealing with the Educationally Disadvantaged, Handicapped, and Minorities. Final Report. Lincoln, NE: University of Nebraska, 1977. ED 145 173

Implied Competency List:

Upon completion of the workshop, you will be able to:

1. Describe the basis for special vocational needs programs.
2. Be more sensitive to the needs and feelings of people.
3. Be aware of the differences among and between students.
4. Describe the rationale behind programming students into least restrictive environments.
5. Be aware of the effects of disadvantages and/or handicaps on human development.
6. Utilize community resources in the education process of special vocational needs students.

Project: Curriculum Research and Design for a Vocational Special Services Education Staff Development Program in New Hampshire.

Student Population: Non-successful Students (handicapped and disadvantaged)

Type of Student Program: Enrolled in vocational program; mainstreamed

Project Objective: To identify the competencies required by the vocational education teacher/administrator to adequately provide occupational preparation to handicapped and disadvantaged students within the mainstream of a vocational education program.

Method of Competency Identification: A literature search was conducted (Kemp, 1966; Kruppa, 1973; Mackie, 1957) and a list of "information areas" was derived. An instrument containing these information areas was developed and sent to 400 special education and vocational education teachers, administrators, and support personnel. Each area was to be rated as to the respondent's degree of knowledge and the area's degree of importance. A total of 172 completed instruments were received. The data clearly indicated that these persons needed additional preparation to be effective.

The conclusion of the study provided a list of 25 competencies deemed important for vocational teachers/administrators to adequately serve the non-successful student found in the regular classroom situation.

The competencies were compared to those on the Cotrell list of 384. None of the 25 were mentioned on the Cotrell list or they were mentioned only in reference to the general populace.

Kemp, The Youth We Haven't Served, 1966: 9 competencies for vocational teachers to successfully teach special education students; e.g., "an interest in working with these students"; "skill in helping students build better self-concepts"

Kruppa, Preparing Teachers of Industrial Education for Disadvantaged and Handicapped Children at the Secondary Level, 1973: 11 competency areas for teacher of exceptional child, e.g., "understand the types of natures of exceptionalities among children and youth and their educational relevance"

Mackie, Teachers of Children Who Are Mentally Retarded, 1957: 4 competency areas for teachers of mentally retarded; e.g., "understanding the characteristics of the mentally retarded child and his place in society"

Purpose of Competency Identification: Competencies could be used to form basis for improving preparation of vocational teachers and administrators. Course/curriculum outline would include preparation in the following areas: identification and evaluation of non-successful students; issues today in special/vocational education; vocational course planning for non-successful student; clinical teaching experiences; concepts in vocational education for students with special needs.

Bibliographic Citation: Robert E. Wenig (Project Director). Curriculum Research and Design for a Vocational Special Services Education Staff Development Program in New Hampshire. Final Report. Keene, NH: Keene State College, 1975. ED 128 641

Complete Competency List:

25 total competencies

The teacher-in-training will become knowledgeable concerning--

1. Physical characteristics of handicapped students including (a) EMR, (b) hearing impaired, (c) visually impaired, (d) orthopedically handicapped, (e) emotionally/disturbed, (f) disadvantaged.
2. Approaches to teaching the handicapped.
3. How to teach non-readers.
4. Individualizing instruction.
5. Effective methods of communication with non-successful students.
6. Special problems concerning non-successful students.
7. Methods and techniques of motivating non-successful students.
8. Employment possibilities for the non-successful student.
9. Establishing appropriate learning situations for non-successful students.
10. Resources available to the teacher.
11. Methods and techniques of counseling non-successful students.
12. Personal, social, academic competencies of the non-successful student.
13. Psychological barriers to non-successful students.
14. Special support services and resource personnel within school districts.
15. State regulation, procedures and funds available for the education of non-successful students.
16. Factors contributing to low academic achievement.
17. Use of audio-visual aids in teaching non-successful students.
18. Methods of communication with the deaf.
19. Classroom management procedures for non-successful students.
20. Instructional sequencing of occupational skills based on job task analysis.
21. Preparing audio-visual media to aid in teaching non-successful students.
22. Locating and utilizing research and supplementary materials for non-successful students.
23. Mainstream education.
24. Cultural/sociological influence on non-successful students.
25. Entry and exit level skills in developing career ladders.

Project: Identification of Professional Competencies Necessary for Teachers of Disadvantaged and Handicapped Youth

Student Population: Disadvantaged and Handicapped Students

Type of Student Program: Enrolled in OWA, OWE, and Special Needs programs

Project Objective: To identify the competencies necessary for vocational teachers who serve Ohio's special needs students.

Method of Competency Identification: Phase I: The competencies were developed by project coordinator with the assistance of two consultant committees. Committee One was comprised of 15 teachers (5 OWA, 5 OWE, and 5 Special Needs). This committee met nine times to identify competencies in specific areas. Committee Two was comprised of six persons (state staff supervisors and university teacher educators). This committee met four times to review competencies and suggest changes.

Phase II: Both committees met to finalize the list. The list was then sent--in instrument form--to all teachers of Ohio's OWA, OWE, and Special Needs programs to be rated concerning (1) perceived need for each skill, and (2) frequency of use. The results were sent to members of both committees for review.

Phase III: A two-day workshop was held for teacher educators and state supervisors to plan teacher preparation programs.

Purpose of Competency Identification: To introduce project results to teacher educators for eventual incorporation into preservice and inservice teacher education programs (CBVTE).

Bibliographic Citation: Leonard Albright (Project Director). Identification of Professional Competencies Necessary for Teachers of Disadvantaged and Handicapped Youth. Final Report. Kent, OH: Kent State University, Department of Vocational Education, 1975. ED 126 309; ED 126 310

Partial Competency List:

112 total competencies in six categories

PROGRAM MANAGEMENT

- 3. Research current trends in business and industry.
- 10. Identify learning disabilities.
- 15. Identify resource people.

CURRICULUM

- 38. Administer appropriate diagnostic tests.
- 44. Organize a weekly plan of instruction.
- 46. Locate instructional materials.

CLASSROOM MANAGEMENT

- 50. Give a lecture.
- 55. Develop a system of material storage.
- 59. Chart student progress.

COORDINATION

- 74. Identify entry level jobs in the community.
- 81. Develop public relations literature.

REMIEDIATION

- 88. Identify emotional factors which contribute to reading difficulties.
- 94. Assess student comprehension of math concepts.

COUNSELING

- 104. Identify symptoms of drug abuse.
- 106. Develop value clarification strategies.
- 108. Inform students of scholarships and grants available.

Project: Identification of Problems and Competencies Needed by Vocational and Technical Education Personnel Teaching Persons with Special Needs in Virginia

Student Population: Disadvantaged and Handicapped Students

Type of Student Program: Enrolled in vocational classes: self-contained, or regular/mixed

Project Objective: To determine and examine the problems, necessary competencies, and inservice needs of those currently teaching disadvantaged and handicapped students in vocational/technical schools and programs.

Method of Competency Identification: A literature search was conducted and a survey instrument was designed to solicit information from vocational/technical teachers, administrators, and counselors on (1) problems encountered in teaching disadvantaged and/or handicapped students; (2) competencies needed by vocational education personnel; and (3) most effective teaching strategies, resources, and curriculum materials. Sixteen competencies were listed to be rated as to importance.

Respondents were 107 graduate students (EPDA awardees) at VPI (29% had master's; 61% taught agriculture, home economics, or business; 63% had 2-5 years of experience teaching disadvantaged/handicapped).

Of the 16 competencies, 13 were rated very important and 3 were rated important.

Purpose of Competency Identification: To serve as a basis for the development of a competency-based instructional system for training vocational teachers in the skills necessary for dealing with the disadvantaged and handicapped.

Bibliographic Citation: N. Alan Sheppard. Identification of Problems and Competencies Needed by Vocational and Technical Education Personnel Teaching Persons with Special Needs in Virginia. Blacksburg, VA: Virginia Polytechnic Institute and State University, 1975. ED 112 094

Complete Competency List:

16 total competencies

1. Possess knowledge of the characteristics of the disadvantaged and handicapped students.
2. Identify and utilize techniques of diagnosing learning problems and needs of disadvantaged and handicapped students.
3. Identify and manage students with mental and emotional disorders.
4. Utilize guidance and counseling practices appropriate for working with disadvantaged and handicapped students.
5. Possess an interest in and enthusiasm for working with disadvantaged and handicapped students.
6. Identify and utilize appropriate teaching methods especially successful with disadvantaged and handicapped students.
7. Identify, evaluate, and utilize instructional materials appropriate for disadvantaged and/or handicapped students.
8. Plan occupational experience programs and/or laboratory experiences for disadvantaged and/or handicapped students.
9. Develop academic skills through vocational programs.
10. Identify and secure the cooperation of other agencies concerned with the welfare of the disadvantaged and/or handicapped students.
11. Identify health problems of the disadvantaged and/or handicapped students and refer students to the appropriate persons.
12. Evaluate academic and vocational development (progress) of the disadvantaged and/or handicapped students.
13. Manage discipline problems that may develop in working with disadvantaged and/or handicapped students.
14. Possess the "know-how" in coordinating and utilizing community resources and services.
15. Know how to relate to people--regardless of socio-economic level, race, color, or sex.
16. Have practical experience via internships, externships, and student teaching or the like in preparation for teaching the disadvantaged/handicapped.

Project: Professional Development Program for Vocational Educators of Handicapped Students

Student Population: Educable Mentally Retarded (EMR)

Type of Student Program: Enrolled in diversified occupational programs (prevocational, career exploration)

Project Objective: To create a training program specifically geared to preservice and inservice preparation of teachers in vocational and practical arts education for the handicapped.

Method of Competency Identification: Through a Delphi Query instrument sent to all area vocational center directors, department chairpersons, and diversified occupations instructors in Vermont, 20 items were identified. In addition, the competencies identified by Donn Brolin (1970), J. Russell Kruppa (1973), Barbara Bateman (1969), and Calvin Cotrell et al. (1971) were used as a basis for the final "Diversified Occupations Teacher Competencies Checklist."

(Feel teachers need a minimum on characteristics of EMR and a maximum on effective methods. This is not supported by most other studies.)

Purpose of Competency Identification: Final "Essential Teaching Competencies List" used as a needs assessment tool and a basis for development of (1) teacher training curriculum, and (2) learning activities packages (LAP's) which are continually modified, revised, and updated.

Bibliographic Citation: Marc M. Hull and William Halloran. Professional Development Program for Vocational Educators of Handicapped Students. Final Report. Montpelier VT: Vermont State Department of Education, Division of Special Education and Pupil Personnel Services; and Burlington, VT: University of Vermont, College of Agriculture, Vocational Education and Technology Department, 1974. ED 100 089

Partial Competency List:

180 total competencies in 9 categories

DESIGNING INSTRUCTION

4. Complete a job analysis of two occupations appropriate for EMR pupils to enter. Use the diversified occupations job analysis format.

DIRECT PURPOSEFUL INSTRUCTION

27. Modify verbal presentations according to language comprehension ability of students.

DEVELOPING INSTRUCTIONAL MATERIALS

6. Develop remedial techniques that will reinforce lesson content for students who need additional help.

EVALUATING INSTRUCTION

20. Construct a performance test.

PROVIDING STUDENT GUIDANCE

1. Present information to students on occupational opportunities; include all occupational clusters offered in diversified occupations lab.

CONDUCTING RESEARCH

5. Use resources--primary, secondary, and people--to solve information retrieval problems.

MANAGING THE CLASSROOM

8. Formulate with students acceptable standards of behavior in diversified occupations classrooms and laboratories.

COMMITMENT TO EDUCATIONAL PROFESSION

5. Acquire new occupational skills needed to keep pace with technological advancement in his teaching field.

MAINTAINING COMMUNITY RELATIONS

2. Speak to school and community groups on the diversified occupations program.

Project: Preparing Teachers of Secondary Level Educable Mentally Retarded:
Proposal for a New Model

Student Population: Educable Mentally Retarded (EMR) Students

Type of Student Program: Special Education

Project Objective: To develop a model for training special class teachers to prepare secondary level EMR students for social and vocational adjustment.

Method of Competency Identification: Step One: Utilizing expertise of personnel at Stout State, an idealized program was hypothesized, with ten competencies as its basis. A literature search was also conducted.

To determine if this proposal was in accord with the needs of the field, a state and national workshop was conducted, with papers on needs of EMR students, and/or teacher competencies needed, presented by eight experts. Also during the conference, the Delphi Technique was used with the 44 participants (also experts) to generate a list of student needs (90) and teacher competencies (113).

A final questionnaire of needs and competencies, clustered into four curriculum areas and refined into 31 items, was developed based on the results of the Delphi. This was sent to all EMR teachers and randomly selected administrators in Wisconsin. Each need was to be rated according to the percentage of emphasis that should be spent on that need during a three-year high school program. Each competency was to be rated according to how important it is, who should perform the activity, and who actually performs it. Results are not included in this report; see Brock, 1975, WI.

Purpose of Competency Identification: The competencies were used as a basis for developing a teacher training curriculum.

Bibliographic Citation: Donn Brolin and Barbara Thomas. Preparing Teachers of Secondary Level Educable Mentally Retarded. Project Report No. 1. Menomonie, WI: Stout State University, 1971. ED 050 500

Partial Competency List:

31 total competencies ("Special Education Study Field Questionnaire")

A. Psycho-Social Curriculum Area

The student must be provided with:

- 1.1 techniques of expressing socially acceptable behavior
- 1.2 necessary reinforcement for the development of adequate self-confidence, self-awareness, and self-concept
- 1.8 professional assistance in developing responsibility to himself and others

B. Activities of Daily Living Curriculum Area

The student must be provided with:

- 2.1 instruction in methods of home management (e.g., cooking, purchasing and budgeting, clothing construction, etc.)
- 2.9 opportunities to become aware of his responsibilities to himself and others

C. Academic Curriculum Area

The student must be provided with:

- 3.1 an ongoing evaluation of academic abilities and limitations (e.g., through observation, testing, etc.)
- 3.2 academic skill instruction related to present and future vocational and social adjustment

D. Occupational Information & Preparation Curriculum Area

The student must be provided with:

- 4.1 vocational evaluation (e.g., interest and aptitude tests, job samples, work tasks, situational assessments, on-the-job evaluations)
- 4.2 instruction and training for work adjustment (e.g., work habits, interest, motivation, interpersonal relations, ability to follow directions, etc.)

Paper: "Secondary Pupil Needs and Teacher Competencies" by consultant
Dr. Gary M. Clark, University of Kansas

Student Population: * Educable Mentally Retarded (EMR) Students

Type of Student Program: Special Education (with training for social and
vocational adjustment)

Project Objective: N/A

Method of Competency Identification: Inferred from job descriptions.

Purpose of Competency Identification: Input into project cited below.

Bibliographic Citation: Donn Brolin and Barbara Thomas. Preparing Teachers
of Secondary Level Educable Mentally Retarded. Project Report No. 1.
Menomonie, WI: Stout State University, 1971. ED 050 500

Complete Competency List:

12 total competencies

1. Screening, evaluating, and approving all referrals to the program.
2. Planning and implementing secondary curriculum.
3. Teaching and coordinating all instructional activities.
4. Evaluating occupational readiness.
5. Correlating classroom experience with work experience.
6. Planning and securing on-the-job training situations.
7. Supervising on-the-job training situations.
8. Counseling pupils and parents on social, personal, and vocational problems.
9. Securing or assisting in securing job placements.
10. Serving as liaison person between the school and the state vocational agency.
11. Maintaining school and work evaluation records.
12. Interpreting the work-study program to school personnel and the community.

Paper: "Needs of the Secondary EMR Pupil and Competencies Required of the Teacher" by consultant Dr. Jack Dinger, Slippery Rock State College

Student Population: Educable Mentally Retarded (EMR) Students

Type of Student Program: Special Education (with training for social and vocational adjustment)

Project Objective: N/A

Method of Competency Identification: Based on competency studies conducted by Romaine Mackie and Dr. Lloyd Dunn using a national survey in the 1940's.

Purpose of Competency Identification: Input into project cited below.

Bibliographic Citation: Donn Brolin and Barbara Thomas. Preparing Teachers of Secondary Level Educable Mentally Retarded. Project Report No. 1. Menomonie, WI: Stout State University, 1971. ED 050 500

Partial Competency List:

41 total competencies

*Care about doing a superior job in preparing EMR for adulthood.

1. The ability to communicate (written, verbal).
2. The ability to work on a team (diplomacy, leadership, idea sharing).
3. The ability to individually apply individual prescriptions to all pupils in the class.
4. The ability to use an aide (select, utilize, supervise).
5. A working background in the semi-skilled and unskilled positions of the community which will permit him to present a valid pre-vocational training experience for his students.
8. Knowledge of the global and specific goals of education for EMR and the various routes to reach them.
10. The ability to observe and record behavior (significance of messages transmitted by student behavior, speech, mannerisms, gesture).
11. The ability to change a child's interpersonal and academic behavior (operant conditioning, contingency management, etc.).
16. The ability to advise and counsel students relative to personal and occupational goals (build rapport, problem solving).
21. The ability to conduct a quality, comprehensive public relations program.
29. The ability to understand, empathize with, and cope with the cultural deprivation and ethnic differences which many of these pupils come from (different attitudes, vocabulary, and values; attitudes toward work, aspirations, and general motivation to succeed).
31. The ability to use an advisory panel composed of peers, parents, publics, consumers of our product, administration, etc.
32. The ability to fight lethargy, defeat any obstacles placed in the path of progress (drive, perseverance).

Paper: "Needs for Teachers of Secondary Educable Mentally Retarded Students" by consultant Dr. Rex Pinegar, Brigham Young University

Student Population: Educable Mentally Retarded (EMR) Students

Type of Student Program: Special Education (with training for social and vocational adjustment)

Project Objective: N/A

Method of Competency Identification: Based on author's expertise and experience.

Purpose of Competency Identification: Input into project cited below.

Bibliographic Citation: Donn Brolin and Barbara Thomas. Preparing Teachers of Secondary Level Educable Mentally Retarded. Project Report No. 1. Menomonie, WI: Stout State University, 1971. ED 050 500

Complete Competency List:

4 total "competencies"

The secondary teacher of EMR children needs:

1. An awareness of and experience with the broad spectrum of education; he needs to be able to see the relationship between pre-school, elementary, intermediate, and secondary educational programming for the development of appropriate and meaningful educational experiences for the mentally retarded.
2. Exposure to and experience with educational programs in clinical settings as well as in public school or private school situations.
3. Experience with and exposure to occupational resources within the community and the immediately surrounding area.
4. An extended practicum to include work with the retarded at all levels of educational and intellectual functioning.

Program: University of Wisconsin--Stout Career Special Education

Student Population: Educable Mentally Retarded (EMR) Students

Type of Student Program: Enrolled in special classes

Program Objective: To provide teacher training for the secondary level career special educator of EMR students.

Method of Competency Identification: A list of 31 skills needed were projected by "expert" opinion (teacher educators, SDE leaders, educational researchers), and compiled into a questionnaire. The questionnaire was mailed to all 251 EMR teachers and 31 randomly selected supervisors in Wisconsin for "validation"--evaluation of each competency in terms of its ability to meet the needs of secondary EMR students. Seventy-three percent (205) responded. The competencies were then clustered into four areas: academic, psychosocial, occupational information and preparation, and daily living. It was found that five of the seven competencies considered "very important" were in the occupational information and preparation cluster.

In attempting to develop curriculum based on these competencies ("work adjustment"; "job seeking"; "personal care"; "reinforcement for self-confidence"; "reports to agencies"), however, it was discovered that "alas" the competencies were not instructional competencies; in fact, were not competencies at all. Instead, they were "vague generalities difficult or impossible to translate into educational outcomes."

Based on research, professional experience of staff, and gut feeling, staff developed a role description of what an idealized person should be able to do upon completion of teacher training program. The role description was analyzed for competencies; yielded 18. Each competency was translated into one or more performance criteria describing behavior (knowledge or skills) teachers-in-training are expected to complete successfully during program. A program was developed based on the competencies. Staff feel that the competencies need to be continuously refined and updated.

As of this report, the program had operated for two years with 20 graduates, 100% placement record. Response from employers of the teachers had been extraordinarily positive.

Purpose of Competency Identification: It was felt that EMR students have been tracked into academic avenues, although this may not be appropriate. It may be more appropriate for these students to have vocational, career, and life-function preparation. The competency identification/verification study sought to substantiate this need. In addition, the final competencies were to serve as a basis for curriculum development for the teacher training program.

Bibliographic Citation: Robert J. Brock (Program Director). Vocational Education for the Handicapped: A Competency Based Program. Monomonic, WI: University of Wisconsin-Stout, 1975. ED 142 005

Partial Competency List:

18 total competencies

1. Develop a career-oriented special education program compatible with school procedures and regulations and obtain administrative approval of the program.
2. Select students for a Vocational Education for the Handicapped (VEH) project, including initial screening of the total school district population and follow-up evaluation resulting in selection of students to be served.
6. Analyze students' occupational aptitudes, occupational liabilities, academic strengths and weaknesses, personal ambitions, and occupational expectancies.
7. Analyze the local job market, economic factors in the community, job security and working conditions in several different job settings, community attitudes, and services of community support (economic, personal, recreational).
10. Develop, utilize, and evaluate job samples designed to teach specific occupational skills.
11. Develop and utilize mock job application and interview procedures and evaluate student performance in these simulated conditions.
13. Identify, establish, and maintain part-time work placements for students in school and local community.
15. Supervise students in on-the-job placements and design school programs to support the controlled work placement.
16. Develop, implement, and evaluate post-school follow-up procedures designed to provide guidance to students for a period of up to three years following graduation.

Project: Vocational Teacher - EMR Project

Student Population: Educable Mentally Retarded (EMR) Students

Type of Student Program: Enrolled in vocational classes; mainstreamed

Project Objective: To determine the teacher competencies needed in order to develop valid and effective occupational learning experiences for EMR students based on available diagnostic test data and information.

Method of Competency Identification: Action research design: six four-member teams were selected, one from each participating school (four secondary, two postsecondary). Each team was comprised of one special educator, one vocational instructor, one AV specialist, and one counselor, vocational director, or special educator. Three workshops were held for these people. In the first workshop, the activities were designed to determine what competencies these people had and what additional competencies they needed (information used in planning the subsequent workshops). Each team identified problems in modifying instructional materials, teaching strategies, and classroom procedures. The team then designed solutions which, following the workshop, were implemented and evaluated by the vocational teacher on the team. In subsequent workshops, new techniques were presented and later applied on the job. This action research is one way in which the competency list was developed and refined.

In addition, a competency list was developed based on the literature and submitted to workshop participants on a pre/post basis. They responded to each item relative to their need for that competency, and their present ability in that area. Participants had the opportunity to add items if needed.

Finally, staff visited participants on the job to observe and assist.

Through these three interrelated activities, the final competency list was developed.

Purpose of Competency Identification: Development of a two-week workshop agenda designed to provide the basic competencies needed. The workshop is competency-based, individually paced, and covers competencies in the following areas: job identification, task analysis and detailing, development of concrete learning experiences, need for emphasis on students not content, and classroom management.

Bibliographic Citation: Orville Nelson et al. An Investigation of the Teacher Competencies Needed to Utilize Diagnostic Test Data in Prescribing Occupational Learning Experiences in Teaching EMRs. Final Report. Menomonie, WI: University of Wisconsin-Stout; Center for Vocational, Technical, and Adult Education, 1976. ED 137 534

Partial Competency List:

94 total competencies

1. Conduct a task analysis of a job.
2. Utilize behavior modification techniques in developing desired behavior.
4. Ease the transition from school to work through instruction of job getting and job keeping skills.
6. Utilize a competency-based evaluation system rather than the A-B-C-D-F grading system.
7. Simplify instructional units into small learning steps with constant use of repetition and over-learning.
16. Understand the job requirements (motor and social skills) in those occupations applicable to the EMR.
20. Minimize lecturing and maximize learning by doing.
28. Develop instructional units revolving around job-specific concepts and skills rather than general concepts and skills (mini-courses, packages).
36. Develop more positive attitude toward working with EMRs.
45. Accept individual differences of EMRs.
48. Develop an awareness of how to recognize students with problems in the regular class (EMR, learning disabled, etc.).
50. Develop positive attitudes toward working on a team.
62. Develop alternatives to reading instruction.
66. Conduct follow-up contacts with EMRs after graduation.
68. Conduct flexible learning experience (be able to quickly adjust to student needs).
70. Relate classroom instruction to life.

Program: Program Modification and Prescriptive Teaching for Handicapped Students

Student Population: Handicapped Students (see below)

Type of Student Program: Enrolled in vocational classes

Project Objective: To develop a course on serving the handicapped to meet the specific needs of the vocational teachers enrolled in the course.

Method of Competency Identification: Worked with administrators and teacher inservice committees in Wisconsin's Vocational, Technical, and Adult Education (VTAE) districts to determine "competencies" needed.

Inservice instruction offered by the Wisconsin Vocational Studies Center in seven content areas, and ten disability areas:

- physical disability
- mental disability
- hearing impairment
- visual impairment
- emotional disturbance
- learning disability
- drug/alcohol dependency
- speech disability
- ex-offenders
- language/cultural disability
- multiple disabilities

Purpose of Competency Identification: See project objective above.

Bibliographic Citation: Lloyd Tindall and John J. Gugerty. "Building Vocational Education for the Handicapped." Paper presented at Central States AERA, Columbus, 1977. ED 141 635

Implied Competency List:

Training Content Areas:

Awareness of needs, characteristics, and capabilities

Evaluation: strategy, techniques, utilization

Adaptation of classroom and building facilities

Modifying curricula appropriately

Specialized teaching techniques

Job placement strategies

Role of other agencies in serving people with handicaps

Project: National Curriculum Development Project for Vocational Education of Disadvantaged and Handicapped Students

Student Population: Disadvantaged and Handicapped Students

Type of Student Program: Enrolled in special vocational classes

Project Objective: To train a nucleus of vocational educators in performance-based curriculum preparation and modification of instructional material to enable disadvantaged and handicapped students to achieve success in career preparation programs.

Method of Competency Identification: A one-week workshop was planned and conducted by staffs of the seven Area Manpower Institutes for the Development of Staff (AMIDS). This was piloted with over 1200 vocational educators across the country, and revisions were then made. Implicit in the workshop objectives (six) are the teacher competencies needed. It is not stated how the competencies covered in the workshop were derived or selected.

Purpose of Competency Identification: N/A

Bibliographic Citation: National Curriculum Development Project for Vocational Education of Disadvantaged and Handicapped Students. Final Report. Montgomery, AL: Link Enterprises, Inc., 1973. ED 086 815

Implied Competency List:

Overall goal: Individualize instruction.

Workshop objectives:

1. **Recognize special needs, desires, and limitations of disadvantaged or handicapped students.**
2. **Tailor instruction to the particular learning style of the individual student.**
3. **Determine relevant, realistic curriculum content based on job requirements.**
4. **State learning objectives in specific, performance-oriented terms.**
5. **Design and construct modules of instruction--learning packages--which facilitate the achievement of success by the disadvantaged or handicapped student.**
6. **Evaluate and modify learning materials.**

Project: Several projects; see bibliographic citations below

Student Population: Special Needs Students (Handicapped, Disadvantaged)

Type of Student Program: Enrolled in vocational programs

Project Objective: N/A

Method of Competency Identification: ② A literature search was conducted (Cotrell, Brock, Phelps, Albright, Kruppa, Schoonmaker & Girard). From the literature was synthesized a list of 49 major professional tasks essential to providing vocational programming for special needs populations, clustered into 4 categories. The list was made into a three-page instrument with three criterion questions to be answered for each competency: how critical is the task; to what extent do you want to know more about the task; how much time do you spend on the task. A national workshop was held, sponsored by the Universities of Illinois and Kansas and involving ten other universities. Workshop participants completed the instrument (N = 54). There was unfortunately a large difference between the importance ratings of teacher educators and those of experienced vocational teachers.

③ Based on previous research by Phelps et al., seven modules covering 24 professional tasks were developed. The list of 24 tasks also serves as a self-directed needs assessment device.

Purpose of Competency Identification: To serve as a basis for module development and development of teacher training programs.

Bibliographic Citation: L. Allen Phelps. ① "Competency-Based Inservice Education for Secondary School Personnel Serving Special Needs Students in Vocational Education: A Formative Field Test Evaluation." Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign, 1976. 77-09144
 ② Vocational Education for Special Needs Students: Competencies and Models for Personnel Preparation. Final Report. Urbana, IL: University of Illinois, Bureau of Educational Research, 1976. ED 132 303 ③ Instructional Development for Special Needs Learners: An Inservice Resource Guide. Urbana, IL: University of Illinois at Urbana-Champaign, Department of Vocational and Technical Education, 1977. ED 133 940

Partial Competency List:

- ② 49 total competencies in 4 categories, "Professional Task Analysis Questionnaire"

ASSESSING PROGRAM AND LEARNER NEEDS

- 1.05 Develop and use screening-referral processes for identification of students.

PLANNING INSTRUCTION

- 2.09 Plan a sequence of modules or units of instruction according to the learner's need.

IMPLEMENTING INSTRUCTION

- 3.06 Organize and use a "buddy system" for special needs learners.

EVALUATING PROGRAM AND INSTRUCTION

- 4.01 Develop instruments and procedures appropriate for assessing the achievement of special needs learners.

- ③ 24 total competencies in 16 clusters in seven modules

- Module One: Learner Identification and Analysis
Two: Cooperative Instructional Arrangements
Three: Instructional Resources
Four: Cluster and Content Analysis
Five: Instructional Planning
Six: Instructional Implementation
Seven: Evaluation of Learner Progress

Sample competencies:

6. Formalize a cooperative team teaching plan for serving special needs learners.
7. Identify a variety of community and governmental agency resources in planning instructional programs and services.
12. Plan a sequence of modules or units of instruction according to the learner's needs.
18. Evaluate and select instructional materials appropriate for special needs learners.
20. Manage and modify when necessary the tools, equipment, facilities, materials, and conditions in the learning environment.

Project: Improving Vocational Education Services for Handicapped Students

Student Population: Handicapped Students

Type of Student Program: Enrolled (mainstreamed) in regular vocational classes

Project Objective: To develop a comprehensive set of instructional materials for vocational teachers with handicapped students in their regular classes.

Method of Competency Identification: Content of resulting seven modules was established cooperatively with an advisory panel of six experts (local, state, regional, and university representation). A literature search was also conducted.

Purpose of Competency Identification: See project objective above.

Bibliographic Citation: Robert A. Weisgarber and Claudette A. Smith. Improving Vocational Education Services for Handicapped Students. Final Report. Palo Alto, CA: American Institutes for Research in the Behavioral Sciences, 1977. ED 142 774

Partial Competency List:

Module A: Developing a General Understanding

Knowledge of: rights and entitlements of the handicapped
capabilities and characteristics of handicapped persons
training the handicapped for competitive employment
shaping the training environment
evaluation of instructional outcomes
available resources, agencies, and service groups

Module B: Developing a Positive Attitude

Understanding attitudes and how they are formed; how attitudes can affect success in teaching the handicapped

Module C1: Serving the Orthopedically Handicapped

Module C2: Serving the Visually Impaired

Module C3: Serving the Mentally Retarded

Module C4: Serving the Communication Impaired

Module D: Developing a Plan of Action