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ABSTRACT

A study undertaken to aid administrators in considering program alternatives for administering Occupational Work Adjustment (OWA) and Occupational Work Experience (OWE) programs in Ohio examined the Ohio Department of Education's certification of OWA and OWE teachers in light of the state's new minimum standards for elementary and secondary schools. The study entailed the following data collection procedures: a literature review, a telephone survey of administrators in 19 States, surveys and small-group interviews with 56 OWA and OWE coordinators throughout Ohio, and analysis of followup data on OWA and OWE program completers. Data from these sources indicated that the current OWE and OWA programs must reexamine and modify their program-scheduling and teacher certification practices if they are to meet the new standards. In the future, programs should be approved as educational options at the local level, reduce time requirements for related classwork, and implement a new teacher education option for certifying teacher coordinators to teach basic academic courses for credit. (This report includes 19 tables, the student characteristics and teaching method survey instruments, the telephone survey interview schedule, and a ranking of teaching competencies.) (MN)

PREPARING OHIO'S YOUTH THROUGH OCCUPATIONAL WORK ADJUSTMENT AND OCCUPATIONAL WORK EXPERIENCE PROGRAMS: PROSPECTS FOR THE FUTURE

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FOREWORD

The Department of Educational Policy and Leadership in the College of Education at The Ohio State University is committed to research and programmatic excellence in the field of vocational and technical education. This report has been developed to aid administrators in considering program alternatives for administering Occupational Work Adjustment (OWA) and Occupational Work Experience (OWE) programs in Ohio. The study focused on questions concerning the Ohio Department of Education's certification of OWA and OWE teachers in light of the new Elementary and Secondary Schools Minimum Standards.

The Department of Educational Policy and Leadership wishes to express its appreciation to those vocational education teachers and administrators listed in Appendix A who served in an advisory capacity on this project. We also wish to thank those who assisted by consulting on the project -- James H. Casey, Department of Educational Policy and Leadership; Thomas E. Hyde, Jack L. Lenz, and James E. Price, Division of Vocational Education, The Ohio Department of Education.

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EXECUTIVE SUMMARY

Of the seventeen states that support some form of work experience programs for disadvantaged youth 14 years of age and older, Ohio clearly maintains the most extensive educational options. Follow-up studies indicate a high degree of success in motivating the youth in these programs to either re-enter regular academic programs or persist in vocational education programs until high school graduation.

Effective September 1, 1983, the Ohio Department of Education implemented sweeping new educational standards for elementary and secondary education. Additional standards will become effective September 1, 1987. Current occupational work programs (OWE and OWA) must examine and perhaps modify the way programs are currently scheduled and teachers are currently certified if these standards are to be met.

Recommended changes in the program structure for OWA and OWE programs include approving the programs as "Educational Options" at the local level, reducing the time requirements for "related" classwork, and implementing a new teacher education option for certifying OWA and OWE teacher/coordinators to teach basic academic courses for credit.

Additional findings suggest that the name of the Occupational Work Adjustment (OWA) program be changed to more accurately describe the mission of this unique program, thus reducing the confusion with OWE programs.

INTRODUCTION

Over the past several years there has been increased public attention focused on the quality of schooling in America. This interest has been attributed to a number of national studies and reports which examine the quality of both the process and the product of our public schools. These studies have had a remarkable impact at the state level.

Like most other states, Ohio has been responsive to the public's interest in school reform. A new set of minimum standards for elementary and secondary schools became effective September 1, 1983 (Ohio Department of Education, 1983). These new standards are focused on learner outcomes. In addition, The State Board of Education and the Governor of the State of Ohio proclaimed 1983-84 as the year of educational excellence. Six areas were identified as the focus for excellence. These areas were; administrative leadership, educating the public, public participation in the schools, community involvement, ownership and pride by the taxpayer, and increasing student productivity (U.S. Department of Education, 1983).

Effective September 1, 1987, the total number of units required for high school graduation in Ohio will be increased from 17 to 18. With an increased requirement in math and science, high school graduates will undoubtedly be better prepared for entry into college level programs. However, over 50 percent of those who enter in the school systems in Ohio will choose never to enter a college program. Furthermore, of those who

begin the first grade in Ohio public schools, nearly 30 percent will dropout before completing high school. For those, the dropout prone, it is no longer the level of education, but the kind of education which determines their success.

As a result of this emphasis to upgrade and add more rigor to the standards for high school graduation in Ohio, it is necessary to examine the impact of these changes on several of the exemplary programs administered through the Division of Vocational Education. These are the Occupational Work Adjustment (OWA) and the Occuptional Work Experience (OWE) programs, designed for students with special learning needs.

The Special Need Student

There are a significant number of young people in our nation's schools who are academic underachievers. These are the potential dropouts who have not yet found an interest in learning. These students are accurately characterized as discouraged with their school experience and functioning below grade level, although, they are usually not educably handicapped. These students are capable of learning and with patience may either be directed back into the academic mainstream or into a meaningful vocational education program.

In Ohio, two special types of programs are directed toward the student with special needs and have as a goal the reorientation and motivation of students toward education and the exploration of or preparation for a career through work experience. These are called

occupational work programs. Ohio is a national leader in occupational work programs and has more of these programs than any other state. These programs fall into two categories; the Occupational Work Adjustment programs (OWA), and the Occupational Work Experience programs (OWE).

Occupational Work Adjustment. Occupational Work Adjustment (OWA) programs are designed for 14 and 15 year old students who are potential dropouts. This program is a one to two year ungraded program designed for students who are disinterested in the normal curriculum and are underachievers (Ohio Department of Education, 1982). These students are, however, capable of learning if exposed to relevant and meaningful educational experiences. This program emphasizes remedial instruction and vocational orientation combined with private sector or in-school work experience.

The primary objective of the OWA program is to redirect the 14 or 15 year old student with special learning needs back into a regular academic program when possible or into a regular vocational program where he or she will successfully complete high school.

Occupational Work Experience. Occupational Work Experience (OWE) programs are designed to serve academic underachievers 16 years of age and over who are potential dropouts from high school. Like their younger counterparts in OWA programs, these students may be characterized as disinterested in the regular curriculum and academic underachievers. The OWE student is not necessarily educably handicapped but rather has a lack of interest and/or below grade level achievement in the basic academic skills. Consequently the student has fallen behind and is dropout prone.

The OWE program is designed to develop student motivation through remedial and/or applied academic instruction in basic academic skill areas. Also, to develop through paid work experience the necessary attitudes, skills and abilities that will enable the student to become gainfully employed following high school graduation (Ohio Department of Education 1981).

Purpose of This Study

Because of the state and national focus on educational excellence, this is a particularly appropriate time to examine programs for students with special needs; programs for those whom success has not been possible through the traditional educational process. These programs include the OWA and OWE programs. This study examined the various dimensions of these programs in light of changing education standards and the potential effects of these changes. Specifically, this project examined: the characteristics of OWA and OWE student; the programmatic needs of OWA and OWE students; the critical educational preparation and teaching skills needed by OWA and OWE teachers; and possible alternatives for the preservice and inservice training of OWA and OWE teachers, and the implications for teacher certification.

Procedures of the Study

The study involved the use of several research methods to assist in understanding the nature of the problem and to provide a conceptual framework for making recommendations for the OWA and OWE programs. First, the literature was reviewed to identify research and theoretical literature on programs designed for disadvantaged youth. Second, a telephone survey was conducted with administrators in 19 states across the country that had conducted work experience programs for disadvantaged youth. Third, 56 OWA and OWE coordinators were purposively selected to participate in one of several one-half day conferences where data were collected via surveys and small group discussions. Fourth, existing records including follow-up data, maintained by the Division of Vocational Education, Ohio Department of Education, were analyzed. Data collected through these means were synthesized and used to recommend alternative options for conducting OWA and OWE programs in the future.

The sample of OWA and OWE coordinators who provided information for the study was purposively drawn from all coordinators who either resided in or near Columbus, or in the central and southern regions of Ohio. Representation from urban, suburban and rural vicinities was obtained through the purposive sample. A total of 42 OWA and 14 OWE coordinators provided information for this study through 1 of 3 one-half day conferences held in Columbus Ohio on October 29, 30 or November 5, 1984.

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STUDENT CHARACTERISTICS

The Occupational Work Adjustment (OWA) and Occupational Work Experience (OWE) programs were designed to meet the needs of disadvantaged youth. According to the Vocational Education Amendments of 1976 and the 1977-78 Ohio Plan for Vocational Education, disadvantaged students were identified as "having academic or economic disadvantages and requiring special services, assistance and programs..." Disadvantaged youth lack reading, writing and arithmetic skills and perform below grade level in at least one of these areas. Economically disadvantaged youth reside in a family whose income is at or below the poverty level, whose members are unemployed or underemployed and whose members are receiving public assistance. Furthermore, youth are considered economically disadvantaged when they are institutionalized or placed under state guardianship.

Educators have become increasingly concerned for disadvantaged youth as negative outcomes have become apparent when disadvantaged youth have failed to succeed in public education. Unfortunately, disadvantaged youth have not had the same opportunities for competing successfully in all phases of life as more advantaged youth. Problems for disadvantaged youth have typically begun early in life and have influenced their school performance as an extremely high proportion of disadvantaged youth have dropped out of school. Dropout rates for disadvantaged youth have exceeded 50 percent according to several research reports. Failure to remain in school has hindered opportunities for mobility out of poverty and movement up the social scale.

The impact of youth dropping out of school has created critical problems for society as well. The cost to society for failure to educate all youth has been great. Jones (1977) reported the findings of a select senate committee on equal educational opportunity. The committee estimated in 1972 that the nation would lose 237 billion dollars in potential gross national product during the lifetimes of 25 to 34 year old males who had dropped out of high school. This cost was due, in part, to the high unemployment rate for youth who have dropped out of high school. In 1975, high school dropouts were twice as likely to be unemployed as high school graduates (U.S. Bureau of Census, 1978).

Unemployment was only one cost to society associated with high school dropouts. Underemployment has been a problem for high school dropouts as well. Men and women without high school diplomas have earned only about two-thirds of the salary earned by men and women graduates. This represents a loss in potential income for the individual who has not completed high school and a loss in potential productivity in the American labor force.

Furthermore, high school dropouts have been more likely to participate in crime than high school graduates. High school dropouts were six to ten times more likely to have participated in criminal activities than high school graduates, even though the vast majority of high school dropouts were never involved in crime (Jones, 1977). The cost to society of incarcerating criminals has been extremely high during the 1970's and 1980's.

Overview of Student Characteristics

An extensive amount of research has been conducted to determine the characteristics of students who have been identified as disadvantaged. Alternative educational programs have been designed based on these student characteristics to prevent students from dropping out of high school. Factors which have received attention through previous research and will be discussed briefly here were:

- income
- home environment
- age relative to classmates
- school attendance
- academic performance

Many disadvantaged youth are poor. Families with disadvantaged youth usually live in substandard housing and do not have many books, magazines or newspapers in the home so that youth can practice reading. Due in part to the lack of reading materials, many disadvantaged youth have not been able to read and write as well as other youth at the same age level. Several researchers have reported that disadvantaged youth have had poor vocabulary, poor speech habits, short attention spans and difficulty with higher level thinking when compared with other youth of the same age. Clearly, the poor home environment has created problems for disadvantaged youth in school.

A disproportionate percentage of disadvantaged youth have lived in single parent homes. Clearly, most single parent families have been headed by females who have found financial support of the family difficult. In some cases, youth may have dropped out of school in order

to help support the family. Neill (1979) indicated that youth living with a divorced parent were twice as likely to dropout of high school.

Unfortunately, the family members of disadvantaged youth frequently have not completed high school and youth have sometimes lived in a turbulent home environment. Most of the disadvantaged students who have dropped out of school have had parents or brothers and sisters who have failed to complete school. Obviously, the home environment has not been conducive for learning. Furthermore, rather than positive communication in the home, youth have sometimes experienced communication exchanges of an abusive nature. Disadvantaged youth have tended to experience more physical abuse in the home than their more advantaged counterparts, according to Mouat (1980).

Disadvantaged students were usually older than their classmates because they had failed to be promoted to the next grade level at least once. Being older than classmates or having friends older than classmates were factors which were usually associated with students failing a grade and, subsequently, dropping of high school. Possibly, students dropped out because they could not perform successfully in school or because of association with youth who were not enrolled in their grade in school.

Disadvantaged youth have frequently failed to attend school regularly. In fact, school attendance has been identified as one important factor indicating that a student was prone to dropout of high school. Furthermore, disadvantaged students have been more likely to attend school irregularly or be tardy and, thus, dropout of high school.

Academic performance was typically below grade level in reading and math for disadvantaged students. According to several researchers, poor academic performance has been related to dropping out of high school (Mink and Kaplan, 1970; and Bachman and others, 1973). Disadvantaged students have probably dropped out of school because of learning problems created by the inability to read and write at a comparable level to students of the same age. Certainly, most disadvantaged youth have had adequate intelligence to graduate from high school but, due partly to a deprived home environment, have not been capable of learning at the same pace as other youth.

Most disadvantaged youth had little school involvement beyond the regular school day. This lack of participation in extracurricular school activities was identified as one criterion for the selection of students for work experience and career exploration programs (WECEP) in Ohio, Wisconsin and New York. Possibly, disadvantaged students have not participated in extracurricular school activities to defy school authorities or to demonstratte disinterest in the school. In contrast, possibly disadvantaged students have simply not had the time to participate in activities occurring outside of the regular school day because of other work or family responsibilities.

Another closely related characteristic of disadvantaged youth was the tendency to exhibit behaviors which required discipline by school authorities. Several studies have indicated students who exhibited discipline problems were more likely to dropout of high school. The Oregon State Department of Education found of 100 students who had

dropped out of high school, 26 students reported leaving due to conduct problems. Weisman (1972) found three out of four Illinois students who had dropped out of school had exhibited discipline problems or were juvenile offenders.

Summary

In summary, youth who have grown up in a home environment characterized by too little nutritious food, illness, poor housing, insufficient reading materials, unemployment or underemployment of family members and a lack of educated role models, have had difficulty adjusting to school. Even though many of these youth have possessed the ability to perform adequately in school, most disadvantaged youth have not. Many disadvantaged youth have failed grade levels, attended school irregularly, avoided participating in extracurricular activities and/or performed below grade level in academic subjects. Furthermore, an alarming proportion of disadvantaged youth have dropped out of high school rather than remain in school until graduation. These were the fundamental problems which the OWA and OWE programs were designed to address.

OWA and OWE Student Profile

A survey was conducted with OWA and OWE coordinators to identify the extent that students who have participated in OWA and OWE have exhibited characteristics or a profile which have been shown to contribute to youth dropping out of high school. The survey instrument requested that OWA and OWE coordinators review a list of 25 student characteristics and indicate whether students who have elected to participate in occupational work programs "usually, sometimes or rarely" exhibited the characteristics. The coordinators could select a "don't know" option when they could not provide the information. (Appendix B provides a copy of the Student Characteristic Survey.) A complete list of 25 student characteristics ranked form characteristics identified by OWA and OWE coordinators as "usually" exhibited to "rarely" exhibited is contained in Table 19 in Appendix F.

Overall, OWA and OWE coordinators responded to the student characteristics survey quite similarly (Table 1). Both groups of coordinators indicated that students in OWA and OWE were usually performing poorly in reading classes. In addition, OWA and OWE coordinators indicated students usually lacked personal goals, attended school irregularly and were frequently tardy.

In addition, both OWA and OWE coordinators indicated students sometimes had family income below the poverty level, police records and one or more learning disabilities. OWA and OWE coordinators also indicated students rarely had poor health, physical impairments or were

living in an institution. These survey findings indicate the prevalence of academic problems for OWA and OWE students over other types of problems with economics or health.

There were a few subtle differences in the way OWA and OWE coordinators responded to the student characteristics survey. Almost 80 percent of OWE coordinators indicated students usually avoided participating in extracurricular activities compared to 53 percent of the OWA coordinators. These findings seem to indicate that participating in extracurricular school activities tends to be a greater problem as students grow older and closer to high school graduation. Older students probably were more ambivalent toward school, had increased family responsibilities, were employed and/or had a driver's license enabling them more freedom.

There were other characteristics which differentiated OWA and OWE students, according to the coordinators. While almost 70 percent of OWA coodinators indicated OWA students usually were two years behind grade levels in math, only 50 percent of the OWE coordinators indicated math was usually a problem for OWE students. Clearly, many students in OWA and OWE were experiencing problems with math, yet math performance appeared to be a greater problem for OWA students.

According to the survey findings, there were a few additional characteristics which OWE youth exhibited to a greater degree than OWA students. Over 40 percent of OWE coordinators described students in OWE as usually using mood altering substances and usually older than classmates. All of the OWE coordinators indicated female students in OWE

were sometimes pregnant. Only 19 percent of OWA coordinators indicated students were usually using mood altering substances; and only 38 percent of OWA coordinators indicated OWA students were usually older than classmates. In addition, only 50 percent of OWA coodinators described OWA students as sometimes pregnant. Again, the characteristics of OWE students seem to have indicated that older youth, who have had greater opportunities to be independent from their families, have acquired behaviors which have made success in school difficult. In contrast, OWA student have had difficulty performing in academic classes but have not totally withdrawn from school activities.

Summary

These findings have shown that, in general, the characteristics of students in OWA and OWE were similar. For many of the OWA and OWE students, academic performance was a more serious problem than economic disadvantagement. The difference between OWA and OWE students was primarily due to age and the amount of independence shown by OWE students.

OWE students were less likely to participate in school functions or have friends enrolled in school. In addition, OWE coordinators reported that students in OWE were more likely to have used mood altering substances, slightly more likely to have police records or have experienced pregnancy. These OWE students, probably as a function of being older than OWA students, have experienced more social problems than OWA students. These problems may have increasingly alientated OWE students from schools. In contrast, the problems of OWA students have

primarily been limited to difficulty in math and reading classes and attending school regularly. OWA students have typically had a difficult time succeeding in school, yet have not become completely disinterested in school. Thus, OWA has been viewed by teachers as an "adjustment" program while OWE has been viewed as a terminal education program.

TABLE 1

RANKING OF TOP TWELVE STUDENT CHARACTERISTICS
BY
OWA AND OWE COORDINATORS

Student Characteristics	Ranking by OWA Coordinators	Ranking by OWE Coordinators
Two or more grade levels behind in reading	1	1
Lacks personal goals and/or a sense of purpose	2	1
Irregular school attendance	3	1
Two or more grade levels behind in math	4	12
At least one family member has not completed high school	5	8
Frequent tardiness	6	4
Exhibits behavior problems which require discipline	7	8
Living in a single parent home	8	6
Lacks supervision from family members	9	6
Poor oral communication skills	10	8
Poor handwriting skills	11	8
Rarely participates in extracurricular activities	12	4

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PROGRAM EFFECTIVENESS

Ohio has maintained records of the way students have participated in OWA and has collected some follow-up data on the program. The Ohio Department of Education, Division of Vocational Education, collected evidence from 99 percent of its OWA programs during the 1983-84 school year. These data were compared with similar follow-up data collected during the 1982-83 school year. These data were also compared to follow-up data collected through research efforts conducted on Work Experience and Career Exploration Programs (WECEP) in other states.

The WECEP program is a federally-initiated program designed for 14 and 15 year old youth. The program has an instructional career exploration component and a work component. States have applied for the WECEP program from the Office of Vocational and Adult Education in the federal Department of Education. The federal government provides an exemption under the federal child labor law so that 14 and 15 year olds can obtain work experience from various types of private-sector employers for a maximum of 23 hours per week. The intent of the program is to provide students with work experiences which can help them see the benefit of school. As a result, students should continue in school and improve their school performance. The WECEP program in Ohio is titled the Occupational Work Adjustment program or OWA. The OWE program in Ohio was patterned after WECEP for youth 16 and over, as well.

The follow-up evaluation data on the OWA program show that the program has proven to be successful. OWA has met the goal of placing

students back into regular academic or vocational classes since approximately 90 percent of OWA students were in OWA for only one year and then returned to regular classes. It appeared that OWA was providing students with the skills to continue in regular studies in school rather than continue in OWA or dropout of school.

In addition, the OWA program assisted students to improve attendance, behavior and grades. The follow-up records from OWA revealed that the percentage of failures of students dropped approximately 50 percent from the 1982-83 school year to the 1983-84 school year. Furthermore, the proportion of time students were absent dropped 28 percent from the previous school year. Finally, the number of suspensions of students in OWA declined 12 percent from the previous school year. It appeared as though OWA gave students successes as evidenced through improved grades. This, in turn, may have improved student's attendance in school and may have decreased the amount of disruptive behavior which resulted in suspension.

Related Evidence of Program Effectiveness

A number of studies have examined the effect WECEP has had on grade point average, attendance and classroom behavior. In most cases, research findings have revealed that students who have participated in WECEP have substantially improved their grades, attendance and classroom behavior.

Grade Point Average

Research studies conducted in Minnesota, Wisconsin and North Dakota have revealed very positive results for WECEP. Students who have participated in WECEP in these state have improved their grade point average (GPA). Students who have participated in WECEP have made significant gains in GPA while the GPA of students with similar characteristics, who did not participate in WECEP, stayed the same or dropped. Only a few research studies have indicated there was no gain in GPA for students in WECEP. However, no research reports have revealed negative effects for students who participated in WECEP.

One national research study has had an important influence on WECEP. Stromsdorfer (1973) studied the impact of WECEP on grade point average for 650 WECEP students during the 1971-72 school year. He reported that the program had an important impact on the GPA of students. Stromsdorfer found a positive effect on GPA to be more prevalent for males and students who were employed less than four hours per day and 28 hours per week. Based on these findings, a recommendation was adopted by the federal government to limit the amount of time a child could work, as a part of WECEP, to three hours per day.

Attendance

Students who have participated in WECEP have usually improved their attendance. About 60 percent of the students in a Minnesota WECEP program improved their tardiness record (Prazich, 1970). In Florida's Boca Raton Junior High School, there was slight improvement in absences

for students participating in WECEP. Paris (1981) found that the attendance rates had drastically improved for six Wisconsin WECEP programs. Over the same time period, Paris found students with similar characteristics, who did not participate in WECEP, had worse attendance rates. Possibly, the WECEP program has increased the interest of students in school or helped students take responsibility for arriving at school on time. Either way, students have improved behavior which should help them to improve school performance.

Classroom Behavior

Disruptive classroom behaviors were exhibited much less frequently by students in WECEP than by students with similar characteristics who were not in WECEP. Paris (1981) found the behavior of Wisconsin WECEP students improved more than the behavior of a similar group of students identified as potential school leavers. In addition, students participating in Wisconsin WECEP programs exhibited much less disruptive behavior then during the previous school year when they were not participating in WECEP. A survey of math and reading teachers in the Minneapolis Public Schools indicated that teachers believed WECEP students were more courteous, prompt with class assignments, cooperative with teachers and others, and active in participation in class discussions than before students participated in WECEP (Minneapolis WECEP Advisory Committee, 1972). A survey of the attitudes of students in WECEP indicated students believed their behavior improved as well (Dussault, 1980).

Summary

In summary, previous research conducted to determine the effectiveness of WECEP has revealed very positive results. Generally, the studies have revealed that students who have participated in WECEP have improved GPA, attended school more regularly and exhibited less disruptive classroom behavior. The follow-up data of OWA students has shown that Ohio students have improved their grades, attendance and classroom behavior as well.

The Status of WECEP in the United States

One objective for this study was to determine the status of WECEP programs in the United States. It was important to determine to what extent the program goals, teachers, students and instruction were similar to work experience programs in Ohio. An understanding of the strategies which have been used by other states to certify teachers and implement WECEP was needed to recommend alternatives for the OWA and OWE programs in Ohio.

With these objectives as a guide, telephone interviews were conducted with 19 state administrators of WECEP programs across the country. Six of the 19 states did not currently have WECEP programs operating or state administrators were not aware of local programs in their states. So, the survey was conducted with state administrators of the remaining 13 states. The interview schedule is contained in Appendix C.

The Purpose of WECEP Programs

By far, Ohio operates the most WECEP programs (known in Ohio as OWA) of any state in America. The states of Florida, Illinois, Minnesota, New York, New Jersey, Virginia and Wisconsin also had many WECEP programs operating during the 1983-84 school year. However, none of these states came close to the number of programs operated in Ohio (Table 2). Clearly, Ohio has adopted WECEP more vigorously than any other state in America as evidenced by the number of teachers in Ohio and student enrollment.

The goals of WECEP programs across the country were fairly consistent. All 13 state administrators believed providing related work and career exploration instruction and providing work experience were goals of WECEP (Table 3). All but one state administrator, 92 percent, described the goals of the program as to serve 14 and 15 year olds, to serve potential school dropouts and to move students back into the mainstream of school. Fewer state administrators, yet a majority, viewed providing remedial instruction as a goal of WECEP.

Twelve state administrators, excluding Ohio, responded to a question regarding the responsibilities of WECEP coordinators (Table 4). Many different responsibilities were carried out to accomplish the goals of WECEP by coordinators in the 12 states . A few of these responsibilities were to teach WECEP-related class, provide career orientation and coordinate work experiences. WECEP coordinators, in some states but not all, were responsible for student selection, counseling and remediation. Only a few states identified WECEP coordinators' responsibilities as to promote WECEP programs or develop program guidelines.

TABLE 2

WECEP PROGRAMS AND ENROLLMENTS
(N = 19 STATES)

	Number of Teachers	Number of Students
Colorado	13	280
Florida	250	--
Illinois	80	2,500
Indiana	--	14,679**
Iowa	10	500
Kansas	0	0
Maryland	0	0
Massachusetts	--	--
Michigan	1	--
Minnesota	53	1,200
Montana	0	0
Nebraska	4	50
New Jersey	43	550
New York	77	3,157
North Dakota	0	0
Ohio	491	8,840*
Vermont	0	0
Virginia	75*	1,331
Wisconsin	23	415*

--Unknown
* Estimate
** Student count includes the total number of students served by Cooperative Education Programs

TABLE 3

WECEP GOALS
(N = 13 STATES)

Goals of WECEP	Number of States	Percent of States
Provide related instruction	13	100
Provide work experience	13	100
Serve 14 and 15 year olds	12	92
Serve potential school dropouts	12	92
Move students back to the mainstream of school	12	92
Provide remedial instruction	7	58

TABLE 4

WECEP COORDINATOR RESPONSIBILITIES
(N = 12 STATES*)

WECEP Coordinator Responsibilities	Number of States	Percent of States
Teach WECEP-related class	12	100
Provide vocational/career orientation	12	100
Identify work stations	12	100
Coordinate on-the-job activities of students	12	100
Counsel students	6	50
Select and admit students	5	42
Provide remedial math instruction	4	33
Provide remedial reading instruction	4	33
Develop program guidelines and policies	2	17
Promote the program to local administrators, teachers and community business/industries	2	17
Make home visits	1	8
Coordinate an advisory committee	1	8
Process student records	1	8

*Ohio was excluded

In some states, WECEP coodinators were not responsible for remediation of math and reading for students because a special support instructor was designated within the school to provide remediation for disadvantaged students. However, in three states; Ohio, Colorado and Virginia, credit was given for basic skill classes when students were enrolled in work experience programs. In Colorado, a standardized test was given to students at the beginning and end of the program to assure progress in the basic skill content. In Virginia, the state-level vocational education department and state-level math and science departments have worked together to customize vocational math and science curriculum for vocational education programs.

Only slight variation was reported by 13 state administrators in the amount of time the WECEP-related class should meet during the ›ol year (Table 5). Seven state administrators, 54 percent, specified that the WECEP-related class meet for one class period per day in order for students to receive one credit. These class periods varied from 40 to 50 minutes per day across the seven states. Iowa indicated students were to obtain only one hour instruction for each 20 hours of work experience. This was approximately one hour of WECEP-related class per week. At the other extreme, Ohio required WECEP-related classes meet approximately two class periods per day or 80 minutes per day. Ohio was the only state offering one class period per day of work-related instruction and another period per day of basic skills content. Administrators of the OWA program in Ohio viewed offering WECEP for two periods as an important asset of the program.

TABLE 5

TIME REQUIREMENTS FOR WECEP-RELATED CLASS
(N = 13 STATES)

States	Periods	Minutes for WECEP-Related Class
Colorado	1 per day	Varies by local districts
Florida	1 per day	50 minutes per day
Illinois	1 per day	200 minutes per week or about 40 minutes per day
Indiana	1 per day	
Iowa	1 per week	1 hour class instruction per 20-hour work experience.
Michigan	Varies	180 hours related instruction per year, including 30 hours employment skills training per year and 20 hours Michigan Careers per year.
Minnesota	1 per day	50 minutes per day
Nebraska	Varies	Varies by local districts
New Jersey	1 per day	200 minutes per week or about 40 minutes per day
New York	1 per week	1 credit for 40 minutes per week or 300 hours per year related instruction
	or 1 per day	2 credits for 200 minutes per week or about 40 minutes per day related instruction
Ohio	2 per day	80 minutes per day
Virginia	1 per day	1 class period per day
Wisconsin	3 per week	180 minutes per week taught in 60-minute periods three times per week.

Certification of WECEP Coordinators

The 13 states reported vastly differing certification requirements for WECEP coordintors (Table 6). Five of the states did not issue a vocational certificate for WECEP coordinators. These states were Indiana, Iowa, Michigan, Nebraska and New York. Administrators in these states indicated local schools were responsible for selecting a teacher to coordinate WECEP. In addition, only one state, Colorado, issued a vocational certificate to an individual with a teaching degree in any field without specifying additional requirements for completing preservice or inservice education.

The remaining seven states issued a vocational certificate and specified requirements for WECEP coordinators. All of the seven states except Virginia issued a teaching certificate to individuals who held any type of teaching degree. However, when the degree was from any field of education, three states required that individuals have at least two years teaching experience. In addition, four states required teachers who had a degree in any education field have at least 2,000 hours occupational experience. Several of the states required graduate-level coursework in vocational education or cooperative education in order for individuals to gain a certificate. The number of hours of course work varied from only six semester hours in Illinois to 45 quarter hours in Minnesota. Three of the states required three or four courses, usually with content related to vocational education, for teachers to obtain the vocational certificate.

TABLE 6
TEACHER CERTIFICATION REQUIREMENTS FOR WECEP BY STATES
(N = 13 STATES)

States	Does State Require Voc. Certificate?	Education	Coursework and Inservice	Teaching Experience	Occupation Experience
Colorado	Yes	Teaching Degree in any Field	-----	----	----
Florida	Yes	Teaching Degree in any Field	3 Courses: Philosophy of Voc. Ed. Organization of Cooperative Methods of Voc. Ed. Voc. and Occupational Guidance	2 Years	2,000 Hours within 5 Years of Application (240 Full-Time)
Illinois	Yes	Teaching Degree in any Field	6 Semester Hours: Cooperative Educ.(s) on Administration, Supervision, and Instruction	----	2,000 Hours
Indiana	No				
Iowa	No				
Michigan	No				
Minnesota	Yes	Teaching Degree in Voc. Ed., Special Ed., or other Ed. Field, Guidance, w/Ed. Minor	18 Hours: Coordination, Philosophy of Voc. Ed. and WECEP Program Sequence 9 Hours: Counseling, Interpersonal Behavior, Human Behavior, Career Development 18 Hours: Internship (6 Class, 6 Curriculum Development, and 6 Behavioral Observation)	----	2,000 Hours Non-Teaching Relevant Occupational Experience (related to 1 of 7 vocational service areas). Within 5 Years of Application.
Nebraska	No				
New Jersey	Yes	Option 1: Teaching Degree in Home Economics, Industrial Arts or Voc. Ed.	Option 1: No Courses	Option 1: None	Option 1: None

TABLE 6 (cont.)
TEACHER CERTIFICATION REQUIREMENTS FOR WECEP BY STATES
(N = 13 STATES)

States	Does State Require Voc. Certificate?	Education	Coursework and Inservice	Teaching Experience	Occupation Experience
New Jersey (con't)		Option 2: Teaching Degree in any Field	Option 2: 1 Course: Philosophy of Voc. Ed. 1 Course: Problems in Organizing and Teaching Cooperative Education 1 Course: Curriculum Construction 1 Course: Vocational Guidance	Option 2: 2 Years	Option 2: 4,000 Hours Hazardous Occupational Experience
New York	No				
Ohio	Yes	Teaching Degree in any Field	Renewal of 1-Year Certificate Requires Completion of 72 Hours In-Service Education Provisional Certificate Requires Completion of 12 Quarter Hours of Preservice, plus 1 Year Teaching Experience in OWA and Inservice Instruction.	2 Years	2,000 Hours Non-Teaching
Virginia	Yes	Teaching Degree in Voc. Education or Equivalent	3 Hours: Targeted Populations 3 Hours: Teaching Methods - Voc. Ed./ Special Needs 3 Hours: Curriculum Development for Special Needs 3 Hours: Development and Management for Special Needs Programs	----	----
Wisconsin	Yes	Teaching Degree in any Field. Must hold certification to teach 14-15 Year Olds (i.e., not Elementary Ed. Certificate)	1 Course: Issues and Principles of Voc. Ed. Initial Certificate Requires Participation in 2-Week Training Program	----	----

Only two states required participation in inservice education to obtain or renew a vocational certificate, Wisconsin and Ohio. Wisconsin specified that prior to beginning to coordinate WECEP, teachers must have a teaching degree at the secondary level, that individuals have completed a course in the principles of vocational education and that individuals have participated in approximately 80 hours of inservice teacher education over a two week period. Ohio has also required that teachers participate in about 72 hours inservice education, to renew the one-year certificate. In order to upgrade their certification, OWA coordinators have been required to complete one other graduate-level course as well. Teachers have taken one graduate course from a list of approved courses developed by the Ohio Department of Education, Division of Vocational Education.

Other states besides Ohio and Wisconsin have conducted inservice education for WECEP coordinators. However, these states have not made inservice education mandatory for certifying teachers. Eight of the 13 states reported conducting inservice education for WECEP coordinators (Table 7). Several of the states, such as Colorado and Florida, conducted inservice education for WECEP coordinators in cooperation with all other cooperative education teachers. As a result of the length of time for inservice education, Ohio appeared to cover a broader range of topics than other states. In general, such topics as administration of WECEP programs, characteristics of disadvantaged youth and career exploration instruction were addressed through inservice education by several of the states.

TABLE 7

WECEP INSERVICE EDUCATION
DURING 1983-84 SCHOOL YEAR BY SELECTED STATES
(N = 8 STATES)

States	Time/Number of Meetings Offered	Teachers Participating	Content	Sponsor(s)
Colorado	1 Week	All	Cooperative Education	CO Vocational Association
Wisconsin	2 Weeks	New Teachers	(1) 5-6 Days-disadvantaged youth (2) 3-4 Days-WECEP	WI Department of Education and experienced WECEP Coordinator
Virginia	3 Workshops Per Year	85% of all Teachers Attended in 1983-1984	Vocational Exploration	VA Department of Education and Regional Education Offices
Illinois	2 Days	60% of all Teachers attended in 1983 1984	(1) WECEP Program Administration (2) Follow-up/Evaluation of Students (3) Job Development	IL Board of Education and State Universities
Minnesota	2 Days	Voluntary Attendance	(1) Child Labor Laws (2) WECEP Program Administration	MN Department of Education and MN Vocational Association State Universities
Florida	32 Hours	Voluntary Attendance	How to Write Curriculum	University of S. Florida and FL Department of Education
New Jersey	4 Hours	All	WECEP Program Administration	NJ Department of Education
Ohio	72 Hours	New Teachers	(1) Remedial Reading (2) Career Exploration (3) Values Clarification (4) AV Preparation	OH Department of Education and State Universities

Work Experience Programs for Youth Over 15

All 19 state administrators of WECEP programs were asked to indicate whether or not their state was administering a work experience program, similar to WECEP, for youth over the age of 15. Thirteen of the state administrators indicated some form of a program existed for disadvantaged youth over age 15 (Table 8). Several states, such as Michigan and Massachusettes, indicated older students were enrolled in cooperative education programs along with all other high school students. A few states, such as North Dakota and Montana, described a cooperative education program specifically designed for special needs youth. The states of New York and Minnesota were conducting programs which seemed to be similar to Ohio Work Experience (OWE). These programs were designed specificially for youth over the age of 15 who had been identified as disadvantaged.

Summary

The goals of work experience programs were very similar across the United States. All of the state administrators of WECEP viewed the purpose of WECEP as to provide disadvantaged students with career exploration instruction and work experiences. Even though the purposes were similar, implementation of WECEP differed from one state to another. Several states, such as Iowa and Nebraska, had little involvement in the way WECEP was administered in the local schools. In

TABLE 8

WORK EXPERIENCE PROGRAMS FOR DISADVANTAGED STUDENTS OVER AGE 15
(N = 13 STATES)

States	Programs
Ohio	Occupational Work Experience (OWE)
Maryland	Diversified Occupational Program
Michigan	Cooperative Education
Virginia	(1) Vocational/Occupational Exploration (2) Vocational Education Service Area Programs for Special Needs or Disadvantaged Students
North Dakota	Cooperative-Work Experience
Indiana	Cooperative Education
Illinois	Cooperative Work Training
Minnesota	Work Experience-Disadvantaged
Massachusetts	Cooperative Education
New York	(1) School to Employment Program (STEP) (2) Cooperative Dropout Prevention Program (3) Adolescent Vocational Education Program
New Jersey	Cooperative Education
Montana	Cooperative-Special Needs Education
Colorado	Cooperative Education

contrast, states such as Ohio, Illinois, Minnesota and Florida had administrators in their state offices of vocational education that were much more heavily involved in the way WECEP was administered in local schools. By and large, state-level regulated WECEP programs had many more local WECEP programs than states with only locally administered programs. For instance, Ohio had 491 OWA teachers and about 8,340 students in OWA compared to only 4 WECEP teachers and about 50 students in Nebraska.

The responsibilities of WECEP coordinators varied slightly among the states. All WECEP coordinators taught career exploration and supervised students in work stations. In contrast, only a few states explained that WECEP coordinators were responsible for counseling, providing remediation and/or identifying student selection criteria. Only OWA coordinators in Ohio offered one period per day of career exploration instruction and during a second period, offered academic/basic skills content for credit. Coordinators in the remaining states taught career-related instruction for one class period per day or less. However, WECEP coordinators in several states were providing remediation for students in basic skills content without credit.

In three states, Virginia, Colorado and Ohio, coordinators were giving credit for basic skills content taught by the WECEP coordinator. Virginia has developed a vocationally-oriented math and science curriculum, with the assistance of state-level math and science education administrators, to be implemented through local vocational education programs. Colorado, in contrast, has administered a battery of standardized tests to determine the progress of students who have

participated in locally developed WECEP basic skills classes. Ohio coordinators who have taught basic skills classes have usually taken total responsibility for developing the curriculum and providing instruction.

There have also been differences in the way teachers have been prepared for WECEP and certified from one state to another. While some states have emphasized teaching experience and non-teaching work experience, other states have emphasized preservice education coursework. Almost all states have required that coordinators take one or more courses in vocational, career or cooperative education. Only the states of Ohio and Wisconsin have required participation in an extensive number of hours of inservice education to certify teachers. Ohio has placed a high priority on selecting teachers who have taught for at least two years and have indicated an interest in teaching disadvantaged students. This has been the rationale for certifying teachers through inservice rather than preservice education.

Finally, while Ohio has a well-developed program for disadvantaged youth over age 15 entitled OWE, most states have not developed similar programs. Only the states of Minnesota and New York have implemented similar programs as WECEP for older secondary students. Most states have mainstreamed disadvantaged youth into cooperative education programs rather that develop a separate work experience program.

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THE OWA AND OWE TEACHER

The OWA and OWE teacher has been described as the instrumental factor contributing to the successful educational experiences of disadvantaged students in work experience programs (Pulsinelli, 1981). OWA and OWE coordinators are the individuals whose primary responsibilities are to provide work-related, career exploration and basic skills instruction for students, supervise the work experience of students, and provide counseling and remediation for students. The OWA coordinator assists the student to develop the basic skills and attitudes to successfully complete an academic or vocational program in high school. The OWE coordinator assists the student to develop, through work experiences, the necessary attitudes and skills that will enable the student to complete high school and become gainfully employed. In both cases, the mastery of basic skills related to reading, writing and math is imperative to the success of the student.

OWA and OWE Teacher Qualifications

Typically, OWA and OWE coordinators have been selected from an existing pool of teachers in a local school district to coordinate the work experience program. The Ohio Department of Education, Division of Vocational Education, has set standards for the minimum credentials needed to be certified as a work experience coordinator. These credentials are:

- a teaching degree in any field
- two years teaching experience
- one year work experience outside of education

A few studies have been conducted which have verified that OWA and OWE coordinators have met these minimum standards and, in fact, in most cases have indicated OWA and OWE coordinators have had experiences in graduate education, work and teaching far beyond the minimum requirements.

Characteristics of OWA and OWE Teachers

Most of the current 491 OWA and approximately 660 OWE coordinators in Ohio have had more than 10 years teaching experience with three or four years teaching experience in OWA or OWE. The number of years of work experience outside of teaching has been fairly extensive for both OWA and OWE coordinators. OWA coordinators have worked outside of teaching about 8 years, on average, while OWE coordinators have averaged about 10 years of non-teaching work experience.

OWA and OWE coordinators have usually obtained education beyond the minimum requirement of a bachelor's degree. Slightly over one-half of all OWA and OWE coordinators have received a Master's degree. One percent or less of OWE and OWA coordinators have obtained the Ph.D. or Ed.D. In terms of inservice education, the vast majority of OWA and OWE coordinators have participated in inservice education to meet the requirements for continuing certification.

Since OWA and OWE coordinators could obtain a bachelor's degree from any field of education, the preservice education backgrounds of OWA and OWE coordinators have been quite diverse. By far, the greatest proportion of beginning OWA and OWE coordinators have received bachelor's

degrees in health and physical education, about one-third. Furthermore, another 20 percent of OWA and OWE coordinators have obtained bachelor's degrees in social studies. Fewer OWA and OWE coordinators have had bachelor's degrees in the academic areas of english, science, math or foreign language education. Less than 15 percent of OWA and OWE coordinators received a bachelor's degree in any one of the vocational education service areas of home economics, industrial arts, agriculture or business and office education. In addition, around 9 percent of OWA coordinators, received a bachelor's degree in elementary education. A small proportion of OWA and OWE coordinators have been certified to teach in more than one area.

A large proportion of OWA and OWE coordinators have graduated with a Master's degree in education administration, about 40 percent. Other majors with sizeable proportions of OWA and OWE coordinators have been guidance and counseling, and secondary education. In general, OWA and OWE coordinators have been less likely to have a graduate major in a specialized area such as agriculture education or english education than a more general field such as administration. The one exception was health and physical education which represented the graduate major of about 15 percent of OWA and OWE coordinators.

Summary

OWA and OWE coordinators have been a highly educated and experienced group of teachers. On average, these coordinators have obtained nearly 15 years of teaching and work experience. Over one-half of the

coordinators have obtained a graduate degree. While many OWA and OWE coordinators have obtained a bachelor's degree in health and physical education, a sizeable proportion have obtained a bachelor's degree in an academic or vocational education field. Those coordinators who have obtained a master's degree have usually studied education administration or guidance and counseling.

Extensive educational backgrounds, inservice education and teaching experiences have assisted OWA and OWE coordinators to provide students with necessary competencies for success in further school work or on the job. OWA and OWE coordinators have acquired many of the competencies necessary to teach basic reading, writing and math skills for disadvantaged youth. Teachers and administrators of Ohio's work experience programs have viewed teaching the basic skill areas including mathematics, communications, and interpersonal relations as essential for job success. Research studies have suggested that one of the most effective ways of teaching and reinforcing these basic skills is to teach them as they relate to real world or work-related activities that are of interest to students. Many of the OWA and OWE coordinators have developed curricula which merges basic skills and career exploration content to accomplish this goal.

OWA and OWE Teaching Competencies

One purpose of this study was to verify the importance of various teaching competencies which have been studied through previous research for OWA and OWE coordinators. As a result of the unique responsibilities

of OWA and OWE coordinators to deal with disadvantaged youth in the classroom and training stations, research was needed to identify the specific teaching competencies required of OWA and OWE coordinators. Research conducted by Albright, Nichols and Pinchak (1975) and later by Pulsinelli (1981) surveyed OWA and OWE coordinators regarding the level of importance of over 100 teaching competencies. These studies have provided a foundation for the preservice and inservice education programs used for OWA and OWE coordinators today. In addition, these studies laid the framework for the teaching competencies ranked according to their importance by OWA and OWE coordinators in this study.

Based on previous findings, it was determined that 60 teaching competencies could be considered by most OWA and OWE coordinators to be very important. This study requested that OWA and OWE coordinators indicate the 20 teaching competencies which should be provided through preservice, defined as teaching education prior to the work experience program; another 20 through inservice, defined as teacher education during the first 1 to 2 years of teaching in work experience programs; and the remaining 20 through upgrading, operationalized as teacher education beyond preservice and inservice. Teachers were asked to develop three unduplicated lists of 20 competencies labeled preservice, inservice and upgrading.

There were many similarities in the way OWA and OWE coordinators ranked the 60 teaching competencies Overall, approximately two-thirds of the teaching competencies were grouped by OWA and OWE coordinators to have about the same level of importance. That is, OWA and OWE coordinators rated the same 38 competencies as important for preservice,

inservice and upgrading. Clearly, the majority of teaching competencies needed for OWA and OWE coordinators to carry out their responsibilities were strikingly similar. However, since about one-third of the teaching competencies were ranked differently by OWA and OWE coordinators, there were some important difference in the teaching responsibilities of OWA and OWE coordinators. Table 17 and Table 18 in Appendix D provide a complete listing and ranking of teaching competencies for OWA and OWE coordinators, respectively.

Preservice Teaching Competencies

A total of fourteen teaching competencies were rated by both OWA and OWE coordinators to be needed during the preservice phase of teacher preparation. These teaching competencies are ranked in Table 9. Most of the teaching competencies were skills and behaviors which have traditionally been taught through preservice such as constructing a lesson plan, developing a unit plan and conducting a student conference. Two teaching competencies, identified by both groups of teachers, were to develop positive reinforcement techniques and identify personality patterns. These teaching competencies seemed to address the student population of OWA and OWE specifically and may need to be addressed through additional or different preservice coursework than is currently available for teachers in Ohio generally.

TABLE 9

FOURTEEN TEACHING COMPETENCIES
RANKED BY BOTH OWA AND OWE COORDINATORS
AS IMPORTANT PRESERVICE TEACHING SKILLS

Teaching Competencies	Ranking by OWA Coordinators	Ranking by OWE Coordinators
Construct a lesson plan	1	6
Organize a weekly plan of instruction	2	1
Develop a unit plan	3	11
Locate instructional materials	4	4
Compile accurate, up-to-date records	5	8
Maintain a personal date file for students	5	1
Develop a filing system	7	4
Select instructional materials	8	12
Estimate time sequence for a unit of instruction	9	9
Develop positive reinforcement techniques	10	12
Prepare a schedule of activities	10	1
Develop a system of recording attendance	12	6
Identify personality patterns	13	14
Conduct a student conference	13	10

Inservice Teaching Competencies

A total of eleven teaching competencies were identified by both OWA and OWE teachers as needed to be provided through inservice (Table 10). Again, many of these teacher competencies represented skills which are needed by teachers in general, such as constructing a system of reporting student progress, utilizing classroom facilities, utilizing A-V aids, charting student progress, presenting a demonstration and employing oral questioning techniques. A few of the teaching competencies needed by OWA and OWE coordinators through inservice education such as grouping students for small group instruction, identifying symptoms of drug abuse and publicizing the program would probably not be provided through general teacher inservice workshops. These teacher competencies addressed the special needs of disadvantaged youth.

Upgrading Teaching Competencies

Thirteen competencies were identified by OWA and OWE coordinators as important for upgrading (Table 11). Two other upgrading teacher competencies were related to math instruction. In addition, the evaluation of students, instruction and programs were four of the teaching competencies identified for upgrading. Another three competencies were to identify emotional, physical or intellectual factors which contributed to reading difficulties. Finally, the other teaching competencies for upgrading were to incorporate alternative types of instruction into the work experience program such as discussion leading, student tutoring and incorporating inductive thinking into the curriculum.

TABLE 10

ELEVEN TEACHING COMPETENCIES RANKED BY BOTH OWA AND OWE COORDINATORS AS IMPORTANT BY INSERVICE TEACHING SKILLS

Teaching Competencies	Ranking by OWA Coordinators	Ranking by OWE Coordinators
Group students for small group instruction	1	10
Construct a system of reporting student progress	2	8
Utilize available classroom facilities	3	6
Evaluate student progress at a training station	4	6
Identify symptoms of drug abuse	4	3
Utilize A-V aids	6	3
Chart student progress	7	8
Communicate individual subject goals to faculty and administration	8	11
Present a demonstration	9	2
Employ oral questioning techniques	10	5
Publicize program in school	11	1

Differences in OWA and OWE Teaching Competencies

OWA and OWE coordinators ranked six teaching competencies needed during preservice differently. Refer to Table 17 and Table 18 in Appendix D for a complete ranking of teaching competencies by OWA and OWE coordinators, respectively. OWA coordinators placed at the top of the list for preservice to identify learning disabilities. Other OWA teaching competencies identified for preservice were to assess student reading level, utilize results of achievement tests, utilize results of diagnostic tests, organize a unit of career education and assist students in scheduling adjustments. The majority of these teaching competencies were needed by OWA coordinators to address the special needs of disadvantaged students. These findings agree with research conducted by Albright and others in 1975. In 1975, OWA coordinators rated identification of learning disabilities, assessment of student reading level, utilization of diagnostic tests and organization of a career education unit substantially higher than OWE coordinators.

In contrast, OWE coordinators identified the following six teacher competencies needed through preservice; to operate A-V equipment, identify entry-level jobs in the community, establish student transportation procedures, utilize problem-solving strategies, locate help for drug-related problems and give a lecture. Some preservice teaching competencies for OWE could be viewed as traditionally needed by teachers and provided through most preservice teacher education programs. The exceptions were competencies identifying entry-level jobs,

TABLE 11

THIRTEEN TEACHING COMPETENCIES RANKED BY BOTH OWA AND OWE COORDINATORS AS IMPORTANT FOR UPGRADING TEACHERS

Teaching Competencies	Ranking by OWA Coordinators	Ranking by OWE Coordinators
Evaluate student reading progress	1	7
Identify emotional factors which contribute to reading difficulties	1	4
Identify intellectual factors which contribute to reading difficulties	3	7
Assess student comprehension of math concepts	4	12
Moderate student discussion of sensitive ideas	4	3
Incorporate inductive thinking into curriculum	6	2
Conduct teacher-to-teacher conferences	6	7
Assess the ability of an individual to modify his or her own behavior	8	5
Incorporate world or work into math instruction	8	7
Identify physical factors which contribute to reading difficulties	10	1
Determine effectiveness of instruction	11	11
Implement program modification	12	5
Establish a student tutoring program	12	13

establishing transportation, utilizing problem-solving strategies and locating help for drug-related problems. These teaching competencies appeared to be specific to older disadvantaged students enrolled in OWE programs. Again, five of these six teaching competencies were rated substantially higher by OWE coordinators than OWA coordinators in the 1975 study. The one exception was utilizing problem solving strategies which was rated moderately important by both groups of teachers.

OWA and OWE coordinators indicated nine different teacher competencies were needed through inservice education. (Refer to the complete ranking of teacher competencies for OWA in Table 17 and OWE in Table 18 in Appendix D). OWA coordinators placed a priority for inservice on such teacher competencies as prescribing remedial reading and math. These teacher competencies were identified by OWE coordinators as having lower priority and being only important for upgrading.

On the contrary, OWE coordinators rated such teacher competencies as identifying learning disabilities, utilizing achievement and diagnostic test results, incorporating deductive thinking into the curriculum, developing value clarification strategies and identifying counseling techniques as important for inservice. These findings seemed to indicate the greater need for information about remedial reading and math througoh inservice workshops for OWA coordinators. In contrast, OWE teachers placed priority for inservice on some skills typically used to counsel students or skills which were given a higher priority for preservice by OWA coordinators such as identifying learning disabilities and testing.

OWA coordinators rated seven different teaching competencies as important for upgrading than OWE coordinators. (Refer to Appendix D, Table 17 and Table 18 for a complete ranking of teacher competencies by OWA and OWE coordinators, respectively). These teacher competencies were to locate help for drug-related problems, develop value clarification strategies, give a lecture, develop a schedule for cleaning work areas, devise problem-solving techniques, incorporate deductive thinking and identify counseling techniques. Many of these teaching competencies were related to counseling or dealing with the special problems of OWA students. Each of these competencies were rated by OWE coordinators as more important and needed during preservice or inservice rather than ring upgrading.

In contrast, OWE coordinators indicated the following teaching competencies as needed during upgrading; assessing student reading level, prescribing remedial reading, identifying emotional factors affecting the classroom, prescribing remedial math, employing roleplay, using problem-solving strategies and constructing evaluation instruments based on instructional objectives.

Summary

Overall, the majority of teaching competencies were ranked similarly by OWA and OWE coordinators. Most of the preservice teaching competencies identified were those needed by any beginning teacher except the teaching competencies focusing on positive reinforcement and personality patterns. The inservice and upgrading teaching competencies addressed more specifically the needs of OWA and OWE coordinators teaching in work experience programs. Some of these teaching competencies were supervising students in training stations, identifying symptoms of drug abuse, evaluating student reading progress and incorporating world of work into math instruction.

However, there were some important differences in the teaching competencies needed by OWA and OWE coordinators. In general, OWA coordinators placed a higher priority on remedial teaching competencies in reading and math than OWE coordinators. In contrast, OWE coordinators prioritized counseling skills for the special problems of disadvantaged youth, such as identifying substance abuse problems, more highly than OWA coordinators. These differences in teaching competencies between OWA and OWE coordinators should be considered when preservice, inservice and upgrading teaching competencies are designed. Most of the differences identified between OWA and OWE coordinators have been supported by previous research findings.

Teaching Methods

Introduction

The teaching methods which have been used successfully with disadvantaged youth have usually been designed to maximize the individual needs of students (Glaser, 1981). Disadvantaged youth have extremely diverse characteristics as evidenced by such characteristics as low income, poor reading and arithmetic skills, poor health and/or disruptive classroom behavior. There has been a need for individualized teaching methods which can address the diverse student characteristics in OWA and OWE.

In order to determine the types of teaching methods which OWA and OWE coordinators were using, a teaching method survey was administered to OWA and OWE coordinators. Appendix E contains a copy of the teaching method survey. Coordinators indicated the degree of importance from little to great for ten different teaching methods. Table 12 provides a summary of rating of importance for the ten teaching methods assigned by OWA and OWE coordinators.

A comparison of the way OWA and OWE coordinators ranked teaching methods revealed generally the same patterns. For both groups, the same teaching methods were ranked among the top six of ten teaching methods. Furthermore, these six teaching methods were ranked substantially higher than the remaining four teaching methods for both OWA and OWE coordinators. Each of the top six teaching methods were designed to deal with the individual and special needs of disadvantaged youth.

However, there were some differences between the way OWA and OWE coordinators ranked the top six teaching methods. OWA coordinators rated individualized instruction first, indicating its importance among the ten teaching methods, while OWE coordinators rated small group and activity-oriented instruction as most important. Tables 13 and 14 present the ranking of teaching methods on degree of importance by OWA and OWE coordinators respectively.

There were some subtle difference in the way OWA and OWE coordinators ranked the last four teaching methods. OWA coordinators rated lecture and large group instruction as the two least important teaching methods. Less than 12 percent of OWA coordinators rated the importance of either of these teaching methods as great. OWA coordinators viewed peer teaching and learning centers only slightly more important. In contrast, OWE coordinators ranked peer teaching and learning centers at the bottom of the list.

Summary

OWA and OWE coordinators responded to the teaching method survey in a similar manner. Both groups of coordinators viewed of great importance teaching methods which were individualized, one-to-one or small group. Furthermore, both groups of coordinators saw less value in large group instruction, learning centers, peer teaching and lecture. Since the characteristics of students in OWA and OWE were quite similar and the majority of teaching competencies needed by OWA and OWE coordinators were

TABLE 12

RANKING OF TEN TEACHING METHODS BY
OWA AND OWE COORDINATORS

Teaching Methods	Ranking by OWA Coordinators	Ranking by OWE Coordinators
Individualized Instruction	1	3
Small Group Instruction	2	1
One-to-One Instruction	3	6
Tutoring	4	3
Demonstration	5	3
Activity-oriented Instruction	6	1
Peer Teaching	7	9
Learning Centers	8	10
Lecture	9	7
Large Group Instruction	10	8

TABLE 13

RANKING OF TEN TEACHING METHODS BY
OWA COORDINATORS

Teaching Methods	Rank	Degree of Importance		
		Great %	Some %	Little %
Individualized Instruction	1	79	21	0
Small Group Instruction	2	79	17	4
One-to-One Instruction	3	74	24	2
Tutoring	4	64	36	0
Demonstration	5	60	40	0
Activity-oriented Instruction	6	60	38	2
Peer Teaching	7	19	67	14
Learning Centers	8	21	50	29
Lecture	9	10	55	35
Large Group Instruction	10	12	45	43

TABLE 14

RANKING OF TEN TEACHING METHODS BY
OWE COORDINATORS

Teaching Methods	Rank	Degree of Importance		
		Great %	Some %	Little %
Small Group Instruction	1	57	43	0
Activity-oriented Instruction	1	57	43	0
Individualized Instruction	3	43	50	7
Tutoring	3	36	64	0
Demonstration	3	36	64	0
One-to-One Instruction	6	33	67	0
Lecture	7	21	50	29
Large Group Instruction	8	28	36	36
Peer Teaching	9	7	57	36
Learning Centers	10	14	29	57

similar, these findings indicate there are similarities between the OWA and OWE programs. However, since OWA and OWE coordinators did not provide the exact same responses to the survey, there are some differences revealed between the OWA and OWE programs.

References

Albright, L., Nichols, C. and Pinchak, J. Identification of Professional Competencies Necessary for Teachers of Disadvantaged and Handicapped Youth. Educational Professional Development Act Project #74122. Kent, OH: Kent State University, 1975.

Glaser, R. Occupational Work Adjustment Programs in Ohio. (Unpublished Doctoral Dissertation). Oxford, OH: Miami University, 1981.

Pulsinelli, P. Occupational Work Adjustment Coordinators' Perception of Competencies Needed for Teaching Disadvantaged Youth. (Unpublished Doctoral Disseration). Cincinnati, OH: University of Cinnati, 1981.

Occupational Work Adjustment

There are currently 491 units of Occupational Work Adjustment (OWA) programs in Ohio (FY 1985). These programs are serving 14 and 15 year old youth who are underachieving, normally disadvantaged, and are dropout prone. These students are disinterested in the regular program and curriculum offerings but are clearly capable of learning if their educational program is presented in a practical, meaningful and personally relevant way. These students most often have insufficient skills in reading, writing and mathematics to the degree that they cannot successfully compete in a regular classroom.

In the OWA programs of Ohio, the teacher/coordinator must provide the remediation necessary to enable the student to not only succeed in a motivating career exploration experience but also successfully transition back into the academic mainstream. These remedial skills in the areas of reading, writing and mathematics have been successfully provided by OWA teachers to their special student populations. Regular classroom teachers frequently do not wish to deal with students with lower learning levels and to teach courses appropriate for their remedial needs. This is not to imply that the regular mainstream academic programs are not of high quality or that the teachers of these programs are not excellent teachers. The fact is, however, that these regular programs may not be motivating to the minority of students who are more interested in

practical and immediately personalized career goals. One must conclude that for these students their program of instruction should include more practice in learning to apply reading, writing, and math skills as they are used in work settings to perform meaningful occupational tasks. This special program of instruction in the basic academic skills may be provided either by special academic teachers or by OWA teachers.

The overwhelming majority of OWA teachers in Ohio feel that the ability to teach basic academic skills as part of the OWA program is absolutely essential. Further, students must be given credit for this remedial work taken as part of the OWA program.

Many OWA teachers are currently providing basic academic skills instruction for credit to their OWA students, but the teacher is not formally certified in that academic area. In many cases, if these teachers were not able to provide this credit the OWA students would be compelled to move back into regular classes where failure is more likely, thus jeopardizing their graduation. Clearly some mechanism in the teacher certification and/or teacher education program must be examined and adjusted to meet this critical need.

Implications of the New State Standards for OWA

The Ohio Department of Education's Minimum Standards for Elementary and Secondary Schools will have a profound effect upon OWA programs, especially at grades seven and eight. With the new requirement for grades seven and eight, the present time requirements for OWA cannot be met. The following schedule illustrates the problem for the OWA student

in grades seven or eight (Figure 1). The OWA program requires 80 minutes of related instruction and 80 minutes of work experience each day. This is the equivalent of approximately four periods each day for OWA. From Figure 1 it is clear that scarcely two periods are available each day.

Figure 1

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1	English	English	English	English	English
2	Math	Math	Math	Math	Math
3	Reading	Reading	Reading	Reading	Reading
4	Science	Science	Science	Science	Science
5	Soc. St.	Soc. St.	Soc. St.	Soc. St.	Soc. St.
6	HPE	HPE	Art	Art	Music
7	Music				
8					

Occupational Work Experience

There are currently 664 units of Occupational Work Experience (OWE) programs in Ohio (FY 1985). These programs serve students sixteen years of age and older who are unable to succeed in regular academic or vocational programs. These students will typically have an IQ somewhere between 75 and 90, will be slow or non-readers, not achieving in the regular academic program and be highly dropout prone.

Through the OWE program the teacher/coordinator endeavors to help motivate the student to stay in school until graduation and provide the student with necessary remedial instruction. As a part of this program, meaningful and productive work experience provides the catalyst for student success. Like the OWA programs, the OWE teacher/coordinator must provide the necessary remediation to assist the student to achieve an acceptable level of competence in the basic academic skills necessary for both employoment and academic success.

There are essentially two types of OWE programs, those conducted in self-contained classrooms and those regular classroom programs. In the self-contained classroom program the teacher/coordinator provides not only 80 minutes of OWE related instruction and coordinates the student's work experience, but the coordinator also provides one or more credits in areas of basic instruction (mathematics, English or social studies). In OWE programs without self-contained classrooms, the teacher/coordinator provides remedial help to the student as part of the OWE related instruction. However, credit for basic instruction is not granted in this arrangement. In the regular OWE program (no self-contained classroom) the basic instruction courses are taught by regularly certified teachers in that academic discipline.

OWE teacher/coordinators who conduct self-contained classroom programs agree that basic skill instruction, or credit, must be a part of the program; and, the teacher/coordinator must be capacitated to provide this instruction. Like their OWA counterparts, these OWE students need a program of basic instruction that teaches applied

reading, writing and math skills. Teacher/coordinators in self-contained classrooms are currently teaching basic skill courses for credit in areas where they usually do not hold a standard teaching credential. However, like OWA, this is essential if the program is to function under the new state standards.

Implications of the New State Standards for OWE

The new state standards will have serious implications for the continuation of OWE programs in self-contained classrooms. These programs comprise approximately 350 or half of all OWE programs. In these programs, a significant number of teacher/coordinators have been permitted by their school districts to teach basic skill courses (mathematics, English or social studies) when they held no regular certification in these areas. This has generally occurred because there have not been enough instructors available with appropriate certification in basic skill areas who could provide remedial instruction during the time the OWE students were in school. Most of the school districts involved were unaware of any conflict with state certification requirements. Nevertheless, the practice has proved highly successful in the teaching of basic educational skills to this student population with special needs.

As with the OWA programs, it will be virtually impossible to meet the state mandated requirements for 80 minutes of OWE related instruction (plus work) and also meet the requirements for graduation. However, if OWE teacher/coordinators can obtain certification to continue the successful practice of teaching basic educational skill subjects for

credit in the self-contained OWE classroom, these time conflicts should be eliminated.

PROGRAM RECOMMENDATIONS

To accommodate the guidelines of the new Elementary and Secondary Schools Minimum Standards there are a variety of possible program structures available for OWA and OWE programs. However, these different configurations of program components do not alter the ability of the OWA and OWE programs to meet their original objectives.

Various recommendations for changing the current structure of OWA and OWE programs are listed in Tables 15 and 16. A further explanation of each program component is as follows:

Component 1. This component would use one of the two related class periods (80 minutes total, required minimum for both periods) to teach a required, basic academic subject. The academic subject would be taught for credit by the OWA or OWE teacher who holds a standard teaching certificate for that basic subject area.

Component 2. This component would use one of the two related class periods to teach a required, basic academic subject. The academic subject would be taught for credit by the OWA or OWE teacher holding a special teaching credential in the basic discipline. Requirements for this credential must be met through specific preservice or inservice vocational teacher education requirements. Only OWA and/or OWE students are eligible for this credit.

Component 3. Reduce the requirement for two periods of related classwork (80 minutes minimum) to one period. This would free the OWA/OWE student to take an additional regular academic class, and receive an academic credit in addition to the credit for OWA/OWE, in a basic academic area. (This would affect unit funding.)

Component 4. Reduce the "work" requirement during the school day by one period. (This alternative may be appropriate for OWE programs where the students' work experience is scheduled after the regular school day.)

Component 5. Require a course of study that shows how the basic academic skill content is taught and its relationship to the OWA/OWE curriculum.

Component 6. Require every OWA or OWE student receiving credit in a basic academic skill area to pass a competency or performance test over that academic area. This requirement would apply only to academic subjects taught by OWA/OWE teachers previously defined in Component 2.

Component 7. Offer the OWA or OWE program under the provision for an "Educational Option" [Standard 3301-35-02, (C)(1)]. This would require an approved education plan, updated annually, for each student participating in the program.

OWA: Program Recommendations

The following recommendations are made concerning OWA programs (Table 15):

OWA Recommendation 1: This recommendation proposes an "Educational Option," for OWA programs at the seventh and eighth grade levels. Because of the severe time constraints in the instructional day at grades seven and eight, other alternatives are not practical.

OWA Recommendations 2 and 3: Recommendations 2 and 3 are equally viable and attractive options for conducting OWA programs at grades nine through twelve.

OWA Recommendation 4: Change the name of the Occupational Work Adjustment (OWA) program to something more accurately descriptive. (There is considerable confusion in the educational community over the difference between OWE and OWA programs, due primarily to the great similarity of the names.)

OWA: Teacher Education Recommendations

Cumulative research findings and data from extensive interviews with current OWA/OWE teachers verify that new teachers need:

TABLE 15

PROGRAM RECOMMENDATIONS

FOR

OCCUPATIONAL WORK ADJUSTMENT PROGRAMS (OWA)

Program Component	Recommendation 1	Recommendation 2	Recommendation 3
1. Use a related instruction period for teaching an academic subject by an OWA teacher with a standard teaching certificate in that discipline		*	
2. Use a related instruction period for teaching an academic subject by an OWA teacher; special teaching credential in the basic discipline met through specific Voc. Ed. in-service requirements.			*
3. Reduce the related class to one period so students can attend one more required academic class. (This affects unit funding)			
4. Reduce the Work requirement by one period.			
5. Require course of study to show how academic work is related to the occupational work adjustment (OWA) curriculum.	*	*	*
6. Require a passing grade on a competency test for the academic discipline taught by the OWA Coordinator	*	*	*
7. Offer the OWA program under the provision for an "Educational Option" [Standard 3301-35-02, (C)(1)].	*		

* Prior teaching experience

* Special teaching skills for working with disadvantaged students

* Pedagogy and classroom management skills

* Counseling and tutoring skills

* Preparation to teach selected basic educational skills (math, reading, etc.)

While skills in all of these areas are important for the experienced master teacher/coordinator, some are needed immediately by the beginning teacher. Based upon extensive meetings between state teacher educators, education program is recommended.

OWA Recommendation 5: A two-year Inservice Teacher Education Program For All OWA Teachers

FIRST YEAR (54 Contact Hours)

August
Pre-service Workshop (32 Contact Hours)

Assessment of student needs in basic skills
Remediation and enrichment skills in language arts, reading and mathematics
Assessment of appropriate instructional materials
Career exploration
Program orientation
Counseling techniques

September-June
Regional In-service Seminars (18 Contact Hours)

Evaluation of pretesting students in basic skills
Identification of meeting student individual needs
Identification of instructional materials and instructional techniques to meet individual needs
Career exploration
Counseling techniques
Vocational orientation
Evaluation of post-testing in basic skills

Individual Teacher Visitations (4 Contact Hours)

Development of program evaluation plans

SECOND YEAR (42 Contact Hours)

August
State-Wide Teacher In-service (20 Contact Hours)
Target toward teacher and program needs as determined by an annual needs assessment with the teachers.

September-June
Individual Teacher Visitations (4 Contact Hours)

Regional In-service Seminars (18 Contact Hours)
Focusing upon strategies for teaching disadvantaged students and problem solving; Completion of a course of study document.

OWA Recommendation 6: Special Certificate for Teaching Basic Academic

OWA programs taught under Recommendation 3 (Table 15) requires that a special teaching credential be issued to the OWA teacher to teach a basic academic skill subject. Use of this credential should be limited exclusively to OWA teachers who teach basic academic subjects to OWA students. To earn this special teaching credential the OWA teacher must complete 6 quarter hours of college credit related to the special academic area for which the credential is valid.

This credential does not currently exist for OWA teachers and must be established through the Ohio Department of Education, Division of Teacher Education and Certification.

OWE: Program Alternatives and Recommendations

The following recommendations are made concerning OWE programs (Table 16):

OWE Recommendation 1: This recommendation utilizes current OWE teachers, properly certified to teach an academic subject; an alternative which is currently being used in many OWE programs (without self-contained classrooms).

TABLE 16

PROGRAM RECOMMENDATIONS
FOR
OCCUPATIONAL WORK EXPERIENCE PROGRAMS (OWE)

Program Component	Recommendation 1	Recommendation 2	Recommendation 3
1. Use a related instruction period for teaching an academic subject by an OWE teacher with a standard teaching certificate in that discipline	*		
2. Use a related instruction period for teaching an academic subject by an OWE teacher; special teaching credential in the basic discipline met through specific Voc. Ed. in-service requirements.		*	
3. Reduce the related class to one period so students can attend one more required academic class. (This affects unit funding)			
4. Reduce the Work requirement by one period.			
5. Require course of study to show how academic work is related to the occupational work experience (OWE) curriculum.		*	*
6. Require a passing grade on a competency test for the academic discipline taught by the OWE Coordinator		*	*
7. Offer the OWE program under the provision for an "Educational Option" [Standard 3301-35-02, (C)(1)].			*

OWE Recommendation 2: This recommendation is the most appropriate vehicle for conducting the OWE program in a self-contained classroom where the OWE teacher/coordinator must, at times, teach several basic academic skill subjects.

OWE Recommendation 3: This recommendation is the least desirable of the alternatives because of the inordinate amount of time required to negotiate individual education plans with each student and his/her parents; however, in some cases it may be the only alternative to discontinuing a program.

OWE: Teacher Education Recommendations

OWE Recommendation 4: A Two-Year Inservice Teacher Education Program For all OWE Teachers

FIRST YEAR (54 Contact Hours)

August
Preservice Workshop (32 Contact Hours)

Using diagnostic testing results for teaching basic skills
Defining characteristics of disadvantaged students
Classroom techniques for OWE programs
Development of training plans
Techniques and practices of program coordination

September-June
Inservice Teacher Education Visits (27 Contact Hours)

Methods of initiating OWE programs
Understanding the OWE student
Development of training plans

SECOND YEAR (80 Contact Hours)

Summer
Inservice Second Year Workshop (20 Contact Hours)

Advanced instruction in program planning, coordination and evaluation.

September-June
Inservice Teacher Education Coursework (60 Contact Hours)

Development of a course of study
Understanding laws and regulations related to vocational education program implementation

OWE Recommendation 5: Special Certificate for Teaching Basic Skills

OWE programs taught under Recommendation 2 (Table 16) require that a special teaching credential be issued to the OWE teacher to teach a basic academic skill subject. Use of this credential should be limited exclusively to OWE teachers who teach basic academic subjects the OWE teacher must complete 6 quarter hours of college credit related to the special academic area for which the credential is valid.

This credential does not currently exist for the OWE teachers and must be established through The Ohio Department of Education, Division of Teacher Education and Certification.

APPENDIX A

OWA AND OWE TEACHERS AND ADMINISTRATORS WHO
SERVED AS PROJECT RESOURCE PERSONS

OWA

Mr. Michael Akers, Brookville High School

Ms. Dana Anderson, Nelsonville-York High School

Mr. Christopher Baker, Franklin Junior High School

Mr. Gerald Barker, Rosemore elementary School, Whitehall

Mr. Donald Beane, Roth Junior High School, Dayton

Mr. Virgil Butler, Fairfield Freshman High School

Mr. Phil Cahoon, Dayton City Schools

Mr. David Caudill, Batavia High School

Ms. Amy Chandler, Verity Middle School, Middletown

Mr. Joseph Connors, Grandview Heights High School

Mr. James Dickerson, Finneytown High School, Cincinnati

Ms. Rosemary Evans, Gallia Academy High School, Gallipolis

Ms. Moselee Garcia, Roth Intermediate, Dayton

Ms. Susan Garretson, Fairport Junior High School, Dayton

Mr. James Gorius, Lincoln Junior High School, Newark

Ms. Farrel Golden, East High School, Columbus

Mr. Charles Grant, Norwood Junior High School, Norwood

Ms. Susan Harris, Eastmoor High School, Columbus

Mr. Charles Hatfield, Peoples Middle School, Cincinnati

Mr. James Legg, Northwestern High School, Springfield

Mr. Gary Long, Ferguson Junior High School, Beavercreek

Mr. Joseph Madden, Centerville High School

Mr. Ronald Miller, Cambridge Elementary School

Ms. Lola Moorehead, Springfield South High School

Mr. Ed Ropp, Mechanicsburg High School

Mr. Gregory Rust, Studebaker Junior High School, Huber Heights

Mr. David Sager, Athens High School

Mr. Gene Schoenhoeft, Delhi Junior High School, Cincinnati

Mr. Craig Shafe, Groveport Madison Freshman High

Mr. Ralph Shule, John E. Smith Junior High School, Dayton

Mr. Gary Smith, Worthington High School

Mr. Lloyd Smith, Kettering Junior High School

Mr. Volker Snow, Findlay High School

Ms. Brenda Stewart, Heinold Elementary School, Cincinnati

Mr. Terri Terrell, Longfellow Elementary School, Dayton

Ms. Shirley Thornton, Deer Park High School, Cincinnati

Mr. Wagner, Princeton Junior High School, Cincinnati

Mr. David Waller, Dawson-Bryant High School, Cardington

Mr. James Washburn, East High School, Columbus

Mr. William Williams, Rutherford B. Hayes High School, Delaware

OWE

Mr. Dave Appel, Independence High School, Columbus

Mr. Jerry Bell, Dublin High School

Mr. Ben Bennett, Independence High School, Columbus

Ms. Denise Clapp, Hilliard High School

Mr. Leo Frailey, Lincoln High School, Gahanna

Mr. Richard Hartung, Fairfield Union High School, Lancaster

Ms. Diane Hollenbaugh, Beechcroft High School, Columbus

Mr. Richard Meyer, R. A. Taft High School, Cincinnati

Mr. Robert Moody, Newark High School

Mr. Michael Pearis, South High School, Springfield

Mr. Isaac Reid, Fort Hayes Career Center, Columbus

Mr. Harold Schnaudt, Eastland Career Center, Columbus

Ms. Alberta Stevens, Walnut Ridge High School, Columbus

Mr. Philip Wright, Teays Valley High School, Ashville

APPENDIX B

STUDENT CHARACTERISTICS SURVEY

Students are selected to participate in work experience programs in Ohio schools when there is a concern that students may fail or drop out of school. To what extent have students selected to participate in your work experience program exhibited the following characteristics?

U means Usually
S means Sometimes
R means Rarely
? means Don't Know

	Usually U	Sometimes S	Rarely R	Don't Know ?
	(Circle your answer)			
1. Irregular school attendance	U	S	R	?
2. Frequent tardiness	U	S	R	?
3. Two or more grade levels behind in reading	U	S	R	?
4. Two or more grade levels behind in math	U	S	R	?
5. Average or above in ability but fails to achieve in most classes	U	S	R	?
6. Unable to stay on task for 10 minutes or more	U	S	R	?
7. Poor oral communications skills	U	S	R	?
8. Poor handwriting skills	U	S	R	?
9. One or two years older than classmates	U	S	R	?
10. One or more learning disabilities	U	S	R	?
11. One or more physical impairments	U	S	R	?
12. Lacks personal goals and/or a sense of purpose	U	S	R	?
13. Rarely participates in extracurricular activities	U	S	R	?
14. Exhibits behavior problems which require discipline	U	S	R	?
15. Friends not enrolled in school	U	S	R	?
16. Living in a single parent home	U	S	R	?
17. Family income below poverty level	U	S	R	?
18. At least one family member has not completed high school	U	S	R	?
19. Lacks supervision from family members	U	S	R	?
20. Living in an institution or placed under state guardianship	U	S	R	?

	Usually U	Sometimes S	Rarely R	Don't Know ?
	(Circle your answer)			
21. Poor health	U	S	R	?
22. Police record	U	S	R	?
23. Pregnancy	U	S	R	?
24. Victim of child abuse or other violent crimes	U	S	R	?
25. Use of mood altering substances, such as alcohol or marijuana	U	S	R	?

What proportion of the students in your work experience program exhibit the following attributes? (Check the box corresponding to DON'T KNOW when you cannot provide the information.)

What is the proportion of students who are boys and girls?

_____% BOYS

_____% GIRLS

☐ DON'T KNOW

What is the proportion of students in the following racial or ethnic groups?

_____% WHITE (CAUCASIAN)

_____% BLACK (NEGRO)

_____% HISPANIC (MEXICAN-AMERICAN)

_____% OTHER _____

☐ DON'T KNOW

Please complete the items in this box.

What are the grade levels of your work experience program?

_____ 8th

_____ 9th

_____ 10th

_____ 11th

_____ 12th

What county is your school located in? _____

APPENDIX C

TELEPHONE INTERVIEW SCHEDULE FOR STATE WECEP ADMINISTRATORS

State_____

State WECEP coordinator_____

Telephone number_____

Calling Record for State Coorginators

Date	Time Start	Time Finish	Comments

1. What are your responsibilities for working with WECEP programs?

___ State coordinator/administrator

___ Teacher educator

___ Local administrator

___ Local teacher/coordinator

___ Other _____

Description of responsibilities:

2. In Ohio, we have identified the purpose of WECEP programs as "to aid 14 and 15 year-old students who are potential school dropouts to move toward successful completion of a vocational or academic high school program, . . . , The Ohio WECEP program places heavy emphasis on remedial instruction, vocational orientation and private sector or in-school work experience." Does the purpose of WECEP differ in your state in any way? How?

___ Serve 14 and 15-year old students

___ Serve students who are potential school dropouts

___ Provide remedial instruction

___ Provide vocational orientation

___ Provide work experiences

___ Move students toward completion of vocational programs

___ Move students toward completion of academic programs

___ _____

3. How many students participated in WECEP during the past school year?
   NUMBER OF STUDENTS _____

4. Do you know what proportion of students were boys and girls?
   PERCENT BOYS _____ PERCENT GIRLS _____

5. Do students have flexibility to enter and leave WECEP at any time throughout the school year?

   Do you offer a 2-year WECEP program?

6. How many WECEP teahcers did you have in your state this past school year?
   NUMBER OF TEACHERS _____

7. What are the primary responsibilities of WECEP teachers in your state?
   ___ Select and admit students
   ___ Develop program guidelines
   ___ Provide vocational/career orientation
   ___ Identify work stations
   ___ Coordinate students on-the-job activities
   ___ Counsel students
   ___ Evaluate student progress
   ___ Provide remedial math instruction
   ___ Provide remedial reading instruction
   ___ Provide other remedial instruction
   ___ _____

8. Do WECEP teachers offer a vocational or career-related class for students in WECEP?

_____NO

_____YES,

How many minutes does the vocational/career-related class meet each day?

9. On average, about how much time per day do students spend with the WECEP teacher?

10. In Ohio, students must take at least two courses with teachers other than the WECEP teacher. Is that true for students in your state?

11. Does your state issue vocational certificates for WECEP teachers?

___ NO, continue to Q-12.

___ YES, skip to Q-13.

12. How are WECEP teachers selected since the state does not issue certification?

13. What are the minimum qualifications for the initial WECEP teaching certificate?

Education

___ Less than baccalaureate degree

___ Baccalaureate degree

___ Baccalaureate degree in specific field(s)?

___ Coursework in spcific field(s):

Teaching

___ Any teaching experience

MINIMUM NO. OF MONTHS _____

___ Teaching experience in specific field(s)

MINIMUM NO. OF MONTHS _____

FIELD(s):

Occupational Experience

___ Any occupational experience

MINIMUM NO. OF MONTHS _____

___ Full-time occupational Experience in a teaching-related field

MINIMUM NO. OF MONTHS _____

___ Occupational Experience in a teaching-related field

MINIMUM NO. OF MONTHS _____ _____

Personal Qualities

Other

Is the certificate issued by the State Department of Education or through the Teacher Education Unit?

____ State Dept. of Education

____ Teacher Education

An important part of our study focuses upon inservice education for WECEP teachers and how we can improve our inservice education programs.

14. Does your state offer inservice education workshops for WECEP teachers?

___ NO, skip to Q-20

___ YES, continue

15. How many hours are offered of inservice education each year, approximately?

NUMBER OF HOURS _____

16. How many WECEP teachers participated during the previous year, approximately?

NUMBER OF TEACHERS _____

17. Are all WECEP teachers required to attend?

___ NO

___ YES

Who must attend?

18. What content has been offered in recent years?

19. Who is responsible for inservice education of WECEP teachers in your state?

I'd like to conclude with a few general questions about WECEP.

20. What vocational programs, similar to WECEP, do you have for high school students over 15?

21. What have been the more critical problems which teachers of WECEP programs have experienced in recent years?

22. What are the three most important factors which make a successful WECEP program?

___ Qualified WECEP teachers

___ Other supportive teachers in the school

___ Supportive local administrators

___ Employers available and appropriate

___ Motivated/interested students

___ Adequate financial support

___ Adequate facilities

___ _____

23. What do you see happening to WECEP in the future in your state? Do you see growth? Do you see reducations? Do you see any specific problems?

24. Has your state produced a program criteria handbook?

___ NO

___ YES

Could you mail me a copy?

APPENDIX D

TABLE 17

RANKING OF TEACHING COMPETENCIES
BY
OWA COORDINATORS
(N = 42 OWA Coordinators)

Teaching Competencies	Preservice %	Inservice %	Upgrading %	Mean	Rank
Identify learning disabilities	76	19	5	2.71	1
Construct a lesson plan	71	21	7	2.64	2
Organize a weekly plan of instruction	64	29	7	2.57	3
Assess student reading level	58	37	5	2.54	4
Develop a unit plan	57	31	10	2.50	5
Locate instructional materials	62	24	14	2.48	6
Compile accurate, up-to-date records	50	43	7	2.42	7
Maintain a personal data file on students	51	43	7	2.42	7
Develop a filing system	49	37	12	2.39	9
Select instructional materials	45	34	17	2.32	10
Estimate time sequence for a unit of instruction	45	38	17	2.28	11
Assist students in scheduling adjustments	37	51	12	2.24	12
Develop positive reinforcement techniques	45	33	21	2.23	13
Utilize results of achievement tests	38	48	14	2.23	13
Prepare a schedule of activities	45	33	21	2.23	13
Develop a system of recording attendance	39	44	17	2.22	16
Identify personality pattern	52	14	33	2.19	17
Conduct a student conference	40	38	21	2.19	17
Utilize results of diagnostic tests	36	45	19	2.16	19
Organize a unit on career education	31	55	14	2.16	19
Prescribe remedial reading activities	37	41	22	2.14	21
Group students for small group instruction	24	64	12	2.12	22
Identify emotional factors that affect classroom environment	45	19	36	2.10	23
Operate A-V Equipment	46	17	37	2.10	23

TABLE 17 (cont.)

RANKING OF TEACHING COMPETENCIES
BY
OWA COORDINATORS
(N = 42 OWA Coordinators)

Teaching Competencies	Preservice %	Inservice %	Upgrading %	Mean	Rank
Identify entry-level jobs in the community	40	29	31	2.10	23
Prescribe remedial math activities	33	43	24	2.10	23
Construct a system of reporting student progress	31	48	21	2.10	23
Utilize available classroom facilities	24	51	24	2.00	28
Evaluate student progress at a training station	21	55	24	1.98	29
Establish student transportation procedures	29	40	31	1.98	29
Identify symptoms of drug abuse	36	26	38	1.98	29
Utilize A-V aids	33	40	26	1.93	32
Chart student progress	21	48	31	1.90	33
Employ role-play and simulation	29	29	43	1.86	34
Utilize problem-solving strategies	29	29	43	1.86	34
Communicate individual subject goals to faculty and administration	24	38	38	1.86	34
Present a demonstration	24	37	39	1.85	37
Employ oral questioning techniques	30	23	48	1.83	38
Construct instruments to evaluate instructional objectives	29	26	45	1.83	38
Publicize program in school	21	38	40	1.81	40
Evaluate student reading progress	13	53	35	1.78	41
Identify emotional factors which contribute to reading difficulties	31	16	52	1.78	41
Identify intellectual factors which contribute to reading difficulties	26	24	50	1.76	43

TABLE 17 (cont.)

RANKING OF TEACHING COMPETENCIES
BY
OWA COORDINATORS
(N = 42 OWA Coordinators)

Teaching Competencies	Preservice %	Inservice %	Upgrading %	Mean	Rank
Locate help for drug-related problems	26	21	52	1.74	44
Develop value classification strategies	27	20	54	1.73	45
Assess student comprehension of math	14	43	43	1.71	46
Moderate student discussion of sensitive issues	7	37	56	1.71	46
Give a lecture	27	17	56	1.71	46
Develop schedule for cleaning work areas	20	32	49	1.71	46
Devise problem-solving techniques	26	14	50	1.67	50
Incorporate inductive thinking into curriculum	21	22	56	1.66	51
Conduct teacher-to-teacher conferences	15	37	49	1.66	51
Incorporate deductive thinking into curriculum	24	17	60	1.64	53
Identify counseling techniques	20	23	58	1.62	54
Assess the ability of an individual to modify his/her behavior	22	17	61	1.61	55
Incorporate world of work into math instruction	17	27	56	1.61	55
Identify physical factors which contribute to reading difficulties	19	21	59	1.60	57
Determine effectiveness of instruction	14	26	60	1.54	58
Implement program modifications	10	33	57	1.52	59
Establish student tutoring program	12	29	59	1.52	59

TABLE 18

RANKING OF TEACHING COMPETENCIES
BY
OWE COORDINATORS
(N = 14 OWE Coordinators)

Teaching Competencies	Preservice %	Inservice %	Upgrading %	Mean	Rank
Organize a weekly plan of instruction	71	29	0	2.71	1
Maintain a personal data file on students	71	29	0	2.71	1
Prepare a schedule of activities	79	14	7	2.71	1
Operate A-V Equipment	71	14	14	2.69	4
Locate instructional materials	71	21	7	2.64	5
Develop a filing system	64	36	0	2.64	5
Develop a system of recording attendance	64	29	7	2.57	7
Construct a lesson plan	71	14	14	2.57	7
Identify entry-level jobs in the community	64	29	7	2.57	7
Compile accurate, up-to-date records	57	36	7	2.50	10
Estimate time sequence for a unit of instruction	54	38	8	2.46	11
Conduct a student conference	50	43	7	2.42	11
Develop a unit plan	46	46	8	2.38	13
Select instructional materials	50	36	14	2.36	14
Develop positive reinforcement techniques	57	21	21	2.36	14
Locate help for drug-related problems	43	43	14	2.29	16
Identify personality pattern	50	29	21	2.29	16
Establish student transportation	38	46	15	2.23	18
Give a lecture	38	46	15	2.23	18
Publicize program in school	36	50	14	2.21	20
Develop value classification strategies	36	50	14	2.21	20
Present a demonstration	31	54	15	2.15	20
Identify learning disabilities	50	14	36	2.14	23
Identify symptoms of drug abuse	50	14	36	2.14	23
Utilize A-V aids	29	57	14	2.14	23
Assist students in scheduling adjustments	14	86	0	2.14	23
Employoral questioning techniques	34	50	25	2.08	27

TABLE 18 (cont.)

RANKING OF TEACHING COMPETENCIES
BY
OWE COORDINATORS
(N = 14 OWE Coordinators)

Teaching Competencies	Preservice %	Inservice %	Upgrading %	Mean	Rank
Utilize available classroom facilities	36	36	29	2.07	28
Evaluate student progress at a training station	36	36	29	2.07	28
Identify counseling techniques	43	14	43	2.00	30
Devise problem-solving techniques	43	14	43	2.00	30
Utilize results of diagnostic tests	29	43	29	2.00	30
Chart student progress	21	58	21	2.00	30
Construct a system of reporting student progress	21	58	21	2.00	30
Utilize results of achievement tests	29	36	36	1.93	35
Group students for small group instruction	0	93	7	1.93	35
Organize a unit on career education	31	31	38	1.92	37
Develop schedule for cleaning work areas	15	62	23	1.92	37
Incorporate deductive thinking into curriculum	29	29	43	1.86	39
Communicate individual subject goals	21	43	36	1.86	39
Identify physical factors which contribute to reading difficulties	31	23	46	1.85	41
Construct instruments to evaluate instructional objectives	21	29	50	1.84	42
Assess student reading level	23	31	46	1.77	43
Incorporate inductive thinking into curriculum	23	31	46	1.77	43
Moderate student discussion of sensitive issues	14	43	43	1.71	45
Identify emotional factors which contribute to reading difficulties	31	8	61	1.69	46

TABLE 18 (cont.)

RANKING OF TEACHING COMPETENCIES
BY
OWE COORDINATORS
(N = 14 OWE Coordinators)

Teaching Competencies	Preservice %	Inservice %	Upgrading %	Mean	Rank
Assess the ability of an individual to modify his/her behavior	21	21	57	1.64	47
Implement program modifications	7	50	43	1.64	47
Evaluate student reading progress	8	38	50	1.59	49
Identify intellectual factors which contribute to reading difficulties	23	8	69	1.54	49
Conduct teacher-to-teacher conferences	8	38	54	1.54	49
Incorporate world of work into math instruction	8	38	54	1.54	49
Prescribe remedial reading activities	15	23	62	1.54	49
Determine effectiveness of instruction	7	36	57	1.50	54
Assess student comprehension of math	15	15	69	1.46	55
Prescribe remedial math activities	8	31	61	1.46	55
Utilize problem-solving strategies	7	29	64	1.43	57
Employ role-playing and simulation techniques	7	21	71	1.36	58
Identify emotional factors that affect classroom environment	7	21	71	1.35	59
Establish student tutoring program	0	15	85	1.15	60

APPENDIX E

TEACHING METHOD SURVEY*

Please, indicate the degree of importance these teaching methods have for your work with students participating in the work experience program.

G means of great importance

S means of some importance

L means of little importance

	Degree of Importance (Circle your answer)		
	Great G	Some S	Little L
1. Individualized Instruction	G	S	L
2. Tutoring	G	S	L
3. One-to-One Instruction	G	S	L
4. Small Group Instruction	G	S	L
5. Lecture	G	S	L
6. Learning Centers	G	S	L
7. Activity-Oriented Instruction	G	S	L
8. Peer Teaching	G	S	L
9. Large Group Instruction	G	S	L
10. Demonstration	G	S	L

* The Teaching Method Survey was developed by Glaser, R. Occupational Work Adjustment Programs in Ohio, Oxford, Ohio: Miami University, unpublished dissertation, 1981.

APPENDIX F

TABLE 19

CHARACTERISTICS OF OWA AND OWE STUDENTS
IDENTIFIED BY COORDINATORS
(N = 42 OWA, 14 OWE Coordinators)

Student Characteristics	Occupational Work Adjustment					Occupational Work Experience				
	Usually %	Sometimes %	Rarely %	Don't Know %	Mean	Usually %	Sometimes %	Rarely %	Don't Know %	Mean
Two or more grade levels behind in reading	83	17	0	0	2.83	79	21	0	0	2.79
Lacks personal goals and/or a sense of purpose	79	17	2	2	2.78	79	21	0	0	2.79
Irregular school attendance	69	31	0	0	2.69	79	21	0	0	2.79
Two or more grade levels behind in math	67	31	0	0	2.68	50	43	7	0	2.43
At least one family member has not completed high school	48	31	5	16	2.66	64	29	7	0	2.57
Frequent Tardiness	60	36	2	2	2.60	71	29	0	0	2.71
Exhibits behavior problems which require discipline	55	45	0	0	2.55	57	43	0	0	2.57
Living in a single parent home	55	43	2	0	2.52	64	36	0	0	2.64
Lacks supervision from family members	50	46	2	2	2.49	64	36	0	0	2.64
Poor oral communication skills	50	45	5	0	2.45	57	43	0	0	2.57
Poor handwriting skills	48	43	9	0	2.38	57	43	0	0	2.57

TABLE 19 (cont.)

CHARACTERISTICS OF OWA AND OWE STUDENTS
IDENTIFIED BY COORDINATORS
(N = 42 OWA, 14 OWE Coordinators)

Student Characteristics	Occupational Work Adjustment					Occupational Work Experience				
	Usually %	Sometimes %	Rarely %	Don't Know %	Mean	Usually %	Sometimes %	Rarely %	Don't Know %	Mean
Rarely participates in extra-curricular activities	53	33	14	0	2.38	79	14	7	0	2.71
Unable to stay on task for 10 minutes or more	41	50	7	2	2.26	36	64	0	0	2.36
One or two years older than classmates	38	48	14	0	2.24	50	43	7	0	2.43
Average or above in ability but fails to achieve in most classes	26	64	10	0	2.17	36	29	29	6	2.08
Family income below poverty level	29	62	7	2	2.15	7	79	14	0	1.93
Use of mood altering substances	19	74	5	2	2.15	43	57	0	0	2.43
Police record	5	83	10	2	1.95	7	93	0	0	2.07
Victim of child abuse	0	60	24	17	1.67	0	71	29	0	1.71
Friends not enrolled in school	5	53	40	2	1.63	21	57	7	14	2.16
Pregnancy	2	50	43	5	1.58	0	100	0	0	2.00
Poor health	2	52	46	0	1.57	0	36	57	7	1.38
Living in an institution or placed under state guardianship	2	29	64	5	1.33	0	50	50	0	1.50
One or more physical impairments	0	12	83	5	1.13	0	14	86	0	1.14