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Ohio Adult Basic Education teacher perceptions of deterrents to disabled adult participation in Adult Basic Education as related to personal and programmatic variables

Thompson, Phyllis Elizabeth, Ph.D.

The Ohio State University, 1990
OHIO ADULT BASIC EDUCATION TEACHER
PERCEPTIONS OF DETERRENTS TO DISABLED
ADULT PARTICIPATION IN ADULT BASIC EDUCATION
AS RELATED TO PERSONAL AND PROGRAMMATIC VARIABLES

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Phyllis E. Thompson, B.A., M.A.

* * * * *

The Ohio State University
1990

Dissertation Committee:

David L. Boggs
William D. Dowling
I. Philip Young

Approved By

David L. Boggs
Adviser
College of Education
ACKNOWLEDGEMENTS

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VITA

February 2, 1945 ......................... Born - Fargo, North Dakota

1967 ................................................ B.A., University of Oregon
Eugene, Oregon

1967 - 1968 ..................................... Junior High English Teacher
Cottage Grove, Oregon

1969 - 1979 .................................. Communications Instructor; Continuing
Education Supervisor; Adult Basic
Education Instructor; Adult Basic
Education Supervisor
Moraine Park Technical College,
Fond du Lac, Wisconsin

1981 ................................................ M.A., University of Wisconsin
Madison, Wisconsin

1980 - 1990 ...................... Coordinator of Development Education
The Ohio State University - Newark
Newark, Ohio

FIELDS OF STUDY

Major Field: Education: Adult Education

Cognate Area: Training and Development
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CHAPTER I

INTRODUCTION

A number of practices in the field of adult education are emerging to promote full participation of disabled adults in educational programs and to promote their success as contributing adults in the community. Educators challenged with serving disabled adults recognize the need for research in several areas related to disabled adults. This recognition of research needs was recently expressed in the Declaration adopted at the First National Congress on Adults with Special Learning Needs, 1987.

The 1988 National Conference on Adults with Special Learning Needs hosted by Gallaudet University, the first annual conference resulting from the 1987 Congress, reflects the recent attention being given to the disabled by adult educators. This emphasis on the disabled adult should extend the research of previous decades which concentrated almost exclusively on issues of disabled children.

One of the adult education programs in which there is concern about disabled adult participation is Adult Basic Education (ABE). In the four year ABE State Plan beginning with Fiscal Year 1990, all states, including Ohio, had to submit a plan which, among other criteria, demonstrates how state-wide ABE
programming will "improve educational opportunities for adults who lack the level of literacy requisite to effective citizenship and productive employment." A target population mentioned was handicapped or disabled persons. (Education Amendments of 1988, P.L. 91-230 as amended).

One of the goals of the legislation is to provide improved educational opportunities for disabled adults. Ohio's local or community-based ABE programs serving non-institutionalized adults, will strive to meet that goal, however there are questions of how to enhance participation. One such question is what deterrents to participation are experienced by this population. This study will increase the knowledge base concerning disabled adults by identifying deterrents to their participation in ABE as seen by ABE teachers.

Background of the Problem

Adult Basic Education programs in Ohio are federally funded, through formula grants, and state-administered under the Adult Education Act (P.L. 91-230). The purpose of the Adult Education Act (as stated in Section 311) is to expand educational opportunities for adults by establishing adult education services and program that will:

1. enable all adults to acquire basic skills necessary for literate functioning;
2. provide basic education to adults to enable them to benefit from job training and retraining to become more employable, productive and responsible citizens; and
3. enable adults who desire to continue their education to at least the level of completion of secondary school.
The Adult Education Act defines 'adult education' as services and instruction below the college level for adults

a. who are not enrolled in secondary school;

b. who lack sufficient mastery of basic educational skills to enable them to function effectively in society or who do not have a certificate of graduation from a school providing secondary education and who have not achieved an equivalent level of education;

c. who are not currently required to be enrolled in school; and

d. whose lack of mastery of basic skills results in an inability to speak, read, or write the English language which constitutes a substantial impairment of their ability to get or retain employment commensurate with their real ability, and thus are in need of programs to help eliminate such inability and raise the level of education of such individuals with a view to making them less likely to become dependent on others.

The second federal legislation which directly speaks to adult education programs for handicapped individuals is the Rehabilitation Act of 1973 (P.L. 93-112), Section 504, (34 CFR Part 84.38), which states that:

A recipient to...this subpart applies to [one] that operates [an]...adult education program or activity [and] may not, on the basis of the handicap, exclude qualified handicapped persons from the program or activity and shall take into account the needs of such persons in determining the aid, benefits, or services to be provided under the program or activity.

This focused attention on handicapped or disabled adults has emerged from several national studies and recommendations from the National Advisory Committee on the Handicapped. In 1976, this Committee published "The Unfinished Revolution: Education for the Handicapped," In that publication it is stated, "The progress of the past 200 years, and the last ten in particular, will in fact remain essentially meaningless until handicapped people win their
appropriate place not only in 'regular' classrooms but in the 'regular society,'
there to be judged not only on the basis of their disabilities but on the basis of
their worth as human beings." Acceptance into 'regular society' means
overcoming the barriers which stand in the way.

International focus on the disabled has been proclaimed by the United
Nations General Assembly which, on December 3, 1982, declared 1983-1992 as
the Decade of Disabled Persons. A major goal of the United Nations decade is
expanded educational opportunities for all persons with disabilities. This
educational goal was highlighted at the World Assembly of Adult Education held

**National ABE Programs Serving Disabled**

In the Clearinghouse on Adult Education Fact Sheet number nine, titled
"Adult basic education programs for disabled adults," it is reported that nationally
in FY1987, ABE programs funded under the Adult Education Act served 3.5
million people in adult basic, adult secondary and English as a second language
programs. Approximately five percent of those served were physically or mentally
disabled, and six percent were institutionalized.

These disabled participants are aged 16 and over and have disabilities that
may range from mobility impairments, deaf and hearing impairments, blind and
partially sighted impairments, learning disabilities, mental retardation or mental
illness. These individuals are beyond the age of compulsory school attendance
under state law and lack sufficient educational skills to function effectively in
society.
Adult education programs which serve the physically and mentally disabled are located throughout the States and Territories in local educational agencies, community colleges, community based organizations, mental hospitals, rehabilitation and correctional facilities, and other facilities which serve the disabled person.

**Ohio ABE Programs Serving Disabled**

In FY 1989, Ohio reported a total of 7,216 disabled adults served in all ABE program or 9.4% of the 76,018 adults served (J. Bowling). The programs surveyed included both community-based programs and programs for institutionalized individuals. The national FY 1988 average for the same programs was 12%.

The ABE programs sponsored by the Ohio Department of Mental Retardation and Developmental Disabilities and the Department of Mental Health and the two school districts of Cincinnati City Schools and Columbus City Schools historically enroll over 55% of the total 7,216 disabled adults served.

The percentage of the total ABE students served in Ohio who are disabled adults has remained consistent for the years 1987 through 1989. In 1987 6,490 (9.3%) disabled adults were served; in 1988 6,589 (9.1%) disabled adults were served. The total number of adults served in ABE in Ohio has risen over 7,000 in three years.

**Increasing Need in Nation and in Ohio**

Ohio ABE programs serve adults with a range of physical and mental disabilities including health, hearing, visual, orthopedic, and speech impairments;
mental retardation; serious emotional disturbances; and learning disabilities. The state can expect growth in the need for services to disabled adults if its handicapped population increases as predicted by the National Organization on Disability (1981):

Although America is considered foremost among nations in accepting disabled persons and providing opportunity for them, the problems are staggering. There are more than 35,000,000 Americans with physical and mental disabilities...Approximately half are disease related; another third suffer from genetic malformations, developmental disabilities and injury-related conditions. Millions are impaired by emotional and mental disorders...about 14 percent of adults are disabled. An estimated 42 percent of all persons over 65 are disabled, and this percentage is increasing. The growing number of highway and work-related accidents, substance abuse, and the increasing life span contribute to the growth of our handicapped population, despite advances in medicine, technology and health care.

A closer relationship to the need for ABE services for the disabled population can be drawn from the 1986 Louis Harris poll of disabled Americans which reported that 40% of disabled adults nationwide have not completed high school.

Bowe (1985) reports 12,289,000 Americans between the ages of 16 and 64 and not in institutions to be disabled. Of the disabled young adults 16 to 24 years of age, 14.9% have an eighth grade education or less; 34% have between an eighth and eleventh grade education. Thus, one in two disabled young adults has a high school diploma. Among older disabled adults, ages 25 to 64, 43.4% do not have a high school diploma. Bowe's (1985) figure for non-high school completers among the disabled adult population is 46.1% or 6.1% higher than reported in the Louis Harris poll.
Results of the Ohio Rehabilitation Services Commission's study to profile disabled persons in Ohio were released in the internal publication Project Ohioans (1983). This report estimated the number of disabled individuals in Ohio to be 1,440,000 and 806,400 were between the ages of 16 and 55. If 40% of those disabled persons, the Harris poll figure, do not have a high school diploma, 305,366 disabled Ohio adults between 16 and 55 would be eligible for ABE services. If 46.1%, Bowe’s figure for non-high school completers were used, 327,750 disabled Ohioan adults between 16 and 55 would be eligible for ABE.

The Ohio Department of Education, Division of Educational Services, Adult and Community Education Section in 1988 reported a potential ABE and GED (General Equivalency Diploma) population, ages 16 and over, of 2,325,000 non-high school completers in calendar year 1987. Using the National Organization on Disability figure of fourteen percent (14%) adults being disabled, Ohio would have 325,500 disabled adults who have not completed high school, and theoretically about one-half of these adults would be eligible for ABE programs.

Characteristics of Disabled Population

Although a precise figure is not available, estimates of the number of disabled adults in Ohio who do not possess a high school diploma and could therefore be termed eligible for ABE services are in the 300,000 to 330,000 range. In addition to the characteristic of education level attainment, several other general characteristics of the disabled adult population have relevance this study.
Bowe (1985) presents a recent and comprehensive outline of major characteristics of the disabled adult population ages 16 to 64:

1. **Poverty** - 27.4% of disabled person had incomes below the poverty level. They represent 18.4% of all working-age Americans living in poverty.

2. **Social Security Income** - Although under the age of 65, 31% disabled Americans 16-64 years old reported receiving Social Security income.

3. **Medicaid** - 21%, or one disabled person in every five, was covered by Medicaid.

4. **Food Stamps** - 21% of disabled Americans receive food stamps or 22% of all food stamp recipients.

5. **Veterans** - 47% of the 6,317,000 working-age disabled males were veterans.

6. **Public Housing or Group Homes** - Ten percent of disabled men and women live in public housing or group homes. This is 19.4% of all residents in such housing.

7. **Families** - 79% of all disabled persons live in families; 21% live alone or with an unrelated individual.

8. **Ethnic Grouping** - Of the 12,289,000 disabled persons 16 to 64, 80.2% are white, 17.7% are black and 7% are Hispanic. The disabled population has a greater proportion of blacks than does the general population.

9. **Sex** - 51.4% male, 48.6% female

10. **Marital Status** - 52% married; national average is 59%. 12.3% were divorced; national average 7.9%. 9.3% is widowed; 2.6% in general population.

11. **Age** - Average age of all 16-64 year old disabled adults was 50, as compared to 34 among non-disabled adults. Only one in every six disabled persons was born with a disability or became disabled in childhood.
**Summary**

At the national and international levels, adult educators have expressed a need for research which focuses on education of the disabled adult. There are over 35 million disabled adults in the United States; 40% to 46% of this population have not completed high school. The federally funded Adult Basic Education programs are mandated to target this special population. Ohio ABE programs currently enroll less than three percent of this targeted disabled population who have not completed high school. The percentage of the national population which is disabled is projected to increase. Research in education of disabled adults in Ohio ABE programs, therefore, will contribute to meeting a national expressed need and a federal mandate to serve a significantly large and growing special population.

**Statement of the Problem**

Research on participation in adult education is voluminous and focuses on the prospective or active learner's perception of factors which motivate participation. These factors are present in an education program and/or in an individual's life and thus encourage enrollment in an education program. Since the early sixties, Houle and many other researchers have compiled categories and listings of those factors which promote participation.

Early in the 1980's Cross began to study factors at the opposite end of the participation spectrum, i.e. factors which deter participation. The presence of deterrent factors inhibit or prevent participation. Often a deterrent factor is the absence of a motivation or positive factor. Absence of available transportation is
a negative participation factor or deterrent to participation. These deterrence factors are referred to as barriers or deterrents to participation.

Just as participation studies which focus on positive influencing factors, studies of deterrent factors have been conducted using the prospective or active learner as the audience being surveyed or interviewed. The compiled listings or categories are the learner's perceptions of positive or negative factors promoting or inhibiting participation.

There exists another extensive research base in the literature dealing with the subject of attitudes, and teacher attitudes in specific. This research suggests that the attitudes of teachers have an important impact on the student.

This research proposes to introduce the perceptions or attitudes of teachers into the study of deterrent factors affecting participation in adult education. Specifically, this research will focus on ABE teachers in Ohio to determine their perceptions of internal and external program and situational components which deter disabled adults from participation.

**Purpose of Study**

This study of participation of disabled adults in ABE programs in Ohio extends and refines inquiry on deterrence factors to participation in organized adult education programs to which Scanlan and Darkenwald (1984), and Darkenwald and Valentine (1985) have made substantive contributions. A description of the ABE teacher in Ohio, and an analysis of the deterrent domains they believe have the most influence for disabled adult participation in ABE will be presented in this study.
The purpose of this study was to determine the opinions of ABE teachers about the influence certain deterrent domains may have on the participation or non-participation of disabled adults in Ohio ABE programs. The deterrents are analyzed in domain structures such as accessibility deterrents, professional preparation deterrents, and resource deterrents to determine the perceived influence of each domain. Also, an analysis of the relationship between the domains and the variables of hours per week employed, years employed, program site, experience teaching disabled and training in disability areas are provided.

Central Research Question

1. What deterrent domains influence participation of disabled adults in Ohio's community based Adult Basic Education (ABE) programs as perceived by Ohio ABE teachers?

Subsidiary Research Questions

1. Is there a relationship between the opinions held by ABE teachers regarding the influence of various deterrent domains and various personal and programmatic variables?

2. What are the professional training and programmatic resources ABE teachers perceive needed to improve services to disabled adults in Ohio community based ABE programs?

3. What are some general characteristics of Ohio ABE teachers?

Definition of Terms

Definitions used in this study were adapted from the federal legislation and guidelines of the Rehabilitation Act of 1973 (P.L. 93-112), except where noted.
**Adult Basic Education (ABE):** Federally funded state-administered programs of instruction for adults not legally required to be in school who desire to gain skills to the level of completion of secondary school. (adapted from Adult Education Act (R.L. 91-230).

**Deaf:** A hearing impairment which is so severe that a person's hearing is non-functional for the purposes of educational performance.

**Deterrent:** "A reason or group of reasons contributing to an adult's decision not to engage in learning activities." (Scanlan, 1986).

**Disability/Handicap:** A physical, mental, or emotional impairment which substantially limits one or more of a person's major life activities such as education or employment.

**Health impaired:** Limited strength, vitality, or alertness due to chronic or acute health problems such as heart condition, tuberculosis, epilepsy, diabetes, or some other illness.

**Hearing impaired:** A hearing impairment which adversely affects a person's educational performance.

**Learning disability:** A disorder in one or more of the basic psychological processes involved in understanding or an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations.

**Mentally retarded:** Impaired mental development which adversely affects a person's educational performance.

**Orthopedically impaired:** A severe orthopedic impairment which adversely affects a person's educational performance.
Rural: Designated area with less than 50,000 population. (U.S. Department of Commerce, Bureau of the Census, 1989)

Seriously emotionally disturbed: A condition exhibiting one or more of the following characteristics: (1) an inability to learn which cannot be explained by intellectual, sensory or health factors; (2) an inability to build or maintain satisfactory interpersonal relationships; (3) inappropriate types of behavior or feelings under normal circumstances (4) general pervasive mood of unhappiness or depression; and (5) a tendency to develop physical symptoms, pains or fears associated with personal or school problems.

Speech impaired: A speech or language impairment (such as impaired articulation, stuttering, voice-impairment, or a receptive or expressive verbal language impairment) which adversely affects a person’s educational performance.

Urban: City area with at least 50,000 population. (U.S. Department of Commerce, Bureau of the Census, 1989)

Visually impaired: A visual impairment which adversely affects a person’s educational performance, and includes both partially sighted and blind persons.

Research Design

This study was descriptive in nature. Its population was 906 Ohio Adult Basic Education teachers.

A survey instrument was developed using a Likert scale to measure responses indicating the degree of influence various deterrent domains are perceived to have on the participation of disabled adults in Ohio ABE programs. The deterents were categorized into eight domains.
The discrete items in the domains were gathered from interviews with ABE professionals and disabled adults in ABE programs. Domains of the items were developed based on literature review and the judgement of a panel of experts. A pilot study was conducted with 28 ABE teachers. The remaining 878 were the population for the major position of the research. Data were collected from 525 ABE teachers and used to describe their opinions toward deterrents for disabled adults to participate in ABE.

The Ohio Department of Education, Division of Educational Services, and the Ohio Association for Adult and Continuing Education endorsed this study. The data were analyzed using the SPSSX and SAS computer programs at The Ohio State University. The findings are limited to the Ohio ABE teachers responding.

Assumptions

There are four assumptions on which the research was based. First, deterrent structures can be studied as factors related to participation in adult education programs (Darkenwald and Merriam, 1982). Second, the presence of deterrents impacts negatively on participation in education programs. Third, teachers have opinions about deterrents, and fourth, these opinions can be measured.

Limitations

There are some limitations in this study. First, the generalizability is limited due to the design of studying an intact group which consists of a total population. Secondly, this study is limited to the interpretation of data generated
by the instrument. Thirdly, perceptions are limited by attitude of individual respondents and may be biased.

Implications

This research has implications for:

1. Exploring options for expanding participation of disabled adults in ABE programs.

2. Implementing staff development programs for ABE teachers by professional associations, institutions of higher education, and The Ohio Department of Education.

3. Addressing funding concerns for ABE by The Ohio Department of Education.

4. Promoting the development of professional status for ABE teachers.

5. Equipping ABE programs with materials and equipment for serving disabled adults.

6. Enhancing linkages at local and state levels with promote access to ABE programs by disabled adults.
CHAPTER II
REVIEW OF LITERATURE

The literature relevant to this study is summarized in Chapter II. The related research areas include: motivation theory; theories of participation; deterrents to participation; attitudes toward disabled persons; deterrents for low-literate adults; and teacher attitudes.

Motivation Theory

Models of participation form a foundation for current research on deterrence to participation and are suggestive of the factors which lead to low participation rates by disabled adults.

As the theory and research on human motivation forms the foundation for theories and models of participation, these models are also the origins of current research on deterrence. Three major human behavior theories which deal with motivation substantially influence participation theory. These theories are Maslow's (1954) hierarchy of needs, Vroom's (1964) expectancy theory, and Locke's (1968) goal theory. Maslow (1954) bases his theory on the assumption that individuals are motivated to meet specific universal needs in a linear manner from lower-level needs to higher-level needs. Vroom (1964) concerns himself with how behavior is started, maintained and stopped. Vroom's theory is also linear and emphasizes rationality on the part of individuals. Locke (1968) bases
his theory on the premise of intention to achieve a goal as the primary motivator for behavior.

Summary

All three theories stress internal drives and individual perceptions as compelling determinates of behavior. This emphasis on drives and perceptions is continued in theories of participation in adult education.

Theories of Participation

Theoretical models of participation provide a basis for recent studies into the nature of deterrence and suggest a variety of variables or specific deterents that may influence participatory behavior. Even though these theories of participation generally are not based on empirical research and do not explicitly define a construct for specific deterrents (Hayes, 1987), participation theories are reviewed in this study since the absence of participation factors often become the barriers which deter participation (Darkenwald and Merriam, 1982). Access to transportation, for example, is a positive participation factor, however, the lack of access to transportation becomes a deterrent or a reason for non-participation. Participation studies in adult education, generally speaking, address the question why adults engage in education, in order to specify the nature of factors that affect participation. Deterrence studies generally focus on the question of why adults, usually a specific sub-population, do not engage in education. Such studies attempt to specify the nature of deterrence or the deterrents that affect participation.
The participation theories and models which will be reviewed are Miller's (1967) force-field analysis, Boshler's (1973) congruence theory, Cross's (1981) chain-of-response models, and Darkenwald and Merriam's (1981) psychosocial interaction model.

**Miller's Force-Field Analysis**

Miller (1967) conceived a theory of driving and restraining forces which affect participation. Miller's work is based on Maslow's (1954) hierarchy of needs and Lewin's (1951) model of positive and negative forces to explain participation in educational activities (force-field analysis). Miller postulated that lower social class members are interested in education which meets lower order, or survival needs, while on the opposite end of the continuum, higher class members participate in educational activities which meet high order needs. A person's decision to participate is also influenced by internal, environmental and social positive and negative forces. All forces must be positive to result in participation which persists. This positive alignment of forces is more likely to occur for members of the higher classes.

Miller did not extend his theory into study which could identify and promote research of the many variables suggested as influences on participation. The theory does, however, provide the global internal, environmental and social factor categories as framework for further study.

**Boshier's Congruence Model**

Boshier (1973), like Miller, based his theory of participation on the interaction of internal and external factors. The single most influential internal
factor, to Boshier, was self-concept. His congruence theory depicts participation choices being made by the amount of discrepancy between an individual's self-concept and environmental factors. When congruence exists, the individual is "growth motivated" and most likely to participate, conversely if the individual is "deficiency motivated" non-participation results. Boshier concludes that self-esteem is the critical factor in educational participation, with environmental factors acting as balancing variables to participation or non-participation.

Cross's Chain-of-Response Model

Cross (1981) synthesizes previous models of participation with the individual-environmental interaction paradigm. Cross views participation as an ordered result of a chain of responses to forces affecting the position of an individual in his or her environment. The order of response is from internal self-evaluation of attitudes toward education to the importance of goals and the expectation that education participation will have toward meeting those goals. Life transitions affect the element of expectation. If, at this point, the individual is motivated to participate, he or she will experience the opportunities and/or barriers to participation. Cross contends that the individual's final decision will depend on the strength of motivation to meet goals and the information available to make the decision.

Of particular importance in Cross's work is her conceptualization of barriers to participation. She classifies deterrents into three categories; situational barriers, institutional barriers, and dispositional barriers. Situational barriers are those in an individual's life which arise from one's age, economic
status, etc. Institutional barriers are those related to the agency, school or institution offering educational programs. Dispositional barriers are the attitudes and self-perceptions of the learner.

Cross's multi-dimensional conceptualization of deterrent factors forms the basis of models and assumptions about the nature of the deterrents construct.

Darkenwald and Merriam's Psychosocial Interaction Model

Darkenwald and Merriam (1982), like Cross, address the nature of deterrence, but extend her conceptualization to four categories. Situational and institutional barriers are defined in a manner similar to Cross. An important third category, informational barriers, was based on findings of Cross (1981) and Johnstone and Rivera (1965). Informational barriers deal with lack of awareness of educational opportunities as a major obstacle to participation. The fourth category, psychosocial barriers, extends Cross's dispositional barriers to include attitudes to education and beliefs about oneself as a learner.

As a synthesis of prior theory, Darkenwald and Merriam's model provides a current guide for research into more concrete aspects of theory. This model makes a major contribution as a guide for research in the area of deterrents to participation by adults in educational activities.

Deterrents to Participation

The theories of participation previously reviewed suggest at least two general categories of variables which influence adult participation in education; internal/psychological, and external/environmental.
Hayes (1987) contends that the models lack specificity and thus provide little guidance for an empirical investigation of the relationship among the variables that affect participation. The models, however, do enable the development of speculative assumptions about the nature of the deterrents construct.

Assumptions

Scanlan (1982) developed such assumptions about the deterrents construct. His following assumptions are used as a guide for current inquiry into the nature of the deterrents construct:

1. The deterrents construct is probably multidimensional.
2. The individual's perception and interpretation of deterrents to participation may have a greater influence on behavior than actual deterrents.
3. Psychosocial and environmental variables may influence the perceptions and interpretation of deterrents to participation.
4. Deterrents may represent the absence of enabling factors as well as true barriers or obstacles to participation. (pp. 62-63).

Seminal Studies

Johnstone and Rivera (1965), as part of a national study, collected some of the first descriptive information about deterrents. Interviews were used to identify reasons why nonparticipants did not enroll in adult education. The interviewees were asked to respond how applicable ten different statements were to them. The deterrent statements were intuitively divided into environmental/situational and internal/dispositional categories. Findings showed situational barriers were identified more frequently than dispositional barriers.
Disability was not one of the selected sociodemographic variables. Cost and lack of knowledge of educational opportunities did emerge as more significant for respondents of low socio-economic status.

Carp, Peterson and Roelfs (1974) conducted a national survey which concurred and expanded on the Johnstone and Rivera findings. This survey study of 3,000 people who expressed an interest in further learning contained a list of 24 reasons for non-participation. Each respondent was asked to identify those reasons which were barriers to participation. As in the Johnstone and Rivera study, cost and time constraints were the most significant barriers were rated as more important. Sociodemographic variables did not include physical ability or disability. Of significance to this study however, were the findings that low-literate, or respondents with less than a high school diploma were three times more likely than high school graduates to identify lack of confidence due to previous poor academic performance as a deterrent. Other deterrents significant to this group were transportation, cost, and lack of child care.

These studies are presented as seminal works for their preliminary suggestions of dimensions for the deterrents construct, and for demonstrating evidence of the disparate influence of deterrents on various segments of the adult population.

Empirical Studies

While the seminal studies reviewed provided intuitive models, more recent studies have been empirical in nature. As descriptive studies the earlier works contained certain flaws which Scanlan (1982) described as including limited lists
of deterrent items deductively generated by the researchers themselves, with no
evidence of the reliability of the deterrent measures used, and elementary
methods of measurement. Cross (1979) also points up the problems of possible
response bias and sample attenuation.

In 1984 Scanlan and Darkenwald sought to overcome many of the
methodological flaws in previous studies by using rigorous empirical methods to
explore the deterrents for participation of continuing health professionals. The
researchers developed a Deterrents to Participation Scale (DPS). The deterrents
were identified through interviews and an extensive literature search. Data was
collected from a mailed survey. Six orthogonal factors were identified using
principal components analysis; inertia, quality, family constraints, cost, benefit and
work constraints.

The generalizability of their findings was limited due to the nature of the
sample. Darkenwald and Valentine (1985), in an attempt to overcome this
limitation, developed a generic form of the DPS. Factor analysis revealed six
different orthogonal factors; lack of confidence, lack of course relevance, time
constraints, low personal priority, cost, and personal problems. The only factor
common to both studies was cost.

In a 1987 study of perceptions of deterrents to participation held by low-
literate adult basic education student's following Darkenwald and Valentine's
methodology, Hayes (1987) identified only two factors, self-confidence and
personal priority, as common with the general population study.

The results of the three studies provide new information about deterrents
for two particular groups in adult education. Results also support including the
deterrents construct in models of participation in adult education. Most importantly, the findings provide evidence to support Scanlan's (1982) assumption that the deterrence construct is multidimensional.

Conclusions

Based on the results of these studies, the nature of the deterrence construct differs for subgroups of the adult population and the construct differs according to the type of adult education being referenced. Hayes (1987) concludes that "different instruments are necessary to measure deterrents to participation in specific forms of adult education for select target groups." (p. 27)

Deterrents for Low-literate Adults

Although difficult to define as a distinct target group, low-literate or educationally disadvantaged adults have been studied to determine the general types of barriers which impact on participation in adult education. Low-literate is generally associated with lack of a high school diploma and often low socioeconomic status (Hunter and Harmon, 1979).

Anderson and Niemi (1970) reviewed the literature on the disadvantaged adult and education. These researchers describe two categories of barriers to participation; social barriers and dispositional barriers. Social barriers include prejudice against the disadvantaged as limiting access to educational opportunities. Middle-class orientations of educators produce a lack of sensitivity to problems faced by the disadvantaged, and often result in programs which are too rigid to meet the unique needs of the disadvantaged. Dispositional barriers which are held by the disadvantaged include a "subculture" value system which
conflicts with the more prevalent middle-class society. This type of barrier exemplifies Maslow’s (1954) motivation theory in that the disadvantaged are seeking a survival or lower need oriented program as opposed to the higher order success or self-actualizing program dominately offered in adult education. Dispositional barriers also include negative attitudes toward education and a denial of education needs.

In developing their deterrent categories, Anderson and Niemi (1970) create a dichotomy of barriers which is useful in identifying origins of barriers. This work does suggest that the disadvantaged subgroup has unique barriers to participation.

Otto and Ford (1967) intuitively grouped barriers to participation for low-literate adults in literacy programs into four groups; economic problems, familial problems, social problems and psychological. Economic problems include lack of child care and transportation. Attitudes of family members, family responsibilities and obstacles within the home which interfere with study are examples of familial problems. Social problems include a low regard for education and absence of incentives for application of academic skills. Psychological barriers such as fear of failure and fear of change comprise the most restricting barrier category.

Deterrents to Participation in Adult Basic Education

Boggs, Buss and Yarnell (1978) studied the characteristics of the Ohio population eligible for adult basic education, their awareness of and interest in the program, and conditions favorable to attendance. The only criterion of eligibility for ABE was noncompletion of high school. A multiple random sample
design was used to identify a representative out-of-school sample ages 16 years and older who had not completed 12 years of education. Telephone interviews were conducted with 1536 persons. Results showed that approximately 40% of the respondents were not aware of the existence of ABE. Lack of information, therefore, can be a significant barrier to ABE participation. The most frequently reported barrier was feeling too old to learn, perhaps a biased response since 73.5% of the sample were age 45 or older. Other barriers reported were lack of time, not interested/not necessary, health constraints and family responsibilities.

The findings of Boggs et al, 1978, were substantiated in three related studies; Kreitlow, Glustrom and Martin (1981), Glustrom (1983), and Fitzgerald (1984). The Wisconsin Educational Needs Assessment (Kreitlow, et al, 1981), used the same sampling criteria as the Ohio study. Again, 1,690 respondents were surveyed by telephone, using computerized random digit dialing. Institutional and informational barriers were reported, but not of primary significance even though 45% of the sample had not heard about adult classes in their community. Age was found to be positively associated with non-participation with younger adults more likely to participate. The most frequently given reason for non-participation was "not considering obtaining a high school diploma." Other reasons cited were too busy, had to work, family responsibilities, too old, and poor prior school experiences. The researchers concluded that a combination of economic, social and psychological factors form deterrents to participation in ABE.

Glustrom (1983) used a sample from the original Wisconsin Needs Assessment to attempt to validate the findings. The majority of the sample
respondents felt they were functioning satisfactorily without a diploma. Basic skills testing verified this perception. This study is not well described in terms of sample size and interview procedures.

A follow-up study by Fitzgerald (1984) also attempted to verify the Wisconsin study findings. A major change in methodology used was to identify the sample by income level rather than education level. Person-to-person interviews were conducted of 100 individuals. Age was concluded to be a major barrier, but evidence was lacking to support the conclusion. One third of the sample members did have a high school diploma, however 12 of those said they needed basic skill development. Many respondents were deterred from participation because of the belief that improved reading skills were not necessary and attending classes would not improve their dissatisfactory economic condition. Fitzgerald introduced a new category dealing primarily with elimination of economic problems before education could be considered. Another new category of deterrents, one not reported by Kreitlow or Glustrom, was dissatisfaction with program variables and teachers.

Mezirow, Darkenwald and Knox (1975) cite several factors of non-participation in ABE, specifically for the most disadvantaged in the target population. The researchers further cite possible programmatic causes for these barriers. For lack of knowledge about ABE, the authors suggest inappropriate recruitment methods as the barrier. Also inaccurate or partial information about ABE can create the barrier of misconception in the mind of the prospective learner that ABE is only a program to prepare for the high school equivalency exam (GED) rather than a program for basic skills development. Other barriers
noted were cost of child care and transportation and fear of failure and embarrassment in returning to a school setting. The basis for this work was an extensive study of ABE programs across the United States.

**Summary**

These studies identified a variety of deterents to participation in ABE by adults with less than a high school diploma. The deterents encompass the constructs of dispositional, institutional, situational and informational barriers as outlined by Darkenwald and Merriam (1981). The studies also support Scanlan's (1982) assumption that the deterrence construct is multidimensional.

**Attitudes Towards Disabled Persons: Historical Development**

Research to measure the attitudes of non-disabled people toward people with specific disabilities, or disabilities in general, has been conducted for more than half a century. Pioneering work was conducted by social psychologists such as Strong (1931) and Barker (1948). Antonak and Livneh (1988) content that measures of attitudes on non-disabled people toward people who are disabled have ranged from subjective, informal, and (usually) psychometrically unsound instruments to more objective, carefully planned and developed studies and instruments.

In the 1940's Mussen and Barker (1943) used 24 personality characteristics and asked non-disabled respondents to depict, by rating, the presumed characteristics (i.e., self-pity, friendliness, mental alertness) of both the physically disabled person and the so-called ideal person. The actual term used to describe the disabled person was "cripple."
Many of the attitude studies of the 1950's and early 1960's targeted the disability area of blindness. Some of those studies were conducted by Rusalem (1950, 1965), Steingisser (1954), and others through to Siller and Chipman (1964). These researchers developed progressively more complex scales and methodologies. Siller and Chipman finally concluded that attitudes toward people who are blind and toward people who are disabled in general, were complex and multidimensional, and could not be reduced to a single-scale format.

Measurement of attitudes toward other specific areas of disabilities were initiated in the early 1960's. Cowen and others (1967) rewrote the earlier attitude toward blindness scale and used the referent deafness or deaf person and added new items. Cohen and Struening (1963) developed their Opinions about Mental Illness (OMI) scale. Their work gave support to the previous notion of multidimensionality of attitudes toward people with disabilities.

Research shifted from the focus on specific disabilities toward general physical disabilities later in the 1960's. Another area of focus was mentally retarded people. In the 1970's Jordan (1971) combined attitudes toward three areas of disabilities (i.e., deafness, mental illness and mental retardation) into one Attitude Behavior Scale.

The 1970's and 1980's saw the start and continued thrust to reintegrate disabled children and adults into schools, community residences, and the workplace. Researchers became attentive to the possibility that attitudes of teachers, neighbors and employers might be a barrier to complete integration of disabled people. Consequently, scales to measure societal attitudes and responsibilities toward disabled people were developed.
Antonak and Livneh (1988) make the following statement concerning the measurement of attitudes toward disabled people:

The number of investigations of attitudes toward disabled people has increased tremendously through this decade...The recent publication of a book containing state-of-the-art papers on theoretical, methodological, and practical issues in the measurement of attitudes toward people who are disabled (Yuker, 1987) will be a significant resource for many years. (p.19)

One of Yuker's (1987) contentions is that a measurement of attitudes concerning disabilities in general offer adequate representation for attitudes toward specific disabilities.

Implications for Disabled People

Altman (1981) describes three distinct yet interacting social circles or levels of attitudes toward disabled people. These groups are the innermost circle (disabled person's relatives, friends, peers), the professional circle (physicians, nurses, social workers, teachers, etc.), and the general public. The attitudes of these groups can influence socialization, processes of assistance given the disabled person, employment, and education. Attitudes of one group may influence attitudes of those in another group. For example, professionals may strongly influence family and peers. Siller (1984) suggests that understanding the dimensions of attitudes may suggest change procedures and promote assessment of the effects of interventions.

Teacher Attitudes

Teacher attitudes provide what Stern and Keislar (1975) call 'the human element'. They believe this element is a key factor to improvement in education;
and that launching programs where the resources of materials and people are necessary for success, the program falters if the human element is not adequately considered. The predispositions of the teachers help determine how resources are utilized. Stern and Keislar also point out that teacher attitudes are even more significant in the development of programs when the students possess special characteristics.

Boulmetis (1982) discounts the theory that school districts or administration are the main determiners of the content of instructional materials and the effectiveness of instruction. He quotes Russell (1975) who contends that the teacher ultimately determines the effectiveness of a program. Consultation with and in-service for the teacher are the means by which innovation and change are made successfully in educational programs.

In summary, attitude studies concerning disabled persons have been based on a variety of elements from personality characteristics to barriers for integration into schools, communities and workplaces. These attitudes are multidimensional. Teachers attitudes are of significant importance as the human element necessary for success of programs, especially when instituting change in the use of resources or curriculum.
CHAPTER III
RESEARCH PROCEDURES

This research was focused on perceptions held by currently employed Adult Basic Education (ABE) teachers currently employed in the Ohio Department of Education sponsored ABE programs during the academic year 1988-89. The study sought answers to questions concerning deterrence to participation for disabled adults in community-based Ohio ABE programs. Programs under sponsorship of the Ohio Departments of Health, Mental Retardation and Developmental Disabilities, M.R./D.D., and Rehabilitation and Correction. This chapter includes the purpose of the research, the research questions and a description of the population, research design, instrumentation, and data analysis.

Purpose of Study

This study is an extension of the line of inquiry on deterrence to participation in organized adult education programs initiated by Scanlan and Darkenwald (1984), and Darkenwald and Valentine (1985). Their work focused on providing empirical support for incorporating the construct of deterrence into the theories of participation in adult education. Earlier adult education research, beginning with Houle (1961) through Sheffield (1964), Boshier (1971), Burgess
(1971), Grabowski (1972), Morstain and Smart (1974), focused on what impels adults to participate in adult education programs. Cross (1981), and Darkenwald and Merriam (1982) began to assert that the construct of deterrence occupies a central place in theories of participation. Deterrent factors are reasons for non-participation and thus these deterrents should be studied as factors affecting participation (Darkenwald and Merriam, 1982).

Two major results of Scanlan, Darkenwald and Valentine's work were that the deterrence construct is multidimensional, and secondly, the factor structure varies for various subgroups of the adult population. Health professionals, for example, had deterrents for continuing education participation in six orthogonal factors; disengagement, lack of quality, family constraints, cost, lack of benefit, and work constraints (Scanlan and Darkenwald, 1984). The general adult population had six orthogonal factors of lack of confidence, lack of course relevance, time constraints, low personal priority, cost and personal problems (Darkenwald and Valentine, 1985). Only one factor, cost, was identified for each group. The overall purpose of this study was to investigate specific deterrent structures or domains which may influence disabled adult participation in Adult Basic Education as viewed by ABE teachers and to determine which factor structure(s) (deterrent domains), if any, had impact on disabled adult participation.

**Research Questions**

This study focused on teachers in Ohio community-based ABE programs in non-institutionalized or agency sponsored settings and described and analyzed their opinions about deterrent domains to participation in those ABE programs
by disabled adults.

**Research Questions**

This study sought descriptive information about Ohio ABE teachers and sought to assess the degree to which their opinions about deterrence factors to participation in ABE programs by disabled adults were related to certain personal and programmatic variables.

Specifically, opinions were sought to assess the degree to which ABE teachers believed that each of the following deterrent domains contribute to non-participation in ABE by disabled adults:

1. Attitude and emotional deterrents
2. Legal deterrents
3. Accessibility deterrents
4. Organized group deterrents
5. Pre-employment deterrents
6. Employment deterrents
7. Professional preparation deterrents
8. Resource deterrents

In addition to the biographic and opinion statements, respondents completed checklists of types of teacher training desired and materials and equipment needed to make ABE programs more accessible to disabled adults.

Additional insights were collected and categorized concerning suggestions to increase participation in ABE programs by disabled adults.

**Population**

The population from whom opinions were gathered was 906 teachers employed in community-based ABE programs in the State of Ohio during the academic year 1988-89. Of the 906, 28 participated in the pilot study. The
remaining 878 comprised the population for the major portion of the study. Each community-based ABE program director (listing provided by the Ohio Department of Education) was contacted and each provided a directory of employed ABE teacher's names and addresses. No limit was placed on hours employed per week to obtain the most complete information possible.

Research Design

This research assessed the opinions of Adult Basic Education teachers about deterrent factors for disabled adult participation in ABE programs. Gay (1981) stated that "descriptive research involves collecting data in order to test hypotheses or answer questions concerning the current status of the subject of the study" and "determines and reports the way things are" (p. 12). Gay (1981) further states that "typical descriptive studies are concerned with the assessment of attitudes, opinions, demographic information, conditions and procedures" (p. 153).

Dickinson and Blunt (1980) discussed advantages to utilizing the survey approach which were summarized by Thiel (1987) as "(1) providing a description of a field at a given time, (2) gathering a great deal of representative information, (3) identifying areas where other types of research are needed, and (4) focusing on information about a specific, definable population." (p. 35).

Dillman (1978) acknowledges that weaknesses in survey research exist and his concerns, as summarized by Dansie, 1988, are "concern for accurate responses by the participants, an adequate response rate, the amount of time, money and manpower required, and the cooperation of the individuals under study" (p. 33).
With his concerns, Dillman (1978) suggests several strategies to control for weaknesses. This study followed the suggested strategies to minimize and control for the weaknesses. To maximize response rate and control for non-response error the surveys were personalized to each participant. The survey format was concise and clear to minimize the time needed for completion. Anonymity was guaranteed to eliminate the chance of personal risk or embarrassment. There was no monetary cost for the participant. The cover letter developed a unity of purpose and reward between respondent and the researcher by explanation of the use of the results to improve local programs and a willingness to provide participants with the research findings. Follow up-procedures were implemented where necessary.

A thorough search of the literature was conducted to identify deterrents to participation in adult education in general, to participation in adult basic education specifically, and to barriers for disabled adults. A synthesis of the information allowed for categorization or a domain construct of the deterrents for disabled adult participation in adult basic education programs.

Item identification, or the deterrent variables for the instruments, were developed through individual and group interviews of nine ABE professional and six currently enrolled disabled adults in urban and rural programs. The interviews were structured using a preliminary survey which called for listings of barriers or deterrents to enrollment in ABE programs for disabled adults. The resulting compilation of discrete items was reviewed by a panel of experts to determine the quality and scope of the items and to estimate the degree to which each item could be discriminatory in terms of agreement or disagreement of the
importance as a deterrent to participation and to cluster the items into deterrent domains. The panel consisted of an ABE program director, a Bureau of Vocational Rehabilitation counselor, a state ABE consultant, an adult education professor and researcher, and an experienced ABE instructor.

A pilot study was conducted as closely as possible to the final format of the instrument to test the survey instrument, the design, the reliability and the statistical procedures. The pilot study was based on the responses from 28 ABE teachers. An internal reliability analysis indicated reliability coefficients of .68 for attitude/emotional, .88 for accessibility statements, .78 for organized group statements, .81 for employment statements, .80 for professional preparation statements, and .84 for resource deterrent statements. Analysis of the data was made by each deterrent domain.

Instrumentation

The survey instrument and procedures were designed and used in ways which are suggested by Dillman (1978) and Fowler (1984) to maximize response rates and accurate analysis. Data collection occurred over an eight week period and was conducted with endorsement of the Ohio Department of Education, Division of Educational Services and the Ohio Association for Adult and Continuing Education (OAACE). A signed statement of support from representatives of the two endorsers was included with each mailing to enhance trust and provide legitimacy to the study. Each mailing also included the survey instrument and a stamped, addressed return envelope. A second mailing, two weeks later, contained a cover letter from the researcher, the survey and a
stamped return envelope. The third mailing, two weeks later, was a letter from
the researcher encouraging completion of the survey. The text of the survey
included a "thank you" and an opportunity to request survey results. A response
rate of 63.8% was attained. Usable data were obtained from 525 ABE teachers
(59.8%).

Data Analysis

Data received from the respondents were coded and analyzed using the
SPSSX and SAS programs available at the Information and Research Computing
Center at The Ohio State University. Frequencies, percentages, means and
standard deviations and rank order were used to describe the deterrent variables.

Demographic information was collected from each respondent. The
information included hours employed per week, length of employment, rural or
urban program sites, experience in teaching disabled adults, level of professional
training, type of training desired and willingness to assume tuition costs for
college credits.

The first research question was to identify the significant areas or domains
of deterrents to participation in ABE programs by disabled adults as perceived by
ABE teachers. The discrete items in the final version of the survey represented
possible barriers to participation. The degree of agreement as to the influence of
each item as a deterrent was assessed through a Likert scale. The scale values
indicated no basis for opinion, strong agreement, agreement, disagreement and
strong disagreement. "Each response is associated with a point value and an
individual's score is determined by summing the point values for each statement"
(Gay, 1981, p. 126). The Likert scale, according to Gay (1981) is one of four attitude scales which can measure attitudes toward self, others and a variety of attitudes towards institutions and situations.

Descriptive statistics were determined for the total population of respondents. Means and rank of each deterrent domain were calculated. The deterrent scores for each item were used as the data base for analyses to determine the deterrent domains perceived to be of most influence to participation of disabled adults in ABE.

Mean scores were analyzed and described according to the following scale:

- 4.6 to 5.0 Very strong agreement
- 4.0 to 4.5 Strong agreement
- 3.5 to 3.9 Agreement
- 2.5 to 3.4 Neither agreement nor disagreement
- 2.0 to 2.4 Disagreement
- 1.5 to 1.9 Strong disagreement
- 1.0 to 1.4 Very strong disagreement

Data analysis was conducted to determine the means and rank of each of the eight deterrent domains: attitude/emotional; legal accessibility; organized group pre-employment, employment; professional preparation; and resources. A Pearson product-moment correlation coefficient was used to determine whether a relationship existed between the scores (responses) and the personal and programmatic variables. The mean and standard deviation of each group were computed.
Measurement of associations were analyzed and described according to the following conventions (Davis, 1971):

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.70 or higher</td>
<td>Very strong association</td>
</tr>
<tr>
<td>.50 to .69</td>
<td>Substantial association</td>
</tr>
<tr>
<td>.30 to .49</td>
<td>Moderate association</td>
</tr>
<tr>
<td>.10 to .29</td>
<td>Low association</td>
</tr>
<tr>
<td>.01 to .09</td>
<td>Negligible association</td>
</tr>
</tbody>
</table>

The coefficient of determination ($r^2$) was used to indicate the proportion of variance in the dependent variable deterrent domains of attitude/emotional, legal, accessibility, organized group, pre-employment, employment, professional preparation and resources that were determined from the personal and programmatic independent variables.

Descriptive data of professional and programmatic resources needed are clustered by key word and ordered by frequency of response. Comments are grouped by relatedness to topical areas.
CHAPTER IV
FINDINGS

This chapter contains the results of the mail survey and the analysis of data. The purpose of the survey was to obtain information concerning the opinions of Ohio's Adult Basic Education (ABE) teachers toward deterrents to participation in ABE programs by disabled adults.

The survey contained questions concerning selected personal and programmatic factors. In addition to providing descriptive data regarding Ohio ABE teachers as a body, this study includes an analysis to determine the relationship that exists between personal and programmatic variables and the opinion statements. Checklists and comment sections were used to obtain information concerning knowledge or skill areas of training desired and ways to improve accessibility and instruction to disabled adults in ABE programs.

The results reported in this chapter are based on data obtained from 560 (61.8%) of the 906 ABE teachers in Ohio. The findings are reported under headings: (1) Response Data, (2) Personal Data, (3) Opinions of ABE teachers toward deterrents to participation for disabled adults in ABE Programs, and (4) Data Analysis.
Response Data

Adult Basic Education teachers in local community-based programs in all 88 Ohio counties participated in this study. Response data are indicated in Tables 1-6.

TABLE 1
RESPONSE RATE OF ABE TEACHERS

<table>
<thead>
<tr>
<th>Number Possible</th>
<th>Number Completed</th>
<th>Percentage Completed</th>
<th>Number Usable</th>
<th>Percentage Usable</th>
</tr>
</thead>
<tbody>
<tr>
<td>878</td>
<td>560</td>
<td>63.8</td>
<td>525</td>
<td>59.8</td>
</tr>
</tbody>
</table>

Of a possible 878 ABE teachers, 560 (63.8%) participated in the study. From these 560 ABE teachers 525 (59.8%) usable surveys were obtained, as shown by the data in Table 1.

Respondents were asked to record the number of hours per week they were employed as ABE instructors. These data appear in Tables 2 and 3.
### TABLE 2
RESPONSE RATE BY HOURS EMPLOYED IN ABE

<table>
<thead>
<tr>
<th>Hours</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Cumulative Percentage</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>30</td>
<td>5.7</td>
<td>5.7</td>
</tr>
<tr>
<td>3</td>
<td>24</td>
<td>4.6</td>
<td>10.3</td>
</tr>
<tr>
<td>4</td>
<td>30</td>
<td>5.7</td>
<td>16.0</td>
</tr>
<tr>
<td>5</td>
<td>57</td>
<td>10.9</td>
<td>26.9</td>
</tr>
<tr>
<td>6</td>
<td>113</td>
<td>21.5</td>
<td>48.4</td>
</tr>
<tr>
<td>7</td>
<td>20</td>
<td>3.8</td>
<td>52.2</td>
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<tr>
<td>8</td>
<td>18</td>
<td>3.4</td>
<td>55.6</td>
</tr>
<tr>
<td>9</td>
<td>27</td>
<td>5.1</td>
<td>60.8</td>
</tr>
<tr>
<td>10</td>
<td>22</td>
<td>4.2</td>
<td>65.0</td>
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<td>11</td>
<td>7</td>
<td>1.3</td>
<td>66.3</td>
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<tr>
<td>13</td>
<td>6</td>
<td>1.1</td>
<td>73.7</td>
</tr>
<tr>
<td>14</td>
<td>9</td>
<td>1.7</td>
<td>75.4</td>
</tr>
<tr>
<td>15</td>
<td>19</td>
<td>3.6</td>
<td>79.0</td>
</tr>
<tr>
<td>16</td>
<td>8</td>
<td>1.5</td>
<td>80.6</td>
</tr>
<tr>
<td>17</td>
<td>9</td>
<td>1.7</td>
<td>82.3</td>
</tr>
<tr>
<td>18</td>
<td>6</td>
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<td>83.4</td>
</tr>
<tr>
<td>19</td>
<td>6</td>
<td>1.1</td>
<td>83.4</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
<td>3.8</td>
<td>87.2</td>
</tr>
<tr>
<td>21</td>
<td>1</td>
<td>.2</td>
<td>87.4</td>
</tr>
<tr>
<td>22</td>
<td>2</td>
<td>.4</td>
<td>87.8</td>
</tr>
<tr>
<td>23</td>
<td>2</td>
<td>.4</td>
<td>88.2</td>
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<tr>
<td>24</td>
<td>10</td>
<td>.9</td>
<td>90.1</td>
</tr>
<tr>
<td>25</td>
<td>8</td>
<td>1.5</td>
<td>91.6</td>
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<td>26</td>
<td>3</td>
<td>.6</td>
<td>92.2</td>
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<td>27</td>
<td>5</td>
<td>1.0</td>
<td>93.1</td>
</tr>
<tr>
<td>28</td>
<td>3</td>
<td>.6</td>
<td>93.7</td>
</tr>
<tr>
<td>30</td>
<td>7</td>
<td>1.3</td>
<td>95.0</td>
</tr>
<tr>
<td>31</td>
<td>3</td>
<td>.6</td>
<td>95.6</td>
</tr>
<tr>
<td>32</td>
<td>5</td>
<td>1.0</td>
<td>96.6</td>
</tr>
<tr>
<td>33</td>
<td>1</td>
<td>.2</td>
<td>96.8</td>
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<tr>
<td>34</td>
<td>2</td>
<td>.4</td>
<td>97.1</td>
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<td>35</td>
<td>7</td>
<td>1.3</td>
<td>98.5</td>
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<td>36</td>
<td>1</td>
<td>.2</td>
<td>98.7</td>
</tr>
<tr>
<td>37</td>
<td>1</td>
<td>.2</td>
<td>98.9</td>
</tr>
<tr>
<td>38</td>
<td>1</td>
<td>.2</td>
<td>99.0</td>
</tr>
<tr>
<td>40</td>
<td>3</td>
<td>.6</td>
<td>99.6</td>
</tr>
<tr>
<td>43</td>
<td>1</td>
<td>.2</td>
<td>99.8</td>
</tr>
<tr>
<td>45</td>
<td>1</td>
<td>.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>525</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
TABLE 3
RESPONSE RATE BY RANGES OF HOURS EMPLOYED PER WEEK IN ABE

<table>
<thead>
<tr>
<th>Hours Employed</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 10 hours</td>
<td>341</td>
<td>65.0</td>
<td>65.0</td>
</tr>
<tr>
<td>11 to 20 hours</td>
<td>117</td>
<td>22.2</td>
<td>87.2</td>
</tr>
<tr>
<td>21 to 25 hours</td>
<td>23</td>
<td>4.4</td>
<td>91.6</td>
</tr>
<tr>
<td>26 to 30 hours</td>
<td>18</td>
<td>3.4</td>
<td>95.0</td>
</tr>
<tr>
<td>31 to 39 hours</td>
<td>21</td>
<td>4.0</td>
<td>99.0</td>
</tr>
<tr>
<td>40 or more hours</td>
<td>5</td>
<td>1.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>525</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Data in Tables 2 and 3 indicate 341 (65.0%) of the 525 respondents are employed 10 or fewer hours per week in ABE, 117 (22.2%) are employed 11 to 20 hours, 41 (7.8%) are employed 21 to 30 hours, 21 (4.0%) are employed 31 to 39 hours, and 5 (1.0%) are employed 40 hours or more per week in ABE.

TABLE 4
HOURS EMPLOYED PER WEEK IN ABE

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.78</td>
<td>8.71</td>
<td>2-45</td>
</tr>
</tbody>
</table>

Data were provided by 525 ABE teachers. The respondents indicate (Table 4) that the average hours employed per week in ABE was 10.78 hours and the range was 2 hours to 45 hours.
Respondents were asked to indicate, by ranges provided in the survey, the number of years they have been employed as ABE teachers. These data appear in Table 5.

**TABLE 5**

RESPONSE RATE BY YEARS EMPLOYED IN ABE

<table>
<thead>
<tr>
<th>Years of Service</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 year</td>
<td>15</td>
<td>2.9</td>
<td>2.9</td>
</tr>
<tr>
<td>1 - 4 years</td>
<td>242</td>
<td>46.1</td>
<td>49.0</td>
</tr>
<tr>
<td>5 - 9 years</td>
<td>122</td>
<td>23.2</td>
<td>72.2</td>
</tr>
<tr>
<td>10 or more years</td>
<td>139</td>
<td>26.5</td>
<td>98.7</td>
</tr>
<tr>
<td>No response</td>
<td>7</td>
<td>1.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>525</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Data were provided by 525 ABE teachers (Table 5). These respondents indicated that 15 (2.9%) were employed in ABE less than one year, 242 (46.1%) were employed 1 to 4 years, 122 (23.2%) were employed 5 to 9 years, 139 (26.5%) were employed 10 or more years. There were 7 (1.3%) non-responses.

Respondents were asked to indicate the type of location, urban (50,000 population or more) or rural (less than 50,000 population), for the program where they were employed. These data appear in Table 6.
TABLE 6
RESPONSE RATE BY THE VARIABLE: LOCATION OF PROGRAM

<table>
<thead>
<tr>
<th>Program Location</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>224</td>
<td>42.7</td>
<td>42.7</td>
</tr>
<tr>
<td>Rural</td>
<td>284</td>
<td>54.1</td>
<td>96.8</td>
</tr>
<tr>
<td>No response</td>
<td>17</td>
<td>3.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>525</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The data in Table 6 indicate that of the 525 respondents 224 (42.7%) were employed in urban programs, 284 (54.1%) were employed in rural programs, and 17 (3.2%) did not respond to the question.

Summary

Based on the data provided by 525 Ohio ABE teachers who responded to the survey, 257 (49.0%) have been employed 4 years or less as ABE teachers, 139 (26.5%) have been employed 10 years or more. There were 341 (65.0%) ABE teachers employed 10 or fewer hours per week; 117 (22.2%) are employed in ABE between 11 and 20 hours per week; 41 (7.8%) are employed in ABE between 21 and 30 hours per week; 21 (4.0%) are employed in ABE between 31 and 39 hours per week. ABE teachers reporting 40 hours or more per week were 5 (1.0%). For the respondents, the average hours of employment as an ABE teacher is 10.78 hours per week. The range is 2-45 hours. Using 20 hours per week to designate one-half time employment, 458 (87.2%) of the 525 ABE teachers responding report half-time or fewer hours of employment per week. Location for programs was reported by 508 respondents as 224 (42.7%) urban
and 284 (54.1%) as rural.

**Personal Data**

Respondents were asked to provide data regarding their experience and training in working with disabled adults. These data were obtained from questions 4, 5 and 6 in Part 1: Biographic Information of the survey, Appendix B. Specifically, ABE teachers were to identify the extent of (1) their experience with disabled adults in their ABE classes, (2) their professional training in disabilities, by disability area, and (3) the type of professional training received.

Respondents were also asked to indicate (1) the areas of disability training they would like to receive, (2) how they would like training delivered, and (3) their degree of willingness to pay for college credits.

Data in Table 7 indicate the extent to which the ABE teachers responding have had disabled adults in their classrooms.

**TABLE 7**

PERCENTAGE OF ABE TEACHERS WITH EXPERIENCE TEACHING DISABLED ADULTS

<table>
<thead>
<tr>
<th>Experience</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>482</td>
<td>91.8</td>
</tr>
<tr>
<td>No response</td>
<td>43</td>
<td>8.2</td>
</tr>
<tr>
<td>Total</td>
<td>525</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Of 525 respondents, 482 (91.8%) indicated they had taught adults from one or more of the disability areas in their ABE classroom and 43 (8.2%) indicated no ABE teaching experience with disabled adults.
The 482 respondents who indicated teaching experience with disabled adults identified the disability areas represented. These data are summarized in Table 8.

### TABLE 8
PERCENTAGE OF ABE TEACHERS WITH EXPERIENCE TEACHING DISABLED ADULTS BY DISABILITY AREA

<table>
<thead>
<tr>
<th>Disability Area</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaf</td>
<td>17</td>
<td>3.2</td>
</tr>
<tr>
<td>Hearing Impaired</td>
<td>32</td>
<td>6.1</td>
</tr>
<tr>
<td>Health Impaired</td>
<td>22</td>
<td>4.2</td>
</tr>
<tr>
<td>Learning Disabled</td>
<td>220</td>
<td>41.9</td>
</tr>
<tr>
<td>Mentally Retarded</td>
<td>96</td>
<td>18.3</td>
</tr>
<tr>
<td>Orthopedically Impaired</td>
<td>22</td>
<td>4.2</td>
</tr>
<tr>
<td>Seriously Emotionally Disturbed</td>
<td>47</td>
<td>9.0</td>
</tr>
<tr>
<td>Speech Impaired</td>
<td>30</td>
<td>5.7</td>
</tr>
<tr>
<td>Visually Impaired</td>
<td>38</td>
<td>7.2</td>
</tr>
</tbody>
</table>

Data were provided by the 482 respondents indicating experience with disabled adults in the ABE classroom. Multiple responses per respondent were accepted. In rank order from most to least frequently experienced disability area, the order is as follows: learning disabled (41.9%), mentally retarded (18.3%), seriously emotionally disturbed (9.0%), visually impaired (7.2%), hearing impaired (6.1%), speech impaired (5.7%), orthopedically impaired (4.2%) health impaired (4.2%), and deaf (3.2%).

Respondents were asked to identify whether they had had any professional training by indicating the disability area(s) of that training. These data are
reported on Table 9 and Table 10.

**TABLE 9**

PERCENTAGE OF ABE TEACHERS WITH TRAINING IN DISABILITY AREAS

<table>
<thead>
<tr>
<th>Training</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>268</td>
<td>51.0</td>
</tr>
<tr>
<td>None Indicated</td>
<td>257</td>
<td>49.0</td>
</tr>
<tr>
<td>Total</td>
<td>525</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Of 525 respondents, 268 (51.0%) indicated previous training in disability areas. These 268 respondents who indicated training identified the disability area in which they had received professional training. These data are summarized in Table 10.

**TABLE 10**

PERCENTAGE OF ABE TEACHERS WITH PROFESSIONAL TRAINING BY DISABILITY AREA OF TRAINING

<table>
<thead>
<tr>
<th>Disability Area</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaf</td>
<td>55</td>
<td>10.5</td>
</tr>
<tr>
<td>Hearing Impaired</td>
<td>199</td>
<td>37.9</td>
</tr>
<tr>
<td>Health Impaired</td>
<td>255</td>
<td>48.6</td>
</tr>
<tr>
<td>Learning Disabled</td>
<td>426</td>
<td>81.1</td>
</tr>
<tr>
<td>Mentally Retarded</td>
<td>243</td>
<td>46.3</td>
</tr>
<tr>
<td>Orthopedically Impaired</td>
<td>154</td>
<td>29.3</td>
</tr>
<tr>
<td>Seriously Emotionally Disturbed</td>
<td>190</td>
<td>36.2</td>
</tr>
<tr>
<td>Speech Impaired</td>
<td>207</td>
<td>39.4</td>
</tr>
<tr>
<td>Visually Impaired</td>
<td>191</td>
<td>36.4</td>
</tr>
</tbody>
</table>
Data were provided by 268 respondents indicating professional training in disabilities. Multiple responses were accepted. In rank order from most to least represented area of disability training, the order is as follows: learning disabled (81.1%), health impaired (48.6%), mentally retarded (46.3%), speech impaired (39.4%), hearing impaired (37.9%), visually impaired (36.4%), seriously emotionally disturbed (36.2%), orthopedically impaired (29.3%), deaf (10.5%).

Those respondents indicating professional training in disability areas were asked to identify the type of training they had received. These data are reported in Table 11.

### Table 11

PERCENTAGE OF PROFESSIONAL TRAINING BY TYPE OF TRAINING DELIVERY SYSTEM

<table>
<thead>
<tr>
<th>Type of Training</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>College credits</td>
<td>279</td>
<td>53.1</td>
</tr>
<tr>
<td>In-Service Training</td>
<td>248</td>
<td>47.2</td>
</tr>
<tr>
<td>Non-credit or continuing education</td>
<td>147</td>
<td>28.0</td>
</tr>
<tr>
<td>Other</td>
<td>17</td>
<td>3.2</td>
</tr>
</tbody>
</table>

"Other" training categories reported (3.2%) were classes for parents of disabled children (3), on-the-job training (3), masters degree in reading (3), LD and MR certification (2), workshops (2), trainee in arts for disabled (1), LD tutor training (1), EMT training (1), and special education certificate (1). College credits (53.1%), in-service training (47.2%) and non-credit or continuing education (28.0%) were the reported modes of delivery for training received.
Data were provided by 268 ABE teachers. Multiple responses were accepted.

In addition to providing data regarding professional training previously had, respondents were asked what areas of disability training and the modes of training delivery they would like to receive. Data reported for disability areas of training desired are reported in Tables 12 and 13.

**TABLE 12**

PERCENTAGE OF ABE TEACHERS WITH INTEREST IN TRAINING IN DISABILITY AREAS

<table>
<thead>
<tr>
<th>Training</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>462</td>
<td>88.0</td>
</tr>
<tr>
<td>No response</td>
<td>63</td>
<td>12.0</td>
</tr>
<tr>
<td>Total</td>
<td>525</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Of 525 respondents, 462 (88.0%) indicated interest in training in one or more disability areas. The disability areas of interest identified are reported in Table 13.
TABLE 13
PERCENTAGE OF ABE TEACHERS INDICATING INTEREST IN TRAINING BY DISABILITY AREA

<table>
<thead>
<tr>
<th>Disability Area</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaf</td>
<td>89</td>
<td>17.0</td>
</tr>
<tr>
<td>Hearing Impaired</td>
<td>110</td>
<td>21.0</td>
</tr>
<tr>
<td>Health Impaired</td>
<td>84</td>
<td>16.0</td>
</tr>
<tr>
<td>Learning Disabled</td>
<td>340</td>
<td>64.8</td>
</tr>
<tr>
<td>Mentally Retarded</td>
<td>95</td>
<td>18.1</td>
</tr>
<tr>
<td>Orthopedically Impaired</td>
<td>51</td>
<td>9.7</td>
</tr>
<tr>
<td>Seriously Emotionally Disturbed</td>
<td>130</td>
<td>24.8</td>
</tr>
<tr>
<td>Speech Impaired</td>
<td>104</td>
<td>19.8</td>
</tr>
<tr>
<td>Visually Impaired</td>
<td>109</td>
<td>20.8</td>
</tr>
</tbody>
</table>

Data were provided by 462 respondents indicating interest in disability area training. Multiple responses were accepted. In rank order from most to least frequent, disability areas of interest are as follows: learning disabled (64.8%), seriously emotionally disturbed (24.8%), hearing impaired (21.0%), visually impaired (20.8%), speech impaired (19.8%), mentally retarded (18.1%), deaf (17.0%), health impaired (16.0%), and orthopedically impaired (9.7%).

Respondents were asked to indicate their preferred location and mode of delivery for training. These data are reported on Tables 14 and 15.
Of the 475 respondents indicating a preference for location of training, 54.7% preferred local, 26.8% indicated regional, and 9.0% preferred state-wide delivery of training.

Respondents were asked to indicate their preferred mode of delivery for training. Data in Table 15 reports these preferences.

### TABLE 15
PERCENTAGE OF ABE TEACHERS WITH PREFERENCE FOR MODE OF TRAINING

<table>
<thead>
<tr>
<th>Mode</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>College credit</td>
<td>186</td>
<td>35.4</td>
</tr>
<tr>
<td>Continuing education units</td>
<td>182</td>
<td>34.7</td>
</tr>
<tr>
<td>Non-credit conferences/</td>
<td>128</td>
<td>24.4</td>
</tr>
<tr>
<td>workshops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td>29</td>
<td>5.5</td>
</tr>
<tr>
<td>Total</td>
<td>525</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Of 525 respondents, 496 reported preference in mode of training; 35.4% indicated college credit, 34.7% continuing education units and 24.4% preferred non-credit conferences/workshops.

Those respondents indicating a preference for college credits were asked to indicate the degree to which they would be willing to pay for the credit. These data are reported in Table 16.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full tuition</td>
<td>23</td>
<td>12.3</td>
</tr>
<tr>
<td>Partial tuition</td>
<td>123</td>
<td>66.1</td>
</tr>
<tr>
<td>None of tuition</td>
<td>40</td>
<td>21.6</td>
</tr>
<tr>
<td>Total</td>
<td>186</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Of 186 respondents indicating preference for college credit as the mode of training, 23 (12.3%) indicated willingness to pay full tuition, 123 (66.1%) partial tuition, and 40 (21.6%) were willing to pay none of the tuition.

Summary

In Part I: Biographic Information of the survey, questions 4-9 gathered data from respondents as to their experience teaching disabled adults in ABE classrooms, professional training in disability areas, type of the training received, disability areas and types of training wanted, and willingness to pay tuition for college credits.
Of the 525 ABE teachers responding to the survey, 482 (91.8%) reported having had teaching experience with disabled adults in ABE classes. The most frequently reported disability area of the adults taught was learning disabled (41.9%); the second most frequently reported area was mentally retarded (18.3%); the least reported area was deaf (3.2%).

Professional training in one or more disability areas was reported by two hundred sixty-eight (51.0%) of the 525 respondents. Learning disabled was the most frequently reported (81.1%) area of training. The next most frequent area of training (48.6%) was health impaired. Least frequently reported (10.5%) area of training was deaf.

The types of training had by the 268 respondents was college credits (53.1%), in-service training (47.2%), and non-credit or continuing education (28%). Of the 525 respondents, 462 (88.0%) reported an interest in further training in various disability areas. The area of greatest interest was learning disabled (64.8%). The seriously emotionally disturbed area was the next most frequently indicated (24.8%) area of interest for training. Orthopedically impaired was the least frequently selected area of interest (9.7%).

When asked for their preference for location of training, 475 responded. The rank order of preference was local (54.7%), regional (26.8%) and state-wide (9.0%). The preference for the mode of the training ranked as college credit (35.4%), continuing education units (34.7%) and non-credit conferences/workshops (24.4%). Of the 186 respondents preferring college credits, 66.1% were willing to pay partial tuition, 21.6% would pay none of the tuition, and 12.3% were willing to pay full tuition.
Opinions of ABE Teachers Toward Deterrents to Participation for Disabled Adults in ABE Programs

A specific focus within the research area of adult education participation studies is to identify factors which are barriers or deterrents for a targeted audience. Deterrents for disabled adult participation can be clustered into domains or groupings.

Respondents in this study were asked to specify their opinions on possible deterrents to disabled adult participation in ABE programs by selecting from a scale that measured from 1 (strongly disagree) to 5 (strongly agree) on 48 items. The value assigned to "no basis" was three which places those responses mid-range. This allows for the interpretation of such responses to be no knowledge of the item or neutral, without an opinion of agreement or disagreement. Cumulative means, therefore, include all responses, with no missing values. There were 11 items in the attitude/emotional deterrents domain, four in the legal/policy/funding deterrents domain, four in the organized group deterrents domain, seven in the organized group deterrents domain, seven in the pre-employment deterrents domain, five in the employment deterrents domain and seven in the resources deterrents domain (Appendix B). The data were analyzed by each domain. Data regarding the opinions of ABE teachers on the attitude/emotional deterrents which may be held by disabled adults are reported in Table 17.
### TABLE 17

**COMPOSITE OF MEANS OF ABE TEACHERS REGARDING NON-PARTICIPATION BY ATTITUDE/EMOTIONAL DETERRENTS**

<table>
<thead>
<tr>
<th>Deterrents</th>
<th>N</th>
<th>X</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude/Emotional</td>
<td>525</td>
<td>3.23</td>
<td>.555</td>
</tr>
</tbody>
</table>

Data in Table 17 indicate a mean score of 3.23 attesting that respondents neither agreed nor disagreed (mean range of 2.5 to 3.4) regarding the attitude/emotional deterrent domains. These deterrents were 1) disabled adults', lack of confidence in themselves; 2) lack of confidence in the ABE program; 3) lack of initiative; 4) belief they cannot learn; 5) fear of failure; 6) fear of accepting responsibility; 7) fear of social interaction; 8) fear of embarrassment caused by exposing their handicap(s) in a class; 9) belief that education is not necessary; 10) negative reactions by ABE staff, and 11) negative reactions from other students. The literature classifies these deterrents as dispositional, internal or psychosocial barriers.

ABE teachers were asked to indicate their opinion of the influence of legal/policy and funding deterrents on non-participation by disabled adults. The data are contained in Table 18.

### TABLE 18

**COMPOSITE OF MEANS OF ABE TEACHERS REGARDING NON-PARTICIPATION BY LEGAL/POLICY/FUNDING DETERRENTS**

<table>
<thead>
<tr>
<th>Deterrents</th>
<th>N</th>
<th>X</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal/Policy/Funding</td>
<td>525</td>
<td>3.045</td>
<td>.832</td>
</tr>
</tbody>
</table>
Data in Table 18 indicated that ABE teachers neither agreed nor disagreed (mean range 2.5 to 3.4) that legal, policy and funding deterrents acted as non-participation factors for disabled adults. These deterrents include (1) restrictive eligibility criteria for services from support agencies, (2) complex procedures involved in getting local, state or federal funding, (3) restrictive policies for testing alternatives and accommodations on GED test, and (4) inadequate funding for adaptive classroom equipment.

Accessibility barriers are classified as institutional barriers in the literature. ABE teachers were asked to indicate their opinions on accessibility barriers as deterrents for disabled adults. The data are contained in Table 19.

<table>
<thead>
<tr>
<th>Deterrents</th>
<th>N</th>
<th>X</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td>525</td>
<td>3.545</td>
<td>.864</td>
</tr>
</tbody>
</table>

ABE teachers slightly agreed (mean range of 3.5 to 3.9) that (1) lack of transportation to class, (2) lack of child care, (3) inadequately modified buildings were deterrents to participation in ABE by disabled adults (Table 19).

Organized group deterrents are labeled informational barriers in the literature. ABE teachers were asked to indicate their opinion of these deterrents as reasons for non-participation. Data regarding their opinions are presented in Table 20.
TABLE 20

COMPOSITE OF MEANS OF ABE TEACHERS REGARDING
NON-PARTICIPATION BY ORGANIZED GROUP DETERRENTS

<table>
<thead>
<tr>
<th>Deterrent</th>
<th>N</th>
<th>X</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organized Group</td>
<td>525</td>
<td>3.105</td>
<td>.919</td>
</tr>
</tbody>
</table>

Data in Table 20 indicated that ABE teachers neither agreed nor disagreed (mean range 2.5 to 3.4) that (1) lack of or confusing information/communication about ABE programs given by agencies, (2) lack of information about ABE programs given to special interest and advocacy groups, (3) lack of cooperative agreements between ABE and support service agencies on state and local levels, and (4) lack of support service agencies were deterrents to participation in ABE programs by disabled adults.

Situational barriers were clustered in the pre-employment deterrents domain. ABE teachers were requested to indicate their opinions of these deterrents on participation by disabled adults. The data are displayed in Table 21.

TABLE 21

COMPOSITE OF MEANS OF ABE TEACHERS REGARDING
NON-PARTICIPATION BY PRE-EMPLOYMENT DETERRENTS

<table>
<thead>
<tr>
<th>Deterrent</th>
<th>N</th>
<th>X</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-employment</td>
<td>525</td>
<td>3.436</td>
<td>.644</td>
</tr>
</tbody>
</table>

Data in Table 21 indicated that ABE teachers tended to slightly agree (mean range 3.5 to 3.9) that adults with disabilities do not participate in ABE program because of (1) their personal belief they are unemployable, (2) ABE
program's lack of special job seeking skills curriculum, (3) disability benefits greater than disabled could earn from employment, (4) unrealistic employment objectives, (5) employment biases held by employers, (6) limited substantial job availability, or (7) lack of specific career counseling for the disabled adult.

Employment deterrents were clustered in another situational domain. ABE teachers were requested to indicate their opinion of employment deterrents as non-participation barriers for employed disabled adults. The data are reported in Table 22.

### Table 22

<table>
<thead>
<tr>
<th>Deterrent</th>
<th>N</th>
<th>X</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>525</td>
<td>3.024</td>
<td>.697</td>
</tr>
</tbody>
</table>

Data in Table 22 indicated that ABE teachers neither agreed nor disagreed (mean range 2.5 to 3.4) that (1) limited opportunities for advancement even with increased basic skills, (2) employer's negative attitudes, (3) lack of time to further education, (4) inconvenient scheduling of ABE classes, or (5) lack of work-site ABE classes contribute to non-participation by disabled adults.

The literature classifies the final two deterrent domains as institutional, or programmatic issues. ABE teachers were to indicate their opinion of professional preparation deterrents as non-participation barriers for disabled adults. The data are presented in Table 23.
Data in Table 23 indicated that ABE teachers neither agreed or disagreed (mean range 2.5 to 3.4) that deterrents relating to ABE staff preparation relate to non-participation by disabled adults. The mean score indicated a lack of consensus on these seven areas: (1) insufficient in-service training in methods of working with disabled adults, (2) locating relevant college courses, (3) lack of incentives to pursue education for working with disabled adults, (4) have no specific certification requirements for working with disabled adults, (5) lack knowledge of auxiliary services provided by other agencies, (6) lack information of teaching materials available for disabled adults and (7) lack information of diagnostic instruments appropriate for disabled adults.

The final domain of deterrents concerned resources. ABE teachers were asked to indicate their opinions regarding lack of certain resources as deterrents to participation for disabled adults. These data are contained in Table 24.
Data in Table 24 indicated that ABE teachers had a slight tendency to agree (mean range 3.5 to 3.9) that lack of appropriately trained personnel influences the non-participation of disabled adult. Very slight agreement was indicated on the following deterrents: (1) lack of appropriate level materials in multiple teaching/learning modes, (2) lack of specialized instructional equipment for disabled adults, (3) lack of appropriate diagnostic instruments for disabled adults, (4) lack of trained support professional to assist teachers in identification and accommodation selection for disabled adults, (5) lack of financial support to acquire appropriate materials and equipment, and (6) limited research support and resources about disabled adults.

Rank ordering of each responder's mean scores for the eight deterrent domains was calculated. Frequency percentages of the total group rankings were then tabulated. These data are presented in Table 25.
The data presented in Table 25 indicated that the deterrent domain ranked most frequently (32.3%) as number one by having the highest mean score in comparison to each of the other domains was the accessibility deterrent domain. Accessibility was ranked by 54.3% of the responders as number one, two or number three. The domain ranking second (22.3%) most frequently was the resource deterrent domain. Of all 525 responders, 52.8% ranked resource deterrents as first, second, or third. Pre-employment deterrents ranked third most frequently (14.1%) and as first, second, or third 46.7%. Organized group deterrents ranked fourth (9.9%). Although professional preparation deterrents
ranked fifth (8.1%) most frequently as respondents' highest scorer, 36.3% ranked professional preparation deterrents in their top three. Fourth ranked organized group deterrents was ranked in the top three by a lesser percentage 30.4%, of the respondents. Attitude and legal deterrents were closely ranked numbers six and number seven respectively (7.4%, 7.0%). The deterrent domain least frequently ranked number one was employment deterrents.

Summary

This section reported the opinions of 525 ABE teachers regarding eight deterrent domains; attitude/emotional; legal/policy/funding, organized group, pre-employment, employment, professional preparation and resources. The opinion of the ABE teachers was a slight to mild agreement that accessibility deterrents acted as non-participation factors for disabled adults by analysis of mean scores. A lesser level of agreement was reported regarding pre-employment and resource deterrents as non-participation factors. Neither agreement nor disagreement was reported regarding the other five domains.

Also reported in this chapter were the frequency percentages of ranked mean scores for each deterrent domain. The rank order from highest to lowest mean scores for each deterrent domain given by 525 responders was accessibility, resources, pre-employment, organized group, professional preparation, attitude, legal and employment deterrent domains.
Data Analysis

Correlations of Opinions with Personal and Deterrent Variables

This section focuses on the correlations under investigation in this research. Correlations indicate the relationship between two variables. In this research the dependent variables of eight deterrent domains (attitude and emotional; legal, policy and funding; accessibility; organized group; pre-employment; employment; professional preparation; and resource) were correlated with five independent variables; 1) hours employed; 2) years of ABE teaching experience; 3) program site; 4) experience teaching disabled, and 5) training in disability areas. The correlations are reported in Table 26. In addition to calculating correlations, the coefficient of determination ($r^2$) was used to measure the extent of the association (proportion of variability) that existed between the eight domains and the specific program and personal variables. The Pearson product-moment correlation coefficient was used to calculate the relationship between each of the eight deterrent domains and the five independent variables.

The relationship between opinions concerning each deterrent domain with the selected personal and program variables is presented in Table 26.
Results of correlations between selected personal and programmatic variables and the opinion of 525 ABE teachers toward the deterrent domains are displayed in Table 26.

Hours employed per week was more closely associated with the opinions on resource deterrents than with the other deterrent domains of attitude, legal, accessibility, organized group, pre-employment or employment. The positive association was low in magnitude ($r^2 = .02$).
Years of employment in ABE associated more closely with the resource deterrent domain opinions than with the other deterrent domains. This positive relationship was low in magnitude ($r^2 = .01$).

Program site related most closely to three of the domains: accessibility, pre-employment and employment deterrents. These positive relationships were low in magnitude ($r^2 = .02$). Low magnitude positive relationships ($r^2 = .01$) also existed between program site and the deterrent domains of attitude/emotions and professional preparation.

Experience teaching disabled adults in the ABE classroom had a positive low magnitude level of association with all of the deterrent domains. Association was strongest with the pre-employment deterrent domain ($r^2 = .07$). The next strongest association was the opinions on the attitude/emotional deterrent domain ($r^2 = .05$). Association between experience teaching and the organized group deterrent domain was negligible ($r^2 = .01$).

All associations between disability training and opinions on the deterrent domains were negligible ($r^2 = .00$).

Summary of Correlations

Five personal and programmatic variables were investigated in this research. The variables included the hours employed per week in ABE, the number of years employed in ABE, the program site, experience teaching disabled adults in ABE classes, and previous disability training.

One variable, experience teaching disabled adults in ABE classes, associated at a positive low magnitude level with all of the eight domains, attitude/emotional, legal, accessibility, organized groups, pre-employment,
employment, professional preparation and resources. With the organized group deterrent domain the relationship was positive and negligible.

Other positive low level associations existed between the variable hours employed per week and the deterrent domains of professional preparation and resources and between years employed and the resources deterrent domain.

Program site associations with the deterrent domains were in the positive low magnitude range for five of the relationships. The closest association was with the pre-employment deterrent domain.

Having had disability training consistently associated at a positive but negligible to nearly non-existent level with each of the deterrent domains.

**Analysis of Comments**

The final two questions of the survey instrument requested checklist responses and written comments from ABE teachers regarding (1) knowledge or skill area personally desired to aid in ability to instruct disabled adults, and (2) ways and resources to make their ABE program more accessible and to provide better instruction for the disabled adult.

Responders were asked to select from a checklist all areas of knowledge or skill that would improve their ability to instruct disabled adults. These data are reported in Table 27.
TABLE 27
RESPONSE RATE BY KNOWLEDGE AND SKILL AREAS DESIRED

<table>
<thead>
<tr>
<th>Knowledge/Skill</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sign language</td>
<td>128</td>
<td>24.4</td>
</tr>
<tr>
<td>LD Identification</td>
<td>331</td>
<td>63.0</td>
</tr>
<tr>
<td>Disability teaching techniques</td>
<td>232</td>
<td>44.2</td>
</tr>
<tr>
<td>Diagnostic techniques</td>
<td>283</td>
<td>53.9</td>
</tr>
<tr>
<td>Learning theory</td>
<td>120</td>
<td>22.9</td>
</tr>
<tr>
<td>Resource materials available</td>
<td>313</td>
<td>59.6</td>
</tr>
<tr>
<td>Resource person contacts</td>
<td>294</td>
<td>56.0</td>
</tr>
</tbody>
</table>

Data in Table 27 were provided by 525 ABE teachers. Multiple responses were accepted. The largest percentage (63%) of ABE teachers responding indicated their ability to instruct disabled adults in their classroom would be improved by knowing LD identification. The remaining knowledge and skill areas selected in descending order of frequency were: resource materials available (59.6%), resource person contacts (56.0%), diagnostic techniques (53.9%), disability teaching techniques (44.2%), sign language (24.4%), and learning theory (22.9%).

In addition to selecting knowledge and skill areas from the checklist, responders could enter written comments to the question, "What other knowledge or skill areas do you believe would benefit your teaching of disabled adults?" Of the respondents, 89 (16.9%) made written comments. Following is a categorization of the comments by disability areas:
Knowledge or skills by specific disability (20 comments)

Learning Disabled - (9 comments)

- How to teach LD adults (3)
- Information on lateral dominance (2)
- LD identification
- Auditory and visual discrimination
- Broader knowledge of LD
- Methods for working with dyslexia

Hearing Impaired/Deaf (5 comments)

- Signing skills (2)
- Ability to "voice" interpret
- How language is developed for deaf
- English classes for the deaf

Mentally Retarded (3 comments)

- Broader knowledge of mental retardation
- Specific materials available for MR adults
- Psychology of MR adult

Emotionally Disturbed (2 comments)

- How to deal with emotionally disturbed adults (2)
- Developmentally Handicapped (1 comment)
- How to develop realistic goals for developmentally handicapped

Knowledge or skills for unspecified disability areas (69 comments)

- Knowledge of and coordination with BVR and social service agencies (8)
- Information on material and instructional resources (8)
- Knowledge of employment opportunities for disabled adults (5)
- Counseling techniques (5)
- Curricula for math and reading (3)
- Observe successful classes in operation (3)
- Training longer than two hours (3)
- More time and money (2)
- Knowledge for teaching disabled adults in ESL classes (2)
- Career/vocational preparation techniques (2)
- Knowledge of alternatives for those not able to pass GED (2)
- Psychology courses related to disabled (2)
- Understanding of home and social environments of disabled adults
- Rehab counseling
- Social work courses related to disabled
- Counseling courses related to disabled
- Career/vocational testing for disabled
Training in teaching strategies
Training in transfer of learning techniques
Need more educated teachers; aides not helpful in this area
Research as needed
Specially trained personnel to conduct class for disabled
Life skill materials
Learning language encoding
Knowledge of diagnostic equipment
Sensitivity training
Positive methods of instruction
Knowledge to deal with drug/alcohol problems
Knowledge of college grants for disabled
Appropriate supplies
Teaching of social skills
Ways to initiate their need for good education
Training in special education

In summary of the written comments, knowledge and skills related to the specific area of learning disabilities was mentioned most frequently (9). Items relating to hearing impaired and deaf were given second most frequently (5). Other disability area knowledge and skills mentioned specifically were for the mentally retarded (3), emotionally disturbed (2), and developmentally handicapped (1). Other comments regarding knowledge or skills to improve one’s ability to instruct disabled adults were general in nature, addressing no specific disability area (69). Two knowledge areas mentioned most frequently were knowledge of and coordination with BVR and social service agencies (8), and information on material and instructional resources (8). Other specifically mentioned material and instructional resource needs were in the areas of computerized instruction and software (3), math and reading (3), English as a Second Language (ESL) (2), life skills (1), language encoding (1), diagnostic equipment (1), methods of instruction (1), drug/alcohol problems (1), appropriate supplies (1) and social skills (1). Several groups of comments centered around employment of disabled adults. These were knowledge of
employment opportunities (5), career/vocational preparation techniques (2), and career/vocational testing for disabled adults (1). Another group of comments focused on counseling and psychology areas. The comments were knowledge of counseling techniques (5), psychology courses related to disabled (2), rehab counseling (1), counseling courses related to disabled (1) and sensitivity training (1).

The final question of the survey asked responders to select from a checklist all the ways their ABE program could be modified or enhanced to be more accessible and to provide better instruction to the disabled adult. These data are reported in Table 28.

<table>
<thead>
<tr>
<th>Way</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building accessibility</td>
<td>163</td>
<td>31.0</td>
</tr>
<tr>
<td>Handicapped parking</td>
<td>100</td>
<td>19.0</td>
</tr>
<tr>
<td>Accessible restrooms</td>
<td>118</td>
<td>22.5</td>
</tr>
<tr>
<td>Computer adaptations</td>
<td>249</td>
<td>47.4</td>
</tr>
<tr>
<td>Adaptive equipment</td>
<td>267</td>
<td>50.9</td>
</tr>
<tr>
<td>Multiple mode materials</td>
<td>325</td>
<td>61.9</td>
</tr>
<tr>
<td>Publicity</td>
<td>324</td>
<td>61.7</td>
</tr>
<tr>
<td>Agency meetings</td>
<td>318</td>
<td>60.6</td>
</tr>
</tbody>
</table>

Data in Table 28 were provided by 525 ABE teachers. Multiple responses were accepted. Three of the ways presented on the checklist to modify or to
enhance ABE programs to provide more accessibility or better instruction to the disabled adult were checked as applicable to their program by over 60% of the responders. Those ways checked were instructional materials in multiple modes (61.9%), publicity targeted to disabled adults (61.7%), and informational meetings with agencies which served disabled adults (60.6%). Other ways presented on the checklist were given positive responses, in descending order of frequency, adaptive equipment (cassette recorders, voice calculators, VHS playback unit, page magnifiers, etc.) (50.9%), computer adaptations (large screen print, voice activation, non-keyboard control such as touch screen or "mouse," etc.) (47.4%), building accessibility (ramps, automatic doors, etc.) (31.0%), and handicapped parking (19.0%).

In addition to selecting ways and resources to make their ABE program more accessible and to provide better instruction for disabled adults, respondents could enter written comments to two questions: (1) what equipment and materials are most needed? and (2) what other ideas do you have which would increase your ABE program's appeal and effectiveness with disabled adults?

Of the respondents, 263 (50.1%) expressed their needs by writing comments to the question of what equipment and materials are most needed? Key word analysis of those responses produced the data in Tables 29, 30 and 31.
### TABLE 29
RESPONSE DATA BY FREQUENCY ORDER OF SPECIFIC EQUIPMENT CITED

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers</td>
<td>54</td>
<td>20.5</td>
</tr>
<tr>
<td>Software</td>
<td>46</td>
<td>17.4</td>
</tr>
<tr>
<td>Tape recorders</td>
<td>22</td>
<td>8.4</td>
</tr>
<tr>
<td>Audio tapes</td>
<td>20</td>
<td>7.6</td>
</tr>
<tr>
<td>Adapted computers</td>
<td>18</td>
<td>6.8</td>
</tr>
<tr>
<td>Page magnifiers</td>
<td>18</td>
<td>6.8</td>
</tr>
<tr>
<td>VCR</td>
<td>17</td>
<td>6.5</td>
</tr>
<tr>
<td>Video tapes</td>
<td>8</td>
<td>3.0</td>
</tr>
<tr>
<td>AV material</td>
<td>7</td>
<td>2.7</td>
</tr>
<tr>
<td>Xerox machine</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td>Voice calculator</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td>Language master</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td>16mm projector</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td>Overhead projector</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td>Screen</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td>Telephone</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td>Tables</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Typewriter</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Chairs</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Slides</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Materials</td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>Multiple mode materials</td>
<td>24</td>
<td>9.1</td>
</tr>
<tr>
<td>Low level, high interest materials</td>
<td>16</td>
<td>6.1</td>
</tr>
<tr>
<td>Large print books</td>
<td>15</td>
<td>5.7</td>
</tr>
<tr>
<td>Diagnostic materials</td>
<td>13</td>
<td>4.9</td>
</tr>
<tr>
<td>Books on tape</td>
<td>10</td>
<td>3.8</td>
</tr>
<tr>
<td>Large print visual aids</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Consumable workbooks</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>GED books</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td>Career aptitude tests</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Life skill materials</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Manipulative materials</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Modified GED test</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Dictionaries</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Advanced reading materials</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Braille books</td>
<td>1</td>
<td>.4</td>
</tr>
</tbody>
</table>
TABLE 31
RESPONSE DATA BY FREQUENCY ORDER OF GENERAL NEEDS CITED

<table>
<thead>
<tr>
<th>General Need</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevator</td>
<td>9</td>
<td>3.4</td>
</tr>
<tr>
<td>Ramps</td>
<td>8</td>
<td>3.0</td>
</tr>
<tr>
<td>Publicity</td>
<td>7</td>
<td>2.7</td>
</tr>
<tr>
<td>Training for teachers</td>
<td>6</td>
<td>2.3</td>
</tr>
<tr>
<td>Inter-agency information</td>
<td>5</td>
<td>1.9</td>
</tr>
<tr>
<td>Time</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td>Volunteers</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Space</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td>Lowered drinking fountain</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Transportation</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Access to special education facilities</td>
<td>1</td>
<td>.4</td>
</tr>
</tbody>
</table>

Data in Tables 29-31 were provided by 263 ABE teachers who gave written responses to the question what equipment and materials are most needed. Items not clearly defined as either equipment or materials were classified as general needs.

Of the 525 respondents, 181 (34.0%) wrote comments to the question, what other ideas do you have which would increase your ABE program's appeal and effectiveness with disabled adults. All comments were transcribed, read by three readers and clustered in related topics. Comments not generic to a cluster were classified as general comments. Results of the analysis follow.

Responses to the question:
What other ideas do you have which would increase your ABE's program appeal and effectiveness with disabled adults?

Ideas related to publicity (31 comments)

- Increase effective publicity (13)
- Target publicity to handicapped (5)
- Publicize and recruit through social service agencies (3)
- TV story about classes and employment of disabled (2)
- Information on disabilities for other students (1)
- Stress "no cost" of program (1)
- Better outreach (1)
- Ubiquitous publicity (1)
- Recruitment (1)
- Newsletters/mailings (1)
- Increase community awareness (1)
- Survey area disabled for their interests (1)

Ideas related to training (30 comments)

- Inservice training in working with disabled adults....
  - for teachers (9)
  - for staff members (6)
  - for volunteers (3)
  - for aides (2)
- Inservice to work with hearing impaired (2)
- Inservice on equipment/material use (2)
- Establish teams to work together (1)
- Form support groups (1)
- Have ABE employees visit rehab centers (1)
- Resource manual of guidelines to assist disabled adults (1)
- Provide state wide training for teachers interested in this area (1)
- Better training of ABE instructors, supervisors, directors (1)

Ideas related to staffing (26 comments)

- Lower student/teacher ratio (6)
- More trained volunteers (6)
- Caring tutors to work with disabled on one to one instruction (4)
- Nurse or health aid available (1)
- Counselors (1)
- Recruiter (1)
- District specialist (1)
- Stable staff year to year (1)
- Special needs resource person (1)
- Instructor to go to the home of disabled adults (1)
- Aides (1)
Better wage for instructors (1)
Full time instructors with prep time (1)
Hire handicapped staff members (1)
Resource person available (1)

Ideas related to placement (16 comments)

Have separate limited size classes especially for disabled adults (5)
Centrally locate a regional class for disabled adults provide transportation (2)
Our ABE program is crowded with non-disabled, we have neither space, money, nor personnel to handle any more (1)
Have separate classes first, then mainstream (1)
Do not put LD persons in GED classes (1)
Group according to ability (level 1, 2 or 3) (1)
Special classes to help disabled find ABE programs that focus on disabled (1)
Mildly disabled can work somewhat independently in classroom setting without causing interruptions (1)
Small individualized classes (1)
Job placement assurance to GED grads (1)
Need employer incentive pipeline to meaningful work (1)

Ideas related to instructional methods/resources (15 comments)

Ability to diagnose and instruct LD (2)
Greater diagnostic and prescriptive teaching (2)
Emphasis on computers for disabled adults (2)
Integrate resources as needed (1)
More information on how LD students can take GED under special test conditions (1)
Information on using colored lenses for dyslexics (1)
Increase verbal teaching, less reading (1)
More low reading level materials oriented toward basic survival skills
Current GED filmstrips in all areas (1)
Summer programs (1)
Samples of texts and materials (1)
A variety of workbook approaches (1)
Need science equipment (1)
More money spent on materials (1)
Social, emotional and career needs in programs (1)

Ideas related to agencies (12 comments)

Network with agencies for the disabled (6)
Take programs to agencies (1)
Better knowledge of agencies who sponsor our programs (1)
Agency participation (1)
Work with nursing homes (1)
Referral process to agencies (1)
Let social service agencies know we welcome the disabled (1)

Ideas related to physical site (11 comments)

First floor location (3)
Building accessibility (2)
Handicapped parking (2)
Ramps (2)
Accessible restrooms (1)
Carpeted classrooms (1)
Bigger rooms equipped for physically handicapped (1)
Several rooms for individual work (1)

Ideas related to administration (10 comments)
Fewer administrator/instructors (1)
State needs to show more interest in ABE program, there are more students, fewer teachers, and less money (1)
Better coordination of programs (1)
Visits from administrators showing their interest and encouragement (1)
More funding (1)
Better organization and administrative abilities (1)
Don't do things half-way (1)
Get rid of local director and supervisor (1)
Better management at the top to organize and plan program (1)
More supervisor involvement (1)

Ideas related to attitudes/emotions (10 comments)
They need lots of attention and teaching time (3)
Disabled need confidence they will be treated with dignity and sensitivity (1)
Plenty of praise or encouragement at all levels. Show genuine interest (1)
Need way to congratulate these people trying for GED (1)
Encourage disabled to try and help themselves by coming to the ABE class (1)
Sensitivity and knowledge of methods for all of staff (1)
Teach self-work, self-esteem (1)
Show that basic education can help disabled more than anything else (1)

Ideas related to programming (8 comments)
Lower level GED test for these special people (2)
Work site classes (2)
Three hour sessions, not two (1)
Teach job procurement techniques (1)
Teach parenting classes (1)
Need transition class from ABE to the workplace (1)
Ideas related to services (7 comments)

Child care needed (3)
Transportation needed (3)
Counseling to improve self-esteem (1)
Home instruction (1)
Form support groups (1)

General comments (5 comments)

Currently we meet very few severely disabled adults (1)
I have 100% attendance twice a week (1)
We have given suggestions before, Columbus threw them out, won’t do it over (1)
Our program is well equipped; need the students (1)
Money to purchase own books (1)

Chapter Summary

This chapter contains the personal and programmatic information of 525 respondents, and the opinions and rankings of the 525 ABE teachers toward attitude, legal, accessibility, organized group, pre-employment, employment, professional preparation, and resources deterrents as domains of influence of non-participation for disabled adults in ABE programs. This chapter also contains the correlations between the opinions of ABE teachers toward the eight deterrent domains and the personal and programmatic variables. Additionally, knowledge and skill areas and resource needs are ordered from most frequently to least frequently requested and written comments are clustered and summarized.
CHAPTER V
SUMMARY, CONCLUSIONS AND DISCUSSION AND RECOMMENDATIONS

Summary

Of the over 350 thousand disabled adults in the United States, over 40% have not completed high school. Adult Basic Education (ABE) is a federally funded, state-administered educational program for adults to acquire basic skills at least to the level of secondary school completion. As mandated by the Adult Education Act (1965) and the Rehabilitation Act of 1973, ABE must be accessible to the disabled adult population. Reported participation information shows that many of Ohio’s community-based ABE programs enroll no disabled adults although the state’s estimated target population is over 300,000.

One area of participation studies in adult education focuses on deterrence to participation. Identification and analysis of deterrents assists program planners and administrators in offering accessible programs. For each target population of a program, various and multidimensional deterrents can exist. Deterrents to participation for disabled adults can exist in many areas: within the disabled adults, their families, their advocates; within the program delivery system; within the employment field; within society in general.

Many methods and the opinions of various groups can be used to identify participation deterrents. Experts who study schools and their effectiveness agree
that teachers are the most important element in schools. This is as true in ABE as it is for teachers in other schools. The direction and accomplishments of educational programs are affected significantly by the opinions held by teachers. It is also true that teacher opinion and attitude can itself be a deterrent or attraction for a program. If the opinions of ABE teachers regarding various deterrents to participation for disabled adults are determined, increased awareness will contribute toward focused planning for removal of the deterrents.

The purpose of this study was to determine the opinions of Ohio’s ABE teachers in regard to the influence on participation of disabled adults by eight deterrent domains: attitude/emotional deterrents; legal/policy/funding deterrents; accessibility deterrents; organized group deterrents; pre-employment deterrents; employment deterrents; professional preparation deterrents; and resource deterrents. This study provided a description of those opinions and an analysis in relation to five variables: (1) location of ABE program, (2) years of ABE teaching experience, (3) hours employed per week, (4) experience teaching disabled adults in the classroom, and (5) professional training in disability areas.

**Research Questions**

1. What deterrent domains, if any, influence participation of disabled adults in ABE programs as perceived by ABE teachers?

2. Is there a relationship between the opinions held by ABE teachers regarding the influence of various deterrent domains and the variables of hours employed per week, years of teaching experience, location of program, experience teaching disabled adults, and teacher training in disability areas.

3. What are the reported training and programmatic resources needed to improve services to disabled adults in Ohio community based ABE programs?
4. What are some general characteristics of Ohio ABE teachers?

**Procedures and Instrumentation**

The population for this study was 878 teachers in community-based Adult Basic Education programs in every Ohio county who were employed during the 1988-89 academic year.

The data were collected via a mail survey. The survey had three sections:

1. Biographic information which asked the respondent for information regarding hours employed in ABE per week, years of ABE teaching experience, experience with teaching disabled adults, professional training in disability areas, type of training, disability areas of interest for training, mode of delivery of training desired, and willingness to pay college tuition for training.

2. Opinion questions were clustered in eight deterrent domains with a Likert-type response scale ranging from strongly agree (5) to strongly disagree (1) on individual deterrents within each domain.

3. Two checklists were provided for respondents to indicate knowledge or skill areas to improve their ability to instruct disabled adults, and to indicate ways their ABE program could be more accessible and provide better instruction to disabled adults. In addition, respondents were provided the opportunity to respond with items not on the checklists and to share their ideas of how to increase the appeal and effectiveness of ABE for disabled adults.

Surveys were completed in usable form by 525 ABE instructors for a response rate of 59.8%.
Analytical Procedures

Data were coded and analyzed using the SPSSX and SAS programs available at The Information and Research Computing Center at The Ohio State University. Frequencies, percentages, means, standard deviation, rank order and ranges were used to describe the variables.

The opinion statements were analyzed by domain. Correlations were used to calculate the degree of relationship between each of the eight domains as dependent variables and the five independent variables of hours employed per week, years in ABE, location of program, experience teaching disabled adults, and professional training in disability areas. Pearson product-moment correlations were used to calculate the relationship. In addition to the correlations, \( r^2 \) (the coefficient of determination) was used to indicate the proportion of variance in the eight deterrent domains.

Findings

Findings in this study were reported and summarized under four headings: (1) response data, (2) personal data, (3) opinions of ABE teachers toward deterrents to participation for disabled adults in ABE programs, and (4) data analysis.

Response Data

Data yielded from 525 ABE teachers in Ohio indicated that the average number of hours of employment is 10.78 hours per week. Over 95% of the ABE teachers have been employed in the program over one year and 50% of those for five years or more. Fifty-four percent of the ABE teachers who responded taught
in rural locations and 42.7% taught at urban sites. A vast majority (91.8%) of the ABE teachers have had disabled adults in their classrooms. Slightly more than half (51%) of the ABE teachers have had professional training in one or more disability area. Eighty-eight percent of the respondents indicated an interest in training in disability areas. The areas of interest for training are multiple. The most frequently indicated area of interest was learning disabilities (64.8%). The second area indicated was seriously emotionally disturbed (24.8%). Over one-half (54.7%) of the respondents preferred training to be delivered locally or regionally. The two most preferred modes of delivery for training were college credit (35.4%) or continuing education units (34.7%). Those ABE teachers who preferred college credit were willing to pay partial tuition (66%), or full tuition (12%).

Characteristics of an average Ohio ABE teacher which could be drawn from this study are:

ABE teachers in Ohio...

1. Are part-time employees.
2. Remain as teachers for over one year.
3. Teach in rural settings.
4. Have experience teaching disabled adults.
5. Are as likely to have had as not to have had professional training in one or more disability area.
6. Are interested in teacher training in disability areas, learning disabilities in particular.
7. Prefer training delivered locally.
8. Want credit for training.
9. Are willing to pay partial or full tuition to receive college credit.

Opinions of ABE Teachers Toward Deterrents to Participation for Disabled Adults in ABE Programs

The mean score, standard deviation and rank order were computed for the opinions given by ABE teachers to eight domains of deterrents to participation for disabled adults in ABE programs. Analysis indicated neither agreement nor disagreement regarding the attitude/emotional deterrent domain. Mean score was 3.23 and the standard deviation was .55. This domain ranked sixth with 7.4% of the respondents rating these attitude/emotional deterrents as the highest mean score of all eight domains.

The mean score for the legal/policy/funding domain was 3.05 and the standard deviation was .83. This indicates neither agreement nor disagreement. Of the respondents, 7% rank these deterrents highest, or in most agreement. Overall, the legal domain ranked seventh of eight.

Respondents slightly agreed that accessibility deterrents of lack of transportation to class, lack of child care, and inadequately modified buildings were factors which influenced non-participation for disabled adults. The mean score was 3.55 with a standard deviation of .86. Accessibility deterrents were ranked number one by 32.3% of the respondents. Over one-half of the respondents (54.3%) ranked accessibility deterrents as one of their top three by rank of individual mean scores.

Organized group deterrents had a mean score of 3.11 with .92 standard deviation. This mean indicated neither agreement nor disagreement. The
domain was ranked fourth (9.9%) in highest mean score frequency.

Pre-employment deterrents ranked third with 14.1% ranking the domain first. The mean for the total respondents was 3.44 with .64 standard deviation. This mean is close to the 3.5 lower limit of the scale indicating slight agreement. Also, 46.7% ranked pre-employment deterrents in the top three.

Neither agreement nor disagreement was noted for the employment deterrent domain with a mean score of 3.02 and standard deviation of .69. This domain ranked eighth with 2.9% of the respondents ranking it highest.

Although neither agreement or disagreement was indicated by the mean score of 3.20 and standard deviation of .85 for professional preparation deterrents, over one-third (36.3%) ranked this domain among their three highest, and first 8.1% of the time. This percentage was higher than the top three rankings given to organized group (30.4%) which was ranked fourth.

The final deterrent domain was resources. Similar to the pre-employment domain, resource deterrents had a mean score of 3.43 and a standard deviation of .95, very close to the lower limit of 3.5 indicating slight agreement. Rank order placed the resource domain second, with 22.3% of the respondents scoring it highest of the eight. Over one-half (52.8%) of the respondents ranked resource deterrents in the top three.

In summary, ranking of mean scores indicated the most agreement that accessibility deterrents influenced non-participation of disabled adults in ABE. The mean score was 3.55. Pre-employment deterrents had a mean score of 3.44, and resource domains a mean score of 3.43, both were near the low range score for slight agreement (3.5).
Rank order was used to describe the ranking of individual means. This process revealed that highest individual means were given to the accessibility domain (32.3%) the same ranking for group mean scores. Also, over one-half of the respondents' means for the accessibility deterrents placed that domain first, second, or third.

The second most frequently rated individual mean scores for most agreement was given by 22.3% of the respondents to the resource deterrent domain. Ranking of the group mean score indicated the resource deterrent domain to be almost equal to the pre-employment deterrent domain, 3.43 and 3.44 respective means. These were the second and third rankings of the group mean scores. Pre-employment was ranked first by 14.1% of the respondents and third overall for the eight domains.

Use of the rank order procedure allowed for more clarity when describing the deterrent domains in terms of influence on non-participation as perceived by ABE teachers. Accessibility deterrents were rated as most influential by group mean score (3.55), frequency of high individual mean score (32.8%), and top three rankings (54.3%). The near tie of group mean scores for pre-employment (3.44) and resource deterrents (3.43) is clarified by noting that resource deterrents were ranked first by 22.3% of the respondents as highest individual mean, and ranked as first, second or third by 52.8% of the respondents. Although pre-employment deterrents had a mean score of 3.44, individual respondents ranked it first 14.1% of the time, and as first, second, or third 46.7% of the time.
Correlations of Opinions with Personal and Program Variables

Five personal and program variables were investigated in this research. The variables were: (1) hours employed per week in ABE, (2) years of teaching ABE, (3) location of program, (4) experience teaching disabled adults in ABE, and (5) previous training in disability areas. One personal variable, experience teaching disabled adults in ABE classes was most closely associated with all deterrent domains of attitude, legal, accessibility, organized group, pre-employment, employment, professional preparation and resources. Experience teaching disabled adults was the only variable associated with the attitude/emotional deterrent domain, the legal domain, the accessibility domain, and the pre-employment domain. There were no associations above negligible between having had disability area training and the eight deterrent domains.

Summary of Findings

1. Over one-half of the ABE teachers in Ohio who responded are employed less than eight hours per week in rural settings and nearly one-half have taught in ABE four years or less.

2. A vast majority (91.8%) of the ABE teachers who responded have taught disabled students in the classroom. The most frequently identified area of disability is learning disabled.

3. Slightly more than one-half (51%) of the ABE teachers responding report having had training in one or more disability area. Most of the training has focused on learning disabilities. Most responders (88%) are interested in further training, mainly in learning disabilities, delivered locally for college credit, for which most are willing to pay partial tuition.

4. No strong agreement existed that any of the eight deterrent domains greatly influenced non-participation of disabled adults in ABE programs.
5. Slight agreement exists to the deterrent factors in accessibility, resource and pre-employment domains as influential to non-participation in ABE by disabled adults.

6. Experience teaching disabled adults is associated at a positive low magnitude level with the deterrent domains of attitude/emotional, legal, accessibility, pre-employment, employment, professional preparation and resources.

7. Having had training in disability areas has no association with any of the deterrent domains.

8. Three areas of need to improve ABE program accessibility to disabled adults are resource materials in multiple modes, targeted publicity and increased collaboration with community agencies. Over 60% of the respondents respectively selected these three areas as ways to modify or enhance ABE program accessibility to disabled adults. Nearly 25% of the added comments related to these three areas.

Conclusions and Discussion

1. Employment as an ABE teacher in Ohio is part-time work. Only five percent of the respondents in this study reported employment of 30 hours or more in ABE. However, only 2.9% of these teachers have been employed in ABE less than one year. Over half of the teachers have taught ABE for five years or more. Although the hours are few per week, the length, in years of teaching experience is vast, with 25% of the teachers in ABE for over ten years. For many, ABE teaching may be a second job, but there appears to be a certain level of commitment displayed by the fact that the majority stay for over four years. Because rural settings dominate (54.1%), and staff in any one location is often minimal (see comment section of Chapter IV), these teachers often work without much opportunity for exchanging ideas or seeking consultation with a colleague. Whoever comes to class needs to be served. This leads to the next conclusion.
2. A vast majority of the ABE teachers responding (91.8%) have had disabled adults in their classrooms. The variety of disabilities reported is all-encompassing, both visible and invisible disabilities were mentioned. Since the respondents were judging the presence of disabilities in their adult learners based on their experience and knowledge, but not necessarily on clinical diagnosis, there can be some question as to the actual presence of the disability.

The disability area most questionable is the invisible area of learning disabilities. Even if only a portion of the 220 who reported teaching learning disabled (LD) adults is verifiable, the predominance of LD related issues which surfaced in this survey conveys a major concern for ABE teachers. Even though previous training in LD was reported by 81.1% of the teachers, 64.8% of the 462 who wanted training selected LD training as an area of desired instruction. In the responses to the checklist of knowledge or skill areas desired, 63% indicated LD identification. Nine written comments spoke directly to the desire for more information about working with LD adults. ABE teachers believe they are teaching LD adults, have had training in the area, but select LD as their most frequently indicated concern for further knowledge and skills.

3. Over 88% of the ABE teachers responding indicated a desire for teacher training in disability areas. The area of greatest interest is learning disabilities. Over fifty percent want the training delivered locally and over one-fourth want it delivered regionally. These preferences may be directly related to the fact that ABE teachers are part-time employees usually without benefits and possibly working two jobs.
Two conclusions must be considered seriously. ABE teachers stay in the program for several years, and are interested in further training. They also want the training to carry either college credit or continuing education units. Of the 186 indicating college credit as their preference, 78.4% are willing to pay partial or full tuition costs.

Based on the profile of the Ohio ABE teacher developed from information given in this study, this group of adult educators is teaching disabled adults, is concerned about teaching learning disabled adults in particular, is voicing a willingness to participate in teacher training activities to increase their knowledge and skill about disability areas, and has definite ideas about increasing accessibility for disabled adults to ABE program.

4. ABE teachers responding tended to agree most that accessibility deterrents were influential factors in non-participation by disabled adults. These visible deterrents of lack of transportation, lack of child care and inadequately modified buildings would compare to what Cross (1981) refers to as situational barriers most frequently given as reasons for non-participation or for non-continuance by learners themselves. Reasons which are non-personal or non-programmatic and are therefore external are more comfortable to cite as causes for something negative, such as non-participation by disabled adults.

That does not discount, however, the need for ABE program administrators to be cognizant of the existence of these barriers, and to try to eliminate them. (See recommendations) The same comment applies to the deterrent domains of resources and pre-employment that the respondents slightly agreed were influential to non-participation.
5. Experience teaching disabled adults relates in a positive direction to opinions held about deterrents to participation for disabled adults in ABE programs. The relationship is slight, but consistent with all the deterrent domains. A vast majority of the ABE teachers responding have had experience teaching disabled adults. This relationship indicated that personal interaction with disabled adults may tend to increase a person's awareness of factors which act as deterrents to participation in ABE programs for this particular group.

6. Having had training in disability areas does not relate to any of the deterrent domains. This lack of a relationship warrants further investigation in light of the fact a majority of the ABE teachers responding indicate a desire for further training. Reflection on several comments given by the respondents indicates a dissatisfaction with previous training. Comments which support this concern deal with remarks about desiring more than one day workshops, a disinterest in learning theory, a call for "how to" training (i.e. teach adults with LD, diagnose LD, etc.), and a desire for training which carries a form of credit, which implies longer, more in-depth study.

7. The ABE teachers responding have a wide range of ideas to improve accessibility and effectiveness of ABE programs for disabled adults. There is, however, an underlying sense of frustration about the perceived lack of resources, personnel and funding to implement the ideas.

As largely part-time employees in rural settings, ABE teachers often work in isolation. They often are resentful of their counterparts in centers with larger staff and access to resources. Also, ABE teachers seldom have input into decisions such as choosing sites for classes, publicity campaigns, and collaboration
with community agencies. The combination of these factors, including the need to instruct adults with disabilities, could contribute to the sense of frustration.

Summary of Conclusions and Discussions

When considering the opinions of Adult Basic Education teachers toward the influence of certain deterrents to non-participation of disabled adults, it is important to do so in context of the profile characteristics of the teacher. The need for the teacher to instruct disabled adults has been established both through federal legislation and the actual existence of disabled adults in the classroom. For the ABE teacher there is no choice but to comply and do the best with the knowledge and resources available.

This compliance, or the actual attempt to instruct disabled adults, appears to be related to the opinions held concerning certain deterrents. Interaction of this sort is more influential than factors such as having had specific disability training, or terms of employment such as years of teaching.

Even without a choice in major decisions of programming, ABE teachers tend to stay on the job for several years. With this experience they have formulated ideas for program changes, but feel frustrated with seemingly little progress in program revisions. ABE teachers, however, do express a willingness to participate in teacher training in disability areas, especially learning disabilities, if this instruction is delivered locally or regionally and carries a form of credit.

Recommendations

The following section contains recommendations for practice and recommendations for research.
Recommendations for Higher Education

1. Institutions of higher education should implement teacher education course work that focuses on adult basic education. This course work should include practical application of teaching methods for target populations, specifically learning disabled adults, as well as course work that reflects organizational practices and procedures of adult education agencies (such as ABE), and courses which promote professional growth.

2. Institutions should consider offering a specialized degree with teaching disabled adults as its main focus.

Recommendations for the Ohio Department of Education

1. A collaborative model among districts to share ABE resources and personnel should be established in designated regions of the state. Initial focus should be on development of a system to identify and prescribe instructional strategies for learning disabled adults.

2. Establish agreement(s) of collaboration between the Ohio Department of Education with the Bureau of Vocational Rehabilitation and other agencies which provide services to disabled adults.

3. Establish procedure for dissemination of techniques, materials and effective program models of instruction for ABE disabled learners to the community-based ABE teachers. This dissemination can be in the form of published articles and studies, conference presentations, regional workshops, courses and inservice training activities.
Recommendations for Adult Basic Education Directors

1. In cooperation with the Ohio Department of Education and the Ohio Association for Adult and Continuing Education (the professional adult education association with the largest ABE membership) ABE directors need to increase their promotion of professional involvement by ABE teachers. Through increased opportunities to share methodologies, philosophies and discuss issues, ABE teachers can proactively take part in promoting the changes they perceive of importance.

2. Frequent opportunities for ABE teachers to provide input to staff development activities and resource acquisitions need to be implemented on a local basis.

3. Specific diagnosis criteria to certify existence of learning disabilities, accepted state-wide, needs to be incorporated in program procedures to ensure uniform parameters in providing accommodations, such as extended time on tests, scribes, etc., to this population.

4. Compliance to all federal regulations regarding building accessibility for disabled adults must be met when selecting program sites.

5. Actively seek local collaborative agreements with agencies and organizations which provide services to disabled adults. Consider issues of transportation, child care, accessibility, resources, and specialized personnel when formulating agreements.
Recommendations to ABE Teachers

1. ABE teachers need to be cognizant of barriers which may deter disabled adult participation. These barriers include, but go beyond, the physical obstacles which impede mobility to attitudes, resources and professional training.

2. ABE teachers need to be proactive in seeking support from professional organizations, institutions of higher education and the Ohio Department of Education to promote professional status and recognition for the field.

Recommendations for Professional Associations

1. Professional associations such as the Ohio Association for Adult and Continuing Education with ABE teachers as members, should be involved with dissemination of information to ABE teachers which focuses on teaching disabled adults.

2. Professional associations of adult educators should develop networks for adult educators interested in increasing their knowledge of and service to learning disabled adults.

3. Professional associations of adult educators should promote research in the area of disabled adult learners. Endorsement of studies and funding projects are two possibilities.

4. Professional associations should identify qualified experts, consultants who are willing to help community-based adult programs assess, plan and/or implement changes to increase accessibility and instruction for disabled adults.
Recommendations for Further Research

1. Since this study examined the opinions of ABE teachers in Ohio toward deterrents to participation for disabled adults, it should be replicated with both disabled adult ABE participants and non-participants to allow for comparison of opinions.

2. An attitude study of ABE teachers toward disabled adult students should be conducted prior to or in conjunction with the deterrent survey to be able to measure correlation of the attitude variables.

3. The issue raised by the non-existence of a relationship between prior teacher training and opinions about deterrents should be explored further. Training, as a choice expressed by the ABE teachers, is the accepted method to increase awareness, knowledge and skills. A study of attitudes prior and following training would lead to greater understanding of the effectiveness of the training received.

4. ABE teachers, as practitioners in the field, expressed a strong concern about working with learning disabled adults, even though a majority have received prior training in this disability area. A study which is designed to determine why the ABE teachers lack confidence in their ability to work with this population would provide greater insight into this concern. Such a study would also identify specific areas to be addressed in future teacher training programs.

5. Studies designed to determine disabled student evaluation of effective teaching methods and styles need to be conducted. These studies would lead to a greater understanding of the effectiveness of the teacher from the learner's perspective.
6. In order to develop a comprehensive program for disabled adults in ABE, research needs to provide a profile of the needs and characteristics of this targeted learner. Program development for adults has progressed in effectiveness and efficiency as our understanding of the adult learner has grown. Studies which expand the current level of knowledge about the adult learner in general to the disabled adult learner in specific will allow for development of more effective programming for this population.

7. Findings of this study could be interpreted to suggest to ABE teachers in Ohio have no strong perceptions of the influence of deterrent domains on the non-participation of disabled adults in ABE programs. This conclusion could be drawn from the composite means which largely cluster at the mid-range of the scale. However, when the data was analyzed excluding the mid-point of "no basis for opinion," variance between the composite means and rankings of the total range of responses (1-5) and the composite means with a missing value for three, no differences greater than .10 were found. This suggests a bimodal range of responses where nearly equal number of respondents had strong agreement or agreement as those who had strong disagreement or disagreement.

This interpretation and the reported relationship between experience teaching disabled adults in the classroom and the deterrent domains suggests the need for further research which explores the dimensions of the teacher/disabled learner relationship as a basis for formulation of perceptions and attitudes held by the teacher and by the learner.
BIBLIOGRAPHY


Kerka, Sandra (1986). "Deterrents to participation in adult education. Overview. Erie Digest No. 59. ERIC Clearinghouse on Adult, Career, and Vocational Education, Columbus, Ohio.


Kreitlow, B. W., Glustrom, M., & Martin, C. (1981). Educational needs assessment for Wisconsin adults with less than high school graduation or GED. Madison, WI: Wisconsin State Board of Vocational Technical and


Scanlan, Craig L. (1986). *Deterrents to participation: an adult education dilemma*. (Information Series No. 308). Columbus, Ohio: ERIC Clearinghouse on Adult, Career, and Vocational Education.


Dear Colleague,

Through Adult Basic Education programs like yours, over 6,500 disabled adults in Ohio were able to improve the quality of their lives in 1988. You are an important part of this impressive picture. Ohio's ABE programs do make a difference in educating those with both visible and invisible handicaps.

You may have been one of the hundreds of ABE instructors who worked with these adults, or you may have that challenging opportunity this year. With over 200,000 disabled adults in Ohio who do not have high school diplomas, and new federal legislation supporting access to education for the disabled, the chances are quite high that you or your program will be serving disabled adults.

Because you are the one directly involved in providing these educational experiences, Phyllis Thompson is seeking your opinions about how to make your program even more accessible, with learning experiences compatible to the special needs of disabled adults. Phyllis is a former ABE instructor and director, and currently a Coordinator of Developmental Education at The Ohio State University. The results of her research will have positive implications for the funding of Adult Basic Education, implementing staff development activities, and influencing building and material modifications. By determining if deterrents exist for the disabled, we can plan strategic removal of such barriers.

We ask that you take a few minutes to complete this survey to insure that your opinions are included. The Ohio Department of Education, Division of Educational Services, and the Ohio Association of Adult and Continuing Education (OAACE) have given their support to this research. Local programs and the State Department of Education will receive the compiled results to use in the continued promotion of excellence for Ohio's ABE programs.

Harry R. Meek  
Associate Director  
Ohio Department of Education  
Adult and Community Education Office

Jeffrey C. Raynor  
President  
The Ohio Association for  
Adult and Continuing Education

P.S. Thank you for responding by October 6 and have a great new school year.
APPENDIX B
ADULT BASIC EDUCATION IN OHIO:
A STATEWIDE SURVEY OF
ABE TEACHERS CONCERNING
DETERRENTS FOR DISABLED ADULTS

Less than ten minutes is needed to ensure that your opinions are included in this Ohio effort to continue promoting excellence in your local ABE program.

Please feel free to write any comments you have at the end of the survey.
DEFINITIONS*

Deaf - a hearing impairment which is so severe that a person's hearing is non-functional for the purposes of educational performance.

Deterrent - a real or perceived obstacle or barrier which inhibits or stops an action from being completed.

Disability - a physical, mental, or emotional impairment.

Handicap - a physical, mental, or emotional impairment which substantially limits one or more of a person's major life activities such as education or employment.

Health Impaired - limited strength, vitality, or alertness due to chronic or acute health problems such as heart condition, tuberculosis, epilepsy, diabetes, or some other illness.

Hearing Impaired - a hearing impairment which adversely affects a person's educational performance.

Learning Disability - a disorder in one or more of the basic psychological processes involved in understanding or an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations.

Mentally Retarded - impaired mental development which adversely affects a person's educational performance.

Orthopedically Impaired - a severe orthopedic impairment which adversely affects a person's educational performance.

Seriously Emotionally Disturbed - a condition exhibiting one or more of the following characteristics: (1) an inability to learn which cannot be explained by intellectual, sensory or health factors; (2) an inability to build or maintain satisfactory interpersonal relationships; (3) inappropriate types of behavior or feelings under normal circumstances; (4) general pervasive mood of unhappiness or depression; and (5) a tendency to develop physical symptoms, pains, or fears associated with personal or school problems.

Speech Impaired - a speech or language impairment (such as impaired articulation, stuttering, voice-impairment, or a receptive or expressive verbal language impairment) which adversely affects a person's educational performance.

Visually Impaired - a visual impairment which adversely affects a person's educational performance, and includes both partially sighted and blind persons.

*adapted from Wisconsin Vocational Studies Center
PART 1: BIOGRAPHIC INFORMATION

1. Number of hours per week you are employed as an ABE instructor?
   ____ hours

2. How many years have you taught in ABE? (Check one)
   ____ less than 1 year  ____ 5-9 years
   ____ 1-4 years  ____ 10 years or more

3. Is the ABE program where you currently teach located in an urban setting
   (50,000 population or more) or rural setting (less than 50,000 population)?
   ____ urban  ____ rural

4. Have you ever taught adults in your ABE classes with any of the disabilities
   listed below? Please check the disability area(s) that apply. (Definitions on
   opposite page).
   a. ____ deaf  f. ____ orthopedically impaired
   b. ____ hearing impaired  g. ____ seriously emotionally disturbed
   c. ____ health impaired  h. ____ speech impaired
   d. ____ learning disabled  i. ____ visually impaired
   e. ____ mentally retarded

5. Have you had any professional training in the disability areas listed? Check
   the areas which apply or skip to question 7.
   a. ____ deaf  f. ____ orthopedically impaired
   b. ____ hearing impaired  g. ____ seriously emotionally disturbed
   c. ____ health impaired  h. ____ speech impaired
   d. ____ learning disabled  i. ____ visually impaired
   e. ____ mentally retarded

6. Check the type(s) of professional training you have received:
   ____ college credits  ____ in-service training
   ____ non credit or continuing education
   ____ other (specify)

7. In what area(s) would you like to receive training? Check all that apply.
   a. ____ deaf  f. ____ orthopedically impaired
   b. ____ hearing impaired  g. ____ seriously emotionally disturbed
   c. ____ health impaired  h. ____ speech impaired
   d. ____ learning disabled  i. ____ visually impaired
   e. ____ mentally retarded

8. How would you like this training delivered? Check one in each section.
   A. ____ local  ____ regional  ____ state-wide
   B. ____ for college credit
      ____ for continuing education units (CEU’s)
      ____ non-credit conferences/workshops
9. If you checked "for college credit," what would you be willing to pay? Check one.

- ____ full tuition
- ____ partial tuition
- ____ none of the tuition

**PART II: PARTICIPATION DETERRENTS SURVEY**

The statements in this survey were identified by ABE staff as deterrents or barriers for disabled adults to participate in local ABE programs. Please circle the level to which you agree or disagree with these statements or indicate no basis for an opinion due to lack of knowledge or experience with the stated deterrent.

<table>
<thead>
<tr>
<th>CIRCLE ONE OF THE FOLLOWING FOR EACH DETERRENT STATEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>NB-No Basis for Opinion</td>
</tr>
<tr>
<td>SA-Strongly Agree</td>
</tr>
<tr>
<td>A-Agree</td>
</tr>
<tr>
<td>D-Disagree</td>
</tr>
<tr>
<td>SD-Strongly Disagree</td>
</tr>
</tbody>
</table>

**I. ATTITUDE/EMOTIONAL DETERRENTS:** Adults with disabilities do not participate in ABE programs because of:

- a: Their lack of confidence in themselves
- b: Their lack of confidence in the ABE program
- c: Their lack of initiative
- d: Their belief they cannot learn
- e: Their fear of failure
- f: Their fear of accepting responsibility
- g: Their fear of social interaction
- h: Their fear of embarrassment caused by exposing their handicap(s) in a class
- i: Their belief that education is not necessary for them
- j: Negative reactions from ABE staff
- k: Negative reactions from other students
II. **LEGAL/POLICY/FUNDING DETERRENTS:** Adults with disabilities do not participate in ABE programs because of:

a: Restrictive eligibility criteria for services from support agencies

b: Complex procedures involved in getting local, state, or federal funding

c: Restrictive policies for testing alternatives and accommodations on GED test

d: Inadequate funding for adaptive classroom equipment

III. **ACCESSIBILITY DETERRENTS:** Adults with disabilities do not participate in ABE programs because of:

a: Lack of transportation to class

b: Lack of child care

c: Inadequately modified buildings

IV. **ORGANIZED GROUP DETERRENTS:** Adults with disabilities do not participate in ABE programs because of:

a: Lack of or confusing information/communication about ABE programs given by agencies

b: Lack of information about ABE programs given to special interest and advocacy groups

c: Lack of cooperative agreements between ABE and support service agencies on state and local levels

d: Lack of support service agencies

V. **PRE-EMPLOYMENT DETERRENTS:** Adults with disabilities do not participate in ABE programs because of:

a: Their personal belief they are unemployable
b: ABE program's lack of special job
    seeking skills curriculum .................................................. NB SA A D SD

c: Disability benefits greater than
    disabled could earn from employment ............................... NB SA A D SD

d: Unrealistic employment objectives held
    by disabled ................................................................. NB SA A D SD

e: Employment biases held by employers ......................... NB SA A D SD

f: Limited substantial job availability ............................. NB SA A D SD

g: Lack of specific career counseling
    for the disabled adults ................................................ NB SA A D SD

VI. EMPLOYMENT DETERRENTS: Employed adults with disabilities do not
    participate in ABE programs because of:

   a. Limited opportunities for advancement
       even with increased basic skills ..................................... NB SA A D SD
   b. Employers' negative attitudes ..................................... NB SA A D SD
   c. Lack of time to further education ................................ NB SA A D SD
   d. Inconvenient scheduling of ABE classes ....................... NB SA A D SD
   e. Lack of work-site ABE classes ................................... NB SA A D SD

VII. PROFESSIONAL PREPARATION DETERRENTS: Adults with disabilities
    do not participate in ABE programs because ABE staff:

   a. Have insufficient in-service training in
       methods of working with disabled adults ........................ NB SA A D SD
   b. Cannot locate relevant college courses ........................ NB SA A D SD
   c. Have no incentives to pursue education
       for working with disabled adults .............................. NB SA A D SD
   d. Have no specific certification
       requirements for working with disabled
       adults ............................................................... NB SA A D SD
   e. Lack knowledge of auxiliary services
       provided by other agencies ....................................... NB SA A D SD
f. Lack information of teaching materials available for disabled adults .................. NB SA A D SD

g. Lack information of diagnostic instruments appropriate for disabled adults .................. NB SA A D SD

VIII. RESOURCE DETERRENTS: Adults with disabilities do not participate in ABE programs because ABE programs:

a. Lack appropriately trained personnel .................. NB SA A D SD

b. Lack appropriate level materials in multiple teaching/learning modes .................. NB SA A D SD

c. Lack specialized instructional equipment for disabled adults .................. NB SA A D SD

d. Lack appropriate diagnostic instruments for disabled adults .................. NB SA A D SD

e. Lack trained support professionals to assist teachers in identification and accommodation selection for disabled adults .................. NB SA A D SD

f. Lack financial support to acquire appropriate materials and equipment .................. NB SA A D SD

g. Have limited research support and resources about disabled adults .................. NB SA A D SD

IX. Are there any knowledge or skill areas you, as an ABE teacher, feel would improve your ability to instruct disabled adults in your classroom? Check all that apply.

____ Sign language
____ LD identification
____ Teaching techniques for any specific disability area.
____ Name area(s) __________________________________________________________
____ Diagnostic techniques
____ Learning theory
____ Resource materials available
____ Resource person contacts
What other knowledge or skill areas do you believe would benefit your teaching of disabled adults? ____________________________________________________________

______________________________________________________________________

X. Are there any ways your ABE program could be modified or enhanced to be more accessible and to provide better instruction to the disabled adult? Check all that apply.

____ Building accessibility (ramps, and automatic doors, etc.)
____ Handicapped parking
____ Accessible restrooms
____ Computer adaptations (large screen print, voice activation, non-keyboard control such as touch screen or "mouse", etc.)
____ Adaptive equipment (cassette recorders, voice calculators, VHS playback unit, page magnifiers, etc.)
____ Instructional materials in multiple modes (tapes, videos, software programs, books recorded on tape, etc.)
____ Publicity targeted to disabled adults
____ Informational meetings with agencies which served disabled adults

What equipment and materials are most needed? ___________________________

______________________________________________________________________

______________________________________________________________________

What other ideas do you have which would increase your ABE program's appeal and effectiveness with disabled adults? ________________________________

______________________________________________________________________

______________________________________________________________________

Comments:
______________________________________________________________________

______________________________________________________________________

______________________________________________________________________
Thank you...

for completing this survey in a timely manner. The results will be shared with the Ohio Department of Education, Division of Educational Services and available at the Ohio Association for Adult and Continuing Education Conference, Spring, 1990. If you wish to have a summary of the results, please print your name and address on the back of the postage-paid envelope and write, "Results Requested."