University of Louisville

ThinkIR: The University of Louisville's Institutional Repository

Electronic Theses and Dissertations

8-2004

Family literacy—predictors of program participation and goal attainment in Kentucky.

Zelma Renae Stewart Harrison
University of Louisville

Follow this and additional works at: https://ir.library.louisville.edu/etd

FAMILY LITERACY—PREDICTORS OF PROGRAM PARTICIPATION AND

GOAL ATTAINMENT IN KENTUCKY

By

Zelma Renae Stewart Harrison
B.S. Southwest Texas University 1975
M.A. Western Kentucky University 1992

A Dissertation
Submitted to the Faculty of the Graduate Schools of the
University of Louisville and Western Kentucky University
In Partial Fulfillment of the requirements
for the Degree of Doctor of Philosophy

Adviser Dr. Mike Boyle

August, 2004

FAMILY LITERACY—PREDICTORS OF PROGRAM PARTICIPATION AND

GOAL ATTAINMENT IN KENTUCKY

By

Zelma Renae Stewart Harrison
B.S. Southwest Texas State University 1975
M.A. Western Kentucky University 1992

A Dissertation Approved on

July 7, 2004

by the following Dissertation Committee:

_____
Dissertation Director

_____

_____

_____

_____

DEDICATION

This dissertation is dedicated to

Mattie Sue Price Davis

my aunt who quit high school when her mother died

to take care of her brothers and sisters.

Because of her belief in the value of education she

returned to school when her daughter was grown.

She earned her high school diploma and then enrolled in

college.

ACKNOWLEDGEMENTS

consistent questioning "how is that paper going" kept me working when it would have been easier to quit. And last but certainly not least, I want to thank my husband David who supported, guided, and advised me through this endeavor. Without his support and knowledge of the process I would have given up after the first semester.

ABSTRACT

FAMILY LITERACY—PREDICTORS OF PROGRAM PARTICIPATION AND

GOAL ATTAINMENT IN KENTUCKY

Zelma Renae Stewart Harrison

August, 2004

The purpose of this study was to investigate how various components of family literacy programs such as operational characteristics (enrollment procedure, hours of operation, time of class, curriculum selection, type of instruction, and age of child served) and staff characteristics (gender, full or part time status, and educational attainment level) influence the recruitment, and goal attainment of adults in family literacy programs. This research investigated factors that could help educational administrators improve family literacy programs through increased enrollment, and improvement of goal attainment of participants.

This exploratory, quantitative study utilized 2002-03 data submitted by family literacy programs in Kentucky. Two hierarchical multiple regressions and three Pearson Correlation's were conducted.

Neither of the hierarchical multiple regressions on recruitment and goal attainment showed any significant relationship between the dependent and independent variables. Two Pearson Correlations were conducted that addressed the relationship between the presence of male staff members and the number of male and total students enrolled. There was no significant correlation between the variables. A third Pearson Correlation addressed the relationship between the hours of week of instruction and goal attainment. This was a positive correlation.

Findings indicate that providers in Kentucky have developed multiple program models for delivering family literacy services. Lack of significance in the analysis indicates there does not seem be a definitive program model that will result in improved recruitment or goal attainment of the students.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

In 1993 the National Center for Educational Statistics released the first report on the National Adult Literacy Survey of 1992. Twenty-one to 23 percent (40 to 44 million) of the 191 million adults in the United States demonstrated skills in the lowest level of literacy -- Level 1. Some 25 to 28 percent of the respondents, representing 50 million adults nationwide, demonstrated skills in the next higher level of proficiency -- Level 2.

Jennings & Whitler (1997) in the Kentucky Adult Literacy Survey related these literacy levels to grade levels at the elementary or secondary levels:

Level 1   0 to 5.9 grade level

Level 2   6 to 8.9 grade level

This means that half of the adult population in the United States is functioning below 9.0 grade level. They also found that the literacy levels of Kentucky's population are comparable to other residents of the Southeast United

States and with literacy levels of all Americans. Fourteen percent (340,000) of Kentucky adults, however, have virtually no literacy skills. Another 656,000 have low levels of skills that are likely to impede their personal advancement and the development of the state's economy.

In his report, "The Adult Education and Literacy System in the United States, Moving From the Margins to the Mainstream of Education", Sticht (2000) identifies the growing value of the adult education and literacy system. He points out that investment in adult education and literacy development will produce an immediate return in improvement of the workforce, where as investment in K-12 systems could take a generation to produce results. As governments become increasingly concerned about economic vitality they are looking toward adult education and literacy systems as one of the methods of improving the workforce quickly.

Historically, recruitment of those in need of services has been a problem for various reasons: (a) marketing of programs (Douglas, Valentine, and Cervero, 1999; Jensen, Haleman, Goldstein, & Anderman 2000); (b) prior schooling experience (Quigley, 1992a); and (c) programs not meeting the needs of the participants (Jensen et al. 2000). Even if programs are able to recruit members of the target

population, retention of that student becomes a problem. Various reasons prevent students from attending to the extent needed to reach their goals. The reasons include work and family responsibilities (Al-Barwani and Kelly, 1985; Bean, Partanen, Wright, & Aaronson, 1989; Malicky and Norman, 1994). Program services and the way students are served are also issues (Fitzgerald and Young, 1997, Millar and So, 1998; Purcell-Gates, Degener, Jacobson, & Soler, 2000; Quigley, 2000).

In 1998, Title II of the Workforce Investment Act replaced the federal Adult Education Act. This law has three goals that relate to adult basic education. It specifies that programs must assist: (a) adults in becoming literate and obtaining the knowledge and skills necessary for employment and self-sufficiency, (b) adults who are parents in obtaining the educational skills necessary to become partners in the educational development of their children, and (c) adults in completing high school or the equivalent (Amstutz & Sheared, 2000).

Background to the Study

Historically, as adult education programs explored new models of delivering educational services to adults, a family literacy model was developed to meet not only the needs of the adults but also the child. This model is a

3

true attempt at halting intergenerational illiteracy. Different models of family literacy have been explored not only in Kentucky but also in several other states and even other nations (Berkovitz, 1994; Brooks, 1998; Debruin-Parecki and Parris, 1997; Elish-Piper, 1997; Hannon, 2000; Tice, 2000). As these models were developed, their outcomes were examined resulting in both unfavorable and favorable results. Unfavorable results include: (a) no significant increase in reading and writing in the home (Beder, 1999), (b) undermining of family strengths due to instructors emphasis on middle-class values of what it takes for children to be successful (Auerbach, 1989; Strickland, 1996)   Favorable results include: (a) attendance is consistent (National Center for Family Literacy, 1994; Paratore, 1992); and (b) parents take an interest in their child's school experience, stating that they anticipate their child completing high school (Boudreaux, 1999; Farrer, 2000; Seaman, 1992).

While these are positive aspects of the programs, current economic and social conditions have changed. Parents in many of the previously conducted studies were identified as being welfare recipients who attended to retain benefits. With welfare reform legislation, this is no longer the case (Sparks, 2001). Parents must now work

and can no longer attend all day as described in some of the studies reviewed. Another issue – this one not reliant on time - is providing educational service to fathers, because many of the studies dealt only with the mothers (Amstutz & Sheared, 2000).

In 2000 the Kentucky Institute for Family Literacy was created to coordinate the state's funding and services for family literacy. An advisory board of all the state agencies with a stake in family literacy oversees this Institute. The Department for Adult Education and Literacy and the Council on Postsecondary Education came forward with an additional $4 million for family literacy programs, doubling the available funding. In 2001 Governor Patton challenged these state agencies to make family literacy services available in all 120 Kentucky counties. As a result, the number of state-funded programs grew from 48 in 2000 to 84 in 2001. As of July 2002, family literacy is now funded in all 120 counties (Logan, Peyton, Read, McMaster, & Botkins, 2002).

<center>Purpose of the Study</center>

As Simmons, St. John, & Mendez (2002) identified in their study, there are issues that need to be addressed concerning family literacy programs. One of these is the absence of a prescriptive model. What elements of a family

<center>5</center>

literacy model attract the largest number of the identified

target audience? Is it evening classes or day classes; all

day or several hours a week; computer technology or books?

What elements demonstrate the ability to attract both

mothers and fathers to the program? Is it the time the

class is offered, or could it be the presence of a male

teacher serving as a role model? What are the outcomes of

the different models? Are parents reaching their

educational goals?

This study addresses the family literacy programs in

Kentucky by investigating the different characteristics of

the programs that have developed since the 2001 mandate.

These characteristics will be explored as predictors of

recruitment, retention and goal attainment of adults

enrolling in the programs. The purpose of the study is to

identify factors that influence adult student recruitment

and goal attainment in family literacy programs.

<center>Significance of the Study</center>

The purpose of this study is to determine the program

characteristics that have the most influence on the

recruitment, and goal attainment of adults enrolled in

these programs. If characteristics are identified that

facilitate the recruitment and goal attainment of adult

students in family literacy programs, then this information

<center>6</center>

can be used for the development of policy and

recommendations for program development. Further study of

these characteristics may provide suggestions to ways that

programs can increase recruitment and success of adults

enrolled in family literacy education programs in and out

of Kentucky.

<div align="center">Research Questions</div>

The research questions are:

1. Which adult literacy program characteristics predict
   the best recruitment of the target population?
2. Which adult literacy program characteristics predict
   the best goal attainment rate of enrolled students?

<div align="center">Limitations of the Study</div>

The study will be a quantitative study using data

submitted by individual family literacy programs. This

study will employ correlational statistics with separate

multiple regression models correlating each of the

dependent variables with selected independent variables.

This design was selected because of the intent to determine

which independent variable is a significant predictor for

each dependent variable. The limitation of the study design

is that all data will be self-reported by the family

literacy programs. Data are correlational so causal

relationships between predictors and the independent

variables must be cautiously made.

Definition of Terms

ABE – Adult Basic Education

ASE – Adult Secondary Education

DAEL – Department for Adult Education and Literacy

ESL – English as a Second Language

ESOL – English for speakers of other languages

Family Literacy – A program where both the parent and the child attend an educational program together.

GED – General Equivalency Diploma

KYAE – Kentucky Adult Education

NALS – National Adult Literacy Survey

NCES – National Center for Education Statistics

NRS – National Reporting System

Providers – those entities and personnel that sponsor adult literacy and basic education programs.

TABE – Test of Adult Basic Education

CHAPTER II

LITERTURE REVIEW

The Need for Adult Education

In his report, "The Adult Education and Literacy System (AELS) in the United States: Moving From the Margins to the Mainstream of Education", Sticht (2000) identifies the growing value of the adult education and literacy system in the new millennium. He states "Investments in adult education and literacy development may provide 'double duty dollars' returning benefits on the job, at home, in the community and at school" (p.4). He also makes the point that "to accomplish the improvement of the workforce through the K-12 school system with children will take several generations. The economic return to investment in adult education is immediate" (p. 5). As governments become concerned about economic vitality they are looking toward adult education and literacy systems as one of the methods of improving the workforce quickly.

Before addressing the problem of adult literacy it is necessary to understand how the definition of illiteracy

has changed during the past 50 years. Conventional illiterates (defined by the Census Bureau as someone at least 14 years of age who has not completed the fifth grade) have virtually disappeared in the US, representing less than 1% of the population. Educators now discuss "functional" literacy, defined as skills needed for an individual to perform productively in society as a citizen, family member, consumer and worker. Functional literacy is becoming increasingly more complex (Glover & Mitchell, 1991).

To determine the literacy levels of the population of the United States the National Adult Literacy Survey was conducted in 1992. In 1993 the National Center for Educational Statistics released the first report. This survey used the following definition of literacy, "Using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential". This survey measured literacy along three dimensions—prose literacy, document literacy, and quantitative literacy.

Prose Literacy consists of Expository and Narrative prose. Expository prose consists of printed information in the form of connected sentences and longer passages that define, describe, or inform, such as newspaper stories or

written instructions. Narrative prose tells a story. Prose varies in its length, density, and structure. Document literacy consist of structure prose and quantitative information, in complex arrays arranged in rows and columns, such as table, data forms, and lists, in hierarchical structures such as tables of contents or indexes, or in two-dimensional visual displays of quantitative prose, such as graphs, charts, and maps. Quantitative information may be displayed visually in graphs or charts or it may be displayed in numerical form using whole numbers, fractions, decimals, percentages, or time units. These quantities may appear in both prose and document form. Appendix A explains the competencies of the five different levels of prose, document and quantitative literacy.

Twenty-one percent (more than 40 million) of the 191 million Americans over the age of 16 in the United States demonstrated skills in the lowest level of literacy. A subgroup in this category – representing roughly 4 percent of the total adult population, or about 8 million people -- was unable to perform even the simplest literacy tasks. Some 25 to 28 percent of the respondents, representing 50 million adults nationwide, demonstrated skills in the next higher level of proficiency.

In order to address this problem of low levels of adult literacy it is necessary to understand how conditions of literacy learning have changed within the last century so that delivery of services can be developed to meet these challenges. Brandt (1999) documented the changing conditions of literacy learning as experienced by ordinary people in the twentieth century. The purpose was to gather a description of literacy learning, set within the economic and cultural movements that changed the Midwest area of the United States from an agrarian society at the turn of the twentieth century into an information and service society 100 years later. The objective of the author was to understand what the rising standards for literacy have meant to successive generations of Americans and how people have responded to the changes as they acquired those higher levels of literacy. The researcher selected two European American women with similar backgrounds, yet born two generations apart, for an in-depth comparison study of literacy acquisition and the effect of sponsors on that literacy. Using oral and life history research methods, Brandt asked them to remember everything they could (focusing on the institution, materials, people, and motivations involved) about how they learned to read and write across their lifetimes,

Using grounded theory, Brandt (1999) analyzed the interviews checking for frameworks sensitive to economic forces at the scenes of literacy learning. She determined that economic changes devalue once-accepted standards of literacy achievement, and destabilize the ways once used to acquire literacy skills. Rapid economic change can interrupt the social mechanisms that traditionally have supported and sustained literacy. As investments in local education, commerce and social welfare drain away from a community, the institutions providing literacy acquisition also drain away making it more difficult for those most in need of services to access them.

Brandt concluded that increasing literacy skills was more complicated at the end of the twentieth century. Economic changes create immediate needs for students to cope with gradual and sometimes dramatic alterations in systems of access and reward for literacy learning. These changes can wipe out, as well as create, access to supports for literacy learning.

Brandt recommended consideration of the economic conditions of student lives when developing curriculum. For people caught in the rapid change of commerce and economics, literacy learning entails more than attaining the reading and writing abilities implied by constantly

rising standards. It requires an ability to make the transformations that have become embedded, across time, in the history of those standards. These changing standards apply to Kentucky as well to the states of the Midwest. As Brandt recommends, one of the independent variables addressed in the study will be that of economic conditions in the counties of Kentucky. Accessing poverty rates of each county will do this.

As Brandt (1999) explained, the methods of acquiring literacy when the desire or the need arises have been removed from easy access over the last 100 years. Yet, economic vitality of communities is reliant on educational attainment levels of the residents. To serve those in need the practitioner, or provider of services, should understand the characteristics of the population in need of services. The next two studies will address this need. First a study by Beder & Valentine (1990), that examines the reasons why low-literate adults participate in Adult Basic Education (ABE) and then a study by Eksrom, Goertz, Pollack & Rock (1986) which examines characteristics of drop-outs in particular.

Beder & Valentine (1990) designed a study to gain a better understanding of the reasons low-literate adults choose to participate in ABE. Two frames of data were

collected. The first frame consisted of data on motivations for participation in ABE. The second frame consisted of date on a large number of background variables, which would allow for characterization of different types of learners in ABE.

A 62 item scale to measure motivations was constructed based on in-depth interviews with learners; the scale was embedded into a seven page questionnaire surveying a broad array of background variables.

Questionnaire data were collected by means of face-to-face, structured interview in which the interviewer read all questions to the respondent and recorded the responses. A large random sample (N = 323) of learners enrolled in ABE programs who had completed less than eleven grades of formal schooling in the state of Iowa were interviewed. The Woodcock-Johnson was given to a random subsample (N = 153) of this group.

Through factor analysis of the motivation items, ten dimensions were identified. The first was *self-improvement*, which represented 8.6% of the total scale variance. These items referred to intrinsic self assessment as opposed to instrumental gains with respect to social roles. This factor was psychological in nature and represents a motivational orientation.

The second dimension was *family responsibilities*, which comprised of setting a better example for children, being a better parent, and helping children with homework. This factor explained 5.8% of the total scale variance. The third factor was *diversion,* which suggested social activity and escape or stimulation. This factor explained 5.0% of the total scale variance. The fourth factor *literacy development* explained 4.6% of the total scale variance. One point of interest was that improvement in math skills did not even load on this factor, which presents a challenge to those who would group basic skills together as a motivations factor.

The remaining factors were *community/church involvement* representing 4.1% of total variance, *job advancement* representing 4.1 % of total variance, *launching* representing 4.0 percent of the variance, *economic need* representing 4.0% of the variance, *educational advancement* with 3.5% of total scale variance, and *urging of others* representing 3.0 total scale variance.

Cluster analyses based on factor scores revealed six distinct subgroups of students. The first and largest cluster representing 32.8% of the group was *Mainstream Women*. This cluster contained more women, more married students, and a higher percentage of members who reported

17

having children at home. It had the highest percentage of homemakers of any cluster and a disproportionate number of members who reported leaving school because of marriage or pregnancy.

Cluster II, *the Urged,* comprised 12.1% of the sample and was the third largest cluster. This group consisted of a mature learner who attended ABE largely at the urging of friends, relatives, and workmates. A disproportionate number of this group left school to go to work, and a higher percentage of these members were employed than the total group as a whole.

Cluster III, *Young Adults,* represents a group of young dropouts who are at the point of launching into adulthood. It was the second smallest cluster (8.4%) and had the highest percentage of unemployed and seeking work as well as the largest number unable to specify an occupation.

Cluster IV, *the Climbers,* are the older students living in a city or large town and who is relatively better off than the sample as a whole. It was the smallest cluster, comprising only 6.5% of the sample, exhibited the most complex motivational profile. It had the second highest mean age of the six clusters. It had the lowest grade completion of the six clusters yet the mean household income for this cluster is higher than four of the other

five clusters and the incidence of public assistance was quite low.

Cluster V, *Least Affluent and Least Employed,* was made up by ABE students with low socio-economic status and a strongly perceived need for the improvement of literacy skills. It was the second largest cluster, representing 30% of the study sample. It was somewhat disproportionately male and had both the smallest percentage of employed members and the smallest percentage of skilled workers. It had the lowest mean household income and a relatively high percentage of members on public assistance. It had relatively low percentage of married members and cluster members were somewhat less likely to have children living in the home.

Cluster VI, *Low Ability Strivers,* consisted of ABE students who were generally less academically able than those in the other clusters. It was the third smallest subgroup, 10.2% of the sample. It was disproportionately male, and had the highest incidence of self-reported handicap. This group reported the highest incidence of unexplained reasons for leaving school and the lowest incidence of public assistance of any cluster.

This study captured the diversity of motivation leading to participation in ABE programs. Motivation is

multidimensional and goes well beyond the simple desire to improve basic skills or attain a high school diploma. The results of the cluster analysis captured that diversity. Careful consideration of each of the clusters can assist instructional designers in developing programs that match the aspirations of different types of adult learner.

Ekstrom, Goertz, Pollack & Rock (1986), conducted an in depth study which examined the characteristics of one particular group of individuals that need to access adult educational services. This group is those individuals who failed to complete high school. To serve this group providers must first understand them.

Ekstrom et al. (1986), using the National Center for Education Statistics (NCES) database, examine how the cognitive achievement and attitudes of high school dropouts differ from those of teenagers who chose to stay in high school. The research focused on four questions: (a) Who drops out? (b) Why does one student drop out and not another? (c) What happens to dropouts during the time that their peers remain in school? And (d) What is the impact of dropping out on gains in tested achievement?

The researchers used data from "High School and Beyond", a national longitudinal study of American high school students sponsored by NCES. The data were drawn from

a highly stratified national probability sample of about thirty thousand high school sophomores who attended about one thousand public or private high schools in 1980. Students were administered base-year survey and achievement tests in vocabulary, reading, mathematics, science, writing and civics. A follow-up survey collected data from and retested over twenty-two thousand of these students who were seniors in 1982 and over two thousand of the individuals who had dropped out of school by 1982.

Descriptive analysis was used to describe those who stayed in school and those who dropped out between their sophomore and senior years. Students who stayed in school were compared with those who did not complete school on a number of dimensions: race/ethnicity, socioeconomic status, family structure, home education support system, ability and attitudes, and school behaviors. A path analysis was used to explain why some students and not others drop out of school. These results were further verified by comparing these estimates with those of a propensity analysis. A value-added analysis was conducted to estimate the relative impact of staying in or dropping out of school on gains in tested achievement.

Students who became dropouts differed appreciably in their sophomore year from those who chose to remain in

school. These difference included background, educational achievement and other school-related behaviors, out of school activities, educational aspirations, and attitudes toward self and society. Thirty percent of the dropouts reported leaving school during tenth grade, 44 percent during eleventh grade, and 26 percent during twelfth grade.

Background factors related to dropouts included social economic status (SES) and ethnicity. Twenty-five percent of the students in the lower SES group became dropouts, 13 percent of the students from medium SES and 7 percent from high SES became dropouts. While fourteen percent of the white students became dropouts, over 27 percent of the Hispanic students and 18 percent of the black students became dropouts

Identifying why students drop out of school and assessing the impact of this decision on future values, behaviors, and achievement are not easy tasks. Students drop out of school for a variety of personal reasons, and the impact of leaving school is affected by when an individual drops out, what he or she does after dropping out, and the outcome measures employed. The analysis conducted in this paper shows the following. First, the critical variables related to dropping out are school performance, as measured by grades, and extent of problem

behavior. These variables are more important in explaining dropout behavior than ability as measured by test scores.

Second, problem behavior and grades appear to be determined in part by the home educational support system. The mother's educational aspirations for the student, the number of study aids in the home, parental involvement in curriculum choice, and the provision of opportunities for non-school learning all affect school academic performance and/or deportment.

Third, regardless of ethnicity, gender, or curriculum choice, staying in school increases achievement gains in all tested areas. Students in the academic curriculum gained most, followed by students in the general and then the vocational curriculum. Females and minorities suffered the greatest with respect to unrealized achievement gains if they dropped out of school.

Ekstrom et al. (1986) stated that the study showed that the students' home environment had a critical although indirect, impact on the decision to leave school and that policies should be developed to help parents increase their interest in and monitoring of their children's school progress. It is also important to identify potential dropouts before the high school years and to begin interventions, when the first behavior signs are noted.

23

As Ekstrom et al. found, high school dropouts are disproportionately from low socioeconomic status (SES) families and racial /ethnic, minority families. As these students grow older their SES rarely changes and they become participants of the welfare system. In recognition of this, funds were provided to adult literacy programs for development of special services to meet the specific needs of this population and welfare recipients were encouraged to attend to advance their educational attainment level. With the implementation of welfare reform these funds were no longer available and participants were mandated to search for work. Education was no longer an emphasis. Sparks (2001) reports on Nebraska's practitioners experiences, fears, and perspectives on a social policy in which they have a high stake but little power. The study sought to answer the following questions: How does welfare reform influence Adult Basic Education (ABE) programs? What educational, philosophical, and ethical issues does welfare reform raise in relationship to ABE practice? How do practitioners deal with these issues? The sample population included teachers and administrators who work in Nebraska's ABE programs ($N = 26$). Most were employed part time as instructors or administrators; several were full time administrators.

An interpretative case study was used to determine how Nebraska's ABE practitioners identify the key issues regarding welfare reform and ABE programming and how they perceive the influence of these reform measures on program delivery, learners, and subsequent decision making. Three phases of data collection were used to triangulate the data. The three phases were: (a) group discussion with 26 ABE practitioners, (b) follow-up interviews with three administrators who participated in the group discussion, and (c) a questionnaire completed by 14 practitioners of programs that participated in the group discussions. The researchers analyzed data collected at each phase with an iterative process of constant comparison; a moving back and forth among the data was used to develop categories and properties of meaning. Responses to individual questions were collated and emergent categories were identified. The comparative analysis revealed concerns about serving the new welfare clients, programmatic priorities, areas of need, shifts in program emphasis, views about welfare reform, and stresses and strains on programs.

Sparks (2001) identified three themes in the key issues that ABE practitioners have regarding the influence of welfare reform on ABE programming and the issues that should be taken into account in providing educational

services to low skill welfare recipients. The first issue is the relationship between education and work. The new welfare reform policy does not view the relationship between work and education as formal adult education programs view it. As a result, there is a restriction of educational desires, an overemphasis on economic development at the expense of full adult development, and recognition that without more education many recipients will not be able to find self-sustaining employment. The second issue is the quality of programs; there is a lack of funding in the welfare reform movement for implementation of new ABE programs to address the changes that clients must face. The third issue, student learning, is also affected by welfare reform. Only two years are allowed for education, this will not allow those with low academic skills to move up the levels they will need to obtain skilled jobs that can lead to self-sufficiency. While this study was conducted with Nebraska's practitioners, welfare reform was nation wide and Kentucky practitioners experienced these same concerns.

Summary

Governments – local, state and national - are looking to adult education as a method of improving the workforce quickly for the purpose of insuring economic vitality

(Sticht, 2000). The definition of illiteracy has changed during the past 50 years and is becoming increasingly complex. The National Adult Literacy Survey was conducted in 1992 to determine literacy levels of the population of the United States. Twenty-one percent of those over the age of 16 were functioning at the lowest levels of literacy. Twenty-five percent were in the next highest level.

Brandt (1999) explained how it has become more difficult for adults to increase literacy skills due to the institutions providing literacy instruction being removed from easy access over the last 100 years.

In order to recruit and serve those in need of educational services practitioners must first understand them. Beder & Valentine (1990) described six distinct groups of individual who participate in adult education programs and addressed the motivational factors given by the groups as reasons for participating.

One identified group of individuals in the United States who are most likely functioning at low levels of literacy are those that chose to drop out of high school. Ekstrom et al. (1986) found that this group is disproportionately from low socioeconomic status, and racial and ethnic minority families. The study showed that the students home environment had a critical impact on the

decisions to leave school and that programs and policies should be developed to help parents increase their interest in and monitoring of their children's school progress. It is important to identify potential dropouts before the high school years and to begin interventions when first signs are noted.

One of the outcome from these new interventions was the development of educational programs for welfare recipients who were mandated to attend. With welfare reform these funds were no longer available and participants were mandated to search for work. Sparks described key concerns of adult education practitioners in relation to the education of welfare recipients. While these studies are descriptive of issues at the national level they are also reflected in the concerns of those involved in adult education in Kentucky. Kentucky is not exempt from the issues of an adult acquiring literacy skills as described by Brandt or high school dropouts as detailed by Ekstrom et al. Welfare reform has also had an impact on the residents of Kentucky, many of which are clients of adult education programs. The following studies will describe the issues in Kentucky with more detail.

Implication at the State Level - Kentucky

During the past decade Kentucky has taken several steps to improve the total system of public education. The passage of the Kentucky Education Reform Act in 1990 and the Post-secondary Education Act of 1997 are examples of this effort. Neither act (nor any other act), however, addressed the needs of the adults who missed the opportunities the younger students now have. Why is adult illiteracy important? McGuinness in his report for the Kentucky Legislative Research Commission (2000) addresses this issue as it applies to the Commonwealth.

> Adult illiteracy is like a disease that infects virtually every dimension of Kentucky life. Adult illiteracy saps the energy and capability of Kentucky's people and its economy. Adult illiteracy feeds the state's unemployment, its welfare rolls, and the correctional institutions. Adult illiteracy severely hinders the life changes of young children, undermines school reform, and limits the opportunities for post-secondary education. (p. 1)

As Brandt (1999) explained, accepted levels of literacy have changed along with the changes in sponsors of literacy over the past century. Jennings and Whitler (1997) conducted a survey to determine the literacy skill levels

of Kentucky's adult population. This Kentucky Adult Literacy Survey was designed to accomplish several objectives: (a) produce a literacy survey of 1,500 adult Kentuckians, (b) produce assessment of literacy in three areas: prose, document, and quantitative, (c) produce results that are comparable with those from the National Adult Literacy Survey, (d) produce information that can be used for literacy education campaigns, (e) produce information that is useful for worker retraining programs, and (f) produce reports on literacy issues for the widest possible dissemination to decision makers.

A stratified, multistage sampling design was used to obtain a minimum of 1,500 interviews statewide. Stratification was achieved by dividing the state into five regions using Area Development Districts to create the geographical boundaries for the regions. Within each region, a multistage sampling plan was used to identify 420 potential study participants. Interviewed within each of these regions was a scientifically drawn, random sample of 300 members of the population between the ages of 16 and 65.

This study used the same set of instruments used in the National Adult Literacy Survey (NALS). These instruments were developed by the Educational Testing

Service for the U.S. Department of Education and were
designed to assess adult literacy in three areas: prose,
document and quantitative. Scores on the three dimensions
range from 0 to 500. Level 1 encompasses scores from 0 to
225; Level 2 is 226 to 275; Level 3 is 276 to 325; Level 4
is 326 to 375; and Level 5 is 376 to 500. The study was
designed to produce 1,500 completed literacy assessments of
adult Kentuckians, assuming a 71.4% participation rate from
the selected sample.

To gather data, 1,492 Kentuckians were interviewed in
their homes during the period from June to October 1995.
The interviews, which lasted approximately an hour,
consisted of two parts. The researchers asked the
participants background questions to determine personal
characteristics of the respondents, such as age, education,
sex, and family status. The researcher asked the
participant to complete a three-part literacy instrument
that would assess their levels of literacy in prose,
document and quantitative dimensions. The researchers coded
and scored background items and literacy assessment
responses.

Jennings & Whitler (1997) found that the literacy
levels of Kentucky's population are comparable to other
residents of the Southeast United States and with literacy

levels of all Americans. Fourteen percent (340,000) of Kentucky adults, however, have virtually no literacy skills. Another 656,000 have low levels of skills that are likely to impede their personal advancement and the development of the state's economy. This is a total of over 1 million adults functioning at Level I and II, which is comparable to grade level of 8.9 or below.

This Kentucky Literacy Survey brought attention to this target population and in 1998 the General Assembly adopted SCR 126 to establish the Task Force on Adult Education. The task force was charged to develop recommendations and an implementation plan for raising the literacy level and educational attainment level of Kentucky's adults who have not graduated from high school or who have poor literacy skills.

Aims McGuinness, consultant, drafted a report for the Kentucky Legislative Research Commission based on the actions of this Task Force. The Task Force asked the following question. "Do Kentucky's current efforts to combat adult illiteracy match the severity of the problem?" (Legislative Research Commission, 2000, p. 17).

The group met ten times during the year. It heard from various presenters and stakeholders and visited programs across the state to learn more about adult education.

The findings include the following:

1. Forty percent of Kentucky's working age population (one million) are at the two lowest literacy levels (1 and 2) – not being able to read at all or at very limited to moderate levels.

2. Two-thirds of Kentucky's counties have 40% or more of their working age population at literacy levels 1 and 2.

3. Continued high dropout rates from secondary schools continue to feed the problem.

4. Low literacy levels of parents relate directly to the education of children and youth. Children of parents with low literacy levels are five times more likely to drop out of school.

5. Illiteracy is a pervasive condition affecting every dimension of Kentucky life.

Based on these findings the Kentucky Legislative Research Commission made the following recommendations:

1. Assign responsibility for statewide policy leadership for lifelong learning and adult education to the Council on Post-secondary Education.

2. Retain the Department for Adult Education and Literacy (DAEL) in the Cabinet for Workforce Development.

3. Expand the adult education and literacy initiative fund to support county and regional strategies for lifelong

learning and adult education to provide a system of

statewide initiatives for excellence, and to provide

research and development funds.

4. Expand funding components.

5. Mandate that public employers require employees to have a

high school diploma or GED. If employees do not have a

GED, require that employers provide access to adult

education for employees.

6. Provide incentives for secondary school completion.

With these recommendations, the Commonwealth of Kentucky

began to look toward delivery of educational services for

adults functioning at low levels of literacy.

Summary

Kentucky officials took a proactive stand on adult

illiteracy and first conducted a survey to determine the

literacy skill levels of the adult population. Using the

National Adult Literacy Survey as the model, this survey

was conducted during 1995 by the Martin School of Public

Policy and Administration at the University of Kentucky.

The results of this study were that over 1 million adults

in Kentucky were functioning at the two lowest levels of

literacy. The results of this survey attracted the

attention of the General Assembly which established the

Task Force on Adult Education. This resulted in a report by

Amis McGuinness (2000), which addressed adult illiteracy

and how it was hindering the growth of Kentucky. Based on

these findings the Kentucky Legislative Research Commission

published recommendations to strengthen and expand adult

education and literacy initiatives.

As efforts continue toward the goal of assuring that

every adult in the United States be literate and possess

skills necessary for economic competitiveness and

citizenship research suggests that some formidable problems

lie ahead and that programmatic options need to be

considered (Reder, 1992). In the following section these

issues are addressed.

Recruitment and Goal Attainment of Adults in Literacy

Target Audience

"One of the biggest mysteries in the field of adult

education is why more adults, especially those who might

benefit the most, are not involved in adult education."

(Merriam & Caffarella, 1999 p. 56). Recruitment and

retention of adult students in ABE programs has been

subject to examination since the 1980's (Balmuth, 1988; and

Quigley, 1997), Adult students must deal with many demands

for their time, some of which include study, family, work,

and other commitments. Their learning goals are often

different than those of the educational institutions and providers; and their desires and requirements may change during the educational process (Wonacott, 2001). Adults are often affected by situational factors beyond their control—job, health problems, financial problems, legal problems, personal or family problems (Belzer 1998, Kohring 1999). In addition, dispositional factors such as expectations, self-esteem, level of family support, and past educational experience, can be barriers to participation (Hubble 2000, King 2002).

Institutional factors such as red tape, program fees, scheduling, and procedures can either help or hinder participation (Quigley, 1992b). Studies of non-participants suggest that such factors as the lack of perceived need for improved literacy, unfavorable perceptions of the time and effort required to develop literacy, and a strong dislike for the school-like design of most adult literacy programs keep many from every participating (Beder, 1990; Sticht, 2002). How to attract and retain adult students to literacy education programs is a question that plagues providers of adult education. Recruitment was one of the issues that the practitioners identified as a need to be addressed in the study conducted by Bingman, Smith and Stewart (1998).

Recruitment

The following studies address recruitment and retention issues of adults functioning at low levels of literacy. First, how will students know that literacy programs exist unless someone or something tells them? Douglas, Valentine and Cervero (1999) explored the provider's (adult education program management) perspective on marketing strategies for program development in adult literacy education. The authors asked, "What is the perceived, relative importance of the eight broad marketing strategies?" These marketing strategies were: (a) market research, (b) market segmentation, (c) understanding learners, (d) responsive planning, (e) minimizing costs, (f) maximizing access, (g) communicating with publics, and (h) program promotion.

A questionnaire was developed to measure the perceived importance of these marketing strategies. The questionnaire consisted of 71 items measuring specific behaviors indicative of the eight broad marketing strategies. Each respondent was asked to rate the importance of a specific behavior on a 6 point Likert-type response scale, with 1 = "low priority" and 6 = "high priority". The number of items measuring the eight broad strategies ranged from 6 to 11, and observed coefficient alphas for the eight strategy

scales ranged form .77 to .94. The questionnaire also contained items measuring respondent and program characteristics.

The questionnaire was disseminated to a nationwide sample of literacy educators using a multi-stage distribution plan. The researchers asked the adult literacy state directors to distribute the survey to the 10 largest publicly funded adult literacy programs in the state. Forty of the 50 states participated; 10 state directors chose not to distribute any questionnaires. Of the 500 surveys mailed, 224 were returned for a raw response rate of 44.8%. Of the questionnaires actually distributed to programs, 56.5% were returned. The researchers calculated the mean for each strategy and each item in the strategy; each item and strategy was rank ordered.

Douglas et al. (1999) discovered that all categories were ranked well above mid-point of the 6-point scale, suggesting substantial support for the marketing behaviors on the questionnaire. The strategy, communicating with publics, was perceived as the most important. Data suggested that literacy educators should devote some time to identifying relevant publics and establishing a positive image through communication. Maximizing access was another highly valued component in program development for literacy

education. This was an interesting connection with the one programmatic issue mentioned by participants in the study conducted by Al-Barwini and Kelley (1985). Market research and market segmentation received substantially lower ratings. This may be a result of the survey being sent to the largest programs in a state where population is denser and programs are more likely to have waiting lists for enrollment. The program directors did not see the need to conduct market research if they have people waiting for services.

Even when marketing has been addressed adequately there are still obstacles to participation. Some of the obstacles deal with the participant's prior experience in school. Quigley (1992a) examined the issue of why so many adults, who could benefit from ABE and literacy classes, decide not to participate. The study investigated four areas of subjects' prior schooling: (a) teachers, (b) peers, (c) course content, and (d) school environment.

For this study, a range of subjects' ages 18-57 (mean age 34.45) was selected through the cooperation of two established ABE centers in Pittsburgh, Pennsylvania. Currently attending ABE students approached undereducated adults whom they knew refused to attend such programs and ask them to either call the interviewers or to gain the

resisters' consent for the interviewers to contact them. Twenty such adults voluntarily came forward to tell their stories. (12 female, 8 male; 18 black, 2 white; 7 were on public assistance, 6 were unemployed, and 7 were employed either part-time or full-time). The grade level mean was 10.05 with a mean of 10.72 years in school and 16.88 as the mean for the years out of school. All subjects had studied in local schools and had lived their formative and adult lives in the same area. This was considered representative of most ABE-eligible adult illiterate populations in major cosmopolitan centers.

Expert evaluation teams were utilized to review the interview schedule before and after the two initial pilot interviews. Two professionally trained African American interviewers - using neutral settings of subjects' homes, community centers, and civic and sports centers - met with these adults who had consciously chosen not to attend literacy programs. All acknowledged that they were probably eligible to attend classes and agreed they could physically have attended such classes had they truly wanted. Interviews were tape recorded for accuracy; the transcripts were analyzed for consistent patterns under category headings with systematic analysis methods.

Quigley (1992a) reported that each subject stated education was important. Many said they should go to ABE or literacy classes. They willingly gave suggestions for improving an adult literacy program, but the interviews continually gravitated back to early schooling as the primary de-motivating factor. Subjects were influenced by the memories of their prior schooling experiences. Quigley detailed three findings from this project:

(1) Although subjects were experiencing real situational barriers, the primary reasons given were based mainly on the unswerving belief that ABE or literacy would be no different and no better than school.

(2) Adults in this study suggested three general categories of resistance: (a) personal/emotive, grounded in trauma and critique of oppressive individuals and their actions; (b) ideological/cultural, grounded in an understanding and critique of macro-systems and dominant ideologies; and (c) age-based, rejecting schooling and knowledge as irrelevant to their current needs.

(3) The third finding challenges the often-read argument in the education literature that generational values of undereducated adults are

passed inexorably to their children. The exact

opposite was found in the study. Subjects adamantly

asserted that education was of real importance and

they all said they would do whatever was possible to

see that their children completed school

Quigley recommended that future programs must contain

a high degree of learner input into the content and

structure. Being recognized as adults with valuable

opinions and experiences would clearly be critical if

ideological resisters such as were in this group were ever

to return to a literacy-learning event.

Quigley (1992a) explored the influence of past

schooling on participation. Jensen, Haleman, Goldstein and

Anderman (2000) conducted a study for the Kentucky

Department for Adult Education and Literacy to determine

the motivations and obstacles that influence educational

decision-making among undereducated individuals who have

not attended a GED or literacy program or who have not

reached their educational goals.

The following questions were asked:

(1)   Why do some under-educated adults choose not to

        pursue adult education or literacy training?

(2)   What kinds of internal and external motivations

        affect these decisions?

(3)   How do economic opportunities or constraints

affect educational decision-making?

(4)   How do local attitudes toward schooling affect

perceptions of adult education?

(5)   How are these attitudes similar or different in

diverse geographic areas of the state of

Kentucky?

The researchers used a purposeful sampling technique,
identifying individuals who had not completed high school
or the GED and were not currently attending an adult
education program. Because Kentucky is a rural state, even
though policy decisions are made in the metropolitan region
of central Kentucky, the research for participants was
conducted in seven rural counties. These counties were
chosen based on economic profiles defined by the United
States Department of Agriculture. Three of the counties
were mining counties, two were manufacturing, and two were
non-specialized. Eighty-four interviews were conducted with
approximately 10-17 interviews at each site.

Jensen et al. stated that the "study represents an
innovative research approach using interpretive qualitative
methods and theoretically guided analysis" (2000, p. 9). It
was based on in-depth interviews that allow respondents to
describe their experiences in their own words. The

research began in September 1998 and concluded in August 1999. The researchers focused on local gathering places, visiting such sites as a small town's city hall where local residents pay their utility bills, Community Action Agencies as volunteers prepared for holiday food basket dispersal, or unemployment offices.

The researcher sited three types of analysis used in this project. Grounded theory was used to identify new ways of understanding a phenomenon. Emergent design analysis was used to determine what questions to ask or who to contact for more information. A qualitative component was included using the interview protocol as a survey instrument.

The results indicate the following:

1. Adult education programs directly compete in complex ways with everyday priorities including work, family, and community responsibilities.

2. Adult education is perceived by the public as GED preparation with the accompanying stigma of being "school-like".

3. The GED is often not considered an appropriate goal by under-educated adults and therefore not valued.

4. Alternative forms of certification other than the GED are desirable.

5. The population of under-educated individuals in the state is not only demographically diverse (age, gender, and geographic location), but also diverse in work and educational experiences requiring a mix of program offerings.

6. There is no one marketing campaign that will reach this diverse population.

7. To be more effective, adult education providers must assume a client-centered philosophy of practice that respects prior experience, prioritizes relevant content, and emphasizes a problem-solving approach to learning.

Jenson et al. recommended the following for additional research: (a) What is the culture of the adult education classroom? (b) What kinds of alternative curricula are possible? (c) What kinds of alternative credentials are possible? (d) What kind of media is best for promoting adult education?

Retention or Goal Attainment

While Quigley (1992) and Jensen (1999) addressed the recruitment of students to adult education programs, attrition in Adult Basic Education programs is a problem that has concerned teachers and administrators since the beginning of the program. It is estimated that approximately 60% of those who enroll in Adult Basic

Education classes leave the program before reaching their goals (Dickinson, 1996). Because there are no "exit interviews" in literacy programs – students normally just do not return—attrition of students is a complex problem. One researcher in particular, Quigley (1997) believes that there is a not just one literacy attrition issue. He believes that attrition can best be understood as a cluster of disconnected elements. Some can be affected by systematic efforts, some cannot. He groups these issues into two sets; one involves the outer world, which consists of issues of transportation, location, money, childcare etc. The second set of issues is attitudinal dealing with experience with past schooling, fear of academic failure or dislike of school.

When asked, students give various reasons for leaving the programs before completion of goals. Most of the reasons are those of the 'outer world' described above (Merritt, Spencer, & Withers, 2002). Researchers' question if these are the true reasons or just the ones that the students think the practitioners wants to hear (Quigley, 1997). Regardless, these reasons extend beyond the traditional literacy programs as Perin and Greenberalso found these reasons given in workplace programs (1994).

A third aspect to consider in retention and goal attainment of adult students is the importance of the instructors in the programs. Students view their teachers as crucial (Malicky & Norman, 1995) and research has linked the employment status of staff to success of the students (Fitzgerald and Young, 1997). Teacher characteristics, such as educational attainment level, also have a bearing on goal attainment of the adult students (Kestner, 1994).

Retention was an issue on which practitioners asked for additional research (Bingman, Ebert & Smith, 1999). The following studies not only address retention issues in the United States but across the world. Al-Barwani and Kelley (1985) investigated factors influencing the recruitment and retention of learners in the adult literacy program in Oman. To identify the factors influencing recruitment and retention of learners the researchers explored the following: (a) purpose for enrolling in literacy education classes, (b) why adult learners do not enroll in literacy education classes, (c) why adult learners fail to complete literacy training, (d) obstacles faced by learners during participation in literacy programs, (e) learner identified interests in literacy program, and (f) changes adult learners would like to see taking place in the literacy education program. Personal interviews were conducted in

47

the interior and capital regions of Oman (N = 102). An interview guide was used to gather information. Randomly selected respondents included 46 enrolled learners, 26 dropouts and 30 adults who had not enrolled in the program. An interview guide was used to gather information. There were three forms, one for each group of respondents. All forms collected demographic information and statements that guided the interviews in formulating open-ended questions. All interviews were tape-recorded. Content analysis was used to analyze the interview responses. Seven categories were developed after a review of the literature on participation, obstacles to participation, dropout, and learning interest of adults. The taped interviews were transcribed onto index cards. Using the reasons given as the coding unit, the interview data were coded into seven categories of analysis, namely; Spiritual, Economic, Social, Personal, Family, Academic, Program, Organizational, Instructional, and Other. To establish the reliability of the coding system, an independent coder recoded the data using the same categories.

Responses were analyzed using the Statistical Package for the Social Sciences. Simple descriptive statistics were computed and relationships were examined in cross tabulations

Al-Barwani and Kelly (1985) found there was a difference in the adults' motivation for enrolling, but economic, academic, and spiritual reasons were the most significant. Respondents from the capital district reported more concern about economic advancement than did the people in the interior. Respondents from the interior reported spiritual motives for enrollment. This was linked to the prevalent outside influences and increased employment opportunities that respondents in the capital districts had contrasted to the limited outside influences and employment opportunities in the interior. Men and women reported different patterns of conflict and obstacles in completing their literacy studies. Men indicated work demands (time limitations) as their biggest obstacle, while women complained about family responsibilities. Program attrition was mainly attributed to family problems and structural characteristics (location of the learning centers) of the program.

This study was conducted over 15 years ago in a Middle Eastern country where it would be expected that cultural

issues would influence participation. However, a similar study was conducted with adult literacy programs within the past 10 years in Canada. Malicky and Norman (1994) examined participation and dropout patterns of adults in Canadian literacy programs. Past school experiences of participants as well as their reasons for entering and leaving literacy programs were examined. Participants were adults enrolled in literacy programs (N = 94). Reflecting the cultural makeup of literacy classes, 40 subjects were Canadian born and 54 were immigrants. Participants were interviewed at the beginning of the study using a structured interview schedule to obtain demographic data as well as information about educational background and reasons for entering literacy programs. Subjects were interviewed at 6-month intervals to determine participation status and if they had exited the program, their reason for leaving.

The principle investigators carried out data analysis. Data were tabulated to obtain a description of adults focusing on sociodemographic variables such as age, gender, immigrant status, reading level and educational attainment. Means were calculated for the variables of age and reading level. Data gathered regarding difficulties encountered in school, reasons for leaving school, and reasons for leaving programs were read and categories for each were

established. Once categories were obtained, data for each individual were analyzed and categorized. During reading of the transcripts, it appeared that gender and immigrant status were factors in the nature of responses provided by subjects. Data were initially combined across individuals by subgroups on the basis of gender and immigrant status. These subgroups were combined when few differences were evident.

Malicky and Norman (1994) found the following characteristics. When asked about prior schooling experience, 90% of the Canadian born participants reported difficulties in school, only 24% of the immigrants reported difficulties. When the students were asked why they had enrolled, the most frequently cited reasons were job related (83%). All groups cited personal or psychological reasons (e. g., feeling better about themselves, improving themselves, and developing self-confidence) for entering literacy programs. This reason was given more frequently by Canadian-born participants then immigrants. Social reasons (becoming more independent, meeting family obligations, meeting people) were given by 21% of the men and 29% of the immigrant women.

Malicky and Norman (1994) found that 48 (51%) of the participants dropped out before meeting their goals. A

higher proportion of Canadian born subjects (68%) than immigrants (39%) dropped out of literacy classes. Another 6 participants had moved to other programs and dropped out before finishing. Only 29 (31%) were still attending schooling at the end of the three year study, 22 of these were immigrants and seven were Canadian born. The remaining 11 (12%) subjects had progressed into trade programs and eight had completed or were enrolled at the conclusion of the study. Dropout rates were highest in the first few months of the literacy program, with 19 dropping out within the first three months, 17 more by the end of the first year. Reasons for dropping out varied with 17 giving program problems, 16 giving social, family or personal problems, 10 giving pregnancy or childcare problems, 6 giving work and 3 giving financial reasons.

These two studies dealt with retention in adult education programs in a Middle Eastern country and a Canadian province. The following study dealt with a population in the United States. Bean, Partanen, Wright, and Aaronson (1989) investigated why individuals drop out of literacy programs. Their intent was to analyze the data relative to reasons for dropping out with the expectation that the findings would have implications for both program improvement and student retention strategies.

The first stage of the study was designed to obtain the perceptions of the literacy providers regarding possible reasons for attrition. Providers were asked for opinions and observations as to why adult clients did not complete the literacy program. The number of providers that participated was not included in the report. Nine possible reasons were identified: (a) incompatibility with tutor, (b) transportation, (c) child care, (d) lack of student interest, (e) health problems, (f) scheduling, (g) job conflict, (h) lack of work discipline, and (i) lack of support from family and friends. Frequency or ranking for these reasons were not given in the report.

A highly structured interview protocol based on this input was designed to obtain specific information concerning reasons for attrition. The question format was planned to achieve a balance between questions requiring a prompted choice and those allowing an open-ended response. Questions were intended to be as unobtrusive as possible while eliciting information about the reason clients left the programs. Training was given to all interviewers. Demographic information for each client was compiled from the student files at each site.

A total of 192 adults were identified as having discontinued their reading program in the Pittsburgh area.

All had been enrolled in a one-on-one volunteer tutorial program, and all had been tested as reading between the 0-4 grade levels. Of the 192 identified, 69 were reached and 60 volunteered to participate in this survey. Of the 60 who participated in the study, the mean age was 38.8 years; there were 32 males (53%) and 28 females (47%); 35 (58%) were minority, and 25 (42%) were white.

Bean et al. (1989) did not mention a specific data analysis method, though results were given in percentages. Responses to the questions were categorized into three broad groups: (a) factors that were directly attributable to the program or providers (program), (b) factors generated by the individual's situation (personal), and (c) factors requiring the assistance of other agencies. The major reason for dropping out was in the personal category (47%). Program factors accounted for 40% of the reasons, and factors requiring the assistance of other agencies accounted for 13% of the reasons. The personal factor mentioned most frequently was the work schedule of the participant (23%). Personal or family health reasons accounted for 17% of the responses. Within the program category, tutor factors of incompatibility with the tutor or resignation of tutor (18%) and student's dissatisfaction or embarrassment about their lack of learning (18%) were

the most common. The most frequently mentioned reason that required assistance of other agencies was difficulty with transportation (7%).

Both program and personal factors affect an individual's decision regarding continuation in a literacy program. Various program strategies to reduce the attrition rate include: (a) increased tutor and student support, (b) the evaluation of the student/tutor match, (c) recognition of achievement, (d) assistance with goal identification, and (e) the construction of dropout prediction models. More flexible scheduling and better record keeping were also recommended.

Comings, Parrella, and Soricone (1999) conducted a study on persistence of adult learners for the NCSALL. The objective of the study was to present a comprehensive picture of the factors that work for or against the motivation of adult learners to persist in ABE programs. The study focused on learners between the 5-8th grades reading level.

The research team interviewed 150 adult learners in 19 pre-GED classes in 15 ABE programs in five New England states. Potential study participants were identified through a teacher or program coordinator. Each study participant chose to be interviewed after participating in

a classroom or individual orientation activity and brief explanation of the study. Each participant was paid $10 for each of the two 30-minute interviews. This sample was not representative of the national population of adult learners. The findings of this study, therefore, may not hold for the entire population or for specific sub-populations that are not represented in sufficient numbers in the study sample.

Comings et al. (1999) reported the research methods used as: (a) a review of the ABE Learner Motivation Literature, and (b) one-on-one interviews with learners in Pre-GED classes across New England. The interviews with learners focused on what keeps learners motivated to stay in school. Questions were focused on identifying the various factors that work against or support learners to persist in their programs. The study team interviewed learners near the beginning of their participation in a program and again four months later. A persistent learner was one who, at the second interview, was still in class, was no longer in class but was involved in organized self-study, or had transferred to another class.

Three coders worked on the data and developed the coding procedure. To assure inter-rater reliability, the three coders worked in the same room and discussed any

ambiguous answers. After the first coding, the research

team discussed any possible biases they may have brought to

the coding and through this process of discussion, arrived

at decisions on how to classify difficult to code

responses. In analyzing the relationship between

persistence and the factors included in the study (i.e.,

learner background, educational experience, supports and

obstacles) the researchers performed a series of X^2 (chi

square) tests with significance at the .05 levels to

determine whether these factors had a statistically

significant relationship to persistence. The researchers

cautioned that the small sample size and the small number

of people falling into some categories might not allow for

the observation of significant relationships.

This study found the many ways to classify adult

students (by gender, ethnicity, age, employment status,

number and age of children, previous school experience and

educational background of other adults in their lives) does

not give information about how to help them persist in

their education. The only significant findings were that

immigrants, those over the age of 30, and parents of

teenage or grown children were more likely to persist than

others in the study. Two aspects of educational experience

were also associated with persistence. Adults who had been

involved in previous efforts at basic skill education, self-study, or vocational skill training were more likely to persist than those who had not. The strongest relationship was with those who had undertaken self-study. Adults who, when asked why they had entered a program, mentioned a specific goal (such as help my children or get a better job) were more likely to persist than those who either mentioned no goal or said they were doing it for themselves. These findings suggest that experience with education may increase an adult's self-confidence about learning and that motivation, especially as demonstrated by undertaking self-study or by being clear about the goal for attendance, supports persistence.

What can adult educators do to retain these students until they meet their learning goals? Quigley (2000) explored factors that influence student retention of ABE students. The researcher had three questions: Could adult education practitioners identify an 'At Risk' (AR) student? Would more attention make a difference for these students? If so, what kind of attention and from whom? Participants were students enrolled in an ABE institute in Pittsburgh (*N* = 20). AR students were identified in a 3-level process. Each level consisted of an interview with a counselor. The counselor talked with the student, observed, and identified

possible at risk behaviors. These behaviors were: (a) expressed hostility or overt negativity, (b) overt anxiety about joining the group, (c) obvious uncertainty about the program's value, (d) evident lack of commitment to staying in the program, (e) consistent lack of eye-contact, (f) anxiousness as expressed in body language, and (g) a desire to cut the interview short. If identified behaviors were observed at all three interviews, the student was identified as AR and targeted for the project.

Quigley (2000) used a quasi-experimental pretest control group design to test ways of retaining the group of AR students. With informed consent, five verified AR students were referred randomly to the three treatment groups (the independent variables) or a control group. The three treatment groups were (a) individual placement in a group of 13-15 members where additional support was provided by the counselor/teachers working together in a team approach, (b) individual placement in existing small classes of 4-6 mainstream learners for a small group approach, and (c) individual placement with one-on-one trained tutors for enhanced instruction either during ABE courses or afterwards at the center. The dependent variable was retention in the program with the measurement being AR

students in one of the three treatments staying longer than the control group.

Quigley (2000) found AR students were identifiable. In the treatment design the small group approach proved more promising then the team approach. Sixty percent of those students assigned to the small group approach completed three months or more. Only 40% of those in the team teacher/counselor support group completed three months or more. The tutoring approach had a completion rate of 20% for three months or more. Each of the three treatment groups proved more successful than providing no treatment at all—meaning each treatment group had better retention success than the control group in which no member was retained for three months. Quigley (2000) recommends that future research should test these findings in larger and more diverse groups of students. He also recommends an additional exploration of instructional methodology for AR risk students.

While Quigley (2000) specifically addressed at risk students, Millar and So (1998) investigated what literacy programs can do to promote student persistence and retention within a general population. They questioned whether the development of a cohort group in which students regularly participated in discussion of their interest

would have an effect on persistence in the literacy program. The participants were students enrolled in an adult education program in Winnipeg (N = 26). Thirteen in the control group and thirteen in the cohort group. They were matched for literacy level, gender, age, and employment status. Fourteen students were female and 12 were male. Fourteen were employed, and 12 were unemployed.

The researchers constructed a study of quantitative and qualitative design to compare students assigned to a cohort group versus students whose program was individualized. The independent variable was the placement of students in a cohort group that would meet for eight one-hour discussion sessions (once a week for eight successive weeks). The instructor and the students determined the topics of the discussions. Attendance was mandatory at these cohort group meetings.   Students in the cohort group were matched randomly to a control group of students studying independently in the same programs. Since the dropout rate in literacy programs is particularly high in the first two months, Millar and So speculated that the cohort group would provide greater support to help students continue with the program and achieve their identified goals. They collected data on student persistence for the eight-week period.

Millar and So (1998) found that students in the cohort group had slightly higher persistence rates but the study had such a small number of participants that few definite conclusions can be drawn. The learning level of the students did not seem to affect the dropout rate as much as family responsibilities, work related responsibilities, or other concerns. On the surface, the quantitative data do not suggest a particular impact that the cohort group had on persistence. The qualitative data, however, suggest the cohort group sustained participation and provided support early on in the program. Students were asked about the value of the cohort discussion at the end of the eight-week sessions and several months later. All students found the experience to be helpful for a number of reasons. It reduced their sense of isolation, helped them understand their past experiences, and provided meaning for their new endeavor.

Millar and So (1998) made the following recommendations for programs: (a) Provide opportunities for regular small group discussion, (b) develop a range of discussion topics of interest to students, (c) focus on learning strategies and study skills, (d) provide support to becoming a student, and (e) use the discussion group to informally evaluate the program.

Additional research might address the effect a cohort group would have on attendance beyond an eight-week program. Would dropout rates reflect the results of the control group or would persistence remain strong?

As indicated above, another area where practitioners requested research was studies on curriculum and instruction issues. As adults are not mandated to attend educational activities, the subject of curriculum and instructional issues could have an effect on persistence and educational attainment. The following study deals with these particular areas. Purcell-Gates, Degener, Jacobson, and Soler (2000) investigated the relationships between two dimensions of adult literacy instruction and change in the literacy practices of adult literacy students. The two instructional dimensions investigated were (a) degree of authenticity of the activities and texts used in the literacy class, and (b) degree of teacher/student collaboration around activities, texts, assessments, and program governance. Authenticity was defined as those literacy activities and purposes used by people in their lives, excluding those that are structured solely around learning to read and write in school settings.

The research questions for this study were: What are the relationships among (a) the degree to which adult

literacy classes employ real-life literacy activities and materials; (b) the degree to which students and teachers share decision making; and (c) changes in students' out of school literacy practices. The outcome measure was change in out-of-school literacy practices of the students, both in frequency per type of practice and in types of practices.

Teachers/classes and students were enlisted through a process of "snowball sampling". Purcell-Gates et al. (2000) put out a call for participants through adult literacy list serve, databases, and publications. To participate in the study, the site needed the following: (a) at least one teacher willing to participate, (b) at least three students from that teacher's class willing to participate, (c) an identified local data collector, willing to be trained by the researchers and to collect data over the course of the study.

The students recruited were those working to improve their literacy skills. The results of the analysis are based on the responses of 159 adult literacy students. Their ages ranged from 18 to 68. They were fairly evenly distributed across adult literacy classes in 22 mainland states.

This study was descriptive and correlational in design. Multiple methods were used to describe adult literacy classes along the two dimensions described above as well as to document (a) the full-range of literacy practices engaged in by the adult learner participants and (b) the changes, as self-reported, in literacy practices by the adult learner participants.

Three different protocols were developed and then piloted in adult literacy classes not participating in the study. They were: (a) a five page teacher questionnaire which incorporated short-answer questions, check-off items, and Likert scales; (b) a protocol developed for the data collector to use to describe the instruction which included holistic descriptions of the class sessions as well as individual items; and (c) a questionnaire for the data collector to use in an interview with volunteer students, without the teacher present. These protocols collected information about the two instructional dimensions of the study – teacher / student collaboration and authenticity of materials and activities – from three different perspectives: the teacher, students and the data collector observer of the class, allowing for triangulation of data.

Purcell-Gates et al. (2000) reported that the data were analyzed using hierarchical linear modeling to model

change. Due to problems with missing data, the results of the analysis were based on 157 students in 77 adult literacy classes. The questionnaire responses were placed on a common scale using Item Response Theory from which change score was derived. Using this outcome variable, the effects of the two instructional dimensions on change were modeled, controlling for the following student-level variables: (a) literacy level of the student, (b) ESOL status of student, (c) gender, and (d) type of instruction student received (class or one-on-one tutoring). Class-level variables controlled for were the types of classes – ESOL ABE, and Family Literacy.

Regarding the research questions, the results show that the degree of authenticity in the activities and materials used in adult literacy instruction was significantly related to the likelihood that adult literacy students in those classes will report change in frequency and/or type of out-of-school literacy practices. The effect size of this relationship varied from .134 in the logdays unweighted model to .162 in the natural days weighted model. This is considered a "small" to "moderate" effect in social science research. On the other hand, there was no statistical effect of the degree of collaboration between student and teacher on reported change in literacy

practice. Finally, there were no statistically significant interaction effects, meaning that all statistically significant effects were simple, easily interpretable main effects.

While retention is an issue for the adult education field, the outcome of persistence should also be examined. Fitzgerald and Young (1997) determined the effect of student persistence (hours of instruction) on literacy outcomes in English as a Second Language (ESL), ABE, and Adult Secondary Education (ASE). The rationale for the study was that literacy outcomes should be a positive function of student persistence in adult education classes. Student data were obtained from records maintained by the staff of 44 adult education programs located in 20 states. Data for over 22,000 students were obtained as part of a national evaluation of adult education conducted by Development Associates, Inc. The final sample of students ($\underline{n}$ = 614) was based largely on (a) the availability of valid, matched pretest-posttest scores using the inclusion criteria of known placement in ESL, ABE, or ASE, and (b) completed data on the set of predictor variables of interest; evidence of content validity for the test used; and valid pretest and posttest reading scale score.

This quantitative study used a selection bias weighting adjustments and ordinary regression techniques in a path analysis approach to identify variables that directly and indirectly influence reading achievement in adult literacy programs. Separate multiple regression models were developed for sample of ESL, ABE, and ASE students using the ordinary least squares method in which a hierarchy of three blocks of predictors were regressed on posttest achievement scores. The dependent variable was improvement of reading achievement test scores. The independent variables included student background measures, instructional program measures, and persistence measures.

Fitzgerald and Young (1997) found that initial ability, individualized curriculum, and the use of full-time staff were the main influence on improving the literacy of ABE students. Persistence was a positive influence to reaching achievement only in ESL population. Negative persistence effects occurred with ABE classroom and lab instruction. Considering both direct and indirect effects, the data suggest that adult literacy education can generally be improved by greater investment in full-time staff. It was concluded that an emphasis on student persistence in ABE and ASE instruction might be misguided. The study identified several instructional practices that

had positive effects on adult literacy outcomes. In ESL, these practices include student participation in classroom instruction, and investment in structured ESL curricula, full-time and experienced ESL staff, and client support services. In ABE, effective instructional practices included the use of individualized curricula and full-time staff. Instructional cost, partly influenced by the use of full-time staff, was found to contribute positively to literacy outcomes.

Summary

Recruitment of ABE students is a complex and challenging task. The first thing to address in recruitment of the target population is how to let them know about available services. Douglas et al. (1999) explored the providers' perspective on marketing of programs and found that they believed that communicating with the publics was perceived as the most important. Douglas et al. suggested that literacy educators should identify relevant publics and establish a positive image through communication. Maximizing access was another highly valued component.

Even when marketing is being addressed there are obstacles to participation. Quigley (1992) examined why those who could benefit from classes decide not to

participate. While those that were interviewed acknowledged that they were probably eligible to attend classes, and agreed they could if they truly wanted to, they continually referred to early schooling experiences as the de-motivating factor.

Jensen et al. (2000) explored barriers to participation for residents of Kentucky and found many of the same factors that Quigley found. Participation in education competes with everyday priorities such as family and work. Also, adult education is perceived by the public as "school-like". Jensen et al. also addressed marketing of programs and concluded that there was no one marketing campaign that will reach this population.

Even if programs can recruit the students there is still the issue of the students staying long enough to meet educational goals. The studies above examined issues in student retention. Al-Barwani and Kelly (1985) conducted a study in Oman and Malicky and Norman (1994) completed a study in Canada. Al-Barwani and Kelly found that men and women reported different obstacles for completing their literacy studies. Men indicated work demands as their biggest obstacles while women complained about family responsibilities. Program attrition was mainly attributed to family programs and location of the learning centers.

Malicky and Norman reported that reasons for dropping out ranged from program problems to social, family, personal and work problems.

Bean et al. (1989) found that students identified three major factors for leaving literacy programs. These factors were: (a) program issues, (b) personal issues, or (c) problems requiring assistance of other agencies.

Comings et al. (1999) found that immigrants over the age of 30 and those student who were parents of teenage or grown children were more likely to persist than other students. Two aspects of educational experience were associated with persistence. Adults who had been involved in previous efforts of education were more likely to persist than those who had not. Those who mentioned a specific goal when entering the program were more likely to persist than those who did not.

What can programs do to retain students until they meet their goals? Quigley (2000) and Millar and So (1998) found that the small group approach proved promising in promoting student retention.

Purcell-Gates et al. (2000) found that while curriculum selection using authentic materials for the students would result in those students reporting a change in the type and frequency of outside literacy activities.

However, the degree of collaboration between student and teacher did not seem to effect change in literacy activity.

Fitzgerald and Young (1997) found that initial ability, individualized curriculum, and the use of full time staff were the main influence on improving literacy of ABE students.

As adult education programs began to explore ways of overcoming the barriers and improving educational services for their students. New models of delivering educational services to adults have developed. One such model is family literacy education, which was developed to meet not only the needs of the adults but also the child.

<center>Possible Solution—Family Literacy</center>

In 1994, Gadsden stated that although several family literacy program models have been developed, there is still little known about the design of family literacy programs in general. The size and format of family literacy programs run the gamut from small after-school projects to large classes. In some programs, adults may work alone in one room while their children work in another room on separate literacy activities; in other programs, adults and children work together around a common activity designed to improve the adult's and child's literacy. Some programs include home visits, others-group parent sessions. Parents and

<center>72</center>

children may be in the program for a full day or part of a day. Programs may involve a parent and child from the same family or they may include a child and an adult family member other than the parent-a grandparent, uncle, or aunt. Rarely do programs include more than two members within a single family.

Hannon (2000) also reviews the different meanings of the term 'family literacy' explaining that the term had progressed from a research focus meaning 'the interplay of literacy activities of children, and parents and others' to an educational program focus with two broad concepts. The first concept included any approach that explicitly addressed the family dimension in literacy learning, i.e. parent involvement in schools, preschool intervention, parenting education, family use of libraries, community development and extensions of adult literacy education to include children. Some of these programs focused directly on children and only indirectly on parents as literacy learners. Others focused on parents and only indirectly on children. What they all had in common was a recognition that individual literacy learners were members of families, and that families affected, and were affected by the individuals' learning. (Benjamin, 1993) The second concept of family literacy programs referred to those which

combined direct adult basic education for parents with direct early childhood education for children where there was a focus on both generations.

There have been several exploratory studies conducted on family literacy programs. The reports have been mixed, with both positive and negative reviews (Amstutz, 2000). Auerbach (1989) and Mikulecky (1996) criticize the middle class cultural aspects of parenting education that have been noted in studies of family literacy programs. They made the point that often the practices encouraged in family literacy programs violates culture norms of parental authority and respect of participants. Strickland (1996) found that many family literacy programs were designed to fix families that are assumed to be in need of help. Interventions were implemented with little investigation of the needs of the family involved or regard for the family's culture. Hayes (1996) reports that when compared to single-service programs such as General Educational Development (GED) classes, job placements, direct adult-education goals, family literacy programs may show less effects although the cumulative effects on the family are expected to be greater for the family literacy programs (1996). Another negative aspect is the lack of

participation of fathers in family literacy programs
(MacLeod, 2000).

There have been positive reports on family literacy
programs. Darling (1996) in "The power and role of Family
Literacy" reports that adults stay longer, attend more
regularly, and make greater gains when they participate in
a family-centered educational experience that overcomes
some of the persistent barriers such as child care,
transportation and meals. Women who participated in family
literacy programs demonstrated changes in areas of personal
growth and academic skills and viewed themselves as being
able to work more effectively in their relationships with
their children (Glover, Jones, Mitchell & Okey 1991, and
Roth & Myers-Jennings 1997). De Avila, Lednicky, and Pruitt
(1993) reported positive results for adults in a family
literacy program conducted in Bryan, Texas. These results
included increased academic skills of parents and improved
self esteem.

These positive results extend to family literacy
programs in other countries. Brooks (1998) reported that
family literacy programs in England and Wales also had
positive results for the parents some of which were
increased reading and writing test scores, increased self
confidence and social skills along with increased

involvement in their children's schools. Tett (2000) reported positive results of family literacy programs in Scotland with parents gaining a better understanding of the variety of literacies used in the home and not just the one used by the school and in turn gained self confidence.

The next set of studies will explore the characteristics of family literacy programs, and the affect they have on adult students and their children.

Models of family literacy

A review of literature suggests that family literacy initiatives seem to fall within one of at least three categories of family literacy programs (Morrow, Paratore, Gaber, Harrison & Tracey 1993, Morrow, Tracey, Maxwell 1995, Nickse 1990, Nistler & Maiers 1999, Strickland 1996). The first kind is Parent Involvement Programs, which are designed to help parents support their child's literacy learning in school and often reflect the emphasis of schools and school personnel (Nistler & Maiers 2000, Nuckolls 1991). The second category is research on naturally occurring family literacy, which are studies that explore the uses of literacy within families and involve the observation and description of literacy events occurring in the routine of daily lives. (Neuman, Celano & Fischer 1996, Purcell-Gates, Allier, & Smith 1995, Tett &

St. Clair 1997) The third is Intergenerational Programs that increase the literacy achievement of both children and parents. These programs bring parents together with children as learning teams while improving the bonding among family, school, and community. It is this third category of family literacy programs that will be explored in relation to adult educational recruitment and goal attainment. As this category of family literacy has developed there have been several different models that have been implemented. The following studies will examine these different models and issues of implementation.

Elish-Piper (1997) conducted a study with 13 low-income urban families who participated in a nine-week summer family literacy pilot program. The study sought to describe the participants' literacy uses, responses to the program, and the program's development. The information gained was to be utilized in the development and implementation of more in-depth family literacy programs.

This descriptive study used multiple data sources. In preliminary and post-interviews with the parents, open ended questions and statements solicited information about attitudes toward literacy, as well as literacy activities and materials in their homes. In addition to the literacy questions, educational experiences, goals, and expectations

for their children's schooling were explored. Dialogue journals were used so parents and one researcher could dialogue in letter format.

The constant comparative method was used throughout the analysis. Initially, another qualitative researcher and Elish-Piper independently reviewed, wrote memos, and did preliminary coding of the data. As the review of the data progressed, each piece of data was constantly compared to the previous pieces to determine similarities and differences. After the independent coding, they met to compare findings and arrive at a consensus regarding the categories within and across the multiple data sources. Analysis of the patterns and trends led to the development of a preliminary theory to explain the nature of literacy uses, participant responses to the program, and the development of the family literacy program.

Elish-Piper (1997) states the need to be careful when drawing conclusions from research that use qualitative methodologies, especially those of relatively short duration; however, the descriptive data shared in this article point to several conclusions:

(1) The low-income families in this study all used literacy for meaningful purposes, but those purposes differed based on the social-contextual factors within

each family at that point in time. The life situations, goals, and needs of the families determined their needs and uses for literacy.

(2) These families' uses of literacy differed from school-type uses of literacy that often dominate family literacy program activities. These findings indicate that an appropriate beginning point in family literacy programs may not always be children's literature because of the types of literacy experiences, materials, and activities participating families use every day.

(3) Each family had important, insightful feedback to share about the program, which may have provided them with a sense of ownership of the program. This may have translated into the relatively high retention rate of the families because the program allowed them input or ownership. Their feedback helped to focus the program on the strengths, needs, and goals of the participating families, a major goal in the field of family literacy.

Limitations occurred because it was a summer program and thus not possible to gather information about the children's performances and experiences in school. Home visits were not possible due to time constraints, limited funding, and lack of staff. Additional research involving family literacy programs, schools, and families is needed

to explore what can be done to provide meaningful literacy experiences and education for non-mainstream children and adults. Such research may provide insights about how family literacy programs can address and focus on the strengths, needs, and goals of participating families.

Different educational entities have implemented family literacy programs. The following is a description of one sponsored by a community college. Berkovitz (1994) assessed a one-year family literacy program developed and implemented by a community college in Illinois. This was a demonstration project where staff time and effort were directed to developing the best model family literacy program possible within the year of the grant. Unlike traditional family literacy programs, this program operated during evening hours on Tuesday and Thursday and was designed to run for four-week sessions. The first session began in November, the second in December. Each of the sessions were divided into five components: (a) adult education, (b) pre-school or kindergarten classes, (c) parenting/life skill classes, (d) parent/child and family times, and (e) home visitations.

This program intended to recruit a minimum of 50 families who had four- and five-year-old children enrolled in at-risk programs. The objectives included increasing the

basic reading and parenting skills of the adults as well as the readiness skills of the children. The program enrolled a total of 162 participants. Fifty-two were four-and five-year-olds, 51 were parents or other significant adults, and 59 were siblings. The 51 adults included ABE and ESL students. The outcome variables the program addressed included the impact of the program on the adults' basic skills, academic progress, career plans, the evolvement of their goals (personal, educational, economic, and parental) and changes in parental behaviors.

Staff members collected the data from tests and questionnaires administered at the start and conclusion of the project. An independent evaluator analyzed data. Reading gains were assessed by administrating the Test of Adult Basic Education (TABE). A Likert scale was used to measure parenting goals with 5 being most important and 1 being least important. The family literacy questionnaire had three components: (a) a nine-item chart on which parents indicated the frequency of their parenting and readiness behavior with their children; (b) a nine-item chart to ascertain the adults' opinions about their children's education; and (c) four open-ended questions to measure project outcomes. The impact of parental behaviors and improvement in family relationships were measured

qualitatively by home observations as well from the
questionnaires.

Berkovitz (1994) reported the following. The average
attendance of basic skill students who began in the program
in November was 83 hours out of a possible 132 (62%
attendance rate). Those who began in January averaged 83
hours out of a possible 108 (65% attendance rate). A number
of families were absent on the dates the questionnaires and
tests were given and the format of the model did not allow
time to reschedule. There was not 100% participation in
each type of assessment. Testing results for kindergarten
students were not obtained. There was no control group for
comparison of test scores. Thirteen adults of the original
29 (42%) who were given the pretest also took the posttest.
The reading gain average was .86 with one student making a
4.9 grade level gain. One participant took and passed the
GED test, three were ready to take it, and one enrolled in
a community college. For the ESL students the highest gain
for one student was 3 levels. The average gain was 1 level.
Although positive impact on parenting behaviors was
indicated by responses to the Likert type scale Parenting
Goal Evaluation, the data from the questionnaires were not
formally analyzed.

Debruin-Parecki and Paris (1997) conducted a study for the National Center on Adult Literacy to examine the broad range of family literacy programs in Michigan. The objectives of the study were to identify and describe existing family literacy programs to: (a) distribute a comprehensive list of statewide services that could inform and assist participants, practitioners, and administrators in locating needed information; (b) document how goals, instructional practices, assessment methods, staff training, collaboration with surrounding community agencies, and social support for participants varied across different programs; and (c) identify critical factors of effective programs.

The researchers surveyed 700 literacy programs to determine if they would classify as a family literacy program. To meet these criteria the program had to include an interactive literacy component between children and parents. Fifty of the 700 were categorized as family literacy and more detailed information was obtained by telephone interviews. Data were organized according to program location (rural, urban, suburban) population characteristics (e.g., ethnicity, gender), size, use of specific models and funding sources, goals, instructional practices, assessment methods, staff training,

collaboration with surrounding community agencies, and social support for participants. A representative sample of 11 programs was chosen for an in-depth case study based on variation across these characteristics. During planned visits to these 11 programs, the researchers conducted interviews with administrators, participants, and teachers. They observed classes and collected survey information. The combination of these data sources provided information for descriptive case studies

DeBruin-Parecki and Paris (1997) found four critical issues to consider when attempting to design effective family literacy programs. They were (a) participation, (b) curriculum, (c) staff and administration, and (d) fund-raising. The researchers recommended the following: (a) The field of family literacy is changing rapidly, thus it needs theory, research, cultural and community participation and knowledge to guide services and practices; (b) Needed is a greater integration of emergent literacy and adult literacy to make practices interactive and intergenerational; (c) Carefully designed and individualized curricula are necessary. It should be goal oriented, meaningful, and relevant to participants' lives; and, (d) Programs need authentic process-oriented assessments that are outcome based and reflect progress accurately.

The United States is not the only area in which family

literacy has been explored. Brooks (1998) reported the

results of parent participation in family literacy programs

in England and Wales. The researchers asked the following

questions. Would the parent participation in the family

literacy program improve the parents own literacy skills?

Would participation improve parents' ability to help their

children with the early stages of learning to read and

write?

The sample included parents who had at least one child

between 3 years 0 months and 6 years 11 months at the

beginning of the course (N = 361). Both parent and child

had to attend. A total of 154 parents were contacted 20-34

months later for a follow up study. This represented 43% of

those in the original evaluation. The researchers collected

data at the beginning and end of the course, 12 weeks, and

nine months after the course ended. A questionnaire

containing 34 items showed a statistically significant

increase in frequency on almost every item during the

courses, and the results continued both 12 weeks and 9

months afterwards. The independent variable was

participation in the family literacy program. The parents

participated in 6 hours of accredited basic skill

instruction per week, in which they worked on their own

literacy and learned how to help their children. The parents' also participated in 2 hours per week of joint session in which they worked with their children, and used the strategies they learned for supporting their children's language development and emerging literacy. The dependent variables were (a) improvement of parents' own literacy skills, (b) improving parents' ability to help their children with the early stages of learning to read and write, and (c) boosting young children's acquisition of reading and writing.

Brooks (1998) found through the administration of a questionnaire that the rate of involvement of family literacy parents with their children's schools was double that of parents who did not participate. The researchers were able to contact 154 parents 20 to 34 months after the courses ended. Of these 154 parents 66 (43%) were working, which was up from 29 (19%) at the beginning of the course. Of these 66, 57 (86%) attributed their gaining employment directly to family literacy. Sixty percent of the parents (92) had enrolled in additional educational activities. Of that number, 141 (92%) thought that they were continuing to benefit from family literacy in other ways, especially in confidence and in communication skills. The parents continued to benefit in employment, education, and ability

to help their children and involvement with their children's schools. Overall, family literacy parents continued to widen their participation in education and in society in generally.

As programs developed, the need for collaboration with other government agencies to address the needs of the participants became apparent. Tice (2000) conducted a two-year evaluation of a family literacy program. The results of the report was the acknowledgement of the effect that collaboration between agencies had an maximizing resources and providing support to families as they change. The 27 participants lived in a county with a relatively low population density and chronic poverty.

The findings are based on an evaluation process that used direct observation to study both organization and participant (n=27) change. Two program evaluators affiliated with a university-based environmental and public affairs research center conducted the evaluation. The evaluation involved ongoing field work, focus groups, individual qualitative interviews, surveys and observations of meetings, events, and program activities. Additional sources of data were project reports, administrative documents, and meeting minutes. Data were collected using direct observation to study both the organization and

participant change. Data were collected in phases consistent with grounded theory techniques. In the first phase, the evaluators sought relevant themes by conducting interviews with clients, advisory committee members, and program staff. Advisory committee meetings were observed, as were the interactions of program staff with clients and grant collaborators. Document reviews, including meeting minutes, quarterly reports to funding sources, newspaper articles, and letters to area agencies, were conducted throughout the evaluation period. United States Census documents were used in comparative analysis, as were the reports from other family literacy programs in the state. Meetings and interviews were tape recorded and transcribed. Interview transcripts were coded; patterns and themes were identified and grouped according to program goals.

In the second phase, patterns and themes that emerged from the first phase were tested. A survey was distributed to clients and key informants from the advisory committee and area agencies. Individual meetings with the program director and parent educator were conducted. One of the evaluators accompanied the parent educator on home visits to observe the parent-as-teacher curriculum in use. A focus group was conducted with clients.

Graduates of the family literacy program were interviewed in phase three of the program evaluation. Site visits were conducted with program director and parent educator to identify plans for program development. The validity of findings was tested through triangulation of feedback.

The primary objective of the program was to develop services that improved clients' literacy, self-sufficiency and work readiness. This was best achieved through collaboration of agencies within the community. Collaboration was nurtured by locating the literacy program at a multi-service site that housed staff from public housing, the Department of Human Services, the Women, Infants, and Children(WIC) program, and mental health services. The data demonstrated positive results for both impact/outcome and process objectives. The evaluation highlighted an extensive network of interpersonal and inter-agency relationships that maximized resources and supported families as they changed.

Tice recommended the following when designing family literacy programs: (a) Services should be individualized so that clients with extremely limited literacy receive more intensive social, educational, and training services. (b) A provision of social services based on an interdisciplinary

model that assesses attributes that might affect client well-being. (c) Literacy programs need to develop an integrative approach that combines education, skills training, and social support.

As family literacy programs have developed, the issue of meeting the needs of the adult who participate in these programs has been questioned. Elish-Piper (2000) examined the responsiveness of adult education in urban family literacy programs in the Midwest. The following research questions guided the study: Do adult education classes in urban family literacy programs incorporate the strengths, needs, and goals of participating families into programs? If so, how? If adult education classes in urban family literacy programs do not incorporate the strengths, needs, and goals of participating families into programs, what obstacles prevent them from doing so?

Questionnaires, program documents, and follow-up interviews were used to elicit quantitative and qualitative responses. A pool of 100 urban family literacy programs was sent a questionnaire that contained both closed-ended (Likert type format questions) and open-ended questions. Sixty-seven questionnaires were returned with 12 programs indicating that they would be willing to be interviewed by telephone. These 12 programs provided three types of

documents: (a) statement of philosophy or mission statements, (b) program schedule, and (c) sample lesson/activity plans.

Frequency distributions were calculated for the closed-ended questions to determine common trends. Open-ended questions and the telephone interviews were analyzed by using data reduction, data displays, and conclusion drawing/verification. The researcher coded responses by comparing them internally to see if consistency existed among various responses within the given questionnaire and then identified common themes. By connecting the quantitative and qualitative data, the researcher was able to identify trends and then describe those trends. In addition, the researchers were able to identify conflicts between what programs say they will do and what they actually do.

Elish-Piper (2000) found that most of the programs sought to provide responsive adult literacy instruction within family literacy programs; however, their definitions of responsive literacy instruction varied greatly. In general, programs did not incorporate the strengths, needs, and goals of participating families into their adult education classes. While some programs tended to emphasize a strength perspective, deficit view, or a focus on

specific educational outcomes and goals, the majority of
the programs incorporated two or more of the views in their
philosophy or mission statements. The programs did report
obstacles to responsive literacy instruction including
funding agency requirements, limited staff development, and
limited teachers.

Implications for designing and implementing responsive
family literacy programs can be drawn from this study. The
results of this study indicate that most of the programs
were very aware of the concept of responsive, family
centered programs. Their practices, however, did not
support such an approach. Additional research is needed to
document what this approach actually looks like in
practice. In-depth case studies and action research
conducted by family literacy educators will greatly enhance
the research base in this area. Needed is staff development
of family literacy educators. Researchers and theorists in
family literacy must closely examine the audience for their
work.

<p align="center">*Outcomes of family literacy*</p>

There have been different models of family literacy
developed, and to determine the value of these programs
they must be evaluated. The following studies examine the
effect that participation in family literacy programs has

<p align="center">92</p>

had on adults and their families. They are presented in the order they were published. Paratore (1992) examined the influence of an intergenerational approach on the literacy development of parents and on the practice of family literacy at home. The research was based on the premise that an intergenerational approach to literacy would not only extend adults' own uses of literacy, but would also enhance the ways they support their children's school learning. Two questions were posed: (a) What is the impact of an intergenerational approach on the literacy development of adult learners enrolled in an adult basic educational program? And (b) what is the impact of intergenerational approach on the incidence of shared literacy events between parent and child?

During a three-year period, 367 adults enrolled in multilingual, multiability literacy classes for at least one instructional cycle. The ABE classes were held in a community center located within walking distance of three elementary schools in an ethnically diverse area considered a "gateway" for new immigrants. Families represented 28 different countries of origin and 13 different first languages. Of the 367 adults, 351 spoke English as a second language.

93

Paratore (1992) did not report a specific study

design. Data included informal assessments of parents'

fluency in reading English with pre and post analysis,

attendance, attrition, and self-report data on parent/child

literacy activities. The method of data analysis was not

reported but results were given as descriptive statistics.

Results indicated that: (a) attendance was consistent

across learners and across instructional cycles, (b)

demonstration and modeling led to routine practice of

family literacy within a relatively brief period of time;

(c) storybook reading emerged as a frequent behavior, while

shared writing did not; (d) parents visited the local

library only once a month; and (e) there was a high growth

in literacy fluency among the lowest performing adults.

Findings suggest that an intergenerational focus in

multiability multilingual adult education classes may

provide an important vehicle for prompting literacy

learning of adults.

The Kenan Trust Model for Family Literacy has been the

subject of several reports. Darling & Hayes (1989) were the

first to present results in the report "Breaking the cycle

of illiteracy: The Kenan Family Literacy Program model.

Final Report." Seaman (1992) conducted an evaluation of the

effectiveness of the Kenan Trust Model for Family Literacy

and asked the following questions. How have the children who participated in family literacy as three and four year olds progressed during their kindergarten and elementary school years? How has the life of parents who participated in the program changed? What are the program teacher's perceptions about the families enrolled in the program? The researcher randomly selected fourteen programs from a pool that had been operating for several years. Seaman (1992) collected data on 57 children and 42 parents who had participated in the programs. He interviewed parents in person or on the telephone. He conducted on site interviews with the program teachers from the 14 sites. Seaman reviewed public school records of students and interviewed teachers of the students. Teachers were asked to rate the children on a five-point scale on such things as self-confidence, attendance, academic performance, classroom behavior, motivation to learn, and probable success in school. As evidence of parental support, teachers rated the following for each child: on-time to school, dresses appropriately, and comes to school clean. The final question of the teachers was to rank the child in the classroom by quadrant.

Seaman (1992) asked the parents how their lives had changed since enrollment in the family literacy program. He

asked the family literacy program teachers to rate both
parents and children as to how much they had improved
during the year. All data were organized and compiled using
frequency distributions and percentages when possible, and
content analysis when appropriate.

Seaman (1992) reported that the parents felt proud for
the first time in their lives. They were no longer afraid
of challenges, knew how to dress properly, wanted to get
off welfare and food stamps, felt like persons not just
mothers and wives, had new friends, and went out more. They
were no longer afraid to be or speak in public. As a
learner the parents reported they were reading more then
they had before enrolling, they were helping their children
with homework, had passed the GED test and had enrolled in
higher educational opportunities. They were confident in
their ability to learn and would make certain their
children completed high school. They now had jobs and liked
working. They attended school functions and were active in
community events. The children also made improvements.
Seaman asked the classroom teachers to rate their
performance in the classroom. The teachers ranked 75% of
the students in the upper half and 35% in the upper fourth
of their class. Parents also evaluated their children and
reported that they were listening better at home and

comprehending what the parent said. They were picking up

after themselves, working and playing with other children,

and were better at sharing.

Additional research should address these questions.

Can this model be as effective with children older than

three or four years of age? Since this model appears to be

designed for parents who can attend all day at least three

days a week can it be utilized for parents who must work

during the day but who benefit from participation in family

literacy? Is this model effective if restricted to evenings

and/or weekends, the only times many parents can

participate? How does this model compare in effectiveness

to other models or forms of family literacy?

The National Center for Family Literacy (1994)

presented the early findings from the analysis of a family

literacy demonstration project. During the 1992-1993 school

year over 300 families at 32 locations in 10 cities

participated in the Toyota Families for Learning Program

conducted by the National Center for Family Literacy. When

they entered the program, 81% of the families received

public assistance; 91% of the parents were unemployed; 84%

had no high school diploma. Most of the parents in the

program were single (70%), African American (64%), women

(93%), between the ages of twenty-one and thirty (59%), 14% were younger and the rest were older.

The writer of the report did not identify the study design. Information was collected from both parents and children when they entered the program, at mid-year, and in late spring. In addition to demographic information, measures were obtained of the child's level of development and the parent's literacy. Records were kept of the family's attendance in the program.

Analysis of the data was conducted under the supervision of William W. Philliber, Senior Partner of Philliber Research Associates. Available data from adult-focused and child-focused programs were used to provide bases of comparison. The California Adult Education Program provided this comparison data. The method of analysis was not identified in the report.

The data from which this report were based on the experience of over 300 families who participated in a family literacy program for one year. While the results were encouraging, they were considered to be preliminary. Long term impact would require another study at a later date. However, the results point in five promising directions:

1. Adults participating in family literacy programs
    demonstrate greater gains in literacy than adults in
    adult-focused programs. The larger gain among
    participants in the family literacy programs is
    significantly higher than would be expected by chance
    (p < .001).

2. Participants in family literacy programs are more
    likely to remain in the program than participants in
    adult-focused programs. Seventy-one percent of all
    enrollees remained in the family literacy programs,
    significantly more than retained in California's adult
    education programs (p < .001).

3. Adults who participate in the program longer
    continue to learn. Those who stayed in the program
    past 50 hours had higher gain levels. These
    differences were significantly greater than chance (p
    < .001).

4. Children participating in family literacy programs
    demonstrate greater gains than children in child-
    focused programs. The gains made by the children were
    significantly greater than expected by chance (p <
    .001).

5. More educationally supportive home environments are
    reported among participants in family literacy
    programs.

St. Pierre (1995) prepared a national evaluation of a
federally funded family literacy program called the Even
Start program. Even Start programs must have at least three
components: adult basic education, early childhood
education, and parenting education.

Four research questions were posed:

1. What are the characteristics of Even Start participants?

2. How are Even Start projects implemented and what services
   do they provide?

3. What Even Start services are received by participating
   families?

4. What are the effects of Even Start on participants?

Question four had two major components. The first, The
National Evaluation Information System (NEIS), was a data
set that contained descriptive information collected from
Even Start programs. The second component was an in-depth
study of 10 programs.

The NEIS collected descriptive longitudinal and cross-
sectional data from projects funded in 1989, 1990, 1991,
and 1992. The number of participants for this component was
not given. The in-depth study was designed to complement

the NEIS. The original intent was for each program to randomly assign 40 families to either an Even Start or a control group (20 in each group). Only five programs, however, were able to implement the random design.

The independent variable was participation in the Even Start program. The dependent variables were: (a) tested learning gains of the parents, (b) GED attainment, (c) reading and writing in the home, and (d) effects on children's literacy-related skills.

The NEIS component data were collected from families upon entry to Even Start, at the end of each program year, and at exit from the program. Families who did not remain in the program long enough to be posttested were eliminated from the analysis. The in-depth study participants were pretested in the fall of 1991 and were posttested nine months later and again at 18 months. Local program staff trained by the researchers collected data.

Effect estimates were based on a regression model. The posttest was used as the dependent variable. The pretest and group assignment were used as the independent variables. Effect magnitudes were calculated by subtracting the gain between pre and post tests of the control group from those of the participant group and then dividing by the standard deviation of the control group pretest scores.

St Pierre (1995) found that Even Start had some positive short-term effects on children and adults, although those effects vary greatly across programs. Even Start services did result in gains for children and their parents. But on average, the gains were not greater than those that similarly motivated families would obtain for themselves using locally available services. For Even Start to have a larger effect, it must provide service more intensively.

Even Start families that were intensively engaged in core services did better than families with lower levels of participation. There are indications that providing parenting classes to parents has positive effects on their children's vocabularies. Since this is part of what Even Start hopes to produce, this effect is encouraging.

It is hoped that Even Start's effects on children will be enhanced by the positive changes made in their parents. Follow up studies of participants could be conducted to determine whether this long term portion of Even Start's theory holds – that positive effects on parents will lead to long term positive effects for children's cognitive and social-emotional development.

Yaffe and Williams (1998) explored the reasons women chose to participate in a family literacy program and the

factors that made the program successful in the eyes of the participants. The authors asked the following: (a) Why do they join? (b) What are their expectations? and (c) What did they like the best? They interviewed six women participants at one project site. Questions were open-ended and framed to address the research question and to allow for detail from the respondents. The audio taped interviews ranged from 45 to 60 minutes in length. The women verified the accurate representation of their ideas by reviewing a transcript of their interview. The researchers interviewed staff members, by telephone after the parent interviews were completed. These interviews ranged from 60 to 75 minutes. The interview focused on staff members' perceptions of the factors that motivated the women's participation in the program. Data analysis involved techniques similar to grounded theory analysis. The researchers read and reread the interviews searching for (a) answers to the focal research questions, (b) patterns of similarity and difference in the women's and staff members answers, and (c) other patterns that emerged.

Yaffe and Williams (1998) found that while the students indicated their primary reason for joining was to get a GED or increase basic skills, the staff members believed the women had joined the program to get needed

support. The "drawing card" of the program was the supportive atmosphere of women helping women. The second most commonly cited reason for joining the family literacy program dealt with parenting issues and wanting to set a good example for their children. Staff members affirmed this. Although the curriculum emphasized family literacy development, none of the women mentioned direct benefits for their children as a reason they had enrolled in the program. Expectations of the program reflected their reasons for joining which was to increase their educational attainment level. Program components that contributed to the women's satisfaction were the trusting, supportive environment provided by women for women. The early childhood component was another factor that contributed to the women's satisfaction with the program. It was not, however, the early childhood program itself. The convenience of having free child-care at the same site as the adult education program made participation possible.

While the researchers expected the women to say that learning as an adult was easier due to experience and motivation that was not what the women reported. They believed that returning to school was harder than attending high school as a teenager. They also found the learning environment more responsive, however, to individual needs

than traditional schooling had been. None of the mothers mentioned direct benefits to their children as a reason for joining the program. They simply saw the program as free childcare. When asked how their child had benefited from the program, however, the women cited positive outcomes. Another aspect of the program that the women did not mention in their interviews was the parent and child time (PACT) component. The staff reported that the women actually avoided this time and that their attitude regarding adults playing with children was culturally driven. The participants never witnessed adults playing with children; this behavior did not come naturally to them. The parents thought of play as something children did to stay out of their parents' way.

Yaffe and Williams (1998) recommend that as family literacy programs are designed and implemented, models that attempt to transmit the teacher's own cultural practices to the homes of participants should be avoided. Family literacy providers need to examine the interactional patterns that exist within families and build on those patterns. The women joined the program for themselves. At no time did the women indicate that family literacy learning for both parent and child was a reason for joining the program.

Neuman, Caperelli, and Kee (1998) determined how the participants of family literacy programs viewed these programs and if they felt the programs are meeting their needs. They asked the following questions: What attracts participants to family literacy programs? What accounts for success from their point of view? What are the most salient features of these programs? Are there basic principles applicable across a broad spectrum of programs?

The researcher asked and received permission from the Barbara Bush Foundation for Family Literacy to review all their grant awards (52 files, approximately 300 pages per file). Program sites spanned 34 states and included homeless shelters, housing projects, libraries, reservations, schools community centers, and prisons. The researchers read each awarded grant proposal, which provided the original vision or idealization of the family literacy program. They examined the quarterly reports as well as the final report focusing on the project's realization. They conducted a typological analysis of open-ended responses from participants in an exit interview format devised by the Barabara Bush Foundation officers to assess the various projects. Respondents described the benefits of the program, ways to improve it, and changes in their lives due to participation in the program. Each

researcher read the responses from 350 questionnaires, then

through discussion, sought to establish common patterns.

These patterns were validated further through discussions

with the Grants Coordinator from the Barbara Bush

Foundation.

Neuman et al. (1998) found that although many family

literacy participants reportedly enrolled to improve their

literacy skills or earn their high school graduate

equivalency diplomas (GED) most were seeking broader

changes in their lives. Whether or not they achieved their

academic goals, their reasons for staying were of a more

personal and/or social nature. Retention in programs was

related to whether or not participant needs were addressed.

The development of social networks was especially important

in retention. Although their reasons for initially

attending family literacy programs might have reflected the

learning of basic skills of literacy, parents' reasons for

staying varied. They stayed because of the opportunities

that supported their goals, gave voice to their needs and

social practice, and seemed to enhance their personal

growth as well as that of their children. Program features

that seem critical to participants were: (a) the programs

involved participants in planning, (b) programs involved

family-based activities, (c) programs included ongoing

assessment, (d) programs created social networks, (e) programs involved an integration of services, and (f) programs provided next steps for learning and career development.

Suggestions for future studies were: How can we better address the needs of previously unserved populations? In what ways may we foster collaboration and cooperation among agencies? How do we better engage participants in the planning process of curriculum development?

Handel (1999) studied a single program and investigated what the family literacy program means to the participating mothers. This study explored the following questions:

1. What does participation mean to the adult participants?

2. What keeps them coming back?

3. What home literacy environments do they come from and what do they bring back to their home environment?

Seven women, living in a low income, urban community were interviewed. They had all participated in the Family Reading Program, a workshop series for adult family members. All were mothers of children in kindergarten through grade three in the same public school in a low

income, urban community. Criteria for selection were consistency of program attendance and availability for an hour-long interview. A semistructured interview informed by principles of ethnography was the primary methodology of the study.

The researcher interviewed each mother separately and offered a gift of a children's book. The interview elicited mothers' views about what they and their children had learned from the program, their reasons for attending and descriptions of literacy behaviors of both parent and child. The interviews were analyzed inductively using a grounded theory approach. The researcher established categories and themes emerging from the data themselves.

Handel (1999) confirmed that parents in poverty neighborhoods were concerned: (a) for their children's welfare, (b) engage in literacy practices and, (c) use appropriate help from the school. Handel identified three main implications for family literacy programs. The first is the importance of adult-centered reasons for participating in a family literacy program. The adults attended the program because of the learning they experienced. The second implication is schools should recognize and build upon the resource represented by these mothers and others like them. The third implication is the

women interviewed were willing to invest in their children's literacy and viewed the school as a community resource.

Seaman and Yoo (2001) analyzed data from an independent evaluation of Even Start Family Literacy programs. The purpose of this study was to determine the outcomes of parental participation in the program. The objective of the study was to determine if participation in family literacy programs might have a potential for helping reduce school dropout rates. The participants in the study consisted of parents attending Even Start Family Literacy programs at 13 sites operating in the state of Texas. Interviews were conducted with parents who attended the day the interviewer visited the program (N = 313). Parents qualified for the program through a combination of low income, poor academic background, limited English proficiency or having a child at risk of failure in school.

The researcher collected data through small group interviews (3-4 people) during adult education (General Equivalency Diploma and ESL) classes. An oral interview guide measuring life changes was developed and field tested with parents in one program for clarity and accuracy and revised where needed. The researchers grouped the data according to reading activities, writing activities,

parental involvement with children's teachers, parental expectations of their children in school, rating of self-confidence by parents, and the extent of parental help with homework.

The percentage of the total number of answers given per item in the interview was calculated to determine (a) frequency in participation in literacy skills, (b) involvement in child's education, (c) expectations of child's completion of high school, and (d) rating of self-esteem. Among the 313 participants, parental reading increased significantly after they began attending Even Start classes. Increase in writing activity of the parents was not as high as the increase in reading.

Seaman and Yoo (2001) found that parents spent more time helping children with homework after attending the Even Start Program. Before the Even Start Program, of the 234 respondents, 66 (28%) of the parents did not help their child with their homework, whereas after participating in the program only 8 (3%) responded they did not help their child with their homework. The researchers tested the difference between how much time parents helped with their child's homework before and after attending the Event Start Program for significance using the chi-square analysis method. The decrease in the number of parents who did not

help with their children's homework The increase in the number of people who helped their children with homework everyday was found to be equally significant.

Parental expectations of their children completing school increased, with 79 of the 293 parents (27%) responded that their child would be "somewhat likely to graduate" and 176 (60%) answered "very likely to graduate", only 11% saying that their children were unlikely to graduate. Using a 1-5 point scale, the parents rated their perceived self-confidence before they enrolled in the Even Start program and their perception of self confidence since participating in the program. Among the 313 parents who responded, only 21 (7%) reported that they had very much self-confidence before entering the Even Start Program. After participating in the Even Start Program 170 (54.5%) responded they had very much self confidence. Using a chi-square statistical analysis it was determined that there was significant increase in self-confidence level of the parents after their participation in Even Start.

Findings indicate that the Even Start Family Literacy programs have the potential for reducing school dropout rates. The programs are able to reach parents with young children. These programs provide an intergenerational literacy experience, which increases parent involvement

with their child's education and therefore improves the chances that the children will not drop out of high school. Future research might apply the same interview guide to family literacy programs that do not reflect the Even Start model.

Boudreaux (1999) studied a family literacy, Title I program to determine the attitudes and beliefs that affect parental participation in a family literacy program. The assumption was that low-literacy parents who chose to participate in a family literacy program and those parents who chose not to, possess different components in their cultural background.

There were three hypotheses and six study questions that guided the study with dominant (qualitative) and less dominant (quantitative) design. The hypotheses for the quantitative study were:

1. Parents who have high participation rates in a Family Literacy Program will have more favorable perceptions of themselves as a teacher of their child than parents with low participation rates.

2. Parents who have high participation rates in a Family Literacy Program will have more favorable attitudes and beliefs regarding their children when compared to parents who have low participation.

3. Preschool children with high parental participation rates will show significant gains between pretest and posttest scores on the Early Learning Level Checklist.

The study questions for the qualitative study were:

1. What choices and opportunities to initiate activities do parents give their children in a Family Literacy Program preschool settings?

2. What activities do high-participating parents report as being related to their children's education as opposed to low participating parents?

3. What activities do teachers in Family Literacy Programs report as effective parental practices in children's education?

4. Is there a difference in the availability and use of educational materials in the home between high-participating parents and low-participating parents?

5. Do high-participating parents hold different present and future educational expectations for themselves than low-participating parents?

6. Do high-participating parents hold different present and future educational expectations for their children than low-participating parents?

A Title I Family Literacy Program located in a large, urban, public school system was the study site. The sample size consisted of 40 parents who were divided into two groups according to their level of participation in the Family Literacy Program: the high-participation parent group and the low-participation parent group. The sample also included 27 children whose parents were in the high participation group.

Data collection consisted of the Parent as a Teacher (PAAT) inventory, classroom observations, individual interviews with parents and family literacy staff, focus groups with parents and family literacy staff, and document analysis. A total of 20 parental personal interviews were conducted (10 with high-participation parents, 10 with low participation parents). Family literacy staff interviews consisted of open-ended questions. The focus group interviews occurred after the classroom observations, document analysis, and individual interviews with parents. Document analysis provided data used in triangulation techniques. It also provided data used to generate questions for personal interviews with parents.

A paired-sample t-test was performed to test hypotheses three using pretest and posttest Total Scale Score for the Early Learning Level Checklist. This allowed

for the determination of the significance of gains between pretest and posttest scores by preschool children with high-participation parents.

After parents completed the PAAT inventory, a numeric value of 4, 3, 2, or 1 was assigned to each of the fifty responses, with 4 being the most positive response and 1 being the least desired response. Hypothesis one was tested using an independent samples t-test for comparison of means. Hypothesis two was tested using MANOVA and ANOVA for comparison of mean. Frequencies were generated for Hypotheses one and two. Computerized analyses were performed to generate information using SPSS. Qualitative data collection was utilized to collect information on Study questions one through six using the Developmental Research Sequence which consists of observations moving from descriptive to focused to selected observation. Domain Analysis that consists of finding relationships between categories was used for analysis of descriptive observations. Taxonomic Analysis, which focuses on relationships among domains, was used to analyze focused observations. Componential Analysis organizes and represents the contrasts found with and across domains. This was used to analyze selected observations. Data collected from the parental and family literacy staff

116

individual interviews were analyzed using the constant

comparative method. The design of this study included

methodological triangulation since both qualitative and

quantitative methods were utilized to answer the Hypotheses

and Study questions.

Boudreaux (1999) stated that the quantitative results

provided evidence in support of the three hypotheses

suggesting that high-participation parents have more

favorable attitudes toward their children's education than

low-participation parents. Children participating in a

Family Literacy Program also evidenced significant gains

between pretest and posttest scores. The qualitative

results suggested that high-participation parents held

higher educational expectations for themselves and their

children when compared to low-participation parents. High-

participation parents also engaged in writing activities

(81%) and reading activities (64%) more than low-

participation parents. All 20 high-participation parents

(100%) also read to their children on a regular basis, as

compared to 20% of low-participation parents. The results

of this study suggest that family literacy programs broaden

the cultural capital of the parents who choose to

participate.

Farrer (2000) attempted to unveil the effects of the Even Start program on the parent participant in the program. The following questions were addressed in the study's investigation:

1. How do parents gain placement in adult literacy programs?

2. How are the needs for adult literacy identified and met?

3. What influences and experiences contribute to the parents' results and the effectiveness of the adult literacy program?

4. How do parents respond to classes and opportunities provided by the adult literacy portion of the program?

5. What are the results/effects of the adult literacy program of Even Start for the parents?

6. What results/effects are seen in the families after participation in the program?

7. What are the results/effects on the community after participation in the program?

Data from 63 families who participated in the Even Start program for the service year were studied and additional in-depth data was collected from six mothers' cases by interviews, observations, staff discussions; home

visits, Even Start test records and results of surveys collected at the center.

This research used a case study methodology. Staff was interviewed to obtain background information. Interviews of parents gathered information on life history, while observations in homes were used to examine parent-child interactions. Additional data included demographic information provided by Even Start records and evaluation updates.

Analysis of the data was accomplished using a phenomenological approach. Each audio-taped interview was transcribed and verified by providing a written transcript of the interview to the participants. Using the transcripts and researcher notes, the audio-tapes were reviewed to detect intended meaning which might be revealed in intonations and emotional undertones. Notes of the parental behavior during the interview provided insights into parental meaning.

From the context of all the data gathered from interviews, Farrer (2000) identified units of meaning to discern and identify participants' meanings. Each unit of meaning was then charted and transferred to an index card. The cards were sorted and grouped according to similar and /or related meanings. All field notes, transcripts,

119

observations and tapes were analyzed and critiqued to determine intercoder reliability. A coding system was established and two research assistants compared findings with the initial researcher.

The results indicate that the Even Start program has begun to achieve some of its goals. To review the findings, each of the questions will be addressed for clarity.

(1) How do the parents gain placement? Eligible parents who reside in the school district and require ABE are able to enroll in the program.

(2) How are individual needs for adult literacy identified? The parents are assessed individually using the TABE and student intake forms, and are screened to determine the need for services such as parenting, home visitation, and ABE needs.

(3) What influences and experiences contribute to the parents results and the effectiveness of the adult literacy program? Aspirations for their children seemed to stem from the parents' experiences. All of the parents wanted for their children what they had not achieved. Parents viewed education as important for themselves. Each had a goal to further their own education. Some were searching for parenting skill improvement tips.

(4) How do parents respond to the classes and opportunities provided by the Even Start adult literacy portion of the program? Parents clarified goals and opportunities as a result of information presented to them by Even Start staff.

(5) What are the results/effects of the adult literacy program of Even Start for the parents? Increases of parent self-concept, improved attitudes of parents toward education, changes in parent's feelings about learning, greater literacy models in the home, and improved parent skills were indicated through this study.

(6) What results/effects are seen in the families of the adult participants after participation in the Even Start program? Parents reported appreciating information on parenting skills and workshops and PACT time.

(7) What are the results/effects on the community after parental participation in the Even Start program? Many parents wanted to be off welfare roles and out of government housing. The mothers were more involved in their older children's extracurricular activities.

To conclude, when looking at the Even Start program and asking the effect/results of the program on the parents, adult education and job training programs produce positive effects on GED attainment, but only small effects on income or employment. Although parenting programs can change parenting skills, there is little research evidence that these improved parenting skills have any impact on children. It is suggested that family literacy programs pay attention to the following: (a) aim to achieve large effects by delivering high-quality intensive services; and (b) creative methods of engaging fathers in programs need to be developed. From the parent education perspective, the hours may need adjustment for adult education courses to accommodate the father.

Implementation of Family Literacy in Kentucky.

In 2001 the Department for Adult Education and Literacy mandated that every county in Kentucky should have a family literacy program. An external evaluation of Kentucky's statewide system of family literacy programs was conducted by the Indiana Education Policy Center. As a final phase of the years evaluation activities, the Policy Center research team Policy Center visited three sites in Kentucky to explore family literacy programs at different

stages of program development. The following report summarizes the finding from the case studies.

Simmons, St. John, and Mendez, (2002) gathered information that would help develop a workable model for a comprehensive family literacy system in the state. Of particular interest was the challenges faced across the stages of the programmatic life cycle - from those in the planning stages to those with more mature programs - and how to address these challenges.

The three sites selected for this study were identified as County A, County B, and County C. County A was a family literacy program in the planning stage and was situated in a small town in rural western Kentucky. County B was a year old program that had funding through the Department for Adult Education and Literacy (DAEL) and was located in a more densely populated community in the central portion of the state. County C had a program of longer duration that received funding from both Even Start and DAEL and was located in a small rural county in eastern Kentucky. A total of 35 individuals in these counties were interviewed at prearranged times. The sample included staff from family literacy programs as well as civic leaders, business people, school personnel, clergy and social workers of the community.

Semi-structured interviews were used as the data collection method. As the researchers talked with interview participants at all three sites they noted challenges and successes of the family literacy program operations as well as particular characteristics that made each site unique from its counterparts. In County A they were interested in why the community had not yet applied for family literacy funding. In the other two sites, they focused on understanding how the communities had developed the partnerships that enabled their programs to become established or sustained over time and their current challenges. The interviews lasted 45 – 60 minutes and were tape recorded with permission of the interviewee. Two different interview protocols were used, one for family literacy program staff and one for community members. The question topics were selected to prompt conversation concerning program management and administration rather than specific program features. Community participants were asked about their perceptions of literacy needs of the community, the community's priorities in regard to social issues, and their understanding of family literacy.

Simmons et al. (2002) identified the following limitations to the study. (1) Some respondents may have withheld information because they misunderstood the purpose

of the interview. They may have perceived the questioning as a covert evaluation of job performance. (2) Interviews were the exclusive means of data collection. (3) Although the three sites were carefully selected to represent programs in different stages of program life cycle and different areas of the state, they cannot be expected to represent the entire range of family literacy programs in Kentucky.

Below are the findings of the study.

1. There is no ideal community for a family literacy program (FLP).

2. Implementation of family literacy program's can be complicated by the absence of a prescriptive model.

3. In family literacy program's recently funded by DAEL, the adult education director may be unprepared to serve as program coordinator, a situation that could lead potentially to a leadership gap at a critical time.

4. The development of new strategies for recruiting and retaining family literacy program participants lags behind the need for them. This need is brought about by shifts in the local economic base, changes in the demographic profile of the local community, revision of the regulations that govern the welfare system, and other phenomena.

5. A well-developed social support network of community
   agencies and organizations that addresses a broad
   spectrum of family needs will facilitate implementation
   of a family literacy program.

6. Positioning literacy issues in general, and family
   literacy programs in particular, on the priority list is
   a universal struggle for programs, regardless of their
   stage in the programmatic life cycle.

7. Time management is a concern for program coordinators and
   staff in both new and enduring programs.

   Family literacy program personnel fear that, despite
their best efforts, families with the lowest levels of
literacy remain unserved by family literacy programs.

Summary

   Several different models of family literacy programs
have been developed in recent years. This study addresses
intergenerational family literacy. Family literacy programs
operate in a variety of settings, are sponsored by a
variety of entities and are not limited to the United
States.

   Elish-Piper (1997) described a family literacy program
that operated for a short period of time during the summer.
Berkovitz (1994) detailed a program of short duration that
was sponsored by a community college. Brooks (1998)

described programs that operated in England and Wales. Programs exist in urban areas as described by Elish-Piper (2000) and Boudreaux (1999), and in rural areas as described by Tice (2000).

Outcomes of family literacy programs were for the most part self reported by the participants. These outcomes include increased self esteem, removal from welfare, increased participation in literacy activities by the parents, completion of GED, and participation in higher education and employment (Seaman, 1992). Other outcomes were greater gains in literacy for the adults who participated, and longer retention rates in the educational programs (National Center for Family Literacy, 1994).

St. Pierre (1995), Seaman and Yoo (2001), and Farrer (2000) evaluated Even Start programs. St. Pierre found that those families that were intensively engaged in core services did better than families with lower levels of participation. Seaman and Yoo found that parents had an increased interest in, and expectation of, their children completing their education. Farrer reported that the program produced positive results on GED attainment but small effects on income or employment.

Yaffe and Williams (1998) found that the women who joined the program did so for themselves and not for

opportunity to participate in joint family literacy activities with their children. Neuman et al. (1998) found that participants joined family literacy programs for reasons other than academic, and whether or not they continued to participate depended on if these needs were met in the program.

In 2002 Simmons et al. reported anticipated difficulties with implementation of family literacy programs state wide in Kentucky. They reported that the absence of a prescriptive model for family literacy and the lack of preparation of the adult education directors could lead to problems.

Conclusion

As Kentucky addresses intergenerational illiteracy, it must address not only the needs of the child but also the needs of the adult. Many obstacles must be addressed to meet adult needs. An example is recruitment of adult students that has historically been low in Kentucky. (Legislative Research Commission, 2000). As literacy needs have increased over the last 100 years, literacy resources have become harder to access. (Brandt 1999; Sparks, 2001). Another issue of concern is the need for the participant to be involved in the selection of activities and curriculum (Auerbach, 1989; Brown, 1998)

Historically, recruitment of those in need of services has been a problem for various reasons: (a) marketing (Douglas et al. 1999; Jensen et al. 2000), (b) prior schooling experience (Quigley, 1992a), and (c) programs not meeting the needs of the participants (Jensen et al. 2000). Even if programs are able to recruit members of the target population, retention of that student becomes a problem. Various reasons prevent students from attending to the extent needed to reach their goals. The reasons include work responsibilities and family responsibilities (Al-Barwani & Kelly, 1985; Bean et al., 1989; Malicky & Norman, 1994). Program services and the way students are served are also issues (Fitzgerald & Young, 1997, Millar & So, 1998; Purcell-Gates et al., 2000; Quigley, 2000).

As Kentucky explored new models of delivering educational services to adults, a family literacy model was developed to meet not only the needs of the adults but also the child. Different models of family literacy have been explored not only in Kentucky but also in several other states and even other nations (Berkovitz, 1994; Brooks, 1998; Debruin-Parecki and Parris, 1997; Elish-Piper, 1996/1997; Tice, 2000). As these models were developed, their outcomes were examined with favorable results: (a) attendance is consistent (National Center for Family

Literacy, 1994; Paratore, 1992); and (b) parents take an interest in their child's school experience, stating that they anticipate their child completing high school (Boudreaux, 1999; Farrer, 2000; Seaman, 1992). While these are positive aspects of the programs, current economic and social conditions have changed. Parents in many of the studies were identified as being welfare recipients who attended to retain benefits. With welfare reform legislation, this is no longer the case (Sparks, 2001). Parents must now work and can no longer attend all day as described in some of the studies reviewed. Another issue – this one not reliant on time - is providing educational service to fathers, as many of the studies dealt only with the mothers.

In 2001 the Department for Adult Education and Literacy mandated the establishment of a family literacy program in every county of Kentucky. As Simmons et al. (2002) identified in their study, there are issues that need to be addressed concerning this mandate. One of these is the absence of a prescriptive model. What elements of a family literacy model attracts the largest number of identified target audience? Is it evening classes or day classes; all day or several hours a week; computer technology or books? What elements demonstrate the ability

to attract both mothers and fathers to the program? Is it the time the class is offered, or could it be the presence of a male teacher serving as a role model? What are the outcomes of the different models? Are parents reaching their educational goals? Do the parents feel more comfortable advocating for their child at their children's school? Do they feel comfortable talking with school personnel? Are they supportive of their child completing high school? These are the questions that should be addressed by future adult education research.

CHAPTER III

METHODOLOGY

The purpose of this study is to investigate how various components of family literacy programs such as operational characteristics (enrollment procedure, hours of operation, time of class, curriculum selection, type of instruction, and age of child served) and staff characteristics (gender, full or part time status, and educational attainment level) influence the recruitment, and goal attainment of adults in the program. This research investigates factors that could aid educational administrators in improving family literacy programs that will result in increased enrollment of participants and improvement of goal attainment of those participants.

Research Issues

Family Literacy programs are rapidly growing in the United States. However, these programs are a relatively new educational initiative with research reports beginning in 1989 (Wasik, Herrmann, Berry, Dobbins, Schimizzi, Smith and Herman, 2000). There have been several issues raised

concerning research conducted on family literacy programs.

Many of the reported findings dealt with testimonials which

may have some validity but do not provide acceptable

statistical data to show that family literacy programs are

based on documented effectiveness (Amstutz, 2000). Many of

the reports deal with the impact that family literacy

programs have on the child's education (Britto, 2001;

Dever, 2001; Handel, 1999; Jordan, Snow, and Porche, 2000;

Morrow & Young, 1996, Schwartz, 1999) and do not address

the adult component. Another common weaknesses of research

on adult education and family literacy programs is that

data is self-reported by the programs (Beder, 1999).

Research Design

This study examined family literacy programs, funded

by Kentucky Adult Education (KYAE) formerly the Kentucky

Department for Adult Education and Literacy (DAEL) during

the 2002-2003 fiscal year. The purpose was to determine the

relationships between selected program characteristics and

recruitment of, and goal attainment for, adult participants

in the programs.

The study was a quantitative study using data

submitted by family literacy programs. It employed two

correlational methods: (a) Pearson correlation, and (b)

hierarchical multiple regression. Pearson correlation was

selected to determine the relationship between the two

variables number of male students and number of male staff.

Hierarchical multiple regression was used because there was

a need to control the effect that an independent variable

might have on the dependent variable to obtain a better

prediction of the effect of the remaining variables. These

designs were selected because of the intent to determine

which independent variables are good predictors for the

dependent variable. A limitation of the design is that all

data will be self-reported by directors of the family

literacy programs.

<div align="center">Research Method</div>

<div align="center">*Sample*</div>

The sample for this study was family literacy programs

in Kentucky that were funded by the KYAE (DAEL) during the

2002-2003 fiscal year. In 2001, KYAE began the process of

establishing a family literacy program in every county.

During the 2002-2003 fiscal year 120 programs were funded

in the state. This is equivalent to one program per county.

KYAE stipulates that one family be served per each $1000

granted. Limiting the sample to these specific programs

equalized the programs in services provided to the

families. Also, the only stipulation required for

enrollment in these programs was that the adult lack a high

<div align="center">134</div>

school diploma or be functioning at lower levels of literacy. Even Start programs in the state were at first considered for inclusion in the sample, but it was decided not to include those programs since their funding levels were above that granted by KYAE (St. Pierre, Gamse, & Alamprese, 1998). In addition, students enrolling in the Even Start program must meet income guidelines thereby creating an unequal basis for comparison for recruitment of and goal attainment of adult students.

Method of Data Collection

Recruitment and goal attainment are the dependent variables. Data for the dependent variables were obtained from enrollment and separation data that all KYAE family literacy programs are required to submit through the National Reporting System (NRS).

Data on the independent variables were collected from census data, the Kentucky Literacy Survey, and a questionnaire to identified programs. The questionnaire was preceded by a contact letter in which the researcher was identified and the purpose of the study was explained. (See Appendix C.) Each manager of a family literacy program in Kentucky was asked to give demographic variables on the program participants that included student characteristics such as gender and ethnicity of the student. Questions were

asked to gather information about program and staffing characteristics. This questionnaire consisted of closed form questions where the respondent was asked to check the appropriate answer. If the respondent failed to return the questionnaire a telephone call was made or an e-mail sent in an attempt to gather the necessary data.

The questionnaire (Appendix D) was developed using the guidelines suggested by Gall, Borg and Gall (1996). This was pre-tested with a panel of subject matter experts to determine if the sample population would interpret the questions accurately. The National Center for Family Literacy and the Kentucky Institute for Family Literacy in Louisville Kentucky was approached to provide this panel of experts. The instrument was then distributed to 3-5 directors of family literacy programs to verify that the questions were being interpreted correctly.

Each county was identified on the questionnaire, as the answers given were linked to the data attained from KYAE. Because the questions were not personal and were non-threatening, this identification of programs was not expected to be a problem with the return rate on the questionnaire.

Variables

Dependent variables

The dependent variables in the study related to recruitment of members of the target population and goal attainment of those participants. Data for these variables were obtained from KYAE for the 2002-2003 fiscal year. This data was gathered from enrollments and separations submitted by individual programs to KYAE using the NRS. All of the family literacy programs included in this sample were required to enter data in the NRS for families that were enrolled in the family literacy programs.

The NRS includes a set of student measures to allow assessment of the impact of adult education instruction. As families were enrolled in the program the adults were assigned an entry level. These levels are detailed in Appendix B. To determine this measure, local programs assessed students on intake to determine their educational functioning level. There were four levels for adult basic education, two for adult secondary education and six levels of English-as-a-second language students. Each level describes a set of skills and competencies that students entering at that level can do in the areas of reading, writing, numeracy for adult basic education and adult secondary education students and speaking, listening,

functional areas for English as a second language students. Programs determined the appropriate initial level in which to place students by using a standardized assessment procedure.

After a determined amount of instruction or a time period, the program conducts follow-up assessment of students in the same skill areas and uses the functioning level descriptors to determine whether the student advanced one or more levels or was progressing within the same level (Measures and Methods for the National Reporting System for Adult Education, 2001). The two variables obtained from the data was:

Recruitment—(Number enrolled in the program) This was the percentage of each county's target population enrolled in the program. As counties differ in population numbers, using the percentage of each county's target population identified by the Kentucky Literacy Survey (Jennings & Whitler, 1997) provided an equal basis for comparison. The number enrolled was obtained through NRS data collected by KYAE. For example, County A has a total population of 15,000 adults. According to the Kentucky Literacy Survey, 45 percent of that population is functioning at Level I and II as described by the Kentucky Literacy Survey.

That means that 6,750 adults in this county make up
the target population and are eligible for services
from the adult education program. This Family Literacy
Program enrolls 20 adult students and this will equate
to .003 percent of the target population. County B has
a total population of 90,000 adults. According to the
Kentucky Literacy Survey, 32 percent of that
population is functioning at Level I and II. This
means that 28,800 adults in this county make up the
target population and are eligible for services from
the adult education program. The Family Literacy
program enrolls 150 adult students and this will
equate to .005 percent of the target population. These
numbers .003 and .005 were the numbers used in the
analysis.

Goal attainment – The number of participants who
obtain a GED or advance beyond their basic skill
functioning level at the time of enrollment are
defined as having attained their goal. For example,
assume that adult student enrolls with a TABE math
score grade level of 4.2. At the end of the year or
exit from the program that student scores a 7.0 on the
math TABE test (See Appendix B). That student has
advanced beyond his enrollment level and would be

counted in the number of those that attained their

goal.

Independent variables

Most of the independent variables consisted of

demographic descriptors, program characteristics and

instructional staff characteristics. Simmons et al. (2002),

indicated that factors such as poverty level have an effect

on enrollment numbers. This demographic data on each of the

counties was gathered from KYAE. Program characteristics

included enrollment procedures, enrollment incentives,

number of hours of requested attendance, time of day the

class met, adult student participation in curriculum

selection, the type of instruction the adult students

receive, and age of children included in the program.

Data for the following independent variables were

collected through a questionnaire sent to each of the

family literacy program managers. These variables were

selected because research indicated that they may have an

influence on the success or failure of family literacy

programs. They are described below:

Enrollment procedure – Some family literacy programs

operate on a managed enrollment system, which requires

the participant to wait until a specific date to start

the program, and they are then asked to attend for a

specific period of time (Bercovitz, 1994). Some

programs operate on an open enrollment and open exit

system that allows the students to enroll and exit the

program anytime during the program year. The

respondent indicated one of two options: (a) Open

enrollment and open exit or (b) managed enrollment.

Enrollment incentive – Was the program promising

something tangible if the student enrolled in the

program? As family literacy programs expanded to every

county in Kentucky some programs were able to offer an

incentive for enrollment, such as a rebuilt computer.

The respondent indicated yes or no. If yes, a short

explanation of the incentive will be requested.

Number of hours per week students are required to

attend – The number of hours of required attendance in

family literacy programs vary between all day

attendance, six hours a day, four days a week as

detailed by Farrer, 2000 and a few hours a week as

reported by Berkovitz (1994) and Brooks (1998). This

question asked the respondent to indicate the number

of hours per week the program requests that the adult

student attend.

The time of day the class meets—Family Literacy

programs meet at different times of the day. When

Family Literacy first began, the parents went to class during the day as their child attended classes (Farrer, 2000). Welfare reform had an impact on this design and programs changed their meeting times to accommodate those parents who were working (StPierre, Gamse, Alamprese (1998). The respondent was asked to indicate the time period in which classes met: (a) 8:00 a.m. to noon (b) noon to 5:00 p.m. or (c) 5:00 p.m. to 9:00 p.m.

Adult student participation in curriculum selection – Neuman, Caperelli & Kee (1998) addressed the importance of participants taking part in program development. Elish-Piper (1997, 2000) described the attempts of some family literacy programs to incorporate family strengths, needs and goals into curriculum selection. The respondent was asked to indicate one of three options: (a) very little input, (b) some input, or (c) students determine all curriculum choices.

The type of instruction the adult students receive—The respondent indicated yes or no to the use of the following three options: (a) individualized instruction where individual students are assigned individualized assignments pertaining to their basic

skill needs, (b) group instruction where students are

brought together for periods of instruction and are

working on the same subject matter, or (c) home

visitation programs where the instructors go to the

home of the families and instruct the adults.

Age of children—The first family literacy programs

were designed to serve those parents who had children

in preschool age group (Yaffee & Williams, 1998). As

family literacy has developed, the ages of the

children being served has expanded to include birth to

14 years of age. The respondent was asked to indicate

what age of child the program served. As programs in

the state began to offer classes during the evening

hours, the programs adapted and began to serve

children from different age groups. The age of child

served by the program may have an effect on

recruitment of families into the program.

The survey also gathered information on staffing

characteristics. As Fitzgerald and Young (1997) and Kestner

(1994) determined, status of employment and educational

attainment level may have an impact on student achievement.

Descriptive data were gathered to determine if these

findings were replicated in family literacy programs. In

the research studies reviewed concerning family literacy,

very few of the programs indicated that staff members of both genders were involved. A question concerning gender of instructional staff was included as several of the family literacy programs in Kentucky have hired instructional staff of both genders, which is not typical of family literacy programs. The questions asked pertained only to those staff members working with the adults in the program:

Status of employment – the respondent was asked to indicate the number of full time staff members and part time staff members working in the program. Full time will be defined as a position that receives benefits such as health insurance and retirement.

Gender—the respondent was asked to indicate the number of male staff members and the number of female staff members working in the program.

Educational attainment level of the instructional staff—the respondents was asked to indicated the number of staff members with an advanced degree, the number with a college degree, and the number with a high school diploma or GED.

Data Analysis

There were four separate data analysis problems. Two hierarchical multiple regression analyses and two Pearson

Correlations. The hierarchical multiple regression analyses was developed for each dependent and independent variables grouped as demonstrated in the table below. Huck (2000) recommends this method when the researcher wants to control the possible effect of one or more independent variables. As the purpose of this study was to determine which program and staff characteristics contribute to the recruitment and goal attainment of students, it was important to control for county poverty data, which might have had an impact on these goals. By using the poverty level of each county as a control variable the impact that economic conditions has on these goals can be controlled.   Gall, Borg and Gall (1996) recommend the use of one variable per 15 subjects in multiple regression analysis. As the sample size is 120 and an anticipated return rate of 75, no more then 5 predictor variables will be used in each model.

Dependent variable	Independent variables
Recruitment	- Poverty rate of county (control variable) - Enrollment incentive - Number of hours of expected attendance

	• The time of day the class meets
	• Age of child served by the program.
Goal Attainment	• Poverty rate of county (control variable)
	• Student participation in curriculum selection
	• Type of instruction received— individualized, group, or home
	• Staff status of employment—full or part-time
	• Staff Educational attainment level— percentage of advanced or college degree percentage of High School diploma or GED.

Two Pearson Correlations were conducted to examine the relationship between: (a) The number of male staff members and the number of male students and (b) the number of male staff members and the total number of students. The unit of analysis was each program and not individual students.

CHAPTER IV

RESULTS

This study of Kentucky family literacy programs utilized a correlation design with hierarchical multiple regression analyses as the primary analytical procedure. Three Pearson correlations were used to investigate additional components of the study. The purpose of the study was to determine how various components of family literacy programs such as operational characteristics (enrollment procedure, hours of operation, time of class, curriculum selection, type of instruction, and age of child served) and staff characteristics (gender, full or part time status, and educational attainment level) influence the recruitment, and goal attainment of adults in the program. The poverty level of each county served as the control variable.

The population was the 120 county family literacy programs funded by Kentucky Adult Education for the 2002-2003 school year. The research involved a field survey (see

147

Appendix C) delivered by U. S. Postal Service. A week

before mailing it was preceded by an introductory letter.

This letter explained the purpose of the study and asked

that the respondent give the survey immediate attention.

Surveys were mailed to the county program administrators

with a requested return date within two weeks. The

researcher attempted to contact or telephone each

administrator during the following two working days to

alert them to the arrival of the survey and request their

immediate attention to the survey.

A total of 97 out of 120 surveys were returned by the

requested date for an 80.8% return rate. Three of the

surveys were not completed because there were changes in

program administrator and the new administrators were not

familiar with how the program operated during the 2002-2003

year. One survey was not used due to the lack of a

definitive model for family literacy. This was partially

due to the large population size of the county and several

different sites offering family literacy programs utilizing

different methods. A total of 93 surveys were used as the

sample which represents 77.5% of the target population.

As indicated in Chapter 3, a weakness of the study was

that all program data was self reported by the programs. As

responses were entered into the data base, they were

evaluated for correctness. E-mails were sent to a few programs to clarify some responses.

Descriptive Statistics

Descriptive statistics for the study appear in Tables one through four. Of the 93 programs that returned useable surveys, 57 reported that the family literacy program served the adult basic education student, two reported serving an English as a second language population, and 34 reported a student population consisting of members of both of these populations. The majority of the programs ($N = 90$) indicated that the open enrollment/open exit enrollment procedures were used. Only two programs indicated managed enrollment. One program did not include the information. Descriptive statistics for the variables are described in the following tables.

Dependent Variables

The two dependent variables were the percentage of the target population served by each program and the goal attainment of those students enrolled in the programs. The data for these two variables were obtained from statistical information placed on the Kentucky Adult Education website http://adulted.state.ky.us under county profiles. Information was available for all counties with the exception of one. This information is presented in Table 1.

Table 1

Descriptive Statistics for Dependent Variables

Variable	N	Mean	SD	Range
Recruitment of Target population	92	.0050425	.00327147	.00022-.01726
Goal attainment of Target population	92	11.5543	14.20986	.00-85.00

Note. N = number of cases, Mean = average recruitment rate of programs, SD = Standard Deviation, Range = the spread of the variables entered.

Recruitment was the percentage served of the target population as reported by the Kentucky Adult Literacy Survey. Goal attainment was the number of students who progressed beyond their enrollment level or obtained a GED.

Independent variables

Information for the independent variables came from two sources: (a) 2000 Census data, and (b) the survey sent to each family literacy program. The poverty rate for each county came from the Census data. The poverty rate was

provided for 93 counties and ranged from 5.5% to 36.9% per

county (M = 16.1538, SD = 6.29086).

The independent variables consisted of county

demographics, operational characteristics, and staff

characteristics. Data provided for these operational and

staffing variables were provided by the survey distributed

to each family literacy program. Operational data included:

(a) hours per week of expected attendance, (b) time of day

classes were offered, (c) age of child served by the

program, (d) type of instruction offered, (e) who makes the

instructional decisions, and (f) material incentive

offered. Staffing variables included:(a) The number of

female and male staff members, (b) the number of full and

part time staff members, and (c) the distribution of

teachers based upon the level of formal education.

Descriptive data for these variables are detailed in Tables

2 and 3. Table 2 describes those variables, other than the

poverty rate, used for the analysis on recruitment of

target population.

Table 2

Descriptive Statistics for Recruitment Variables

Variable	N	%
Hours per week expected attendance		
0-5	63	70.0
6-10	13	14.4
11-15	6	6.7
16-20	5	5.6
20 or more	3	3.3
Time of Day classes were offered		
One time period	29	31.5
Two time periods	32	34.8
Three time periods	31	33.7
Morning		
Yes	67	72.8
No	25	27.2
Afternoon		
Yes	52	56.5
No	40	43.5
Evening		
Yes	67	72.2
No	25	27.2
Age of child served		
One age group	2	2.2
Two age groups	4	4.3
Three age groups	16	17.2
Four age groups	33	35.5
Five age groups	38	40.9
Infant to 2		
Yes	67	72.0
No	26	28.0
3-4		
Yes	88	94.6
No	5	5.4
5-8		
Yes	89	95.7
No	4	4.3
9-13		
Yes	88	94.6
No	4	4.3

Variable	N	%
Other-beyond 14		
Yes	48	53.9
No	41	46.1
Incentives		
Yes	48	51.6
No	45	48.4

Table 3 describes those variables, other than poverty rate, used for the analysis on goal attainment of target population. Data for these tables came from descriptive statistics for the regression analysis and frequency analysis of the different components.

Table 3

Descriptive Statistics for Goal Attainment Variables

Variable	N	%
Who makes Instructional Decisions		
Instructor		
Always		
Yes	30	32.3
Not Marked	63	67.7
Student Selects Part of Time		
Yes	78	83.9
Not marked	15	16.1
Type of Instruction		
Individualized		
Yes	85	91.4
Not marked	8	8.6
Group		
Yes	77	82.8
Not marked	16	17.2

Variable	N	%
Home Visitation		
Yes	39	41.9
Not marked	54	58.1
Full Time/Part Time Staff		
Full time		
Yes	80	86.0
No	13	14.0
Part time		
Yes	54	58.7
No	38	41.3
Educational Attainment Level of Staff		
High school diploma/GED		
Yes	39	41.9
No	54	58.1
Associates		
Yes	22	23.7
No	71	76.3
Bachelors		
Yes	67	72
No	26	28
Masters		
Yes	37	39.8
No	56	60.2
Above Masters		
Yes	28	29.3
No	65	28.0

Descriptive Statistics for Variables for Pearson

Correlations

Three Pearson correlations were conducted, Table 4 details the descriptive statistics for the variables used in these correlations.

Table 4

Variable Descriptive Statistics for Pearson Correlations

Variable	N	%	Mean	Range
Total Student Enrollment	90		33.78	1-263
Number of Male Students	90		5.2	0-46
Male Staff members				
Number of programs with 0	69	74.2		
Number of programs with 1	20	21.5		
Number of programs with 2	2	2.2		
Number of programs with 3	1	1.1		
Number of programs with 4	1	1.1		

Note. N = number of cases, % = valid percentage, Mean =

arithmetic average, Range = the spread of the variables

entered.

Regression and Correlation Results

This quantitative study employed two correlational

methods: (a) Pearson Correlation, and (b) hierarchical

multiple regression.

The research questions were:

1. Which program characteristics best predict recruitment

of the target population?

2. Which program characteristics best predict goal

attainment rate of enrolled students?

Recruitment

A hierarchical regression analysis was performed to determine which program characteristics best predict recruitment of the target population. It is a popular method for studying the relationship between an outcome variable and several predictor, or independent, variables. It is often used with survey data, because it enables the researcher to combine many variables into one predictive equation. In addition, multiple regression helps to determine the unique role of each variable in predicting the outcome, provides a measure of the total explanatory power of the model and provides an estimate of whether a variable is a statistically significant predictor or not (SPSS, 2003).

Table 5 presents the unstandardized regression coefficients (*B*), standard errors of regression coefficients (*SEB*), the standardized regression coefficients (β), R^2, and R^2 change, for the hierarchical multiple regression used for the first analysis.

Table 5

Summary of Hierarchical Regression Analysis of Family

Literacy Program Characteristics and Recruitment

Variable	B	SEB	β	R^2	ΔR^2
Model 1	.000	.000	.154	.024	.024
Poverty Rate					
Model 2				.215	.191
Poverty Rate	.000	.000	.121		
Incentives	.000	.001	.026		
Hours per week	.000	.000	-.002		
Morning	.000	.001	.058		
Afternoon	-.002	.001	-.226		
Evening	-.002	.001	-.281		
Infant to 2	.001	.001	.073		
Ages 3-4	.002	.002	.137		
Ages 5-8	-.004	.002	-.239		
Ages 9-13	-.001	.002	-.062		
Additional ages	.000	.001	.052		

Note. B = unstandardized regression coefficient, SEB =
standard error of regression coefficient, β = standardized
regression coefficients, R^2 = Multiple correlation squared,
and ΔR^2 = change in R^2

The first step was to identify the variable to predict the ability of the programs to recruit members of the target audience. A hierarchical multiple regression method was used so that any effect that the poverty level of the county would have on the results of the analysis might be controlled.

In Model 1, poverty level of the individual counties was entered into the equation. The R^2 value for Step 1 was .024, which indicated that approximately 2.4 percent of the variation was explained by the poverty level of the county. This was not statistically significant using .05 as the criterion of significance.

In Model 2 the following variables were entered into the procedure: (a) the use of incentives, (b) hours per week of expected attendance, (c) the periods of the day that services were offered, and (d) the ages of the children that were served in the program were entered. These variables were entered into the equation at the same time, which allows for the identification of the variable that might have the most effect on recruitment. Again there was no significant findings with R^2 = .215 indicating that 21.5 % of the variation is due to poverty rate and the additional variables that were entered into the equation.

The ANOVA performed testing each model supported the conclusion neither of the models was significant at the .05 level (Model 1, p = .159; and Model 2, p = .067).

While neither of the models was significant, the author examined the regression coefficients of the individual variables to explain possible predictors of recruitment of the target audience. Two variables had significant coefficients. They were evening offerings (with p = .017) and programs aimed at the 5-8 age level of the children (with p = .048). It should be emphasized that these variables constitute factors that might be examined in future research. Following the advice of Cohen, Cohen, West, and Aiken (2003), these two variables are not being declared significant predictors in the current study.

There was a positive skewness of the dependent variable data in the original analysis. Due to this skewness a logarithmic transformation of the dependent variable was made. There was no change in the results. Data are displayed in Table 6.

Table 6

Summary of Recruitment Regression Analysis with the

Variable Recruitment Logarithmically Transformed

Regression analysis	B	SEB	β	R^2	ΔR^2	p
Model 1				.023	.023	.165
Poverty Rate	.280	.200	.152	.164		
Model 2					.141	.240
Poverty Rate	.246	.211	.134			
Incentive	.015	.071	.026			
Hours per week	.012	.031	.044			
Morning	-.003	.089	-.004			
Afternoon	-.098	.072	-.165			
Evening	-.191	.077	-.292			
Infant to 2	.005	.083	.008			
3-4	.100	.166	.080			
5-8	-.231	.170	-.166			
9-13	-.102	.162	-.074			
other	.053	.068	.090			

Note. B = unstandardized regression coefficients, SEB =

standard errors of regression coefficients, β = standardized

160

regression coefficieints, R^2 = Multiple correlation squared,

and ΔR^2 = change in R^2, p = probability of significance.

Gall, Borg, and Gall (1996) recommend the use of one

variable per 15 subjects in multiple regression. To reduce

the number of variables and to further explore the data the

five variables addressing age of the child were recoded

into one variable which indicated how many age categories

were being served in the program. Also the three periods of

instruction offered during the day were recoded to one

variable indicating how many time periods were being

offered thus, the analysis was conducted with five

variables: poverty level, number of age levels of the

child, the time periods in the day classes were offered,

the use of incentives and the required hours per week of

attendance. The summary of the regression analysis is in

table 7.

Table 7

Summary of Recruitment Regression Analysis with Recoded

Variables

Regression analysis	B	SEB	β	R^2	ΔR^2	p
Recoded Regression Analysis						
Model 1				.026	.026	.131
Poverty	.000	.000	.161			
Model 2				.108	.082	.087
Poverty	.000	.000	.177			
Incentives	-.001	.001	-.078			
Hours per week	.000	.000	.051			
Time of Day	-.001	.000	-.300			
Age of Kids	.000	.000	-.202			

Again the results were not significant. The statistics for Model 1 were R^2 = .026 (p = .131). Model 2 results were R^2 =.108 (p = .087). When exploring the independent variables, the time of day was significant (p = .008) with B = -.001 indicating that those programs that offered fewer time periods for instruction did not have an adverse effect on recruitment.

Goal Attainment

A hierarchical regression analysis was performed to determine which program characteristics best predicted the goal attainment of the target population. Table 8 presents the unstandardized regression coefficients (*B*), standard errors of regression coefficients (*SEB*), the standardized regression coefficients (β), R^2, and R^2 change, for this hierarchical multiple regression analysis.

Table 8

Summary of Hierarchical Regression Analysis of Family Literacy Program Characteristics and Goal Attainment

Variable	B	SEB	β	R^2	ΔR^2
Model 1				.001	.001
Poverty Rate	.070	.245	.030		
Model 2				.114	.113
Poverty Rate	.017	.250	.007		
Instructor makes decisions	-1.154	3.694	-.037		
Student selects part of the time	4.349	4.885	.108		
Individualized instruction	7.751	5.502	.155		
Group instruction	9.467	4.079	.249		
Home visitation	1.890	3.116	.066		

Variable	B	SEB	β	R^2	ΔR^2
Ratio of Full time staff	5.701	4.483	.144		
Educational Attainment of Staff	2.304	5.230	.047		

The first model used the poverty level of the county, as reported by the 2000 census data, as the control variable. In Model 2 the following variables were entered into the procedure: (a) group instruction, (b) status of employment of staff members, (c) type of instruction offered and (d) who chose the subject matter of instruction. These variables were entered into the equation at the same time, which allows for the identification of the variables that might have the most effect on goal attainment of the students.

The R^2 value for Model 1 is .001 which indicates that less than .1 percent of the variation is explained by the poverty level of the county. For Model 2, in which the rest of the predicators were added, .114 percent of the variation was explained by the predicators. This reflects a change of 0.113 between the two models. This value was not significant.

The ANOVA supports this conclusion as neither of the models is significant at the $p < .05$ level. Model 1 had $p = .775$ and Model 2 $p = .256$.

Neither of the models was significant. The researcher examined individual variables to find those related to goal attainment of the enrolled students. There was only one variable that was significant, which was the use of group instruction (p = .023). This is considered a variable to explore in future research.

Again, as in the hierarchical multiple regression for recruitment there was a positive skewness in the variable goal attainment. Due to this skewness a logarithmic transformation of the dependent variable data was performed. As shown in Table 9, there was not a significant prediction for the control variables (Model 1) or for the control variable plus the study variables (Model 2).

Table 9

Summary of Goal Attainment Regression Analysis with the

Variable Goal Attainment Logarithmically Transformed

Regression analysis	R^2	ΔR^2	p
Recoded Regression Analysis			
Model 1	.001	.001	.718
Model 2	.136	.135	.136

Pearson Correlations

Traditionally family literacy teachers have been female. Because of the expansion of family literacy into every county, Kentucky has seen increased employment of male teachers. To determine if the presence of male teachers had an impact on recruitment of students in general and male student in particular, Pearson correlations were conducted. In the first correlation (*n* = 92), involving number of male teachers and percentage of target population served, there was not a significant correlation: *r* = −.193, *p* = .060.

In the second correlation (*n* = 90), number of male teachers and number of male students enrolled in the family literacy programs were not significantly correlated, *r* =

.106 and *p* = .32. While this is a positive correlation, it was not strong enough to be considered statistically significant.

An additional correlation was conducted to determine if there was a relationship between the number of hours that programs expected students to attend per week and goal attainment of those students (*n* = 89). This correlation was significant with *r* = .406 and *p* = .000.

CHAPTER V

DISCUSSION, IMPLICATIONS AND CONCLUSIONS

This study was designed to examine the relationship between selected characteristics of family literacy programs and the recruitment level and goal attainment of adult students enrolled in the programs. The major sections included in this chapter are: a summary of the research problem, methodology, interpretations of each analysis, limitations of the study, implication of the findings and recommendations for future research.

Background

As governments become increasingly concerned about economic vitality they view adult education and literacy systems as one important method of improving the workforce quickly.

Historically, recruitment of those adults in need of adult education services has been a problem. Even if programs are able to recruit members of the target population, retention of those students becomes difficult. Various reasons, including work and family

responsibilities, prevent students from attending classes to the extent needed to reach their goals. Family literacy programs were developed to meet the educational needs of adults as well as children. Different models of family literacy have been explored. As these models were developed, their outcomes were examined with favorable results (Boudreaux, 1999; Darling & Hayes, 1989; Farrer, 2000; Neuman, Caperelli, & Kee, 1998; Paratore, 1992; Seaman, 1992; Seaman & Yoo, 2001; St Pierre, 1995; Yaffe & Williams, 1998).

While initial studies reported positive aspects of the programs, current economic and social conditions have changed. Parents in many of the previous studies were identified as being welfare recipients who attended to retain benefits. With welfare reform legislation, this is no longer the case (Sparks, 2001). Parents must now work and can no longer attend all day as described in some of the studies reviewed. Another issue – this one not reliant on time - is the need for programs to provide educational services to fathers.

The Current Study

In 2001 the Governor of Kentucky challenged the state to establish a family literacy program in every county of Kentucky. As Simmons, St. John, & Mendez (2002) identified

169

in their study, there are issues that need to be addressed concerning this endeavor. One of these is the absence of a prescriptive model. This study attempted to address this need.

There were two major research questions for this study:

1. Which program characteristics best predict recruitment of the target population?

2. Which program characteristics best predict goal attainment rate of enrolled students?

Methodology and Procedures

The study was an exploratory study to determine which family literacy program characteristics had the strongest effect on recruitment of participants and goal attainment of those participants. It was a quantitative study utilizing 2002-03 data submitted by family literacy programs. Recruitment and goal attainment of adult students are the dependent variables. Data for the dependent variables were obtained from enrollment and separation data that KYAE family literacy programs are required to submit through the National Reporting System (NRS). These data were one of the components used for evaluation of programs by KYAE and it was expected that the data would be accurate.

Data on the independent variables were collected from census data, the Kentucky Literacy Survey, and a questionnaire sent to the 120 family literacy programs. (See Appendix C) The questionnaire was developed using the guidelines suggested by Gall, Borg and Gall (1996). The instrument was pre-tested with a panel of subject matter experts to determine if the population would interpret the questions accurately. The Kentucky Institute for Family Literacy in Louisville Kentucky provided this assistance. Several questions were changed and this panel made additional suggestions. The questionnaire was adjusted to meet these suggestions and then distributed to a group of directors of adult education programs to verify that the questions were being interpreted correctly. The outcome produced an instrument of 15 questions, which consisted of closed and open form questions. If the respondent failed to return the questionnaire a telephone call was made or an e-mail sent in an attempt to gather the necessary data.

Each county was identified on the questionnaire, as the answers given were linked to the data attained from KYAE. This instrument was sent to the 120 family literacy programs sponsored by Kentucky Adult Education (KYAE) during the 2002-2003 fiscal year. KYAE stipulates that one family be served per each $1000 granted. Limiting the

sample to these specific programs equalized the programs in services provided to the families. Also, the only stipulation required for enrollment in these programs was that the adult lack a high school diploma or be functioning at lower levels of literacy. The questionnaire was mailed directly to the program administrators who were asked to complete the questionnaire and return it directly to the researcher.

The responses were encoded and entered into an SPSS database. The methodology used to evaluate the responses included two methods of correlation statistics: (a) Pearson Correlation and (b) hierarchical multiple regression. Pearson correlation was selected to determine the relationship between the gender of staff and gender of students, and between the gender of staff and total student population. Hierarchical multiple regressions was used to control the effect that poverty level of the county might have on the analyses. These designs were selected because of the intent to determine which independent variables were the best predictors for the dependent variable. The weakness of the designs was that all questionnaire data were self-reported by the family literacy programs.

Variables

   Dependent variables.

   The NRS includes a set of student measures to allow
assessment of the impact of adult education instruction. As
families were enrolled in each program the adults were
assessed and assigned an entry level. These levels are
detailed in Appendix B.

   After a determined amount of instruction or time
period, each program conducted follow-up assessment of
students in the same skill areas and used the functioning
level descriptors to determine whether the student advanced
one or more levels or progressed within the same level.
(Measures and Methods for the National Reporting System for
Adult Education, 2001) Two variables were obtained from
these data were:

   1. Recruitment – (Number enrolled in the program) This
      was the percentage of each county's target population
      enrolled in the program. Because counties differ in
      population numbers, using the percentage of each
      county's target population identified by the Kentucky
      Literacy Survey (Jennings & Whitler, 1997) provided an
      equal basis for comparison. The number enrolled was
      obtained through NRS data collected by KYAE.

2. Goal attainment – This was number of participants who obtain a GED or advance beyond their basic skill functioning level at the time of enrollment.

   Independent variables.

The independent variables consisted of demographic descriptors, program characteristics and instructional staff characteristics. Simmons et al., (2002), indicated that factors such as poverty level have an effect on enrollment numbers. Poverty level was used as a control variable and was obtained from the 2000 Census data.

Data for a number of variables were collected through the questionnaire sent to each of the family literacy program managers. General results for these variables were as follows. Programs were about evenly divided as to whether tangible incentives were used as enrollment incentives. The great majority of programs (84%) required students to attend in the range of 0-5 hours or 6-10 hours per week. Most programs had sessions in the morning and evening. Regarding curriculum selection, most programs included some student involvement. Both group instruction and individualized instruction were used. Almost all programs (more than 90%) had programs aimed at children ranging from age 3-13.

The survey also gathered information on staffing characteristics. The general characteristics of staff were these. Over 85% of programs had full time staff and almost 60% had part time staff. About 25% of programs had at least one male staff member. Only three programs reported having no staff with at least a bachelor's degree. The majority of programs reported having staff with a bachelor's degree, and over 50% reported having staff with either a master's degree or more hours than a master's degree.

Data Analysis

There were four planned data analyses. Two hierarchical multiple regression analyses and two Pearson Correlations. A hierarchical multiple regression analysis was developed for each dependent variable. Since the purpose of this study was to determine which program and staff characteristics contribute to the recruitment and goal attainment of students, it was important to control the county demographic data that might have had an impact on these goals. By using the poverty level of each county as a control variable the impact that economic conditions have on these goals was controlled.

Hierarchical Multiple Regression.

Research Question 1

Which program characteristics best predict recruitment of

the target population?

In this analysis the dependent variable was

recruitment of target population, the independent variables

were: (a) poverty level of the county, (b) the use of

incentives, (c) the number of hours of required attendance,

(d) the time of day the classes were offered, and (e) the

ages of the children served in the program. In this

analysis there was no significant relationship between

recruitment of the target population and the independent

variables. No one variable had a large effect. Poverty

level of the county explained only 2.4 percent of the

variation. There was no significant findings among the

other variables.

Research Question 2

Which program characteristics predict the best retention

and goal attainment rate of enrolled students?

In this analysis the dependent variable was goal

attainment of the students and the independent variables

were: (a) poverty level of the county, (b) student

participation in curriculum, (c) type of instruction

received, (d) employment status of the staff, and (e)

educational attainment level of the staff. Once again there

was no significant relationship between goal attainment of the students and the independent variables.

The lack of significance on student participation in curriculum was also reflected by Purcell-Gates et al. (2000), who addressed student participation in curriculum selection and reported the same results. Fitzgerald and Young (1997) reported that the two factors: (a) full time staff, and (b) individualized curriculum seemed to have influence on improving literacy of ABE students. However, this was not reflected in the present study. These results show no statistically significant effect of employment status of staff members or student selection of instructional subject matter.

The only variable that produced any significance was that of group instruction with a p = .023. This is reflective of research conducted by Quigley (2000) who used a treatment design consisting of three approaches of basic adult education instruction: (a) small group, (b) teacher/counselor/support group, and (c) tutoring. The small group approach proved more promising then the team approach. Sixty percent of those students assigned to the small group approach completed three months or more. Only 40% of those in the team teacher/counselor support group completed three months or more. The tutoring approach had a

completion rate of 20% for three months or more. Each of the three treatment groups proved more successful than providing no treatment at all—meaning each treatment group had better retention success than the control group in which no member was retained for three months.

Millar and So (1998) also found group instruction encouraged persistence in students as they found that students that participate in a cohort group had higher persistence rates than those that did not participate. Yaffe and Williams (1998) in a study pertaining to family literacy also found that one reason the students participated was the socialization and support provided by fellow students and staff. Neuman et al. (1998) also found that the development of social networks was especially important in retention of students in family literacy programs.

Pearson Correlations.

The third analysis addressed the relationship between the presence of male staff members and the number of male students enrolled in the family literacy programs. There was not a significant correlation between the two variables.

The fourth analysis examined the relationship between number of male staff members and the number of students

enrolled in the program. Again there was no statistical significance.

Because data were available, an additional Pearson correlation was conducted which addressed the relationship between the hours per week of instruction that students were expected to attend and goal attainment of the students in that program. This was a positive correlation with p = .000.

<div align="center">Limitation of the study</div>

There were several issues that were encountered when processing the data collected for this study. This information should be considered when interpreting the findings. Each county had a family literacy program and an adult basic education program, which was operated by the same fiscal agent. In several instances it was apparent that these two programs were so merged together it was difficult for the students and staff to determine which students were enrolled in the family literacy program and which students were enrolled in the adult education program.

One question included at the suggestion of the members of the Kentucky Family Literacy Institute during the trial of the questionnaire was "How do you determine whether the adult is enrolled in family literacy or in adult

education?" Responses to this question give insight to the lack of identification of the family literacy program. While many programs counseled with the students and informed them of the need to participate in all four components of family literacy: (a) Adult Education (b) Child Education, (c) Parenting, (d) Parent and child time; it was apparent that some programs did not make this effort based on responses made to this particular question. The following responses to the above question demonstrate this. "Individual/parent enrolls and participates in 12 hours in adult education program before being entered in family literacy roster/program." "They are enrolled in both if they have children under the age of 18." "If the adult has children in pre-school, Head Start, elementary school, parent is in family literacy." "If they had a child between ages of 2 & 15 years they were enrolled in family literacy" "If a student has a child under the age of 18 they are enrolled in family literacy if not they are enrolled in adult education."

These responses indicated that in some counties there was a not a definitive family literacy program, which was the only educational program, attended by the adults. In these situations it is possible that the family literacy program was one in which the adult and child components

were conducted separately and in isolation of each other with parenting and parent and child time (PACT) activities scheduled at periodic, irregular, intervals. This would suggest that information provided for some of the questions may not be indicative of just the family literacy program, but rather the combined adult education and family literacy program. Simmons et al. (2002) previously reported a concern that the adult education directors might not be prepared to serve as family literacy program coordinators. The above responses seem to support this concern. In addition, due to the mandate that each adult education program must implement a family literacy program, it is possible that some of the directors were not truly committed to the development of a family literacy program and created a program that met the minimum qualifications but was not an definitive program.

This lack of differentiation would have an effect on the analysis of this question. Additional concerns for each of the research questions are addressed below.

Research question 1 dealt with recruitment of students and how this was impacted by the following dependent variables: (a) poverty level, (b) incentives, (c) the number of hours of required attendance, (d) time of day classes were offered, and (e) ages of children served in

the programs with poverty level of the county used as the control variable.

The first issue with this question is that of the independent variable recruitment. The data used for the analysis was the number enrolled provided by KYAE. However, the questionnaire, completed by the directors, asked for the number of male and female students enrolled in the program. These two numbers when added together should have equaled the total number enrolled as reported by KYAE. In 43 instances these numbers did not agree. When contacted for a possible explanation many of the program directors did not know why the numbers did not agree. This is an indication that the data used for the study and reported by KYAE may not be accurate, which would alter the results of the study.

If the number provided by the programs was used instead of the number provided by KYAE the results of the analysis might be different. To determine which was the accurate number would require an onsite visit to each program to verify student record information.

Additionally, the questionnaire stipulated that the information given should only apply to the state KYAE Family Literacy programs and not Even Start which some counties had in addition to the KYAE program. The presence

of two separate family literacy funding sources may have impacted the result if the two sources had been blended into one program.

The second variable that is questionable is that of "incentives". A different method of gathering the information for the variable of "incentives" could produce additional information that would be helpful for programs and might produce a different outcome for the study. The questionnaire asked if incentives were provided to the students. While information was requested on the type of incentive offered, this variable was not divided into categories or weighted in any way. It was entered as a 'yes' the program did offer an incentive or 'no' the program did not offer an incentive. Because of this process those programs that responded yes to the use of incentives and offered items like coupons for fast food restaurants, or books and school supplies for children, carried just as much weight as programs that offered an incentive such as a used computer. If the question that addressed the use of incentives had been divided into categories or weighted in some way, the analysis might have produced different results. For future research studies it is suggested that the questionnaire give categories for this variable so that

this information can be weighted in a way that will provide additional information for the variable.

Time of Day that classes were offered was also a variable that raised questions about the validity of the data used for the study. The introductory information for the questionnaire stipulated that information provided should apply only to the family literacy program. However, the frequency of the times that classes were offered, combined with funding level is an indication that information given on some questionnaires did not apply to just family literacy activities but to the adult education classes in general. This is an indication of a possible problem with the information provided on the questionnaire, which is the lack of separation of data that applied only to the family literacy programs from that information that applied to the total adult education program in the county.

The question concerning the age of the child served in the program is also an indication of the lack of a definitive program. Thirty-eight programs indicated that they serve children between the ages of 0-18 years of age. Thirty-three programs indicated that they served four of the five age groups. This is a total of 71 programs, out of the 94, that indicated they were serving children at ages that covered a span of at least 15 years. While these

184

children might be enrolled in public school and their

parents are attending adult education classes, it is

doubtful that the smaller programs in the state, funded at

the lower amounts, were able to provide appropriate parent

and child activities often enough and during the same time

period for the program to be considered a definitive model

of family literacy.

An additional factor to consider when looking at the

recruitment variable is that several programs indicated

their participants in family literacy were incarcerated in

correctional facilities and were allowed additional time

out of their cells to be with their children if they

participated in the program. This strong incentive combined

with the "captive" audience would provide an unequal

comparison to the other family literacy programs.

Research question 2 involved the dependent variable of

goal attainment of the enrolled students and the

independent variables of: (a) poverty level of the county,

(b) student participation in curriculum, (c) type of

instruction received, (d) employment status of the staff,

and (e) educational attainment level of the staff.

As with research question 1, the respondents' answers

on several questionnaires addressing the independent

variables led the researcher to question whether the

responses referred only to staff of the family literacy program or the total adult education program in general. There were three questions that dealt with staff characteristics; gender, employment status and educational attainment level. Each question asked the respondent to indicate the number of family literacy staff members that fit each description. The number on each of these three questions should have agreed but on 16 questionnaires they did not. This again is an indication that the responses may have included the total adult education program and not a definitive family literacy program so the responses to the questions may not be valid.

This same data would also impact the results of the Pearson correlations that addressed the male staff and male student correlation and the male staff and total student correlation. If the number given for the male staff members is indicative of the total adult education program and not just family literacy, this would alter the results of the analysis. Also of importance is that of the 90 programs that reported the number of males and females enrolled only 13 programs reported having no male students. Since research indicates that the enrollment of male students in family literacy programs is unusual, this could also be a supporting factor to indicate that the family literacy

program was so blended with the adult basic program in the county that it was difficult to tell which students were enrolled in the family literacy program.

Implication of the findings

After examining the answers given on the questionnaire and examining the analysis for the research questions the data indicates that many of the family literacy programs in the state are not definitive programs. While the four components of family literacy: (a) adult education, (b) child education, (c) parenting, and (d) parent and child time activities, were mandated by KYAE, each county was allowed to design the program utilizing existing resources which resulted in a number of programs that operated in different ways. The Goodling Institute proposed that evaluation studies of family literacy programs were not finding significant effects because they included low quality programs that wash out the effects of the high quality ones (Askov, 2001). Since this study encompassed all of the family literacy programs in Kentucky without consideration for strength of the programs the lack of significance for the variables may in part be due to this inclusion of all programs. However, for the purpose of this study, this all-encompassing inclusion was necessary for exploring the recruitment of the programs.

Due to the question about the validity of the information given for the variables, the results of the analysis must be carefully considered when determining the implications of the findings. While neither of the hierarchical multiple regressions resulted in significant independent variables, this study can provide valuable descriptive information of the family literacy programs in Kentucky.

The strongest finding of this study was not provided by the quantitative analysis. It was provided by the responses to the questionnaire that lead the researcher to conclude that many programs were not providing the intensity of family literacy services as first expected. Kentucky has had some form of family literacy since the 1980's (Darling & Hayes, 1989). When family literacy began, the programs were usually full day programs in which the adults and children attended school together. With welfare reform the way services were offered had to change. The mandate to implement family literacy in every county stimulated the creation of multiple ways in which programs have provided the four components of family literacy. It appears that in several programs the parents and children are attending separate educational programs and are being brought together once a month or perhaps four or five times

a year for parent and child time activity. When family literacy programs first began in the 1970's this type of activity occurred weekly if not daily. Providing these activities as infrequently as once a month or seasonally would not be considered a definitive or stand alone family literacy program.

There were data gathered by the questionnaire that was not involved in the statistical analysis. Such information included how many times during the evening did the program plan activities, the use of incentives, and the training background of the staff. These additional data led the researcher to speculate that some directors chose to design their family literacy program in such a way that the working parent was able to attend class and have educational activities for their children at the same time and same location which could be considered a definitive program. While this class may not have occurred daily, they did seem to occur weekly.

The chosen method of analysis in this study was not extensive enough to really capture the many different ways that family literacy has been implemented in the Commonwealth of Kentucky. The lack of significance in the indicators in the two multiple regression analysis presents the following question: Are these program truly family

189

literacy programs or slightly modified or enhanced adult
education program?

In order to determine if the program is truly serving
and affecting the entire family it will be necessary to
look at indicators other than goal attainment of the
adults. Currently KYAE is gathering data on two different
activities that might give a better indication of the
intensity of the family literacy program. The first is the
parents' support of children's reading. The second is the
number of planned interactive literacy activities in which
both the parent and child participate. Program personnel
are now being asked to document how many participants
participate in four or more of these activities during the
year. These two indicators could give additional insight
into the strength of the family literacy program.

A closer look at the two multiple regressions analyses
will provide background information for program managers
when trying to develop a program. In the analysis on
recruitment, there were no significant predictions when
using the independent variables hours per week of expected
attendance, the number of time periods or a particular time
period during the day, the age of the children served and
the use of incentives. While this does not give the program
manager a clear model to follow when designing the program,

it does allow the manager additional freedom knowing that these particular characteristics do not seem to have a large effect on recruitment of the target audience. This result is an indication that the recruitment of the target audience depends on factors that are not represented in this study.

In the analysis of goal attainment, there were no significant predictions when using the independent variables of: (a) who makes the instructional decisions, (b) the type of instruction, (c) the employment status of the staff, or (d) the educational attainment of the staff. Again, this is an indication that out of these particular variables there is no one variable that seemed to have an effect on goal attainment of the students.

Most of the programs indicated that the teacher made instructional decisions with some input from the students. This is reflective of prior research as described by Elish-Piper (2000) who found that although most of the programs sought to provide responsive adult literacy instruction within family literacy programs; their definitions of responsive literacy instruction varied greatly and in general the instructors determined the educational program. Elish-Piper's recommendation was for programs to become more responsive to the wants and needs of the students.

The analyses examining the effect of male teachers on recruitment of all students and male students in particular, also failed to show significance. Again, the possibility that information gathered for male instructors was not family literacy program specific would have an effect on these results. As is, this analysis indicated that the presence of a male teacher is not necessary to recruit the male participant into the family literacy programs. However, those programs serving the incarcerated population could possibly have altered the results of the study. This information should lead all programs to become more proactive in recruiting the male parent into the family literacy programs.

The additional correlation that explored the relationship between the number of hours the students are expected to attend and goal attainment did show a significant relationship. This can be related to the results that St Pierre (1995) reported in his national evaluation of Even Start programs. St. Pierre found that Even Start adults who spent large amounts of time in adult education had greater gains than adults who spent small amounts of time in adult education. This should encourage the design of programs where students are required to

attend more hours per week than the 0-5 hours reported by 63 out of the 93 programs.

Policymakers in the Commonwealth of Kentucky, and other states, can find the results of this study useful when implementing family literacy programs or any educational model. When Kentucky Adult Education mandated that family literacy programs be offered in every county there were several unforeseen results including the lack of strong definitive models and questionable record keeping. The following are suggestions that address these results.

First, the programs were given a great deal of latitude in providing family literacy programs. The only stipulation given was that the four components of family literacy: (a) adult education, (b) child education, (c) parenting education, (d) and parent and child time should be offered. At the time of implementation no recommendations were given of when or how often these four components should occur. Administrators were allowed to develop programs as they desired. The result of this freedom was the lack of strong definitive family literacy programs. The development of several proven family literacy models, from which administrators could choose, would help address this issue in future development of family literacy programs.

Second, additional training of administrators before mandatory implementation of the family literacy program might have resulted in stronger definitive models of family literacy.

Third, mandatory implementation of programs may need to be reconsidered. If administrators, who are already in place, do not value the program, or see the need for it, then these resources might be better used in other programs.

Fourth, student enrollment numbers reported by programs often did not agree with the numbers reported by the state. Future policy should address these differences with additional training and monitoring of programs.

Future research

Because this study was dedicated to exploring the results of the family literacy program on the adults in the family, the recommendations for future research will address the adult component.

Because there were questions about the results of the survey this researcher does not recommend the solitary use of a mail survey for future research. Although the return rate for this survey was relatively high, there were questions about the validity of the answers given. Future researchers might want to use mail surveys with a follow up

telephone interview, as described by Elish-Piper (2000), or use a site visit as described by DeBruin-Parecki and Paris (1997) where the interviewer would have the opportunity to ask clarifying questions.

Since there was a possible identified problem with the existing data provided by KYAE. This study could be replicated with the above modification and the suggestions below:

1. Eliminate the counties that also had Even Start programs operated by the same entity.

2. Select the counties that had definitive family literacy programs.

3. Eliminate those programs serving the incarcerated population.

4. Weight the incentive variable.

5. Use data from subsequent years.

6. Use the two indicators that document family literacy activities.

One question identified for research by Askov (2001) is whether or not the same benefits from integrated family literacy programs could be derived from separate programs for children and adults. There is currently an adult education program and family literacy program in each county in Kentucky. Both programs are operated by the same

entity. One possible study could be to identify those counties that had strong and definitive family literacy programs and compare the retention rate and goal attainment between the family literacy program and the basic adult education program in that county. This might possibly allow for exploration of whether or not family literacy programs support attendance for longer periods of time than the traditional adult basic education program.

Quigley (2000), and Millar and So (1998) found that group instruction were ways to retain students for a longer period of time. Yaffe and Williams (1998) determined that one of the reasons that women who participated in family literacy did so, was for the socialization and support of others in their same situation. One possible factor to explore would be whether the definitive family literacy programs have a better retention rate then those that are not definitive due to the socialization of students with others in their same situation.

As mentioned above, the lack of significance with the chosen independent variables in the multiple regressions is an indication that there are other factors that should be explored when trying to determine what will result in better recruitment of the target population and greater goal attainment of that population.

When examining the effect of the independent variables three variables had significant coefficients that would warrant additional research. Offering of evening classes, and inclusion of the 5-8 age level of the children, might be related to recruitment. The use of group instruction might be related to goal attainment. These three variables are recommended for examination in future research.

REFERENCES

Al-Barwani, T., & Kelly, E. F. (1985). Factors influencing the recruitment and retention of literacy learners in Oman. *International Review of Education, 31,* 145-54.

Amstutz, D. D. (2000). Family literacy implications for public school practice. *Education & Urban Society, 32,* 207-220.

Amstutz, D. D., & Sheared, V. (2000). The crisis in adult basic education. *Education & Urban Society, 32*, 155-166.

Askov, E. N. (2001, October). *Family Literacy: A research agenda to build the future* (Pennsylvania State University, Goodling Institute for Research in family literacy). Retrieved May 5, 2004, from http://www.ed.psu.edu/goodlinginstitute/pdf_files/research.pdf.

Auerbach, E. R. (1989). Toward a social-contextual approach to family literacy. *Harvard Educational Review, 59*(2), 165-81.

Balmuth, M. (1988/April). Recruitment and retention in

   adult basic education: What does the research say?

   Journal of Reading, 31, 620-23.

Bean, R. M., Partanen, J., Wright, F., & Aaronson, J.

   (1989). Attrition in urban basic literacy programs and

   strategies to increase retention. *Adult Literacy and*

   Basic Education, 13, 146-154.

Beder, H. (1990). Reasons for nonparticipation in adult

   basic education. *Adult Education Quarterly, 40,* 207-

   218

Beder, H. (1999). *The outcomes and impact of adult literacy*

   education in the United States (NCSALL Report No. 6)

   Cambridge, MA: National Center for the Study of Adult

   Learning and Literacy.

Beder, H., & Valentine, T. (1990). Motivational profiles of

   adult basic education students. *Adult Education*

   Quarterly, 40(2), 78-94.

Belzer, A. (1998, March). Stopping out, not dropping out.

   Focus on Basics, 2(A), 15 - 17.

Benjamin, L. A. (1993, August). *Parents' literacy and their*

   children's success in school: Recent research,

   promising practices, and research implications.

   Retrieved January 30, 2003, from U.S. Department of

Education's Publications and Products Web site:

http://www.ed.gov/pubs/OR/ResearchRpts/parlit.html.

Berkovitz, L. (1994). *Learning with East Aurora families.*
Project evaluation. Des Plaines, IL: Adult Learning
Resource Center (ERIC Reproduction Service No.
ED373187)

Bingman, M. B., Ebert, O., & Smith, M. (1999). *Changes in*
learners' lives one year after enrollment in literacy
programs: An analysis from the longitudinal study of
adult literacy participants in Tennessee. (NCSALL
Report No. 11). Cambridge, MA: Harvard Graduate School
of Education, National Center for the Study of Adult
Learning and Literacy. Retrieved July 2, 2002 from
http://www.gse.harvard.edu/~ncsall/research/report11.h
tm

Bingman, M. B., Smith C., & Stewart, K. (1998).
Practitioners speak: Contributing to a research agenda
for adult basic education (NCSALL Report No. 4).
Cambridge, MA: Harvard Graduate School of Education,
National Center for the Study of Adult Learning and
Literacy. Retrieved July 2, 2002 from
http://www.gse.harvard.edu/~ncsall/research/report4.ht
m

Boudreaux, K. (1999). *Parental Participation in a Title I Family Literacy Program: Results from a Mixed-Model Study.* Unpublished doctoral dissertation, Louisiana State University and Agricultural and Mechanical College, The Department of Educational Leadership, Research, and Counseling.

Brandt, D. (1999). Literacy learning and economic change. *Harvard Education Review, 69,* 373-393.

Britto, P. R. (2001) Family literacy environments and young children's emerging literacy skills. *Reading Research Quarterly, 36,* 346-347. Retrieved February 19, 2002, from httpa;//www.kyvl.org

Brooks, G. (1998). The effectiveness of family literacy programmes in England and Wales for parents. *Journal of Adolescent & Adult Literacy, 42*(2), 130. Retrieved April 8, 2002 from http://www.kyvl.org

Brown, B.L. (1998). *Family Literacy: Respecting Family Ways.* Columbus, OH:ERIC Clearinghouse on Adult Career and Vocational Education. (ERIC Digest No.203). Retrieved March 5, 2003 from http://ericfacility.net/ericdigests/ed423429.html

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlations analysis for*

the behavioral sciences (3rd ed.). Mahwah, NJ: Lawrence
Erlbaum Ass.

Comings, J. P., Parrella, A., & Soricone, L., (1999).
*Persistence Among Adult Basic Education Students in
Pre-GED Classes* (NCSALL Report No 12).Cambridge, MA:
Harvard Graduate School of Education, National Center
for the Study of Adult Learning and Literacy.

Darling, S. (1996, May/June). The power and role of family
literacy. *Adult learning,* 7(5), 21-22.

Darling, S., & Hayes, A. (1989). *Breaking the cycle of
illiteracy: The Kenan Family Literacy Program model.
Final report.* Louisville, KY: National Center for
Family Literacy. (ERIC Document Reproduction Service
No. ED 373187)

De Avila, M., Lednicky, D., & Pruitt, K. (1993,
September/October). Family literacy holistic
approaches to family literacy facilitate learning of
at-risk families. *Adult learning, 5*(1), 15-16.

DeBruin-Parecki, A.,& Paris, S. G. (1997, May). Family
literacy: Examining practice and issues of
effectiveness. *Journal of Adolescent & Adult Literacy,
40,* 596-606.

Dever, M. T. (2001). Issues in education family literacy
    bags: A vehicle for parent involvement and education.
    Journal of early education and family review, 8 (4), p
    17-28.

Dickinson, J. (1996). Factors affecting goal completion of
    adult basic education students in the Northeast
    Kingdom of Vermont. Unpublished master's thesis,
    Lyndon State College, Lyndonville, VT. Retrieved April
    27, 2003 from
    http://www.nald.ca/fulltext/thesis/thesis1/htm

Douglas, K. H., Valentine, T., & Cervero, R. M. (1999,
    Summer). Marketing adult literacy education:
    Administrators; perceptions of effective strategies
    for program development. *Adult Basic Education, 9,*
    104-115.

Ekstrom, R. B., Goertz, M. E., Pollack, J. M., & Rock, D.
    A. (1986). Who drops out of high school and why?
    Findings from a national study. *Teachers College
    Record, 87,* 356-373.

Elish-Piper, L. (1996/1997). Literacy and their lives: Four
    low-income families enrolled in a summer family
    literacy program. *Journal of Adolescent & Adult
    Literacy, 40,* 256.

Elish-Piper, L. (2000). An analysis of the social-contextual responsiveness of adult education in urban family literacy programs: Trends, obstacles, and solutions. *Reading Research and Instruction, 39,* 184-200.

Farrer, D. A. (2000). *Even Start Family Literacy Program's Effects for Parents: Why Do They Participate.* Unpublished doctoral dissertation, West Virginia University, College of Human Resources and Education.

Fitzgerald, N. B., & Young, M. B. (1997). The influence of persistence on literacy learning in adult education. *Adult Education Quarterly, 47*(2), 78-91.

Gadsden, V. L. (1994, Fall). Understanding family literacy: Conceptual issues facing the field. *Teachers College Record, 96*(1), 58-86.

Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research: An introduction.* White Plains, N.Y.: Longman.

Glover, R. J., Jones, M. J., Mitchell, J. P., & Okey, R. (1991, Summer). Family literacy: A formative evaluation of program outcomes. *Contemporary Education, 62,* 324-326.

Glover, R. J., & Mitchell, J. P. (1991, September). Promoting family literacy: An alternative intervention. *Journal of Instructional Psychology, 18*(3), Retrieved April 8, 2002 from http://ftviewer.epnet.com

Handel, R. D. (1999, November). The multiple meanings of family literacy. *Education and Urban Society, 32,* 127-144.

Hannon, P. (2000, February). The rhetoric and research in family literacy. *British Educational Research Journal, 26*(1). Retrieved February 19, 2002 from http://www.kyvl.org.

Hayes, A. E. (1996). *Family literacy: Directions in research and implications for practice. Longitudinal Study of Family Literacy Program Outcomes.* Wilmington: University of North Carolina. Retrieved February 18, 2002 from http://www.ed.gov/pubs/FamLit/long.html

Hubble, J. H. (2000). *Intake procedures as a factor in identifying and addressing barriers to attendance of adult education students.* Unpublished master's thesis, Southwest Texas State University.

Huck, S. W., (2000). *Reading Statistics and Research.* New York: Longman.

Jennings, E. T., & Whitler, E. T. (1997). *Adult Literacy in Kentucky.* Lexington, KY: Martin School of Public Policy and Administration, University of Kentucky.

Jensen, J., Haleman, D., Goldstein, B., & Anderman, E. (2000, May 9). *Reasonable choices. Understanding why under-educated individuals choose not to participate in adult education* (100). Retrieved January 7, 2002, from http://www.uky.edu/~jjensen/adulteducation.

Jordan, G. E., Snow, C. E., Porche, M. V(2000). Project ease: The effect of a family literacy project on kindergarten students' early literacy skills. *Reading Research Quarterly, 35,* 524-547.

Kestner, S. F. S. (1994). *A study of selected programmatic and personal factors associated with reading and math achievement scores of adult basic education students in Kentucky.* Unpublished doctoral dissertation, University of Kentucky, Lexington.

King, C. (2002, Fall). Barriers affecting GED participation among recent high school dropouts. *Adult Basic Education, 12*, 145-156.

Kohring, A. (1999) Recruitment issues and strategies for adults who are not currently participating in literacy and adult basic education (ABE) programs. University of Tennessee. Retrieved April 27, 2003 from http://cls.coe.utk.edu/lpm/manage_ins/1999mi/aaronk.html

Logan, B., Peyton, T., Read, C., McMaster, J., and Botkins, R., (2002). Family literacy: A strategy for educational improvement. *National Governors Association Center for Best Practices*. Retrieved May 3, 2003 from http://www.nga.*org*/center/divisions/1,1188,C_ISSUE_BRIEF^D_4629,00.html

Legislative Research Commission. (2000). *Adult Education and Literacy in Kentucky.* Research report 296. Frankfort, Kentucky: Kentucky.

MacLeod, F. (2000). Low attendance by fathers at family literacy events: Some tentative Explanations. *Early Child Development and Care, 161,* 107-119.

Malicky, G. V., & Norman, C. A. (1994, Spring). Participation patterns in adult literacy programs. *Adult Basic Education, 3,* 144-156. Retrieved April 17, 2002 from http://www.nald.ca

Malicky, G. V., & Norman, C. A. (1995, March). Perceptions of literacy and adult literacy programs. *The Alberta Journal of Educational Research,* XLI(1), 63-83. Retrieved April 17, 2002 from http://www.nald.ca

McGuinness, A. C., (2000). *Adult Education and Literacy in Kentucky* (Research Report No. 296). Frankfort, KY: Legislative Research Commission

Measures and methods for the national reporting system for adult education. (2001) Washington DC: Division of Adult Education and Literacy Office of Vocational and Adult Education U.S. Department of Education. Retrieved October 28, 2003 from http://cls.coe.utk.edu/pdf/finalguidelines.pdf

Merriam, S. B. & Caffarella, R. S. (1999). *Learning in adulthood: A comprehensive guide.* San Franciso, CA: Jossey-Bass Inc.

Merritt, N., Spencer, M., & Withers, L. (2002, October). Beyond the scope of the teachers: Deciding to employ a social worker. *Focus on Basics, 6*(A), 7-8.

Mikulecky, L. (1996, January). Family literacy: Parent and child interactions. In L.A. Benjamin & J. Lord (Eds.), *Family literacy: Directions in research and*

implications for Practice. Washington, D.C.:
Government Printing Office.

Millar, R., & So, J. (1998). *Learning and talking together:
Research investigating persistence and retention in
adult literacy programs*. Retrieved April 7, 2002 from
http://www.nald.ca/fulltext/journeys/cohort.htm

Morrow, L. M., Paratore, J., Gaber, D., Harrison, C., &
Tracey, D. (1993). Family literacy: Perspective and
practices. *The Reading Teacher, 47,* 194-200.

Morrow, L. M., Tracey, D. H., & Maxwell, C. M. (1995). *A
survey of family literacy in the United States*.
Newark, DE: International Reading Association (ERIC
Document Reproduction Service No. ED 398551)

Morrow, L. M., Young, J., (1996). Parent, teacher, and
child participation in a collaborative family literacy
program: The effects on attitude, motivation, and
literacy achievement. Washington, DC: Office of
Educational Research and Improvement. (ERIC Document
Reproduction Service No. ED398551)

National Center for Education Statistics. *National
Assessment of Adult Literacy: Overview of 1992
Results.* Retrieved October 14, 2003, from
http://nces.ed.gov/naal/resources/92results.asp

National Center for Family Literacy. (1994). *The power of family literacy*. Louisville, KY: National Center for Family Literacy (ERIC Document Reproduction Service No. ED 373859)

Neuman, S. B., Caperelli, B. J., & Kee, C. (1998). Literacy learning, a family matter. *The Reading Teacher, 52,* 244-252.

Neuman, S. B., Celano, D., & Fischer, R. (1996). The children's literature hour: A social-constructivist approach to family literacy. *Journal of Literacy Research, 28*, 499-523.

Nickse, R. S., (1990). Family and intergenerational literacy programs: An update of "The noises of literacy." (Information series No 342). Columbus, OH: ERIC Clearinghouse on adult, career, and vocational education, center on education. (ERIC Document Reproduction Service No. ED327736)

Nistler, R. J., & Maiers, A. (1999). Changing parent roles in school: Effects of a 2-year study of a family literacy program in an urban first-grade classroom. *Education and Urban Society, 32,* 108-126.

Nistler, R. J., & Maiers, A. (1999, November). Exploring home-school connections. *Education & Urban Society,*

32(1), 3, Retrieved June 20, 2002 from

http://ftviewer.epnet.com

Nistler, R. J., & Maiers, A. (2000, May). Stopping the
silence: Hearing parents' voices in an urban first-
grade family literacy program. *The Reading Teacher,
53,* 670-680.

Nuckolls, M. E., (1991, September). Expanding student's
potential through family literacy. *Educational
Leadership,* 45-46.

Paratore, J. R. (1992, December). *An Intergenerational
Approach to Literacy: Effects on the Literacy Learning
of Adults and on the Practice of Family Literacy.*
Paper presented at the Annual Meeting of the National
Reading Conference, San Antonio, TX. (ERIC Document
Reproduction Service No. ED352614)

Perin, D., Greenbert, D. (1994, July). Understanding
dropout in an urban worker education program. *Urban
Education, 29,* 169-188.

Policy and Procedure Manual for Kentucky Adult Education
(2003). Frankfort KY: Kentucky Adult Education, Council
on Postsecondary Education

Purcell-Gates, V., Degener, S., Jacobson, E., & Soler, M.
(2000). *Affecting change in literacy practices of*

adult learners: Impact of two dimensions of instruction (NCSALL Report No. 17). Cambridge, MA: Harvard Graduate School of Education, National Center for the Study of Adult Learning and Literacy.

Purcell-Gates, V., L'Allier, S., & Smith, D. (1995). Literacy at the Harts' and the Larsons': Diversity among poor, inner-city families. *The Reading Teacher, 48*(7), 572-578.

Quigley, B. A. (1992a). Looking back in anger: The influences of schooling on illiterate adults. *Journal of Education, 174,* 104-122.

Quigley, B. A. (1992b). *Understanding and overcoming resistance to adult literacy education.* State College, PA: Institute for the Study of Adult Literacy. (ERIC Document Reproduction Service No. 357196).

Quigley, B. A. (1997). *Rethinking literacy education: The critical need for practice-based change*. San Francisco: Jossey-Bass Inc.

Quigley, B. A. (2000). Retaining adult learners in the first three critical weeks: A quasi-experimental model for use in ABE programs. *Adult Basic Education, 10,* 55-69.

Reder, S. (1992, Summer). Programming adult literacy:

    Developing Individuals and Contexts. NCAL Connections,

    p 4-5. (ERIC Document Reproduction Service No.

    ED346082)

Roth, J., & Myers-Jennings, C. (1997, October). How

    integration of services facilitates family literacy.

    Journal for a Just & Caring Education, 3(4), 418, 15p

    Retrieved April 8, 2002 from http://ftviewer.epnet.com

    .

Schwartz, W., (1999) Family literacy strategies to support

    children's learning. Washington, DC: Office of

    Educational Research and Improvement. (ERIC Document

    Reproduction Service No. ED431063)

Seaman, D. F. (1992). Follow-up study of the impact of the

    Kenan Trust model of family literacy. *Adult Basic*

    Education, 2, 71-83.

Seaman, D. F., & Yoo, C. Y. (2001). The potential for Even

    Start Family Literacy programs to reduce school

    dropouts. *Preventing School Failure, 46,* 42-46.

Simmons, A. B., St. John, E. P., & Mendez, J. P. (2002,

    March). *Family Literacy Programs in Kentucky: A Case*

    Study of Three Sites, Executive Summary. Indiana

    Education Policy Center.

Sparks, B. (2001, Fall). Adult basic education, social

     policy, and educator's concerns: The influence of

     welfare reform on practice. *Adult Basic Education, 11,*

     135-149.

SPSS, Inc. (2003) How to get more value from your survey

     data. Retrieved March 20, 2004 from www.spss.com

St. Pierre, R. (1995, Jan). National evaluation of the Even

     Start Family Literacy Program. Final Report: Executive

     summary (p. 26pages). Bethesda, MD; Arlington, VA: Abt

     Associates, Inc.; RMC Research Corp.

St. Pierre, R., Gamse, B., Alamprese, J., Rimdzius, T., &

     Tao, F. (1998). Even Start: Evidence from the past and

     a look to the future. Washington, DC: U.S. Department

     of Education, Planning & Evaluation Service.

Sticht, T. G. (Consultant in Adult Education). (2000,

     February). The Adult Education and Literacy System

     (AELS) in the United States: Moving from the margins

     to the mainstream of education. El Cajon, CA.

Sticht, T. G. (2002, March) Where does the reading problem

     go when the children grow up? Retrieved April 18, 2002

     from

     http://www.nald.ca/fulltext/sticht/mar02/page1.htm

Strickland, D. (1996, January). *Meeting the needs of families in family literacy programs.* Retrieved January 14, 2002, from U.S. Department of Education's Publications and Products Web site: http://www.ed.gov/about/pubs.jsp

Tett, L.; St. Clair, R. (1997, March-April). Family literacy in the educational marketplace: a cultural perspective. *International Journal of Lifelong Education, 16*(2), 109-120.

Tett, L. (2000, October). Excluded voices: Class, culture, and family literacy in Scotland. *Journal of Adolescent & Adult Literacy, 44,* 122-128.

Tice, C. J. (2000). Enhancing family literacy through collaboration: Program considerations. *Journal of Adolescent & Adult Literacy, 44,* 138.

Wasik, B. H., Herrmann, S., Berry, R. S., Dobbins, D. R., Schimizzi, A. M., Smith, T. K., et al. (2000, August). *Family Literacy: An Annotated Bibliography*. Chapel Hill, North Carolina: University of North Carolina at Chapel Hill.

Wonacott, M. E. (2001). *Adult students: Recruitment and retention.* (ERIC Practice Application Brief No. 18.)

Retrieved April 27, 2003, from

http://ericacve.org/docgen.asp?tbl=pab&ID=108.

Yaffe, D., & Williams, C. L. (1998, September). Why women

chose to participate in a family literacy program and

factors that contributed to the program's success.

Journal of Adolescent & Adult Literacy, 42(1), 8-20.

Appendix A

Adult Literacy Survey Levels

	Prose	Document	Quantitative
Level 1	Tasks require the reader to locate a single piece of information that is identical to or synonymous with the information given in the question, when the text is short; or when plausible but incorrect information is either not present, or is present but located away from the correct information	Tasks require the reader to locate a piece of information based on a literacy match, or enter information onto a document, when little, if any, distracting information is present or when the information requested is personal.	Tasks require the reader to perform a single, relatively simple arithmetic operation, such as addition, when the numbers to be used are provided and the arithmetic operation to be performed is specified.
Level 2	Tasks require the reader to locate a single piece of information in the text, compare and contrast easily identifiable information based on a criterion provided in the question, or integrate two or more pieces of information, when distractors present; or when low level	Tasks require the reader to match a single piece of information, cycle through information in a document, integrate information from various parts of a document, or generate written information by entering requested information in the proper place, when several	Tasks require the reader to locate numbers by matching the needed information with that given, infer the necessary arithmetic operation, or perform a single arithmetic operation, when the numbers and the operations to be performed are stated in the task; when the quantities

	inference are required	distractors are present, or when the match requires low-level inferences.	are easily located in the text or document; or when the operation is easily determined from the format of the material.
Level 3	Tasks require the reader to match literal or synonymous information in the text with that requested by the task, integrate multiple pieces of information, or generate a response based on information that can be easily identified in the text, when the text is dense or lengthy or contains no headings or other organizational aids; when distracting information is present but is not located near the correct information; or when low level inferences are needed.	Tasks require the reader to cycle through the information, integrate multiple pieces of information from one or more document, or generate new information by entering requested information in the proper place, when complex tables or graphs contain irrelevant information; or when the match requires inferences.	Tasks require the reader to locate numbers by matching the needed information with that given, infer the necessary arithmetic operation, or perform arithmetic operations on two or more numbers or solve a problem, when the numbers must be located in the text or document; or when the operations needed can be determined from the arithmetic-relation terms used in the question.
Level 4	Tasks require the reader to search text and	Tasks require the reader to match on	Tasks require the reader to locate numbers

	match on multiple features, integrate or synthesize multiple pieces of information, or generate new information by combining the information provided with common knowledge, when the passages are complex or lengthy; when conditional information is requested by the task; or when more complex inferences are needed.	multiple features, cycle through the information, integrate multiple pieces of information from one or more documents, or generate new information by entering requested information in the proper place, when conditional information is present in the document; when a greater degree of inferencing is needed; or when numerous responses are needed.	by matching the needed information with that given, infer the necessary arithmetic operation, perform two or more sequential operations or a single arithmetic operation, when the quantities are found in different types of displays or when the operations must be inferred from semantic information given or drawn from prior knowledge.
Level 5	Tasks require the reader to search text and match on multiple features, compare and contrast complex information, or generate new information by combining the information provided with common knowledge, when the passages are dense and contain a number of; plausible distractors;	Tasks require the reader to match on multiple features cycle through information, or integrate multiple pieces of information from one or more documents, or generate new information by entering requested information in the proper place, when information displays are	Tasks require the reader to locate numbers by matching the needed information with that given, infer the necessary arithmetic operation, or perform multiple arithmetic operations sequentially, when the features of the problem must be disembedded from text; or when background

	when high-level, text-based inferences are needed; or when specialized background knowledge is required.	complex and contain multiple distractors; when high-level, text based inferences are needed; or when specialized knowledge is required.	knowledge is required to determine the quantities or operations needed.

Appendix B

National Reporting System Functional Entry and Progress

Levels

In Kentucky the ABE and Family Literacy programs use

the TABE 7/8 to determine entry level of students. (Policy

and Procedure Manual for Kentucky Adult Education, 2003)

Functional level	TABE grade level
Beginning Literacy	0-1.9
Beginning Adult Basic Education	2.0-3.9
Low intermediate Adult Basic Education	4.0-5.9
High intermediate Adult Basic Education	6.0-8.9
Low adult secondary education	9.0-10.9
High adult secondary education	11.0-11.9

ESL programs are allowed to choose from a selection

assessment instruments when determining entry level: CASAS,

Oral BEST, Literacy BEST, ESLOA and ALAS R/W and Math.

Beginning Literacy ESL	CASAS:165-180 Oral Best: 0-15 Literacy Best: 0-7 ESLOA: Level 0 to Level 1, Mid-Beginner (0-7 points) ALAS Reading/Writing (R/W) 1-43, Math 1-22
Beginning ESL	CASAS:181-200 Oral Best: 16-41 Literacy Best: 8-46

	ESLOA: Level 1, High Beginner to Level 2, Mid Beginner
	(Level 1, 8-10 points: Level 2, 1-9 points)
	ALAS R/W 44-83, Math 23-42
Low Intermediate ESL	CASAS:201-210
	Oral Best: 42-50
	Literacy Best: 47-53
	ESLOA: Level 2, High Beginner (Level 2, 10-20 points)
	ALAS R/W 84-115, Math 43-58
High Intermediate ESL	CASAS:211-220
	Oral Best: 51-57
	Literacy Best: 54-65
	ESLOA: Level 3, Low-Intermediate (Level 3, 1-11 points)
	ALAS R/W 116-138, Math 59-69
Low Advanced ESL	CASAS:221-235
	Oral Best: 58-64
	Literacy Best: 66 and higher
	ESLOA: Level 3 to Mid-Intermediate to Level 4 (Level 3, 12-15 points)
	ALAS R/W 139-188, Math 70-94
High Advanced ESL	CASAS:236 and above
	Oral Best: 65 and higher
	ESLOA: Level 4, Advanced (Level 4, 1-12 points)
	ALAS R/W 189-200, Math 95-100

FAMILY LITERACY – WHAT WORKS IN KENTUCKY

March 1, 2004

Dear Family Literacy Provider:

You are being invited to answer the attached questionnaire about the family literacy program in your county. There are no risks or penalties for your participation in this research study. The information collected may not benefit you directly. The information learned in this study may be helpful to others. The information you provide will used for a quantitative doctoral study on family literacy programs in Kentucky**.** Your completed questionnaire will be stored at The College of Education and Human Development at the University of Louisville**.** The questionnaire will take approximately 15-20 minutes to complete.

Individuals from the Department of Leadership, Foundations and Human Resource Education, the Institutional Review Board (IRB), and the Human Subjects Protection Program Office (HSPPO), may inspect these records. In all other respects, however, the data will be held in confidence to the extent permitted by law. Should the data be published, your identity will not be disclosed.

Please remember that your participation in this study is voluntary. By completing and mailing the attached questionnaire in the enclosed envelope, you are voluntarily agreeing to participate. You are free to decline to answer any particular question that may make you feel uncomfortable or which may render you prosecutable under law.

You acknowledge that all your present questions have been answered in language you can understand and all future questions will be treated in the same manner. If you have any questions about the study, please contact Dr. Mike Boyle at (502) 641-7510 or mike.boyle@louisville.edu Renae Harrison at (270) 735 6267 or harrison@scrtc.com.

If you have any questions about your rights as a research subject, you may call the HSPPO at (502)852-5188. You will be given the opportunity to discuss any questions about your rights as a research subject, in confidence, with a member of the IRB. The IRB is an independent committee composed of members of the University community, staff of the institutions, as well as lay members of the community not connected with these institutions. The IRB has reviewed this study.

Sincerely,

Appendix D

Family Literacy Program Characteristics Questionnaire

If you are not the person directly responsible for the Family Literacy program during the 2002-2003 fiscal year, please pass this to the person most active with the adults in that program during the 2002-2003 year.

Please complete the following questions on the family literacy program as it was in the 2002-2003 fiscal year.

County: (County Name)

The number of <u>adult students</u> enrolled in your program for the 2002-2003 year. Please indicate the numbers by gender.

_____Female _____Male _____Total

Was there an Even Start Program in your county during the 2002-2003 school year? ____Yes ____No

Program characteristics

1. Is this family literacy program serving

    _____Adult Basic Education Students

    _____English as a Second Language Students

    _____Combination of both.

2. Kentucky Adult Education funded the programs using a

    $1,000 per family allotment. Did you limit the number

224

of families enrolled in the program to the number of families for which it was funded.

_____Yes   _____No

3.   Enrollment procedure used:

_____Open entry open exit—students can start or leave the program at any time.

_____Managed enrollment—students must wait until a designated date to start attending.

4.   How do you determine whether the adult is enrolled in family literacy or in adult education? (explain briefly)

_____

_____

_____

5.   What do adults tell you are their reasons for enrolling in family literacy? (i.e. enrollment incentive, GED, parenting classes, child participation, socialization)

6.   Number of hours a **week** that the adult participants were asked to attend class. (check one)

___0-5 hours

___6-10 hours

___11-15 hours

___16-20 hours

_____20 hours or more

7. **Time** of **day** that the adults met during the 2002-03

   year. (check all that apply):

   _____8:00 a.m. to noon

   _____noon to 5:00 p.m.

   _____5:00 p.m. to 9:00 p.m.

   If evening opportunities are offered please indicate

   how many during the year.

   _____

8. Please check the **age of the children** that were allowed

   to participate in the program (check all that apply) :

   _____ infant to 2 years

   _____ 3 & 4 years of age

   _____ 5-8 years of age

   _____ 9-13 years of age.

   _____ other (please indicate the ages) _____

9. Type of instruction delivered in Adult Education and

   parenting component.

   _____Individualized instruction – each student working

      on individualized assignments

   _____Group Instruction – all students participate and

      work on the same subject matter together

   _____Home visitation – Instructors go to the home of

      the student and deliver instruction.

10. How is instructional subject matter determined:

_____Instructor or staff member make all instructional

subject matter decisions.

_____Students are able to choose what they want to

study part of the time.

_____Students choose what they want to study all of

the time.

11. Does the student receive a material incentive for

enrolling in and attending the program.

_____Yes _____No

If your answer is yes please describe the incentive

they receive _____

Staffing characteristics

All of these questions apply only to those staff

members working with the adults in the program. Please

fill in the appropriate number for the following

questions.

12. Gender

_____Number of female staff members

_____Number of male staff members

13. Employment status

_____Number of full time staff members (full time

meaning that they are working enough hours to receive

benefits from the fiscal entity).

_____Number of part-time staff members working fewer

hours than needed for benefits.

14. Prior to family literacy what was your staffs'

employment background? Please indicate the number in

each field.

_____Business   _____Clergy

_____Social Work   _____Certified Teacher

_____Counseling   _____University professor

15. Educational Attainment of Staff

Please indicate the number of staff members with their

highest educational attainment level.

_____ GED or High School Diploma

_____ Associate's Degree

_____ Bachelor's degree

_____ Master's degree

_____ Beyond master's level

```
                     CURRICULUM VITAE


NAME:              Zelma Renae Stewart Harrison

ADDRESS:           144 Dogwood Dr
                   Hodgenville, KY 42748

DOB:               Abilene, Texas—October 11, 1953

EDUCATION
& TRAINING         B.S. Home Economics Education
                   Southwest Texas State University 1975

                   M.A. Education
                   Gifted Education Certification
                   Western Kentucky University 1992


POSITIONS HELD:Coordinator of Adult and
                   Community Education,
                   Hardin County Schools
                   1992-present time

                   Gifted Instructor Elementary Education
                   Hardin County Schools
                   1990-1992

                   Instructor Adult Education
                   Hardin County Schools
                   1989-1990

                   Teacher—Home Economics
                   Hardin County Schools
                   1975-1979

PROFESSIONAL
ORGANIZATIONS: Kentucky Association of Adult and Continuing
                   Education
                   Member since 1992
                   Vice President 1999-2000
```

President 2000-2003

Commission of Adult Basic Education (COABE)
Member since 1992
Regional 2 Representative, July 1, 2004 to
present time

American Association of Adult and Continuing
Education
Member since 2000

Kentucky Community Education Association
Member since 2003

National Community Education Association
Member since 2003