Advocacy for the Efficacy and Reinstatement of Funding Federal Even Start Family Literacy Grant Programs

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The Even Start Family Literacy model builds coalitions of community partners that build learning communities throughout our nation. The problem for stakeholders in family literacy programs is how to continue funding to encourage success and sustainability of programs. The focus of the study was twofold: 1) the importance of using data from national studies to make program improvements 2) the importance of making program improvement prior to reducing or rescinding funding for the Even Start Family Literacy Program. This quantitative study identified program, participant, and funding characteristics that state and local educators can target for program improvement. Programs must demonstrate measurable outcomes of success for adults and children.

Keywords: family literacy, early childhood education, adult education, collaboration, parenting, federal grant funding

Family literacy programs improve the literacy skills of parents and their children while developing an appreciation for the value of life-long learning. The Even Start Family Literacy model is an effective intervention for enhancing the lives of at-risk families. After approximately twenty-three years of federal funding, Congress is eliminating the program from the national budget. This study examined program improvements suggested by three national studies of Even Start. In addition, the researcher conducted a quantitative study of an Even Start state program to find possible participant, program, and funding characteristics to improve programs prior to rescinding federal funding.

Historical Background of Family Literacy in the United States

The development of family literacy as an approach to level the educational playing field for impoverished adults and children is rooted in the national educational shift that began in the 1980s. According to Parecki, Paris, and Seidenberg (1996) family literacy emerged as a field that integrated knowledge from psychology, education, social work, and literacy and applied the information to improve the educational achievement and economic well-being of families. As the nation focused on student achievement, legislators and educators stressed the importance of community, policy, and parental support in order to reach higher academic standards (King & McMaster, 2000).

In 1988 President Ronald Reagan signed into law a comprehensive program that funded a combination of adult basic education, parenting education, and early childhood education information for its participants. The National Education Goals of 1989 addressed literacy directly and family literacy indirectly. Goal One, titled “School Readiness,” laid the groundwork for family literacy programs by stating,

Every parent in the United States will be a child’s first teacher and devote time each day to helping such parent’s preschool child learn, and parents will have access to the training and support parents need. Goal Six, titled “Adult Literacy and Lifelong Learning,” looked to a future when every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of
citizenship. This goal also states as one of its objectives that schools will implement comprehensive parent involvement programs. (King & McMaster, 2000, p.2)

In 1991, the National Literacy Act officially made community-based and nonprofit organizations eligible for family literacy funding. Family literacy programs according to Purcell-Gates (1995) recognized the importance of the home and the community as places of learning. The impetus for these programs came primarily from the adult education community. Operating under different names and from different funding sources, these programs varied in their approach. Some focused on improving the literacy levels of parents and providing them with parenting tips and literacy activities in which they engaged with their children at home. Other programs involved both parents and children in literacy lessons, either separately, together, or in a variation of both.

The term “family literacy” was used broadly throughout the literature. It was often used to refer to the complex naturally occurring process by which literacy was transferred from parent to child during normal home activities. More specifically it was used to describe an educational program. The design of family literacy programs differed depending upon context, but the ultimate goal was to support the development of literate families (Martinez, 1999; National Center for Family Literacy, 1996).

Federal grant programs have been funded in schools, churches, and community agencies across the country for the purpose of improving the academic, social, and/or economic success of the participants. The Even Start Family Literacy Federal Statute of the Elementary and Secondary Education Act of 1965 provided “seed” money in anticipation that a successful program would be sustained through subsequent state and/or local funding. (US Department of Education, 2001b)

Yet in the past ten years, the financial climate and budget constraints in Washington have caused the Even Start Family Literacy program to be scrutinized heavily each year to determine future funding. Three national evaluations suggest that aspects of the grant program need improvement. The Administration in FY2005 and FY2006 recommended zeroing out federal funding for the program, but the program continued at level funding. Even Start Family Literacy has been eliminated from the federal budget for FY2011-2012.

**Historical Background of the Even Start Family Literacy Program**

The Even Start Family Literacy program was first enacted in 1988 as Part B of Chapter 1 of Title I of the Elementary and Secondary Education Act of 1965. The purpose of Even Start was to help break the cycle of poverty and illiteracy by improving the educational opportunities of the nation’s low-income families. Early childhood education, adult literacy (adult basic education or English as a second language [ESL]), parent/child together time, and parenting education were the basic components of a comprehensive family literacy program.

The Even Start Family Literacy model builds coalitions of community partners to build learning communities throughout our nation. Darling (2008) noted that research demonstrates parental involvement has a positive impact on children’s reading acquisition, regardless of their families’ socioeconomic status. Some parents just need a few tools to help them maximize their children’s education.

According to Tao and Alampre (2005) work-focused family literacy programs resulted in adults more likely to have obtained employment. After one year in the program adults had increased their household incomes, decreased their dependence on welfare, increased their education levels while retaining or increasing their basic skills. Two years later many of the adults continued their education while working and reported that their lives had improved because of the work focused family literacy program. In addition, Fuligni and Brooks-Gunn (2004) posit research that children from low income backgrounds receiving early intervention in family literacy programs make gains including reduction of delinquency and behavior problems. When young children are involved with their families in intensive high quality family literacy programs the effects are stronger than if children are involved alone in early childhood education.

High quality programs for young children living in poverty demonstrated the promise of lasting benefits and return on investment (Gallagher, Clayton, & Heinemeier, 2001). The High/Scope Perry Preschool Project; The Abecedarian Project; and The Cost, Quality, and Outcomes Study (Peisner-Feinberg et al., 1999) convinced researchers there was significantly better intellectual performance with students involved in early childhood education.

Hayes (2002) noted that family literacy programs were designed to be a comprehensive system of services that met the educational needs of children and their parents. For many of the families who enrolled in the programs, the educational, personal, and family needs were both too numerous and too complex to be served well by programs providing educational services for only adults or children. Family literacy programs were more likely to be effective for the entire family.

Martinez (1999) noted that Even Start was an educational intervention program that assisted children and adults to achieve challenging State content standards and student performance standards. The U.S. Department of Education awarded formula grants to states, which in turn made subgrants to eligible applicants. These applicants could be partnerships between one or more local education agencies and one or more nonprofit community-based organizations, public agencies, institutions of higher
education, or public or private nonprofit organizations of demonstrated quality. Susan Newman, then Assistant U.S. Secretary of Education, stated:

First, our goal is to ensure that ALL families and their young children will be provided the education that they deserve—no matter the circumstances of their birth....second our goal is to ensure that instruction is based on the scientific evidence that tells us how children and adults develop reading skills and therefore how reading is best taught....third, there is a clear and direct call for program accountability to determine if instruction results in achievement. This is how the administrations’ key priorities complement and tie into Even Start. (U.S. Department of Education, 2001a, p. A-1).

Through relationships with social service agencies, Even Start Programs helped meet a range of necessary, but non-educational, needs to induce program participation, ensure access to health services, and reduce family stress. Many also provided transportation, early care and education programs, and meals. To promote learning outside the program, staff helped familiarize families with community literacy resources, such as the public library and museums. Collaborations with many agencies were necessary for Even Start programs to meet the mandate for intense, results-oriented, and comprehensive family literacy services (Dwyer, 1995; Schwartz, 1999; Handel, 1999).

Collaboration and partnerships among different groups such as universities, public schools, early childhood education programs, adult literacy programs, and businesses have been advocated as promising avenues for continued growth of the family literacy movement (Brizius & Foster, 1993). The development of grassroots family literacy movements was a visible trend at the local level. Individuals from differing sectors of a community took it upon themselves to initiate a family literacy project in their hometown or city (Morrow, Tracey, & Maxwell, 1995).

Family literacy not only improved the literacy skills of parents and their children, it also helped develop an appreciation for the value of life-long learning. In our nation, education was the quintessential leveler. Through family literacy programs everyone had a share of the American Dream (U.S. Department of Education, 2001a).

Family literacy programs offered promise as being an effective intervention for enhancing the literacy development of young children. Children received direct help with their language and literacy development. Parents received help in literacy skills, parenting, and related areas such as job skills. The combination of these intervention efforts influenced the lives of children and their families who participated in family literacy programs (Wasik, Herrmann, Dobbins, & Roberts, 2000).

Results of family literacy studies on children’s reading acquisition from kindergarten to grade 3 noted significantly improved reading and writing test scores. (Saint-Laurent & Giasson, 2005; Senechal & Young, 2008; Swick, 2009). A research study by Katzir, Lesaux, and Kim (2009) concluded fourth graders enrolled with their parents in a family literacy program had 1) higher frequency of children’s literacy practices that were associated with positive attitudes toward reading 2) reading comprehension skills were positively related to self-concept after controlling for verbal ability and word and non-word reading 3) frequency of library visits were significantly related to word reading efficiency 4) home environment was positively associated with reading self-concept.

The Family and Child Education Program (FACE) announced that more than nine hundred Native Americans earned their High School Diploma or General Equivalency Diploma (GED) and fifty percent of special education services for children were eliminated through the collaboration of the Bureau of Indian Education and the National Center for Family Literacy. (Pfannensteil, Yarnell, & Seltzer, 2006). The Toyota Family Literacy Program, a project of the National Center for Family Literacy designed for Hispanic and other immigrant families, maintained that literacy levels among participants increased 21 percent, parental visits to schools increased 14.3 percent, and teachers rated participating children higher than their peers in overall achievement. (Darling, 2008, 1995).

The U.S. Department of Education (2003) stated that Even Start’s purpose included promoting the academic achievement of children and adults, and using instructional programs based on scientifically based research. Each state reported state level performance indicators and used evaluation measures to improve Even Start. Identifying and determining which practices and procedures worked best would be a model for improving Even Start projects across the nation.

Three National Evaluations generate mixed findings

The first national evaluation, 1989-1990, was broad in scope and described implementation of the program. Information from this first evaluation improved the program through legislative changes by targeting those most in need, requiring at least a three-year age range of children, allowing projects to serve teen parents, and allowing involvement of ineligible family members in appropriate family literacy activities. Yet the evaluation did not provide answers to questions about the effectiveness of Even Start Family Literacy. (Martinez, 1999; St. Pierre, Gamse, Alampreze, Rimsdzu, & Tao, 1998; U.S. Department of Education, 2001a)

The second national evaluation, ESIS (Even Start Information system) was conducted from 1993-1997. This report demonstrated that overall, Even Start programs met the specified criteria for adult literacy, school readiness for children, and parenting improvement only to a limited degree (Boser, 2002; St. Pierre, Layzer, & Barnes, 1995; Tao, Schwartz, St. Pierre, & Tarr, 1997; U.S. Department of Education, 1998). St. Pierre et al. (1998) noted the second
national evaluation reported what had been learned about the Even Start Family Literacy Program after 10 years of demonstration and evaluation activities. Problems existed in 1) intensity of service – children and adults with high levels of participation had larger learning gains than those with low level of participation 2) literacy-based parenting education 3) service location – center based programs had larger learning gains than children in projects that emphasized home based services  and 4) duration of parent and child time. Project size was equivocal – children and parents did equally well in small and large projects.

The third national evaluation, 1997-2001, included two complimentary studies: 1) the Even Start Performance Information Reporting System (ESPIRS) which provided annual data on the projects, and 2) the Experimental Design Study (EDS) which was an experimental study of Even Start’s effectiveness in eighteen projects. Key findings noted a) children and parents in the eighteen Even Start programs gained no more than children and parents in the control group b) Even Start served a very disadvantaged population in comparison to Head Start c) Even Start children and parents made small gains on literacy measures and scored low compared to national norms when they left the program d) families made little advantage of the services offered by Even Start projects e) early childhood classrooms did not provide sufficient emphasis on language acquisition and reasoning to produce measurable impacts and hence achieve legislative outcomes f) the extent to which parents and children participated in literacy services was related to child outcomes. (U.S. Department of Education Planning & Evaluation Service, 2003)

Recently, the U.S. Department of Education contracted with Westat and Abt Associates for the Even Start Classroom Literacy Interventions and Outcomes (CLIO) Study (2001-2007 with a follow-up contract 2006 – 2010). The study examined the following two key research questions: 1) Is the combination of research-based, literacy-focused preschool and parenting curricula more effective than existing Even Start services? 2) Do research-based parenting curricula that focus on child literacy add value to the CLIO preschool curricula?

Key findings of the CLIO study indicated 1) although there were positive impacts on instructional supports for literacy, child social competence, and parenting skills, the CLIO curricula did not have statistically significant impacts on the child language development and literacy outcomes, 2) the CLIO parenting curricula did not significantly add value to the CLIO preschool curricula with respect to child outcomes.

The Funding Controversy

The Even Start federal grant initiative was well funded and grew rapidly in its first years, but the program has been subject to increasing criticism. From FY2000 to FY2001 the budget increased funding from $150 million to $250 million. Funding declined in FY2003 to $248 million, FY2004 to $247 million, FY2005 to $225 million, and most notably in FY2006 to $99 million. The Administration requested no funding for the program for either FY2005 or FY2006 stating the program had not been effective in improving child and adult learning outcomes. Although funding was provided each budget year FY2006-2010, the funding has decreased and in FY2010 the Even Start budget was $66.5 million (Congressional Research Service Report Order Code RL33071, 2006). This Congressional Research Report summarized the Even Start Funding Controversy:

Advocates of the Even Start program argue the program should not be eliminated or receive funding cuts because providing integrated family literacy services to an extremely disadvantaged population is so important. Furthermore, they recommend a thorough study of the impact of legislatively mandated quality improvements to Even Start. Proponents of Even Start emphasize that a concerted effort should be implemented to improve the program through implementation of model programs and technical assistance (CRS Report for Congress, 2006, p.1).

Most recently, Congress recommended zeroing out Even Start Family Literacy funding for FY2011-2012. Committees are meeting presently to determine the fate of funding for the programs nationwide.

Method

The purpose of this study was to identify strategies that promote success and sustainability in Even Start Family Literacy Programs in North Carolina. The researcher collected pre-existing data from the North Carolina Department of Public Instruction. The data included the North Carolina Department of Public Instruction Continuation Applications and the North Carolina Family Literacy Performance Indicator Reports. These reports document program characteristics, demographics, participant statistics, educational services provided, collaboration/coordination, progress toward objectives, summer services, project revisions, local contributions, budget requests, expenditures, and performance indicator results for adult education, early childhood education, parenting, and Parent/Child Time.

Participants

Participants were twenty-four Even Start Programs in North Carolina. Eligibility in a local Even Start Program requires at least one parent and one or more eligible child(ren) to participate together in all components of the Even Start project (early childhood, parenting, PACT [Parent and Child Together] and adult education). The Even Start Family Literacy Program Statute specified that each program include the identification and recruitment of families most in need of services as indicated by a low level of income, a low level of adult literacy or English language proficiency, and other need-related indicators.

A total of 776 families were enrolled in the twenty-four Even Start Programs including 785 adults and
929 children. Of the 776 families, 364 (47%) were enrolled to learn English as a second language. Approximately 501 (54%) of the children were ages three or four and were enrolled in preschool. Of the newly enrolled families 87% were at or below the federal poverty level.

**Measures**

The researcher analyzed data for seventeen characteristics reported as part of the North Carolina Department of Public Instruction (NCDPI) Continuation Applications. Characteristics were categorized in accordance with the measures stated in the continuation applications as program, participant, and funding characteristics.

**Program Characteristics.** The first category, program characteristics, measured first the number of families served (FS). Each local Even Start Program reported the number of families served, detailing the newly enrolled adults and children for each fiscal year. The second program characteristic noted the number of preschool children served (CS) by the local Even Start Family Literacy Program. Preschoolers ages birth through age 8 are served in Even Start. Next, age of the program (AGE) indicated how long the program had been in operation; the number of years since the original grant award. The twenty-four programs ranged in age from one to nine years. A fourth important program characteristic was the tenure of the director (TD) noting the length of time a director served as the leader of a local Even Start Family Literacy Program. The educational level of the Even Start Program Director (ED) was also considered a program characteristic important in each local program. Some program directors had terminal degrees while others completed masters degrees and others a four year degree.

**Participant Characteristics.** The second category of characteristics described the participants in the targeted Even Start Programs. These participant characteristics included families enrolled less than three months (ENA), families enrolled four to six months (ENB), families enrolled seven to twelve months (ENC), and families enrolled more than twelve months (END). Retention of families is considered paramount for a successful Even Start Family Literacy Program. The attendance of preschool children (ATTC) was noted an important participant characteristic, as well as, the children’s performance on the Peabody Picture Vocabulary Test (PPVT) achievement for preschoolers. Adults who obtained their General Equivalency Diploma (GED) were also included in the participant category. The final participant characteristic analyzed included the number of families served that were below the poverty level (POV).

**Funding Characteristics.** Number of collaborators (COL) was included in a third category described as funding characteristics. Every program was required by grant guidelines to partner with local community agencies for implementation the Even Start Family Literacy Grant. Funding allotment for the program (FA) specified the dollar amount for each program’s initial federal award. Program allotments ranged from $250,000 to $500,000 for the initial year of funding. Each year the grant award decreased as local matching funds increased. The number of collaborators that shared funding with the program (COLM) was specified as a funding characteristic for analysis. The Even Start Family Literacy Grant was designed as “seed money” to establish a local program in anticipation that local collaborators would “buy in” to the program and ultimately designate funding allotments on a regular basis. Finally, the number of additional grant funds received by the program (AGS) was noted as a funding characteristic worthy of investigation.

**Procedure**

Pre-existing program evaluation data were collected from the North Carolina Department of Public Instruction. The twenty-four Even Start partnerships submitted continuation applications and performance indicator reports to the North Carolina Department of Public Instruction. The performance indicator report stated the adult and child outcomes for each participating family. Preschool teachers in each Even Start Program pre and post tested their three and four year old students using the Preschool Picture Vocabulary Test III (PPVT-III). According to Dunn and Dunn (1997) reliability of the PPVT-III appears to be satisfactory. Four types of reliability were computed: alpha reliability coefficients, split-half reliability coefficients and test-retest reliability. Validity of the PPVT-III ranged from .30 to .86 with the lowest correlation with the Wechsler Preschool and Primary Scale of Intelligence (Wechsler, 1967) and highest with a receptive vocabulary test, the Full-Range Picture Vocabulary Test (Ammons & Ammons, 1948). Its correlations with measures of verbal ability were: .23 with the Columbia Mental Maturity Scale (Burgemeister, Blum, & Lorge, 1972), and .78 with the KAIT Crystallized IQ. In summary, the PPVT-III correlates well with other measures of vocabulary and moderately well with tests of verbal ability. PPVT-III is the leading measure of receptive vocabulary for standard English and a screening test of verbal ability. This individually administered, norm-referenced instrument is offered in two parallel forms—IIIA and IIIB—for reliable testing and retesting.

Even Start adult participants were tested at local North Carolina Community College Adult Basic Education centers using GED Tests. According to the General Educational Development Testing Service for the American Council on Education (2006) the purpose of the GED Tests is to provide an opportunity for adults who did not complete a formal high school program to certify their attainment of high school–level academic knowledge and skills and earn their high school equivalency credential. In order to allow adults the opportunity to demonstrate that their knowledge and skills are comparable to that of high school graduates, the score scales for the GED Tests are referenced to the performance of graduating high school seniors on these
same tests. GED Tests are standardized and normed using a nationally representative sample of graduating seniors. Periodically, changes in national curricular trends dictate changes in the content of the GED Tests. When these changes occur, the “new” forms cannot be equated to the “older” forms, and a new standardization and norming studies are performed. Norming studies are also conducted whenever it is suspected that changes in achievement levels may have occurred in the norm group (i.e., graduating high school seniors). In all cases, the new norms reflect a new set of performance standards for obtaining a GED credential.

A simultaneous multiple regression analysis identified predictors of success for Even Start Family Literacy Programs. The researcher evaluated core indicators from the North Carolina Performance indicator reports. Success of local programs was measured by implementing a two-phase process of data analysis. The first step of the analysis strategy was a preliminary screening to determine which characteristics were more promising in relation to others. The researcher used a significance level of .10 in a multiple regression analysis of the program, participant, and funding characteristics. Next, the researcher used a significance level of .05 in a regression analysis to predict characteristics having a significant relationship to program outcomes.

As noted by Peugh (2009), analyzing multilevel data especially “nested” data structures such as the adult and child outcomes embedded in program outcomes of the Even Start Family Literacy Performance Indicator Reports presents challenges for researchers. The problem arises because the data violate the independence assumption of traditional statistical analyses. For this reason, the researcher used a correlation matrix as an alternative approach. The correlation matrix was analyzed using multidimensional scaling. Next a cluster tree was produced to assess the fidelity of the analysis and a high clustering configuration was presented to conceptualize the data.

Results

Relationship of program outcomes to program dynamics. Seventeen sets of Even Start Family Literacy Program, Participant, and Funding Characteristics were analyzed to identify predictors of success and sustainability of Even Start Family Literacy Programs. In order to manage the analysis more efficiently, characteristics were grouped into the following three categories as indicated on the continuation grant reports: program characteristics, participant characteristics, and funding characteristics (see Table 1).

Overall, the average age of the programs was four and one-half years and the tenure of the director was four years. The average educational level of the director was slightly less than six years. The calculations for the educational level of Even Start directors equaled one year for each year of college (i.e. undergraduate degree [4], masters degree [6], advanced degree [7], and doctorate degree [11]). There was wider variation on the range in the number of families and children served, but the mean number of clients in each category was just over 30 (see Table 2).

Table 1
Characteristics of Even Start Family Literacy Programs

<table>
<thead>
<tr>
<th>Program Characteristics</th>
<th>Participant Characteristics</th>
<th>Funding Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of families served (FS)</td>
<td>Families enrolled&gt;3mo. (ENA)</td>
<td>Funding allotment (FA)</td>
</tr>
<tr>
<td>Number of children served (CS)</td>
<td>Families enrolled 4-6mo. (ENB)</td>
<td>Number of collaborators (COL)</td>
</tr>
<tr>
<td>Age of the program (AGE)</td>
<td>Families enrolled 7-12mo. (ENC)</td>
<td>Collab. That share $$ (COLM)</td>
</tr>
<tr>
<td>Tenure of the director (TD)</td>
<td>Families enrolled 12mo+ (END)</td>
<td>Additional grant $$ (AGS)</td>
</tr>
<tr>
<td>Education of the director (ED)</td>
<td>Attendance of children (ATTC)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Families below poverty (POV)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Peabody Pic Voc Test (PPVT III)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Equiv Diploma (GED)</td>
<td></td>
</tr>
</tbody>
</table>
Table 2  
*Even Start Family Literacy Program, Participant, and Funding Characteristics*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Mean</th>
<th>Standard Dev</th>
<th>95%CI Upper</th>
<th>95%CI Lower</th>
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<tr>
<td><strong>Program Characteristics</strong></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>FS</td>
<td>32.333</td>
<td>13.130</td>
<td>37.878</td>
<td>26.789</td>
</tr>
<tr>
<td>CS</td>
<td>31.875</td>
<td>15.394</td>
<td>38.375</td>
<td>25.375</td>
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<tr>
<td>AGE</td>
<td>4.500</td>
<td>2.919</td>
<td>5.733</td>
<td>3.267</td>
</tr>
<tr>
<td>TD</td>
<td>4.000</td>
<td>2.571</td>
<td>5.086</td>
<td>2.914</td>
</tr>
<tr>
<td>ED</td>
<td>5.870</td>
<td>1.961</td>
<td>6.718</td>
<td>5.022</td>
</tr>
<tr>
<td><strong>Participant Characteristics</strong></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>ENA</td>
<td>7.125</td>
<td>4.712</td>
<td>9.255</td>
<td>5.093</td>
</tr>
<tr>
<td>ENC</td>
<td>9.583</td>
<td>5.867</td>
<td>11.532</td>
<td>6.729</td>
</tr>
<tr>
<td>END</td>
<td>5.043</td>
<td>7.227</td>
<td>8.176</td>
<td>1.643</td>
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<tr>
<td>ATTC</td>
<td>128.696</td>
<td>24.110</td>
<td>139.122</td>
<td>118.270</td>
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<tr>
<td>POV</td>
<td>26.261</td>
<td>13.291</td>
<td>32.008</td>
<td>20.513</td>
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<td>PPVT</td>
<td>9.435</td>
<td>6.700</td>
<td>12.332</td>
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<tr>
<td>GED</td>
<td>3.292</td>
<td>2.528</td>
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<tr>
<td><strong>Funding Characteristics</strong></td>
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<tr>
<td>FA</td>
<td>181.542</td>
<td>31.748</td>
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<td>COL</td>
<td>8.708</td>
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<td>COLM</td>
<td>6.458</td>
<td>6.199</td>
<td>9.076</td>
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<td>AGS</td>
<td>0.682</td>
<td>0.477</td>
<td>0.893</td>
<td>0.470</td>
</tr>
</tbody>
</table>

*Note. N-24.*
A significance level of less than .05 was used in a regression analysis to predict characteristics having a significant relationship to program outcomes. Education of the director and the number of collaborators were identified as characteristics that were significant predictors of success for children’s performance on the PPVT III (see Table 3).

Again, no relationship existed from data collected in this study for performance on the GED.

An alternative approach was used to capture program dynamics. Correlations among the different facets or elements that described the program dynamics were identified in a correlation matrix (see Table 4).

Table 3
Regression Analysis of Variables With a p Value Less Than 0.10 in Phase 1

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>PPVT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED</td>
<td>0.016*</td>
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<tr>
<td>ATTC</td>
<td>0.086</td>
</tr>
<tr>
<td>COL</td>
<td>0.025*</td>
</tr>
</tbody>
</table>

Table 4
Correlation Matrix

FILE: OUTPUT 9-05-04 REANALYSIS SCALING CLUSTERING
SYSTAT Rectangular file C:\Program Files\SYSTAT 10\sydata\excel 3 v009 9-05-04 EN PCT SCALE CREATED.SVD, created Fri Sep 03, 2004 at 04:52:45, contains variables:

<table>
<thead>
<tr>
<th>SITES</th>
<th>POV</th>
<th>FS</th>
<th>GS</th>
<th>AGE</th>
<th>TD</th>
<th>ED</th>
<th>FA</th>
<th>COL</th>
<th>AGS</th>
<th>ATTC</th>
<th>PPVT</th>
<th>PPVT</th>
<th>PCT</th>
<th>GED</th>
<th>PCT</th>
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</thead>
<tbody>
<tr>
<td>ED</td>
<td>0.784</td>
<td>1.009</td>
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</tr>
<tr>
<td>ATTC</td>
<td>0.772</td>
<td>0.685</td>
<td>1.000</td>
<td></td>
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Pearson correlation matrix:

Number of observations: 19
Matrix has been saved.
Configuration

Figure 1. Multidimensional Scaling

Cluster Tree

Figure 2. Cluster Tree
Using the correlation coefficients as a proximity (similarity) measure, the correlation matrix was analyzed using multidimensional scaling. Figure 1 shows the results of the multidimensional scaling (MSD) which is essentially a geometric representation for which things (e.g., objects, variables) that are correlated more closely are located closer together in a geometric space whose dimensionality is minimized. In the present study, the multidimensional scaling solution, using correlations among the different program elements as similarities, resulted in the two-dimensional solution shown in Figure 1.

In order to assess the fidelity of the multidimensional scaling analysis, a hierarchical clustering procedure was applied to the correlation matrix. Figure 2 shows the results of the hierarchical grouping procedure which iteratively linked program elements together that were closest until all elements were linked.

Figure 3 shows the combined results of the hierarchical clustering mapped onto the two-dimensional multidimensional scaling solution. As inspection of Figure 3 shows, these combined results provide evidence of the fidelity of the dimensionality of the multidimensional scaling solution.

The results of these alternative scaling perspectives indicated that collaborators and collaborators that shared resources were highly correlated. Also collaborators and education of the director fitted closely to the Peabody Picture Vocabulary Test as did attendance of the children. Education of the Even Start Director and the number of collaborators were characteristics that were significant as predictors of success and sustainability for Even Start Programs in regard to performance on the PPVT. Attendance of the children was also noted in the scaling model as closely related to success on the PPVT.

Krippendorff (1980) suggested clustering lumped together variables that shared some observed qualities. Some concepts were so similar or so interrelated that they may be regarded as one. Finding clusters conceptualized the data.

**Discussion**
First, Even Start Family Literacy Programs should capitalize on their collaborations with community partners. This study indicated that the number of collaborators, particularly collaborators that share resources, influenced positively the success of the programs. Melaville, Blank, and Asayesh (1993) noted that collaboratives are an emerging force for change in America’s communities. Researchers, policymakers, and practitioners agreed that stronger connections between family, school, and the larger community, particularly among educators and health and human service providers, were essential to the success of children and families.

Even Start Family Literacy programs should also require an advanced degree for the directors of the programs; a masters or doctorate degree is preferred. The educational level of the director was highly correlated with success of the program. The director needed an educational background and/or experience in early childhood education as well as adult basic education. He/she also needed knowledge of parenting education and skills in educational leadership.

State and local leaders must continue to advocate and provide support for Even Start Family Literacy Programs. School districts have the responsibility to provide state and local funding to match the federal mandates for Even Start. State and local funding endorsements for the Even Start Programs ensure family literacy services for families and children.

Even Start Family Literacy can be a powerful program. Systemic change can take place for families. Parents become more self-confident in working with their children and in entering the world of work. The benefit for many participants was continuing their education and improving their job skills. Their first goal was to obtain their GED (General Equivalency Diploma). The adult participants indicated that obtaining their GED was the foremost reason for enrolling in the Even Start Program. The adult outcomes on the North Carolina Family Literacy Performance Indicators are closely linked to progress on obtaining a GED through Even Start Family Literacy and the North Carolina Community College System. Core Indicator One of the report stated that adult participants demonstrate achievement in the areas of reading, writing, English-language acquisition, problem solving, and numeracy, during the family literacy program year. Core Indicator Three stated that adult family literacy enrollees will receive their secondary school diploma or a general equivalency diploma, GED.

When collaboration was associated with other strategies, the combinations emerged as promising strategies for improvement. The success and sustainability for an Even Start Family Literacy Program depended on support from local agencies in the community. Collaboration among the school system, community college, health organizations, child advocates, religious organizations, and civic groups enrich the program. These partners provide varying support from funding resources to professional assistance.

**Limitations**

One problem addressed in this study is the use of program data analysis related to sustained funding for Even Start Family Literacy. Individual participant outcomes were more desirable but unavailable from the North Carolina Family Literacy Performance Indicator Reports. Another problem is the education level of the directors, an ordinal variable, that was used in the statistical analysis as an interval variable.

Also the Performance Indicator Report included only those students enrolled in Even Start programs long enough to be pre and post tested. As the school year progressed student enrollment in Even Start decreased dramatically. Many participants left after the first month while others reached their goal and left shortly before receiving their post-tests at the community college; therefore, the successes of many students were omitted from the reports. Why do adults leave the program? Miller (2005) reports barriers such as culture and language, educational level of parents, psychological issues, and logistical issues prevent family involvement in schools. Family literacy programs often present a deficit thinking perspective measuring adults against European-American, middle-class family literacy practices, which leads to the marginalization of students and families (Reyes & Torres, 2007). To retain adults in family literacy programs more culturally sensitive and supportive approaches to family literacy are needed. Furthermore, adults enrolled in family literacy programs have significant life pressures exacerbated by financial struggles that negatively affect their full participation.

Timmons (2008) explored special challenges that exist in researching family literacy programs. The diversity in funding, organization of the programs, selection of participants, and recruitment of families make it difficult to measure effective implementation. The sometimes informal nature of the family literacy program assessment complicates researchers’ efforts to identify trends and draw conclusions about the effectiveness of family literacy programs.

**Conclusions**

Dwindling financial resources at the federal, state, and local level may eliminate funding initiatives such as the Even Start Family Literacy Program. The federal budget for FY2011-2012 recommends eliminating funding for the Even Start Family Literacy Program.

State and local leaders must provide support for successful Even Start Programs by continually finding ways to fund and improve the program. School districts as well as numerous community agencies and partners are required to provide matching funds for the Even Start Programs and are important partners in collaborative efforts. Educators
statewide must be creative and allocate funds for continuation of successful Even Start Family Literacy Partnerships.

The Even Start Family Literacy model funded through federal grant initiatives was designed as “seed’ money to assist states in breaking the cycle of poverty and intergenerational undereducation. Evaluating programs on a case-by-case basis will inform public and private sources of funding and ultimately determine the future of the Even Start Family Literacy model.

Finally, “investment in family literacy programs requires evidence of their effectiveness; however, the way to obtain such evidence is to fund research that investigates the programs’ effects.” (Timmons, 2008, p. 100-101). National studies provide an impetus for looking at program improvement before reducing and ultimately eliminating funding for family literacy. Olson, Danahy, and Murphy (2005) suggest family literacy professionals must make concerted efforts to maximize implementation of evidence-based research to ensure that knowledge gained through research can be translated into practice. We should not “throw away” family literacy programs before trying to implement national findings to improve them.

**References**
Advocacy for the Efficacy and Reinstatement of Funding Federal Even Start Family Literacy Grant Programs


Article Citation

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