

# The Evaluation of Minnesota's Early Childhood Family Education Program

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The evaluation of Minnesota's Early Childhood Family Education (ECFE) program combined two aims. The first represented conventional uses of program evaluation. ECFE staff wanted to learn what kinds of outcomes are demonstrated by lower-income families involved in their programs, use that information to improve practice, and share what they learned with legislators, funders and colleagues around the country involved in family support and early childhood programs. The second aim was to build organizational capacity by involving staff in the entire evaluation process. ECFE leadership is committed to the notion that program participants, Minnesota families, benefit from staff participation in evaluations. Program staff who have skills in think-

ing critically about information are in a better position to make good practice decisions.

## Planning Context

**The Program.** Early Childhood Family Education (ECFE) is a voluntary public school program for all Minnesota families with children between the ages of birth and kindergarten. The program was begun in 1974 as a pilot and expanded to all districts in 1984. Today, ECFE is funded by over \$32 million in state aid and local levies. More than 260,000 young children and their parents (approximately 40% of eligible families) participated during the 1994-95 school year, the year data were collected for the evaluation. ECFE's delivery model is unique because it combines the following attributes: universal access; child-focused, family-focused, and parent-child interaction components; and individualized approaches.

ECFE's message is that what parents do is important. The purpose of ECFE is to strengthen families through the education and support of all parents to help them provide the best possible environment for the healthy growth and development of their children. ECFE supports parent understanding of children as well as the development of their parental roles.

ECFE programs offer different types and levels of services to meet specific family situations, and families choose those appropriate for them. Typically, a family attends a two-hour session each week that includes parent-child interaction time and additional learning opportunities for infants, toddlers and preschoolers while parents participate in a discussion group. Most programs include early screening for children's health and developmental problems, information on other community resources, special events, and libraries of books, toys and other learning materials. Families needing more or different services may receive home visits or other specialized services. Many districts have extensive collaborations with other community human service, health and education programs to meet growing enrollment demands and

diverse issues brought by families. Programs also offer sessions for families with specific concerns, such as single parents, teen parents, parents of children with disabilities, employed parents and others. Activities are provided at a variety of times during the day, evenings and weekends by professional parent educators and early childhood teachers. Program sites include schools, shopping centers, apartment buildings, homeless shelters, churches and other community facilities.

**Impetus for the evaluation and evaluation questions.** Planning for the evaluation began in the fall of 1993 following award of a grant from The McKnight Foundation to Family Education Resources of Minnesota (FERM). FERM is a, nonprofit organization supporting evaluation and training related to ECFE. FERM members include ECFE staff and district coordinators as well as two state department specialists. Members of FERM worked with me to shape the evaluation plan. The intent of our early work together was to focus evaluation questions and clarify the purposes the evaluation was to serve as well as their expectations about the evaluation process.

FERM members had two concerns. The first was the need for more information about family outcomes. ECFE's work with families is grounded in child development and family research, and the challenge for staff is to serve as effective translators and consultants. ECFE is particularly committed to helping parents understand their children and interact well with them. In this study, staff wanted to assess changes in parent-child interaction and learn how to use methods that could provide more information on behavior change than the strategies they had used in the past. The second concern was to learn more about the effectiveness of universal access programs in working with lower-income families. Only a few states have universal access family education and support programs. Most programs serving young families, of which there are estimated to be thousands, are limited in scope and/or focus; programs tend to be targeted to specific groups of families with specific needs or focus exclusively on children. Limited funds for evaluation prevent extensive evaluation of family support and education programs, and questions persist about the effectiveness of universal approaches (Weiss, 1990) in helping those most in need. In addition, a common perception is that universal access programs, including ECFE, attract and serve middle-income families and are not effective in helping low-income families.

To address these concerns and learn more about outcomes demonstrated by lower income participants, we decided to focus on family interest in ECFE, parenting knowledge and behavior families bring to ECFE, and changes in parent knowledge and behaviors following their first year in the program. (See Table 1 in the next section for a list of the evaluation questions.)

FERM members also described principles to be followed in the design and conduct of the evaluation which helped to clarify their expectations for the evaluation process. Staff emphasized utility and quality. The evaluation process, if useful, would strengthen staff skills, provide new understandings about families and the opportunity to reflect on that learning, and use data collection strategies that could, with slight modifications, become teaching strategies. Staff also wanted to move beyond the survey and interview methods they used in the past to assess behavior. In addition, information must be available during the evaluation process and reported in clear, useful formats. Technical quality was important. The evaluation needed to deliver high quality data, based on thoughtful and thorough analysis and be clearly reported regardless of findings. Finally, the design needed to be acceptable to specific academic audiences whom they felt were skeptical about staff involvement in evaluations.

**Evaluation participants and process.** The evaluation design and process emphasized staff participation in all phases of the study. The composition of the evaluation team evolved over the life of the project. Fifty of the sixty individuals on the team represented intended users (FERM members or district staff serving as site evaluators). FERM members were heavily involved in planning the evaluation, making design decisions, identifying site evaluators, reviewing report drafts and shaping recommendations. Site evaluators began their work in January 1994, during the pilot phase. They helped modify data collection strategies, conducted surveys, identified families to be interviewed and videotaped, conducted interviews and made videotapes of parent-child interactions, analyzed data, reviewed report drafts and helped shape findings. Special expertise was used at strategic points. Four individuals, nationally recognized experts in child development and family relations or evaluation, were contacted during the planning and reporting phases for their review. Technical support was added in the analysis phase to expedite data processing and assist with the analysis. Leadership for the project was provided by Dr. Betty Cooke (FERM member and state department specialist) and myself.

We supported the evaluation process in a number of ways. Dr. Cooke was responsible for the budget, communicating with FERM members, site evaluators and academic reviewers. She also revised the rating scale used by independent raters and worked with me to monitor the quality of data collected by site evaluators. As principle evaluator, I served multiple roles including facilitator and consultant to the design process, trainer, resource person, collaborator and communicator as well as technical expert. These roles included preparing summaries of design discussions, evaluation plans and instruments, two evaluation handbooks for site evaluators, interim briefings for different audiences, surveys of site evaluators to assess their reactions to the evaluation process, and preliminary and final evaluation reports.

## **Design and Methods**

The evaluation focused on lower-income families new to ECFE with a child between the ages of birth and 3 years. Lower-income was defined as reported annual household income less than \$30,000. Fourteen school districts participated; three urban (Minneapolis, St. Paul, and Duluth), five suburban (Twin Cities metropolitan area), and six rural. Districts were selected by geographic location, income and ethnic characteristics of district ECFE participants, as well as district interest in participating. Staff members from the 14 districts served as site evaluators.

**Sampling strategy.** One large group and one smaller group were involved in the evaluation. The large group ( $n = 409$ ) consisted of all lower-income families enrolling for the first time in ECFE during the first six weeks of the 1994-1995 year. This group was identified by surveying all families new to ECFE at study sites. Site evaluators then recruited the small group ( $n = 150$ ), called study families, to participate in the more intensive parts of the evaluation (interviews and videotapes). These families were selected based on their reported income and ethnicity.

Statistical analysis showed study group families were not significantly different from other ECFE low-income families with respect to education, employment status, number in household, ethnicity, residency in neighborhood, parent concerns and indicators of family stress. They did differ, however, on income, marital status, age, length of time at current address and gender. Study families reported lower family incomes, were more likely to have

**TABLE 1**  
**Data Collection Strategies**

<i>Evaluation Question</i>	<i>Data Collection Strategy</i>	<i>Data Source</i>	<i>When Collected</i>
To what extent are lower-income families entering ECFE programs at study sites and what are their characteristics?	<ul style="list-style-type: none"> <li>• Fall Enrollment Survey</li> </ul>	All families new to ECFE	Fall 1994
What knowledge and skills do lower-income parents bring to ECFE?	<ul style="list-style-type: none"> <li>• Fall Parent Interview</li> <li>• Videotaped Observations</li> <li>• Fall Stimulated Response Interview</li> </ul>	Study families	Fall 1994
To what extent and in what ways are lower-income parents involved in ECFE programs?	<ul style="list-style-type: none"> <li>• Participation Record</li> </ul>	Program records (study families)	Monthly (9/94-5/95)
How do families assess their ECFE experience?	<ul style="list-style-type: none"> <li>• Spring Enrollment Survey</li> </ul>	All families new to ECFE	Spring 1995
How do parents change their knowledge and skill?	<ul style="list-style-type: none"> <li>• Spring Parent Interview</li> <li>• Videotaped Observations</li> <li>• Spring Stimulated Response Interview</li> </ul>	Study families	Spring 1995

never been married, and were younger than other lower-income participants. In addition, almost all study participants were female. Analyses also showed study families did not differ significantly across regions (urban, suburban and rural) for the twelve attributes included in the analysis.

**Data collection.** Data collection was designed to assess immediate family outcomes from the perspectives of families, staff and independent raters. Data collection focused on the parent and child participating together in ECFE. Study families were involved in two open-ended interviews and two or three videotaped observations as soon as possible following enrollment in ECFE and again in the spring. Site evaluators conducted all interviews and were responsible for videotaping. Table 1 lists strategies associated with each evaluation question.

**Enrollment surveys.** The Fall Enrollment Survey collected data on parents' demographic characteristics, social support and family stress. The Spring Enrollment Survey collected information about parents' perceptions of the program and the results of their participation.

**Parent interviews.** The Fall Parent Interview included 15 open-ended questions. The interview provided information about how parents talk about their child's development, how well they understand child development and parenting issues, and how they perceive their role

in supporting growth and development. The Spring Parent Interview included additional questions asking how parent-child interactions had changed, if at all, and what difference participation in ECFE made for the parent or family. Interviews were typically conducted in the home by the site evaluator.

**Videotaped observations.** Up to three different observations were recorded in the fall and spring: (1) in-home parent-child interaction; (2) program site parent-child interaction; and (3) child-only observation. During the in-home observation parents were instructed to engage their child in play for 10-15 minutes. A basket of age-appropriate toys was brought to the home for use if parents desired. The program site observation was taped during parent-child interaction time. This observation focused on parents interacting with their children when other parents and children were present. Older children (approximately 18 months to 3 years) were videotaped for ten minutes during ECFE child-only sessions. Older children are typically involved in play and learning activities while their parents meet with other parents and the parent educator.

These videotapes were analyzed by two doctoral candidates from the University of Minnesota Institute of Child Development using the Parent Behavior Rating Scale adapted for this project. This scale provides an assessment of parenting behavior in parent-child interactions on nine concepts documented in child development research. The scale describes five levels for each of the nine concepts. Inter-rater reliabilities for these ratings were found to be .92.

**Stimulated response interviews (SRI).** Following home and program observations, parents viewed videotaped segments during an interview conducted by the site evaluator. The purpose of the interview was to understand how parents describe and interpret the behavior they viewed on the video. Site evaluators reviewed videotapes and selected one ninety-second segment from each of the in-home and program site videos for the parents to view. Site evaluators were instructed to select information-rich segments capturing parent-child interaction behaviors they would expect parents to observe and comment on given their exposure to ECFE. Most site evaluators used the SRI as a teaching opportunity. After the SRI was completed, site evaluators turned off the audio tape and replayed portions of the video to point out parent-child interaction behaviors the parent may have overlooked during the SRI.

Staff assessments of parent knowledge and behavior were based on an analysis of parent interviews and SRI data. Transcripts of the parent interviews and SRI were coded based on concepts central to ECFE work with parents (e.g., parent understanding of child's behavior, child guidance strategies used by the parent, and parent roles). Responses were then scored as high, medium, or low depending on how the responses compared to ECFE outcomes.

## **Findings and Staff Recommendations**

The evaluation report highlights five themes supported by 16 findings. The major themes are summarized here.

1. Parents felt that ECFE made a positive difference in their approach to parenting, parent-child relationships and their child's behavior. Following six to ten months of participation, 92% of low-income parents reported their participation in ECFE made a positive difference in their awareness and understanding of children and child development, in their confidence as a parent, and their feelings of social support. Seventy-

two percent reported improvements in how they relate to their child. Changes in children's behavior reported by parents included increased independence, improved language and communication skills, improved relationships with other children, and more self-confidence.

2. Staff assessments of parents' knowledge, behavior, and role perception from interviews revealed improvements from fall to spring. In general, more lower-income parents demonstrated improved awareness of their child and child development than changes in parenting behavior and parent role perception.
3. Independent ratings of videotapes by child development specialists at the University of Minnesota showed a decrease in the number of parents receiving low ratings on measures of parent-child interaction from fall to spring. The number of parents receiving low ratings on the Parent Behavior Rating Scale decreased 27%.
4. Lower-income families who come to ECFE demonstrate different levels of knowledge about child development and parenting skills, diverse demographic characteristics, different levels of accumulated risk, and different amounts of social support. Parents have in common satisfaction with family life, commitment to spending time with their families, and concerns about children and money. Lower-income families represented 36% of all ECFE participants in 1994 and 58% of new enrollees at study sites.
5. ECFE's universal access approach is effective with many different low-income families. Families with different characteristics demonstrate positive knowledge and behavior change and families who come with moderate or high skills maintain those skills. In this study neither demographics, hours of participation, nor number of risk factors predicted whether a parent's knowledge or behavior scores improved. In other words, characteristics of parents we know something about account for very little of the variance in parent score change as rated by either staff or independent raters.

Program staff spent several months reviewing evaluation findings and report drafts. Many of their comments and interpretations of findings were included in the report. Staff also formulated specific recommendations for policy and program improvement. Policy recommendations emphasized increasing funding so that more than 40% of the eligible population can be served and making ECFE programs available in elementary schools for families with children in grades 1-6. Program recommendations are related to study findings showing a discrepancy between knowledge and behavior change. Staff recommended that all programs review their educational methods and look for ways to help parents observe, practice and reflect on parenting behavior.

### **How the Evaluation is Used**

Staff are using their evaluation experience in interesting ways. During the 1995-96 school year, ten districts of the original 14 in our study volunteered to follow 32 study families for a second year (Mueller, 1996). Staff were interested in the feasibility of longer term studies as well as curious about the kinds of parent behaviors demonstrated during a second year of ECFE participation. During 1996-97, site evaluators planned and conducted 12 workshops around the state based on implications of evaluation findings for ECFE practice. These workshops, which involved 1,000 ECFE staff, placed particular emphasis on the importance of observation skills for both parents and staff and how to use videotaping and SRI interviews to

support positive behavior change. The response to the staff-conducted workshops was very positive. Districts are requesting more training on observation and using the concepts embedded in the Parent Behavior Rating Scale for reviewing teaching strategies. Most districts that participated in the evaluation are using study methods in some way for staff development and program planning. Many of the site evaluators serve as consultants or advisors to neighboring districts that are reviewing their teaching strategies and beginning to incorporate observation methods in their work with families.

Information about the evaluation was widely shared and dissemination efforts began during the pilot phase of the project. State and national conferences, inter-agency meetings and local and state advisory groups meetings were used to inform hundreds of professionals, groups and organizations about the evaluation while it was in process. Materials developed for the evaluation were also shared with school districts not involved in the evaluation and other Minnesota early childhood initiatives such as Learning Readiness and Way to Grow programs. Evaluation findings were officially released during a press conference called by the Commissioner of Education in April 1996 and discussed at national and state conferences the following month. Articles about the evaluation appeared in both major Minneapolis-St. Paul newspapers and the evaluation was included in Minnesota-based television and radio reports. In 1997, evaluation information played an important role in staff reports to state legislative committees.

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