This final report describes a program that developed and prepared a cadre of more than 120 Education Service District staff to become trainers, technical assistance providers, and expert resources in the provision of services to young children (ages 0-8) who are medically fragile or dependent on medical technology for their well being, and their families, throughout Oregon and Washington. Cadre training was designed to prepare participants to provide, coordinate, and enhance educational, safety, and health-related services for the target population. The training centered around three major areas: (1) technical skills; (2) team process; and (3) service delivery. The program included a needs assessment component which led to competency-based training in selected training events in each site. Training was augmented by project-supported follow-up activities and technical assistance based on individual goals developed by cadre participants. One of the challenges faced by the project was the difficulty in obtaining parent input due to their inability to attend meetings. (CR)
Medically Fragile Inservice for Related Services Teams - Outreach (M-FIRST)

Inservice Training Programs for Related Service Personnel
Early Education Program for Children with Disabilities (EEPCD)
Grant # H024D30045
CFDA: 84.024D

Patrick C. Haley, MS, Project Director
Forrest C. Bennett, MD, Janet L. Valluzzi, MBA, OTR/L
Washington Co-Directors

Oregon Health Sciences University
Child Development and Rehabilitation Center
P.O. Box 574
Portland, Oregon 97207
(503) 494-8362

In Collaboration With:
University of Washington
Oregon Department of Education
Washington State Office of the Superintendent of Public Instruction

October 1, 1996
II. ABSTRACT

Medically Fragile Inservice for Related Services Teams-Outreach
1993 - 1996

Since the passage and implementation of Public Laws 99-457 and 101-476 increasing numbers of medically fragile children are receiving services through early intervention, early childhood special education and public school systems. Because these children have safety, health, and educational needs that school staff are often unprepared to meet, the M-FIRST training projects were developed to help assure a safe and healthy educational environment for these children.

This outreach project is based on the Medically Fragile Inservice for Related Services Teams (M-FIRST project), a model inservice training program developed through a US Department of Education grant (Award #H024P00013) from the Office of Special Education and Rehabilitative Services. M-FIRST outreach worked with Education Service Districts in Oregon and Washington State to develop and provide training for related service personnel, educators, and administrators who now, or soon will, serve a target population of young children, ages 0-8 years, who are medically fragile or dependent on medical technology for their well being. The project developed teams in 15 sites in Oregon and Washington and trained over 120 ESD personnel to implement the M-FIRST model utilizing appropriate content and formats based on district needs and configurations. Cadre training was designed to prepare participants to provide, coordinate and enhance educational, safety, and health related services for the target population. National dissemination of information and materials is also an integral component of the proposal.

The model includes a thorough needs assessment component which leads to competency based training via selected training events in each site. Training is augmented by project supported follow-up activities and technical assistance based on individual goals developed by cadre participants.

The project was conducted collaboratively by the University Affiliated Programs at the Oregon Health Sciences University - Child Development and Rehabilitation Center and the University of Washington - CHDD along with the State Education Agencies of Oregon and Washington State.
III. Table of Contents

Final Report: Medically Fragile Inservice for Related Service Teams - Outreach

I. Title Page  i
II. Abstract  ii
III. Table of Contents  iii

IV. Goals and Objectives  1
V. Conceptual Framework  6
VI. Description of Training Model  8
VII. Methodological/Logistical Problems  14
VIII. Research/Evaluation Findings  16
IX. Project Impact  25
X. Future Activities  31
XI. Assurance Statement  32
IV. **Goals and Objectives of the M-FIRST Outreach Project**

**Project Goal**
The M-FIRST Outreach project goal was to develop and implement statewide staff inservice training programs that ensure safe, supportive, integrated educational environments for young medically fragile children in Oregon and Washington state. Reliance on the validated methods, training formats and content areas used in the M-FIRST model were the backbone of the Outreach project.

Through collaborative interface with the Oregon and Washington SEAs, the project worked within the network of Education Service Districts in each state that provide specialized services to LEAs. The project developed and prepared a cadre of more than 120 ESD staff to become trainers, technical assistance providers, and expert resources in the provision of services to young medically fragile children and their families throughout Oregon and Washington.

**Project Objectives**

**Objective 1.0** Implement the M-FIRST Training Model in a representative sample of 12 ESDs in Oregon and Washington.

- **Activity 1.1** Recruit needed personnel. .50 FTE Project Director and a .25 secretary will be recruited for Oregon and two Co-Directors for Washington activities will be staffed at .75 FTE and .05 FTE, respectively. Washington secretarial support will be reduced to .05 FTE.

- **Activity 1.2** Assemble Advisory Committee comprised of representatives to help guide the activities of the project and assure that they are compatible with those of other groups which serve the target population. The committee will consist of representatives from the following organizations: The UAPs in Oregon and Washington, the Departments of Education in Oregon and Washington; the Resource Access Project for Head Start, Region X; and from each state, at least one school nurse, occupational therapist, physical therapist, speech pathologist from the participating school districts, EI programs, adult services, psychologist or counselor, teacher, educational assistant, administrator and parent. The committee will meet on a scheduled basis at a location agreeable to people from both states for a four-hour work session. Evaluation measure: maintain a list of members and minutes of meetings.

- **Activity 1.3** Develop contracts with participating ESDs to delineate responsibilities of project staff and education offices, ESD staff and administrative roles, and establish accounting and documentation procedures for each participating agency.

- **Activity 1.4** Maintain and upgrade database of training/technical assistance consultants. A network of training consultants has been established to provide technical assistance and training.
on topics relating to young medically fragile children in the school setting.

**Activity 1.5** Maintain and upgrade resource library of training materials. A comprehensive bibliography of resource materials available for training on topics related to medically fragile children is currently available through the model M-FIRST project. This resource list will be updated to reflect best practices and coordinated with training packages to ensure the most appropriate use of resources for training.

**Objective 2.0** Develop a cadre of 50 highly trained personnel to implement the M-FIRST Model utilizing appropriate content and format based on district needs and configurations.

**Activity 2.1** Recruit participating team members. Project staff and ESD administrators will identify an appropriate team member selection process to select a multidisciplinary team of related services personnel, parents of young medically fragile children, and community service agency representatives. Evaluation measure: maintain list of participants.

**Activity 2.2** Administer needs assessment to identify personal and district goals. Core team members will be asked to assess their own level of ability on the curriculum competencies so they can select the competencies they plan to undertake as a part of the training program and formulate any other goals that are important. District services will also be profiled to identify goals at the district level. Evaluation measure: the individual needs assessment and district services profile will be administered before and after the training program. Rating changes will be noted.

**Activity 2.3** Arrange for university credit through Division of Continuing Education in Oregon and Washington so participants will be able to earn university credit at their own expense through participation in the training program. Evaluation measure: maintain lists of people registered for credit.

**Activity 2.4** Conduct training as scheduled.

**Activity 2.5** Develop individual and team goals. Based on individual needs assessment and district services profile, individual and team goals will be established to achieve higher levels of competency and service provision.

**Objective 3.0** Provide awareness level and job specific training to an additional 500 educators, related service personnel, administrators, and parents who work with or support programs for young medically fragile children.

**Activity 3.1** Identify local coordinator/Core team leader at each ESD. Each ESD will identify a local coordinator to facilitate team development, training activities, and technical assistance follow-up in their respective ESD. The primary role of the local coordinator will ensure implementation of the training model to meet specific educational service district needs and service delivery structure.
Activity 3.2 Establish mechanism for communicating district needs. The local coordinator will work closely with project staff to identify training needs and available resources to meet those needs. Resource and training requests will be documented for evaluation purposes.

Activity 3.3 Conduct technical assistance/training activities. A network of individuals who have expertise in issues related to medically fragile children had been developed during M-FIRST Model Development. This network and M-FIRST project staff, team and advisory committee members are available to train and provide technical assistance.

Activity 3.4 Monitor effectiveness of training, resource materials, services to children, districts. Impact on district services through assessment of IEPs/IFSPs and community impact will be performed.

Objective 4.0 Evaluate the efficacy of the M-FIRST training model in meeting the differing needs of the participating ESDs.

Activity 4.1 Repeat self-assessments. Training needs assessments will be repeated on an annual basis to monitor changes in training needs. The local coordinator will be responsible for administering this assessment and interpreting its results with project staff, participating teams and ESD administration.

Activity 4.2 Monitor team development. The Team Development Profile will be administered as teams are formed, and the Project Bridge Team Characteristics scale (see Appendix B) will be administered on a bi-annual basis to promote optimal team function.

Activity 4.3 Conduct consumer satisfaction survey. Consumer satisfaction surveys will be completed after each training event to assure appropriateness of training content and format.

Activity 4.4 Analyze data. Data collection and evaluation will be performed in conjunction with the project evaluation specialist. Statistical analysis and database management programs developed during the M-FIRST project will facilitate data collection and analysis.

Activity 4.5 Make revisions. Revisions in data collection methods and data analysis processes will be made as necessary to ensure quality of data. Significant findings of data analysis will be communicated to participants to further best practice.

Objective 5.0 Further develop materials used in implementing the M-FIRST training model. A comprehensive manual of results, recommendations and resources from the M-FIRST Outreach model is planned as a training guide. A diskette focusing on the administration and evaluation of the M-FIRST Needs Assessment is also projected for completion by the end of the project.

Activity 5.1 Monitor literature and actual practice to identify best practice. Investigate pathways
to identification of relevant literature and practice issues include clinical practice activities, technical assistance visits, computerized databases, training network personnel, advisory committee members, family members, and team participants. These resources will be tapped routinely to update training materials and supporting literature.

**Activity 5.2** Revise materials as necessary to reflect best practice and individual ESD needs. Training materials will be revised to reflect variance in ESD needs as determined by the needs assessment and in coordination with the local coordinator.

**Activity 5.3** Submit revisions to field readers to get their opinions and suggestions regarding the appropriateness, clarity, accuracy and usefulness of the information. Field readers will be chosen for their expertise in target areas and their interest in participating in the project.

**Activity 5.4** Re-print materials as necessary. Participating UAP media development and printing resources are available to update materials as indicated for individual ESDs and for national dissemination.

**Activity 5.5** Develop new materials. Implementation of the M-FIRST Outreach Model will allow development of materials specifically geared toward implementation of systems change for provision of services for young medically fragile children in the school setting. The M-FIRST Outreach Model will develop one program development manual which will identify components of the systems change process, including cost analysis. This information can be utilized at the state education agency level to assess resource commitment allocations necessary for M-FIRST Outreach program adoption. A description of computer database programs developed for data collection and analysis would supplement the manual and offer state education agencies an option for monitoring their own program development.

Additionally, the broader sample size of participating districts in M-FIRST Outreach will provide supplementary data for the development of competency-specific training packages. These packages would be developed for competencies which have a high frequency training need rating and would link topic-specific goals and objectives with a training content, format, evaluation and resources.

A report on the reliability of the use of the SIPAAC self-rating/selection of competencies model would provide a tool for assessing changes in self-perceived competency level for use in accordance with professional review standards.

**Objective 6.0** Disseminate project information and materials nationally.

**Activity 6.1** Distribute publicity and advertising in the form of news releases, descriptive information for entry in CDRC Publication's brochure that is disseminated to 5,000 people annually, descriptive information for inclusion in professional journals, newsletters and data banks, and
presentations made to professional groups. Evaluation measure: maintain copy of dissemination activities.

Activity 6.2 Disseminate materials. Copies of the materials will be sent to each of the participating agencies, to SEAs and OSERS for replication and distribution. The remainder will be made available for purchase at the cost of printing and handling through CDRC Publications and CHDD Publications for at least five years beyond the grant period. Evaluation measure: maintain numbers of manuals disseminated.
V. Conceptual Framework

The M-FIRST Training Program is based on the tenet that the numbers and visibility of children with chronic, complex health needs are increasing in the community and school settings. These children and their families deserve appropriate developmental and education services and opportunities provided in a safe environment.

Between 1% and 2% of children between the ages of 0-8 have health problems sufficiently severe to limit or prevent them from engaging in major usual activities at home, school or in the broader community. The medically fragile child has tremendous impact on family, school personnel and other community service providers concerned with meeting his unique health, social and educational needs. For the child, his family and school staff, the result is often stressful. Treatment and education regimens may be complex, demanding and not always successful. People involved face a variety of problems ranging from frequent school absences to dealing with death and dying. The problems include those associated with physical accessibility, lack of knowledgeable staff, filling non-traditional roles and dealing with a fragmented community health service delivery system.

Due to the complexity of needs, collaborative interdisciplinary teams are often involved in provision of care for this group of children. The M-FIRST pilot model provided a framework for an interdisciplinary training model. The Outreach phase of the M-FIRST Project substantiated and broadened this approach.

There is no single simple solution. This project started to address these issues by formulating a training program that would develop the level of skills in school district (and associated community) related service personnel, and administrators, needed to address the unique needs of medically fragile children and in working with their parents. Given a validated inservice training program for conveying a solid base of information, both parents and professionals will be better able to determine how to integrate medically fragile children more fully into the home, school and broader community and to provide them with appropriate, effective and cost efficient services through a collaborative effort.

By addressing the needs outlined above through the development and revision of a comprehensive, competency based training model, M-FIRST was able to validate the effectiveness of the certain strategies, needs assessment techniques, and training formats and content. Use of best practices that embrace sound principles of adult learning theory, including participants’ involvement in the planning process and practical applications of training content strengthened the project’s efficacy.
The key component of the project's success and innovative nature is its Needs Assessment process. Through this approach the training program has sufficient flexibility to respond to changing training needs due to geographic, resource related, and regulatory factors.
VI. Description of Training Model

Project Goal
The M-FIRST Outreach project goal was to develop and implement statewide staff inservice training programs that ensure safe, supportive, integrated educational environments for young medically fragile children. Reliance on the validated methods, training formats and content areas used in the M-FIRST model were the backbone of the Outreach project.

Through collaborative interface with the Oregon and Washington SEAs, the project worked within the network of Education Service Districts in each state that provide specialized services to LEAs. The project developed and prepared a cadre of 120 or more ESD staff to become trainers, technical assistance providers, and expert resources in the provision of services to young medically fragile children and their families throughout Oregon and Washington.

Adoption Sites
The Educational Service Districts (ESDs) of Washington and Oregon provide administrative and instructional support services to a combined total of 593 public school districts (WA = 296, OR = 297). The 29 ESDs in Oregon are in the process of restructuring their borders and administrative parameters. They are reforming into 21 entities for now and plan more changes in the future. Of the Oregon ESDs and the 9 existing ESDs in Washington, a representative sampling of 22 ESDs, formed into 15 separate training teams, participated in the implementation of the M-FIRST Outreach Model. See enclosed map, next page. They included:

<table>
<thead>
<tr>
<th>Oregon ESDs</th>
<th>Washington ESDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yr. 1 Coos ESD</td>
<td>ESD #105</td>
</tr>
<tr>
<td>Clackamas ESD</td>
<td>ESD #112</td>
</tr>
<tr>
<td>Jackson/Klamath/Josephine ESDs</td>
<td></td>
</tr>
<tr>
<td>Yr. 2 Hood River/Wasco ESDs</td>
<td>ESD #113</td>
</tr>
<tr>
<td>Yamhill ESD</td>
<td>ESD #114</td>
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<tr>
<td></td>
<td>ESD #101</td>
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<tr>
<td>Yr. 3 Columbia/Clatsop ESDs</td>
<td>ESD #171</td>
</tr>
<tr>
<td>Multnomah ESD</td>
<td>ESD #189</td>
</tr>
<tr>
<td>Deschutes/Crook/Jefferson/Harney ESDs</td>
<td></td>
</tr>
</tbody>
</table>
Medically Fragile Inservice for Related Services Teams

M-FIRST Outreach
Oregon Health Sciences University
503-494-2754

University of Washington
206-543-7403

Legend
- Year One Sites
- Year Three Sites
- Year Two Sites
- Field Test Sites

La Grande
Tacoma
White Salmon
Marysville
Eugene
Bend
Methods and Procedures

Site Selection

Education Service Districts in Oregon and Washington were recruited for participation based on the following criteria:

- representative demographic profile (culturally diverse, large and small student populations, urban and rural settings),
- willingness and ability to collaborate with the project by providing personnel to take part in project activities,
- perceived need of training in the areas of service provision to medically fragile young children, and
- willingness to provide access to work settings necessary for the completion of participants' follow-up training activities.

Participating ESDs were asked to select representatives to serve on the project advisory committee. This usually was the ESD Coordinator, often an administrator within the district.

Each participating ESD received an incentive grant in the amount of $2500 to help offset expenses associated with providing personnel, resources, and materials during their collaboration with the project. As discussed below, certain ESD personnel were asked to spend a considerable time away from their current duties (between .05 and .1 FTE) in pursuit of project activities. The incentive grant will reimburse only a portion of the expenses incurred by the participating ESD.

Given the rural nature of Washington and Oregon and the overall mission of ESDs in the two states to provide specialized services to schools and children over large areas, the ESD system was uniquely appropriate to be the vehicle of systematic training and technical assistance as set forth in the M-FIRST Outreach model.

Local ESD Coordinator

Project staff, working closely with ESD staff and administrators, selected a local team coordinator at each ESD. This person collaborated with project staff in gathering initial information about the ESD's training needs, staffing patterns, networking capabilities, outreach potential, and current services to young special needs children. In some cases, this position was filled by more than one individual, based on ESD configuration and need.
From this data, plans re: further team development, training format and content, inservice and technical assistance opportunities, evaluation, and outreach were made. All activities were focused upon the implementation of a collaborative systems change plan involving the other participating ESDs and the two SEAs of Oregon and Washington.

The personnel serving as ESD Coordinators within the participating ESDs developed or possessed administrative and organizational skills which allowed them to continue to function as a leader in the fields of training, technical assistance, and state of the art service to young medically fragile children, long after the life of the outreach project.

**Training Cadre Selection and Development**

Project staff assisted the ESD Coordinator with administrative approval and assistance from their district, in developing a multidisciplinary cadre of educators, related service providers, administrators, and parents or family members of medically fragile children. These core teams were made up ESD staff and included personnel from LEAs, and other agencies currently providing services to the target population. The multidisciplinary nature of teams is a key element in the M-FIRST model. It allows for the sharing of information between service providers and facilitates a better understanding of the issues effecting children with a wide array of special needs.

Existing multidisciplinary teams were targeted for participation in order to upgrade their skills and abilities. It is also expected that many new teams of service providers will be created as a direct outcome of the project.

**District Trainees**

Cadre members will bring resources and technical assistance to their local school districts reaching 500 more service providers throughout the two states. These district trainees will receive information at the awareness level from cadre members and M-FIRST consultants, after the life of the grant.

**Assessment of Training Needs**

As teams varied or changed, so did their training needs. The ESD Coordinators were trained by project staff to assess the existing and changing need for training in the field. A comprehensive listing of competencies and sub-competencies specific to issues surrounding service provision to young medically fragile children has been drawn up and infused into the Statewide Inservice Project/Alternative Communication for Severely Handicapped (SIPAAC) self-rating/selection of competencies model. This needs assessment tool asks respondents to rate “Where I am” and “Where I want to be” on all presented...
items. Thirteen large competency areas with numerous sub-competencies in each section have been developed and evaluated through the original M-FIRST project. Cadre team members were asked to respond to the items during each year of the project. The resulting data, indicated to the core leaders which topics are seen as high priorities in the field. This information, along with input from the advisory committee, and the project staff’s research into current trends, issues, and best practices, formed the basis for the development of the inservice training content and format and technical assistance activities.

Training Content
Project staff insured that a significant portion of the training content adhere closely to existing training needs in the regions being served. In both the Outreach phase and the original M-FIRST project, expressed needs, and therefore most content topics centered around three major areas. These were:

- **Technical Skills.** This area encompassed issues such as technical clinical procedures (tracheostomy care, clean intermittent catheterization, respiratory therapy, etc.), management of medical conditions in the classroom and home settings, and certain functional approaches to providing education within the child’s health care environment.

- **Team Process.** Team leadership, interdisciplinary and multi-disciplinary team functioning, team support, case management, and issues surrounding grief and loss were addressed in this topic area.

- **Service Delivery.** Topics involving the management of transitions, safety measures, and the legal and ethical implications of providing services to young children with technological dependence and chronic illness were grouped into this topic area.

The model is flexible enough to allow for, and indeed encourages specialized training needs, should they be required by the ESD teams. Given the training resources and collaborative expertise of the two host UAPs, meeting the training content needs of the ESD cadres was optimistically seen as an exciting challenge.

Training Activities
Given the diverse disciplines, levels of training, and regional needs documented in the cadre team members, training activities were presented in several formats in order to best meet the needs of the learners and impact the state systems.
Formal training conferences were held which brought team members together from all field sites in Oregon and Washington. These large combined meetings took the form of a three to four day Summer Institute each year. These intensive, multi-day training sessions included topics of general and regional relevance, as well as discipline-specific training. There was a mix of interactive, hands-on training, panel discussions, case presentations, and didactic training.

One day training conferences were also held in each state throughout the school year. These sessions, usually held in the spring and fall, focused on issues of state or regional importance and also provided training in discipline-specific topics. Mixing training participants in different combinations (by state, by population base or region, by discipline, by specific interests) allows for extremely dynamic training experiences.

Follow-up training to themes addressed in the Summer Institutes were included in the one day sessions. By revisiting previous topics, cadre training participants will have opportunities to gain further feedback and specialization in techniques, methods, practices, issues, and information presented earlier.

Each team and each team member was invited and urged to develop follow-up goals and plans to be completed during the school year. Project staff assisted the core team leaders in providing technical assistance, further training, resources, or materials to teams and their members in order to assist them in completing their planned activities. The follow-up planning allowed teams and their members to personalize and further develop the concepts introduced in the training sessions and directly impact services to medically fragile children, their family members and the community. It is projected that many teams will offer inservices to their own and other school districts as an outgrowth of their follow-up plans.

Technical assistance provision to ESDs and the programs they serve was also seen as a training priority. Core team leaders learned to develop and match up TA resources with expressed needs in the field. The utilization of existing resources with the local community is emphasized. Team leaders will also have access to TA providers from the two participating UAPs, former M-FIRST team members from the original six field sites, SEA personnel and consultants, and other private practice and agency personnel.

For a given field site, the typical schedule of training through the M-FIRST Outreach project included:

- **Fall:**
  - Team development meetings (one or two)
  - Needs Assessment activities
  - Initial training sessions (one or two)
Winter: Technical assistance visits (as needed and requested)  
Training sessions and district wide inservices (one or two)

Spring: Full-day State Conference (one each in Oregon and Washington)  
Follow-up T/A activities

Summer: 3-4 day Summer Institute

Sites continue to have linkages through district and statewide inservice activities. By working closely with SEAs, the project's and field sites' continuance of project goals is assured.
VII. Methodological/Logistical Problems

Parent Participation on the Advisory Committee
The project has always committed itself to including and seeking out input from parents and family members of medically fragile children. This included a strong desire to have active parent participation on the project advisory committee. This proved to be a difficult task to accomplish. While there was active inclusion of parents on many of the M-FIRST training teams, project staff found it hard to have parents regularly attend the quarterly advisory meetings. Parents of children with complex health needs are not as readily available as professionals in the field for meetings that may require travel, significant time commitment and planning several months in advance. Their children’s conditions may not allow this freedom or level of participation, even though the parent is invested in the advisory process. Frequent telephone contact with parents, holding meetings in the parents’ hometowns and utilizing their expertise in specific ad hoc projects are strategies devised and recommended by project staff.

Project Staffing
The project began in 1993 with OHSU’s Dr. Gerald Smith as Principal Investigator and Co-Director along with Co-Director Dr. Forrest C. Bennett of UW. Mr. Pat Haley and Ms. Jan Valluzzi were project coordinators in Oregon and Washington, respectively. In the interim, Dr. Smith retired and was replaced as PI and Co-Director by OHSU’s Dr. Clifford J. Sells. Later, in the second year of the project, Dr. Sells, who had many other administrative activities, appointed Mr. Haley as PI and Project Director. During the same time frame, Dr. Bennett appointed Ms. Valluzzi as Washington Co-Director. US DOE Project Officer Dr. Lee Coleman was apprised of and approved all staffing changes.

Confidentiality of Student Health Records
State guidelines for confidentiality restricted project staff’s and participating school personnel’s access to student health records. This made project-wide implementation of the District Services Profile (DSP), as planned in the original proposal, unfeasible. Alternative means of gathering some of this data was developed by project staff, but made completion of the DSP related evaluation measures impossible.

As more students with special health care needs receive services in the community and school settings, confidentiality of information and access to this data will continue to challenge information sharing and data collection efforts. Future projects’ evaluation efforts must adequately reflect consideration of state and federal guidelines in this area. Formal “Release of Information” forms and routines or instructional review board informed consents may be necessary to access data. Future grant proposals that look to gather and utilize child, patient, or student data should anticipate the cost, time and procedures necessary
to implement these efforts.

Distribution of Incentive Grant Funds
The project provided "Incentive Grant" funds to participating sites to support team activities and offset costs associated with participating in the project training activities. In the original proposal and budget justification, each participating University (OHSU in Oregon and UW in Washington) were to distribute these funds to participating sites in their respective states. At the request of the University of Washington staff, OHSU took over this duty for both states during all three years of the project.

Some participating districts had difficulty in monitoring and tracking the receipt and spending of these funds. When questions arose, they were sometimes unsure as to who in the project to talk with about when the funds were received, where the money was within their own accounting systems, allowable expenses and other related issues. UW staff were very good at referring Washington school districts' questions on to the appropriate sources at OHSU.

Dissemination Products
The format of one of the replication manuals described in the original proposal has been updated and will appear in diskette form, rather than a paper bound book. The use of computer diskette formatting will allow cheaper and broader dissemination of the information.
VIII. Research/Evaluation Findings

This section of the M-FIRST Outreach Project Final Report presents and discusses the evaluation of the project and the results of the analyses. The project evaluation questions focus on changes in knowledge and skills in M-FIRST team members as measured by the M-FIRST Needs Assessment.

The M-FIRST Needs Assessment is comprised of thirteen competencies. Participants rate themselves on each of the competencies, utilizing a 5 point scale, relative to where they perceive themselves to be at the time of administration (AM) and where they would like to be in the future (WANT). M-FIRST Outreach Project team participants completed the M-FIRST Needs Assessment as they entered into the project (Time 1) and again at the completion of their year of participation in the project (Time 2). Thus, mean ratings are displayed within the following tables as AM1, AM2, WANT1 or WANT2.

For analytical purposes, the thirteen competencies have been grouped into three “mega-competencies.” The three mega-competencies and the competencies which comprise them are:

- **Technical Skills**: Managed of Medical Conditions in the School Setting, Functional Approaches to Classroom Management and Clinical Procedures
- **Service Delivery Issues**: Classroom Safety Measures, Legal Issues, Managing Transitions, Grief and Loss, Inclusive Education, Cultural Diversity
- **Team Process**: Working With Families, Working as Part of Multi-Disciplinary Team, Team Leadership, Team Support

Statistical analyses have been performed on the data to answer four evaluation questions. They are:

1. To what degree has change occurred in the level of competency of Outreach Project participants as a result of the project?

2. Are there significant differences in the Time 1 and Time 2 average mean ratings based upon membership by state, discipline or geographical location?

3. Is there a significant difference in the AM1 scale scores of teams over time (i.e. pilot and each of the subsequent outreach years)?
To what degree is there a difference in the measured level of change in competencies within each of the two project's?

Average ratings (means) and standard deviations for each administration have been calculated. Paired t-tests and ANOVAs have been applied to the data to determine the level of significance in changes reported by the participants over the life of the project.

Data Analysis Results

Q: To what degree has change occurred in the level of competency of Outreach Project participants as a result of the project?

This question was addressed by testing for significant differences in mean ratings using a paired t test for each of the 13 competencies' AM scales (Time 1 and Time 2) for all team participants throughout the life of the project. ANOVA was applied to the data to test for significant differences in the AM1-AM2 scale scores as well as for changes in the differentials between the AM1-WANT1 scale scores and the AM2-WANT2 scale scores on each of the mega-competencies. These results are presented below in Tables 1 and 2.

Table 1
M-FIRST Outreach Project
Summary of Needs Assessment Results by Mega-Competencies
n = 68

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<th>Competency Area</th>
<th>AM1</th>
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<th>WANT2</th>
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</tbody>
</table>

* and **Significance is defined p≤0.05
*p-values of AM1-AM2 ANOVA  **p-values of AM1/WANT1 - AM2/WANT2 ANOVA
Significant differences were found to exist between Time 1 and Time 2 administration on the AM scale for all participants in the Outreach Project on each of the mega-competencies. Significant differences were found to exist between the differences between the AM and WANT scales from Time 1 and Time 2 administrations. Over time, the differences between the Am and Want scales were significantly less for Time 2 than Time 1.

Applying a Paired t test, it was determined that for each of the thirteen competencies assessed by the M-FIRST Needs Assessment, there is a greater change in Time 1 and Time 2 administration scores on the AM scale, for all of the teams participating in the project, than would have been achieved by chance. Significant differences were found to exist in the mean ratings of participants' knowledge on each of the thirteen competencies between the AM1 and AM2 scales.

Table 2
M-FIRST Outreach Project
Summary of Needs Assessment Results - Paired Differences t-test
n = 72

<table>
<thead>
<tr>
<th>Competency Area</th>
<th>AM1</th>
<th>AM2</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>sd</td>
<td>mean</td>
</tr>
<tr>
<td>Mgmt of Medical Conditions</td>
<td>2.99</td>
<td>0.79</td>
<td>3.67</td>
</tr>
<tr>
<td>Grief &amp; Loss</td>
<td>2.68</td>
<td>0.80</td>
<td>3.33</td>
</tr>
<tr>
<td>Managing Transitions</td>
<td>2.59</td>
<td>1.01</td>
<td>3.50</td>
</tr>
<tr>
<td>Working with Families</td>
<td>3.15</td>
<td>0.75</td>
<td>3.81</td>
</tr>
<tr>
<td>Team Process</td>
<td>2.98</td>
<td>0.84</td>
<td>3.49</td>
</tr>
<tr>
<td>Functional Approaches</td>
<td>2.93</td>
<td>0.83</td>
<td>3.65</td>
</tr>
<tr>
<td>Safety Measures</td>
<td>2.71</td>
<td>0.83</td>
<td>3.52</td>
</tr>
<tr>
<td>Legal Issues</td>
<td>2.22</td>
<td>0.79</td>
<td>3.31</td>
</tr>
<tr>
<td>Clinical Issues</td>
<td>2.73</td>
<td>0.93</td>
<td>3.48</td>
</tr>
<tr>
<td>Team Leadership</td>
<td>2.66</td>
<td>0.79</td>
<td>3.35</td>
</tr>
<tr>
<td>Team Support</td>
<td>2.77</td>
<td>0.69</td>
<td>3.47</td>
</tr>
<tr>
<td>Inclusive Education</td>
<td>2.76</td>
<td>0.77</td>
<td>3.55</td>
</tr>
<tr>
<td>Cultural Diversity</td>
<td>2.73</td>
<td>0.83</td>
<td>3.25</td>
</tr>
</tbody>
</table>

Significance determined to exist if p ≤ 0.05
Q: Are there significant differences in the Time 1 and Time 2 average mean ratings based upon membership by state, discipline, density or geographical location?

This question was addressed through the application of ANOVA to examine the degree to which differential change in mean ratings occurred based on membership by state, discipline or geographical location. These results appear below in Tables 3 through Table 6.

State. In Table 3, the mean ratings and standard deviations for each of the three mega-competencies at Time 1 and Time 2 are displayed by state. Only paired scores were utilized in the analysis. Based on the analyses (ANOVA), one cannot conclude that the Oregon and Washington teams changed differently over time as measured by the M-FIRST Needs Assessment. Significant differences were not found to exist in changes over time based upon state membership. The mean rating ratings for all team participants for which there is a Time 1 and Time 2 scores were analyzed by mega-competency using the AM scale.

<table>
<thead>
<tr>
<th>Competency Area</th>
<th>AM1</th>
<th>AM2</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>sd</td>
<td>mean</td>
</tr>
<tr>
<td>Technical Skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oregon (n = 42)</td>
<td>2.91</td>
<td>0.64</td>
<td>3.68</td>
</tr>
<tr>
<td>Washington (n = 30)</td>
<td>2.84</td>
<td>0.84</td>
<td>3.45</td>
</tr>
<tr>
<td>Team Process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td>2.95</td>
<td>0.62</td>
<td>3.56</td>
</tr>
<tr>
<td>Washington</td>
<td>2.87</td>
<td>0.73</td>
<td>3.42</td>
</tr>
<tr>
<td>Service Delivery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td>2.54</td>
<td>0.75</td>
<td>3.49</td>
</tr>
<tr>
<td>Washington</td>
<td>2.55</td>
<td>0.72</td>
<td>3.30</td>
</tr>
</tbody>
</table>

Significance determined to exist if p ≤ 0.05
Discipline. Similarly, the pre/post ratings on the Needs Assessment were grouped for analysis based upon discipline. Team members were grouped into two groups - Educators and Related Services. Individuals who were employed or involved with children or the school setting in a manner that was other than primarily education focused were grouped as Related Services. The results of this are displayed below in Table 4.

Table 4
M-FIRST Outreach Project
Summary of Needs Assessment Results by Discipline Category

<table>
<thead>
<tr>
<th>Competency Area</th>
<th>AM1</th>
<th>AM2</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>sd</td>
<td>mean</td>
</tr>
<tr>
<td>Technical Skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education (n = 35)</td>
<td>2.87</td>
<td>0.72</td>
<td>3.65</td>
</tr>
<tr>
<td>Related Services (n = 37)</td>
<td>2.89</td>
<td>0.74</td>
<td>3.53</td>
</tr>
<tr>
<td>Team Process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>2.97</td>
<td>0.68</td>
<td>3.61</td>
</tr>
<tr>
<td>Related Services</td>
<td>2.86</td>
<td>0.66</td>
<td>3.41</td>
</tr>
<tr>
<td>Service Delivery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>2.53</td>
<td>0.68</td>
<td>3.44</td>
</tr>
<tr>
<td>Related Services</td>
<td>2.55</td>
<td>0.79</td>
<td>3.38</td>
</tr>
</tbody>
</table>

Significance determined to exist if p ≤ 0.05

There are no significant differences in the changes over time in the scores of the team participant based upon their discipline membership. No significant differences were determined to exist (p ≤ 0.05) between Time 1 and Time 2 administration of the Needs Assessment on the three mega-competencies when scores were grouped by discipline.

Density/Geographical Location. M-FIRST was implemented in a full range of settings relative to population density and geographical location throughout Oregon and Washington. The evaluation data were analyzed, using ANOVA, to determine the degree to which differences exist in the effectiveness of the M-FIRST Outreach Project as it relates to these two variables - density and location. The analysis of the Needs Assessment results, by mega-competency, by location of the team was intended to determine the degree to which the project has been effective in different settings.
Two different configurations were created for this analysis. Teams were assigned to one of three categories in relation to population density. The categories were: rural, urban or "hybrid". Many school districts exist in an area in which there may be both a very urban type of environment extending out into a very rural environment.

Due to the nature of the Northwest and its demographics, the teams were also assigned into one of three groups based upon geographical location. These groups were labeled: East side (teams operating east of the Cascade Mountains), 1-5 Corridor (teams clustered around Interstate 5 - the main north-south thoroughfare) and Far West (teams beyond easy reach of the 1-5. Tests of significance were applied to both groupings. The results are displayed below in Tables 5 and 6.

Table 5
M-FIRST Outreach Project
Summary of Needs Assessment Results by Density

<table>
<thead>
<tr>
<th>Competency Area</th>
<th>AM1</th>
<th>AM2</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>sd</td>
<td>mean</td>
</tr>
<tr>
<td>Technical Skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural (n=41)</td>
<td>2.85</td>
<td>0.70</td>
<td>3.60</td>
</tr>
<tr>
<td>Urban (n=6)</td>
<td>3.08</td>
<td>0.72</td>
<td>3.81</td>
</tr>
<tr>
<td>Hybrid (n=25)</td>
<td>2.89</td>
<td>0.79</td>
<td>3.51</td>
</tr>
<tr>
<td>Team Process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>2.93</td>
<td>0.68</td>
<td>3.50</td>
</tr>
<tr>
<td>Urban</td>
<td>2.79</td>
<td>0.69</td>
<td>3.45</td>
</tr>
<tr>
<td>Hybrid</td>
<td>2.93</td>
<td>0.66</td>
<td>3.53</td>
</tr>
<tr>
<td>Service Delivery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>2.53</td>
<td>0.75</td>
<td>3.41</td>
</tr>
<tr>
<td>Urban</td>
<td>2.62</td>
<td>1.05</td>
<td>3.43</td>
</tr>
<tr>
<td>Hybrid</td>
<td>2.55</td>
<td>0.65</td>
<td>3.40</td>
</tr>
</tbody>
</table>

Significance determined to exist if p≤0.05

Neither analysis resulted in significant differences being found to exist between AM1 and AM2 scale scores on the three mega-competencies. The changes in scores were not significantly different based upon either density or geographical location. This suggests that the M-FIRST project is effective with school personnel from a variety of settings.
Table 6
M-FIRST Outreach Project
Summary of Needs Assessment Results by Location

<table>
<thead>
<tr>
<th>Competency Area</th>
<th>AM1</th>
<th></th>
<th>AM2</th>
<th></th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>sd</td>
<td>mean</td>
<td>sd</td>
<td></td>
</tr>
<tr>
<td>Technical Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East side (n=18)</td>
<td>2.41</td>
<td>0.67</td>
<td>3.19</td>
<td>0.63</td>
<td></td>
</tr>
<tr>
<td>I-5 Corridor (n=31)</td>
<td>3.04</td>
<td>0.63</td>
<td>3.71</td>
<td>0.60</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Far West (n=23)</td>
<td>3.04</td>
<td>0.75</td>
<td>3.73</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>Team Process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East side</td>
<td>2.55</td>
<td>0.55</td>
<td>3.22</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td>I-5 Corridor</td>
<td>2.99</td>
<td>0.58</td>
<td>3.56</td>
<td>0.58</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Far West</td>
<td>3.10</td>
<td>0.76</td>
<td>3.65</td>
<td>0.78</td>
<td></td>
</tr>
<tr>
<td>Service Delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East side</td>
<td>2.25</td>
<td>0.60</td>
<td>3.07</td>
<td>0.51</td>
<td></td>
</tr>
<tr>
<td>I-5 Corridor</td>
<td>2.59</td>
<td>0.70</td>
<td>3.50</td>
<td>0.62</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Far West</td>
<td>2.71</td>
<td>0.84</td>
<td>3.56</td>
<td>0.74</td>
<td></td>
</tr>
</tbody>
</table>

Significance determined to exist if p ≤ 0.05

Q: Is there a significant difference in the AM1 scale scores of teams over time (i.e. pilot and each of the subsequent outreach years)?

The AM1 scale scores for each of the thirteen competencies and the three mega-competencies were compared across each of the three years of the Outreach project for significant differences. Additionally, the AM1 scale scores were tested against the Pilot Project AM1 scale score. Over the six years of the Pilot and Outreach projects, there has been increasing attention given to issues related to identifying, planning for and delivering services to children with complex and chronic health issues. This question investigates the degree to which increased activity, in general, in the area of addressing the needs of children with complex and chronic health needs has made a difference in the awareness and skills of entering participants over time. The results of the analysis by mega-competencies are displayed below in Table 7.
As a result of the application of ANOVA to the M-FIRST Needs Assessment data, it was determined that no significant differences exist amongst the Pilot Project AM1 scale scores and the three years of Outreach Project AM1 scale scores on any of the thirteen competencies and three mega-competencies. This suggests that the participants entered the pilot and outreach projects without measurably significant differences in their self-perceived level of competency as measured by the M-FIRST Needs Assessment.

Table 7
Summary of M-FIRST Needs Assessment Results
M-FIRST Pilot and Outreach Projects
A Comparison of AM1 Mega-competency Scores by Year of Project Participation

<table>
<thead>
<tr>
<th>Mega Competency</th>
<th>FY91</th>
<th>FY94</th>
<th>FY95</th>
<th>FY96</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>sd</td>
<td>mean</td>
<td>sd</td>
</tr>
<tr>
<td>Technical</td>
<td>2.92</td>
<td>0.75</td>
<td>2.88</td>
<td>0.68</td>
</tr>
<tr>
<td>Team</td>
<td>2.88</td>
<td>0.66</td>
<td>2.88</td>
<td>0.72</td>
</tr>
<tr>
<td>Service</td>
<td>2.54</td>
<td>0.66</td>
<td>2.57</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.82</td>
<td>0.83</td>
<td>2.93</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td>2.81</td>
<td>0.68</td>
<td>2.86</td>
<td>0.78</td>
</tr>
<tr>
<td></td>
<td>2.46</td>
<td>0.78</td>
<td>2.62</td>
<td>0.81</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td>&gt;0.05</td>
<td>&gt;0.05</td>
<td>&gt;0.05</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>

Significance determined to exist if p ≤ 0.05

Q: To what degree is there a difference in the measured level of change in competencies within each of the two project’s?

Recognizing that the Pilot project worked with participating team members for three consecutive years as opposed to the one year team involvement in the Outreach project, it was anticipated that there might be greater gains measured to exist in the Pilot project. Significant differences were found to exist between the Time 1 and Time 2 between the Pilot Project and Outreach Project on the Team Service Delivery Skills. No significant differences were found to exist between the changes measured over time between the Pilot and Outreach project on the Technical Skills and Team process Skills Mega Competencies. It appears that the model of delivery of the M-FIRST Outreach Project is an effective adaption of the Pilot Project model developed in 1990-1993.
Table 8
M-FIRST Outreach Project
Summary of Needs Assessment Results - ANOVA
Pilot and Outreach Projects by Mega-Competencies

<table>
<thead>
<tr>
<th>Competency Area</th>
<th>AM1 mean</th>
<th>sd</th>
<th>AM2 mean</th>
<th>sd</th>
<th>AM1 mean</th>
<th>sd</th>
<th>AM2 mean</th>
<th>sd</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Skills</td>
<td>2.99</td>
<td>0.73</td>
<td>3.97</td>
<td>0.44</td>
<td>2.88</td>
<td>0.73</td>
<td>3.59</td>
<td>0.70</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Team Process</td>
<td>2.98</td>
<td>0.65</td>
<td>3.95</td>
<td>0.44</td>
<td>2.92</td>
<td>0.66</td>
<td>3.51</td>
<td>0.66</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Service Delivery</td>
<td>2.68</td>
<td>0.75</td>
<td>3.98</td>
<td>0.42</td>
<td>2.54</td>
<td>0.73</td>
<td>3.41</td>
<td>0.66</td>
<td>p=0.05</td>
</tr>
</tbody>
</table>

Significance determined to exist if p < 0.05

Discussion of Result.

The M-FIRST Outreach Project has successfully demonstrated its effectiveness in increasing the self-perceived level of competency in areas utilized in providing care and service delivery to medically fragile children. Designed to focus on both the technical skills required for medical management of children with complex and chronic health needs in a classroom setting and an interdisciplinary team approach to case management, the M-FIRST Outreach Project has demonstrated significant increases in competence of the team participants as measured by the M-FIRST Needs Assessment. The project has been successful in reducing the discrepancy between the participants’ perception of where they are on each of the mega-competencies as they enter the project from where they would like to be by the time they have completed their participation in the project.

Like the M-FIRST Pilot Project which preceded it, the M-FIRST Outreach Project has demonstrated a positive change in the knowledge and skills required to provide care and service delivery to children with complex and chronic health needs which is comparable across state lines, disciplines, population density and geographical location. The M-FIRST Outreach Project is an effective and viable model of interdisciplinary team development and training.
IX. Project Impact

Impact on Services
The M-FIRST Outreach project provided significant national and regional impact in the fields of personnel preparation, model inservice training, and service provision to young medically fragile children, and their families.

Systems Level Outcomes
The M-FIRST Outreach Project was designed to contribute to a positive change in the systems in which children with complex and chronic health conditions receive their education. These system level changes might occur within the realm of policy, procedures, personnel, financing, structure or practices. A qualitative evaluation method, using telephone interviews, focused on the project’s system-wide impact on field sites and related administrative entities.

Method
Upon completion of the M-FIRST project, a telephone interview was conducted, by the project evaluator, with a small sample of participants from the M-FIRST Outreach Project. The study was designed to interview 12 selected participants of the M-FIRST Outreach and Pilot Project. The purpose of the telephone interview was to document examples of systems level change as reflected in the stories of the interviewed participants. Each telephone interview required a brief 20 to 30 minutes of time. Participants were asked to describe examples of the systems level change as a result of the M-FIRST Outreach Project in the areas of Policy, Procedures, Program Structures, Personnel, Financial and Program Structures.

Who was Interviewed
Five individuals successfully completed the telephone interview regarding systems level outcomes of the M-FIRST Outreach Project. They included people who participated at significant levels in the planning and implementation of the M-FIRST Outreach Project. Three of the respondents were ESD M-FIRST Coordinators who served in an administrative role within their respective districts and agreed to work closely with project staff throughout the project’s presence within their district. One respondent, an SEA administrator who is an RN, has worked with the project through both of the 3-year periods of funding. One was an RN who was a training participant in the pilot phase of the project, and who had continued to participate as a trainer and resource for the current Outreach project.

Summary of Findings
Each of the five participants were able to describe examples of systems level change they observed as a
result of the M-FIRST Outreach Project. Changes in policy and procedures that affect the way students with complex and chronic health needs receive services were most frequently cited. The following verbatim excerpts characterize the highlights of the interviews.

ESD Coordinator #1: The reason we entered into the M-FIRST Outreach Project is because we had seen some very happy people from pilot project activities. The project presented the legal material in a manner that is easy to work through, allowing a comfortable dialogue with people about these very important and difficult issues. We had a 12 member team. We focused on training for the core group. Involvement with the project resulted in policy changes that will have a lasting change. As a result of the project involvement, protocols will be developed for medically fragile young children. They are talking about structural changes in the program which will involve contracting services back into the ESD. The inservice piece presents a fundamental change in that it allows us to bring people here to deal with our local problems. The project has been helpful. It has allowed us to get immediate help to our people.

Nurse/Trainer: Involvement with the M-FIRST Project resulted very directly in a personnel change to better serve the children. A protocol book was developed to facilitate other nurses working with this population. These materials are being disseminated throughout the local district and across the state. The project resulted in updated procedures, increases in personnel, a better coordinated program structure, and increased funding as a result of grant writing efforts.

ESD Coordinator #2: All participants came with very different problems - a very heterogeneous group - all with very different kids. With 35 school districts in 5 counties in a large geographical region, the common piece for me was coordinating a training plan to raise awareness of the needs of medically fragile children and access to training to meet the level of needs and the opportunity to have access to technical assistance. My goal was to have access to knowledge. Outreach Project participation resulted in our agency focusing on medically fragile children. That is the first step and it is important, but I don’t have evidence to say there were changes in practitioner behaviors. I learned that consortia requires more involvement than I had anticipated.

SEA Administrator/RN: Major impacts of M-FIRST Outreach project include: 1) Identifying and bringing together teams at district level - the composition and location of team. We have had teams before, but to have multi disciplinary team with classified personnel and parents was really unique. Inservice Training Team at ESD level - in the last 3 years of grant - has involved seven of nine ESDs in our state. ESDs have always been involved - but this focused on health needs.
Broadened availability of inservice. The nurse becomes integral part of team.

2) Development of District Services Profile Community Assessment Tool & identifying procedural and resource gaps. It is a wonderful tool. Studying the availability of nursing services has been useful. The evaluation of inservice training was unique.

3) Legal documents prepared by project staff regarding DNR (do not resuscitate orders) & delegation. Project staff are not afraid to advise on tough issues. The materials really help.

4) Inservice training was designed to meet identified needs. Use of experts were important training components. Higher quality/focused inservices. We will miss having M-FIRST to refer to. The project had so much to offer. Not having M-FIRST will leave a hole.

ESD Coordinator #3: I organized the team, but was not an active member. We acquired FTE to support a team leader (a physical therapist) who keeps it going. Involvement contributed to development of 3 district-wide policies: blood born pathogens, DNR, medication dispensing. The team Leader has been instrumental in doing inservice throughout our 2 county area. The team will reconvene in the fall of 1996, after the life of the project. Increased staffing capabilities. Parent on the group has had parent to parent contact and will meet periodically with other district parents. Planning staff development for team to keep themselves up to date.

This qualitative, focused measure of impact, satisfaction and involvement indicates the overall success of the M-FIRST Outreach project. Participants, who have intimate knowledge of the methods, content, format and outcomes of the project, concur that the project was successful, flexible and efficacious in its attempt to provide training to multidisciplinary teams of service providers. Beyond that, the project had a significant and positive impact on local sites and state systems by drawing attention to and addressing solutions toward issues related to school based service provision to children with chronic, complex health needs.

Systems change, accomplished through product development and dissemination, development of integrated educational sites and programs, training and technical assistance, and interagency coordination including family involvement, has allowed the project to increase public awareness of the needs and program options for young medically fragile children. These children, by definition, include traditionally underserved groups such as those effected by drugs and alcohol and infected by HIV.
Contribution to Current Knowledge

Service to medically children fragile present schools with unique and complex problems. Although a variety of guidelines pertaining to inservice training of school staff relative to students with disabilities are available in the literature, with the exception of the M-FIRST project, none focus on preparing multidisciplinary staff to ensure safe, healthy supportive educational environments for medically fragile children. This project made a significant contribution to the body of knowledge on current best practices for inservice training and state wide systems change, as noted below in the dissemination sections.

National Dissemination Activities

National dissemination of project-produced materials is integral to the goal of this project. Disseminable materials take the form of a replication and training manual, which focuses on resources, recommendations and results of programmatic interventions on a statewide level. It includes guidelines and plans for implementing statewide systems change using the M-FIRST model in its Outreach format. A computer-based version of the M-FIRST Needs Assessment (revised) is also available for dissemination. It contains specific directions and evaluative measures for using the instrument to assess training needs of a diverse, multi-disciplinary group.

The plan for national dissemination includes the distribution of materials and presentations to SEAs, OSERS groups and other national groups. Materials also will be made available, at the cost of printing and handling, through the dissemination vehicle operated by Oregon Health Sciences University's CDRC Publications and UW's CHDD at least five years beyond the grant period. Other publishers have shown interest in project-generated training content and format. Staff continue to explore other creative marketing and publication strategies to help further and strengthen the dissemination effort.

Dissemination Products

Three main products, aside from the numerous articles, working papers and T/A agendas produced by project staff, are available. They include the following resources:

M-FIRST Outreach: Results, Recommendations, and Results for Washington State
Available from University of Washington, CHDD, Box 357920, Seattle, WA 98195

Assessing Training Needs of Service Providers Working with Children with Complex, Chronic Health Needs-diskette version for WP 6.1
Available from CDRC Publications, OHSU, PO Box 574, Portland, OR, 97207
M-FIRST Training Manual (title pending)
Available from UW and OHSU, when completed. See addresses above.

Project staff, and their respective UAPs will continue to be available as resource consultants regarding the dissemination materials to professional groups, SEAs, and other educational agencies.

Articles/Other Publications
Working closely with Head Start agencies allowed project staff to become involved in training of Head Start providers and authoring a publication on medically fragile children widely distributed through Region X (Idaho, Alaska, Oregon, and Washington) early in the life of the Outreach phase. The 21 page publication Serving Medically Fragile Children in Preschool and School Settings is available through the RAPsource program of the Region X Resource Access Project (RAP) located at Portland State University.

Other related publications produced under the auspices of the project include:


Brown, S. and Valluzzi, J. Do not resuscitate orders in EI settings: Who should make the decision? Infants and Young Children 1995 7(3)

Haley, P. And Hartzell, M. Assessing training needs of service providers working with children with complex, chronic health conditions. 1996, Oregon Health Sciences University

Valluzzi, J. Safety issues for Children who are medically fragile: Program planning for natural disasters Infants and Young Children. 1995 7(5)

Valluzzi, J. Medically fragile inservice training for related service teams project: Supplement to students who require special health care services in the school setting. Law and Education Desk Notes 1994, 4(5)

Application of Values Associated with Early Intervention and IDEA
The project objectives are consistent with the values inherent in P.L. 99-457 and P.L. 101-476, and the project has demonstrated methods for putting these values into practice. Implementation of M-FIRST activities help ensure that predictable and consistent services are available from county to county and from age level to age level. It advocates for flexible programming for children to allow for local control and to
accommodate individual differences among children and families. It stresses a collaborative effort ensuring that all appropriate agencies and disciplines work together with families in the provision of services.

Well Trained Group of Service Providers and Family Members
Training participants from fifteen diverse sites in Oregon and Washington received thorough, competency based training in the areas of technical skills, team process, and service delivery. They, in turn, will impact another projected 500 service providers and family members in local communities through inservice training and technical assistance during and after the life of the project. This has already begun as training participants have made several presentations at state conferences in Oregon and Washington, as well as smaller, more focused presentations at local school boards and Education Service Districts. Parent and extended family member participation has been among the most dedicated and important components of these activities.

The "train the trainers" component has proven very successful and as a result of the continued interest and involvement of M-FIRST participants, a large portion of personnel working with medically fragile children in Oregon and Washington will directly benefit.

Replicable, Validated Training Materials
The project evaluated the effectiveness of existing training materials from M-FIRST and other sources regarding the training of staff to meet the needs of medically fragile children through replication of M-FIRST activities. The materials and other published materials are discussed above.

The M-FIRST Needs Assessment
Much of the data from the Needs Assessment is shared in Section VIII, Research and Evaluation findings. This data gathering tool comprises thirteen major competency areas with well over one hundred sub-competencies, specific to the care, education, and related service provision to medically fragile children in school settings. The project has found the Needs Assessment a useful and accurate tool to gather information about training participants' perception of training needs, current level of expertise, and desired levels of competency. The Needs Assessment has recently undergone re-evaluation and has been revised into an even more usable, shorter format, without compromising accuracy and efficacy.
X. Future Activities

Oregon Health Sciences University and the University of Washington have each submitted separate proposals for projects based on and related to the M-FIRST Outreach model. If funded, the projects will continue the M-FIRST model of training to diverse groups of service providers across the large expanses of rural Western America.

OHSU's new proposal, written by current Project Director Pat Haley and Dr. Robin Greenfield of the University of Idaho UAP, focuses on replicating the M-FIRST model throughout Idaho and in the large rural areas of Central and Eastern Oregon. The proposal, submitted under the 1996 Outreach competition, also includes collaboration from the Oregon and Idaho Departments of Education and the Idaho Department of Health and Welfare. The University of Washington's proposal, authored by Dr. Forrest C. Bennett and Jan Valluzzi, is designed to offer M-FIRST related training throughout Alaska, Washington, Northern Idaho and Montana. The proposal is submitted under the 1996 Special Projects competition.

Project staff have been contacted by and are continuing to look for other appropriate publication venues for project products. This includes the possibility of outside publishing agencies taking on the publishing, editing and marketing of products which the field would find useful and innovative.

Dissemination activities, as noted in Section IX, are currently being completed. Products include Assessing Training Needs of Service Providers Working with Children with Complex Chronic Health Needs-diskette version, available from Oregon Health Sciences University and The M-FIRST Training Program Manual and M-FIRST Outreach: Results, Recommendations and Resources for Washington State, available from the University of Washington.

Journal submission of the training program description, findings and recommendations is anticipated. Contractual and further grant proposals culminating in project continuation are pending.

Project staff, advisory members, and other training recipients continue to be called upon to consult, provide training and technical assistance regionally and nationally based on the work completed during the six years of the M-FIRST projects. The broad and varied group of training consultants that provided services to and for the projects continue to be utilized by schools and agencies in need of ongoing training in the projects’ content areas. As this project comes to a close, local capacity to direct and locate appropriate training resources has increased significantly throughout the Pacific Northwest.
XI. Assurance Statement

In addition to the three copies of this full final report being sent to:

Ms. Mary Vest  
Office of Special Education Programs  
U.S. Department of Education  
400 Maryland Avenue SW  
Switzer Building Room 3516  
Washington, DC 20202-2626

One copy of the full final report is also being sent to:

ERIC/OSEP Special Project  
ERIC Clearinghouse on Handicapped and Gifted Children  
Council for Exceptional Children  
1920 Association Drive  
Reston, Virginia 22091

One copy of the title page and abstract is also being sent to:

NEC*TAS  
Suite 500  
Nations Bank Plaza  
137 E Franklin Street  
Chapel Hill, North Carolina 27514

National Clearinghouse for Professions in Special Education  
Council for Exceptional Children  
1920 Association Drive  
Reston, Virginia 22091

National Information Center for Children and Youth with Disabilities (NICHCY)  
PO Box 1492  
Washington, D.C. 20013-1492
Mountain Plains Regional Resource Center
1780 North Research Parkway  Suite 112
Logan, Utah 84321

Western Regional Resource Center
College of Education
University of Oregon
Eugene, Oregon 97403

Federal Regional Resource Center
University of Kentucky
114 Porter Building
Lexington, Kentucky 40506-0205
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