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ABSTRACT

This final report presents an overview and description of a federally-funded model demonstration project that focused on the delivery of comprehensive services to developmentally delayed infants in rural areas. Efforts during the first year of the project (FY 1982) focused on the development of processes and procedures for establishing community linkages and the model of child intervention. Emphasis during the second year (FY 1983) reflected the refinement of the linkage process and initiation of the direct service component. Documentation of the processes and procedures implemented and expansion of established linkages occurred during the third year (FY 1984). This volume presents an overview of the conceptual model and detailed descriptions of its implementation components. The following sections are included: Introduction; Community and Linkage Development; Formal Structured Interaction; Direct Services to Children/Families; Monitoring and Maintenance; Staffing Consideration; and Summary. Appended are Personnel Vitae. (Contains 32 references, 41 figures, and 9 tables.) (SG)

Project LINCS

Linking Infants in Need With Comprehensive Services

Final Report

Volume I

A Process for Expanding Comprehensive Services to Rural Areas

UNIVERSITY OF MISSOURI-COLUMBIA
DEPARTMENT OF SPECIAL EDUCATION

PROJECT LINCS (Linking Infants in Need with Comprehensive Services)

FINAL REPORT

June 1984

VOLUME I

A Process for Expanding Comprehensive Services to Rural Areas

Grant Number: DEG 008 101 968

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As with all collaborative activities, it is difficult to assess the extent of the contributions that various individuals have made during the conceptualization and implementation of Project **LINCS.** The project reflects the individual and collective efforts of project personnel over the last three years. Their varying perspectives and professional expertise enriched the model.

The support of the Department of Special Education, University of Missouri-Columbia, Missouri Division of Mental Retardation - Developmental Disabilities, Bureau of Community Health and the linkage agencies in Calloway, Cooper and Randolph counties was vital to the implementation and continuation of the program model. The guidance and support supplied by members of the Advisory Council provided a perspective and direction for long range impact of the project's concepts. However, the greatest contribution was made by the administrators and direct service personnel in the community agencies. We are indebted to them for their willingness to expand their current roles in order that an "idea" could be implemented.

S.W.G

FORWARD

Problems associated with the delivery of comprehensive services to rural areas have been well documented in the literature. (Helge, 1981; 1983; Johnson, 1980) Factors hampering the effectiveness of rural service delivery include sparse populations, remoteness of clients from resources, limited and precarious economic bases supporting local human service networks, cultural and ideological diversity among rural settings, limited expertise of available professionals, and a tendency toward professional isolation. Social policy designed to improve comprehensive care to individuals in rural areas has resulted in responsibility for meeting the social and health needs of rural citizens shifting from the family and community systems to the public sector. No single rural service delivery model can be identified from these efforts. Most options reflect a centralization of responsibility in the form of a regional or state-wide delivery system. Regional centers for the developmentally disabled, intermediate education units, and state-wide networks providing consultation and resource identification services have evolved. However, the effectiveness of regional service delivery has often been hampered by a number of factors internal and external to the emerging systems and their interface with local communities.

From a regional perspective, efforts to deliver comprehensive services have been hampered predominantly by geographic and fiscal constraints. The geographic size of the area of responsibility, remoteness from the site of need, and limited funding to support the costs associated with outreach activities (particularly, transportation and time requirements) impose constraints upon the frequency and quality of communication and contact. Perceived negative attitudes within rural communities and apathy among rural clients further negate regional efforts of service delivery.

From the local community's perspective, regional delivery systems tend to "intrude" into the local human service network and community structure based upon regionally defined needs. Such intrusion fails to consider and value the strong sense of "community" characteristic of the rural culture, thus raising fears of government "colonialism". Furthermore,

these systems tend to superimpose complex bureaucratic structures often perceived locally as both ineffective and inefficient.

The generic problems of rural service delivery are particularly acute when the target population is high risk or handicapped infants and their families. State/regional health facilities and agencies have developed extensive networks for early identification and tracking. However, provision of follow-up developmental intervention becomes plagued by the problems associated with rural service delivery. Low-incidence of the target population within an already sparce general population, constraints of regional delivery systems including the timeliness of information flow, social policy, societal attitudes, and the diversity of the rural culture further compound the problem. Where intervention has occurred at the community level through either regional-local interagency contracts or local initiative, professional isolation and often "burn out" have remained issues.

Neither societal trends, including the direction of public policy concerning human services, nor economic conditions support continued expansion of autonomous service options or public commitment to vast regional or state systems. Attitudes appear to be moving toward decentralization (Naisbitt, 1982). However, the precarious economic base characterizing many rural communities cannot support the costs of comprehensive services to low-incidence populations. It is apparent that movement toward decentralization in rural service delivery must reflect two dimensions: (a) that regional systems develop muturally beneficial ways to combine their expertise with the strengths of care providers in the local human service network in order to increase local system competence and (b) that the provision of services occurs within a context which recognizes the issues and unique characteristics of the rural and individual community cultures. Thus, the sharing of responsibility and expertise through linkage between regional systems and local community agencies becomes a viable option for rural service delivery. Such an approach has been reflected in the development of collaborative models. However, the difficulties encountered by such approaches have often been due to the application of urban problem-solving methods and a failure to conceive and recognize the complexities, uniqueness, strengths, and diversity of the rural culture. A different concept of linkage is required.

Critical to the effective implementation of a linkage perspective is the process through which such linkages are developed and maintained. Consideration must be given to systematic planning and decision-making. Effective linkages will reflect consideration of rural characteristics, both generic and community-specific, identification of multiple delivery systems at both the regional and community levels, regional and community system characteristics and interface, and location of comprehensive services as close to the client as possible.

Based upon this perspective of regional rural service delivery, Project LINCS (Linking Infants in Need with Comprehensive Services), Department of Special Education, University of Missouri-Columbia, was initiated in August 1981 as a model demonstration project under the Handicapped Children's Early Education Program, Special Education Programs and Rehabilitation Services, U.S. Department of Education. Underlying the design of the LINCS model is the assumption that delivery of comprehensive services to developmentally delayed infants in rural areas can be maximized through mobilizing and integrating existing resources rather than creating larger, more complex systems. This assumption dictated not only the development of regional-community linkages but also a deliberate pooling and exchange of information, knowledge and skills which cross traditional discipline and service delivery parameters. Within the context of the rural setting, further consideration must be given those unique factors which impact effective service delivery (i.e., professional isolation, staffing problems, limitied range of resources, and characteristics of rural communities). The resultant program model emphasized two unique dimensions: (a) a process for linking regional systems with a community's human service network to provide a support base for increasing local competence through role expansion within individual community agencies and (b) identification of significant variables affecting the developement and maintenance of this type of linkage within a rural setting.

The major thrust of the project during its initial year (FY 82) was the translation of the theoretical model into an operational program which reflected the conceptual model and provided a "goodness of fit" with the current systems of service. Efforts focused on the development of processes and procedures for establishing community linkages and the model of child intervention. Emphasis during the second year of funding (FY 83) reflected

the refinement of the linkage process and initiation of the direct service component. Documentation of the processes and procedures implemented and expansion of the established linkages occurred during the third year of funding (FY 84). This latter year was also characterized by increased dissemination and training efforts which formed the basis for continuation and indices of replication and outreach potential.

This document constitutes the final report for Project LINCS (Linking Infants in Need with Comprehensive Services). It is divided into two volumes. Volume I presents an overview of the conceptual model and detailed descriptions of its implementation components. Chapter I narrates the rationale for a linkage model of regional rural service delivery based upon a systems perspective and delineates the program model. Chapter II details the initial component of the process, community linkage development. Chapter III specifies the direct service/training component from the perspective of the agency linkage process. Chapter IV delineates the direct services provided to children and families through implementation of the regional-local linkage. Chapter V delineates the process and procedures required for effective monitoring and maintenance of the linkage. Chapter VI presents the program's staffing configuration. Volume II documents the efficacy of the model. Evaluation data relative to impact on linkage agencies, the community human service networks, and families and children is presented. A discussion of unanticipated benefits and problems encountered has been included. Within this final report, emphasis has been placed on consideration of the unique aspects of the project rather than a chronology of accomplishments relative to implementation objectives. Previously submitted reports document progression toward these objectives. This more comprehensive document reflects the culmination of those efforts. It is hoped that this report might serve as a stimulus for continued development of the approach and strategies presented. It is further hoped that it will stimulate continued emphasis on quality programming for young high risk/handicapped children and their families, particularly in rural areas.

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I INTRODUCTION

Responsibility for meeting the social and health needs of individuals has shifted from the family and/or community system to the broader public sector, including government. The resulting centralization has lead to the expansion of "clusters" of professional expertise and services, primarily in densely populated areas and/or "geographically" central locations. This has imposed a distance, geographically, financially and personally, between many clients and the services they need. Outreach efforts designed to decrease this distance often reflected "intrusion" into the community human service network based on regional interpretation of local needs. Centralization of service delivery only added to the complexity of the bureaucratic maze clients encounter. The result has been cursory and often inadequate professional follow-up leading to client dismay and alienation. Furthermore, there has been an increasing failure to utilize or even acknowledge the magnitude of the role local care providers plan in the daily lives of clients. The greatest impact of this service orientation has been in rural areas where given the best resolution of the preceding issues, the professional isolation of the local service provider remains. Although many regional agencies are quite aware of the need for more effective services to rural areas, they are often at a loss as to how to break the barriers of apparent apathy and/or resistance encountered. No one agency or discipline can, by itself, adequately address the problem of effective rural service delivery. In order to enhance both the quality and quantity of services, resolution must reflect maximizing the delivery of regionally based services within the context of expanding and supporting local competence. Such an approach recognizes the issues imposed by the rural setting including its "culture". Thus, the sharing of responsibility and expertise through linkage between regional systems and community agencies becomes a viable option for regional rural service delivery.

Critical to effective implementation of this perspective is the process through which such linkages are developed and maintained. Within the context of the rural system, linkages must be based upon the recognition that rural communities have a distinct and separate identity which impacts the nature of their interaction with other systems. The essential difference in resolving rural service delivery issues becomes one of

orientation. Emphasis is on the nature of the linkage rather than the tangible outcome (i.e., a written agreement for services) and on the variables critical to its development and maintenance. To be effective, the initial point of delivering regionally oriented services in rural areas is understanding the complexities of the rural community and the dynamics of change as a basis for designing compatible delivery options.

A Systems Perspective

Review of major theoretical constructs addressing issues of human service delivery yields a systems perspective as a viable framework for understanding the rural community and the implications for service expansion by regional systems. Such an orientation dictates a comprehensive perspective as a basis for action and consideration of the interdependency and interrelationships of the regional and community systems. Figure 1 illustrates the dynamics implied by a systems perspective of a regional-community linkage designed to deliver human services.

Although geographic and/or psychological isolation have been terms used to describe rural America, a system's perspective dictates consideration of the rural community within the context of a larger environment and the nature of this interface. Effective regional service delivery is based upon an awareness by the regional system of the characteristics and dynamics of the target rural community and the impact upon both systems their presence in that community creates. Entry into the rural community is influenced by characteristics (referred to as inputs in Figure 1) of both the regional system and the rural community. Consideration of these factors provides a basis for identifying feasible outreach sites and determining an effective entry strategy. The nature and valence of interaction between the regional and community systems is determined by the degree of initial match and/or subsequent adaptation that occurs as the service linkage is negotiated. Thus, the development of regional-community linkages as a viable model for delivery of human services in rural areas must be conceived as both an interactive and adaptive process. Change in one component impacts and generates changes in the other. Changes within the regional system may be made in a conscious effort to modify and bring services more in line with community characteristics (i.e.,"goodness-of-fit"). The resultant linkage leads to not only increased services to individual clients but expanded local competence and capacity

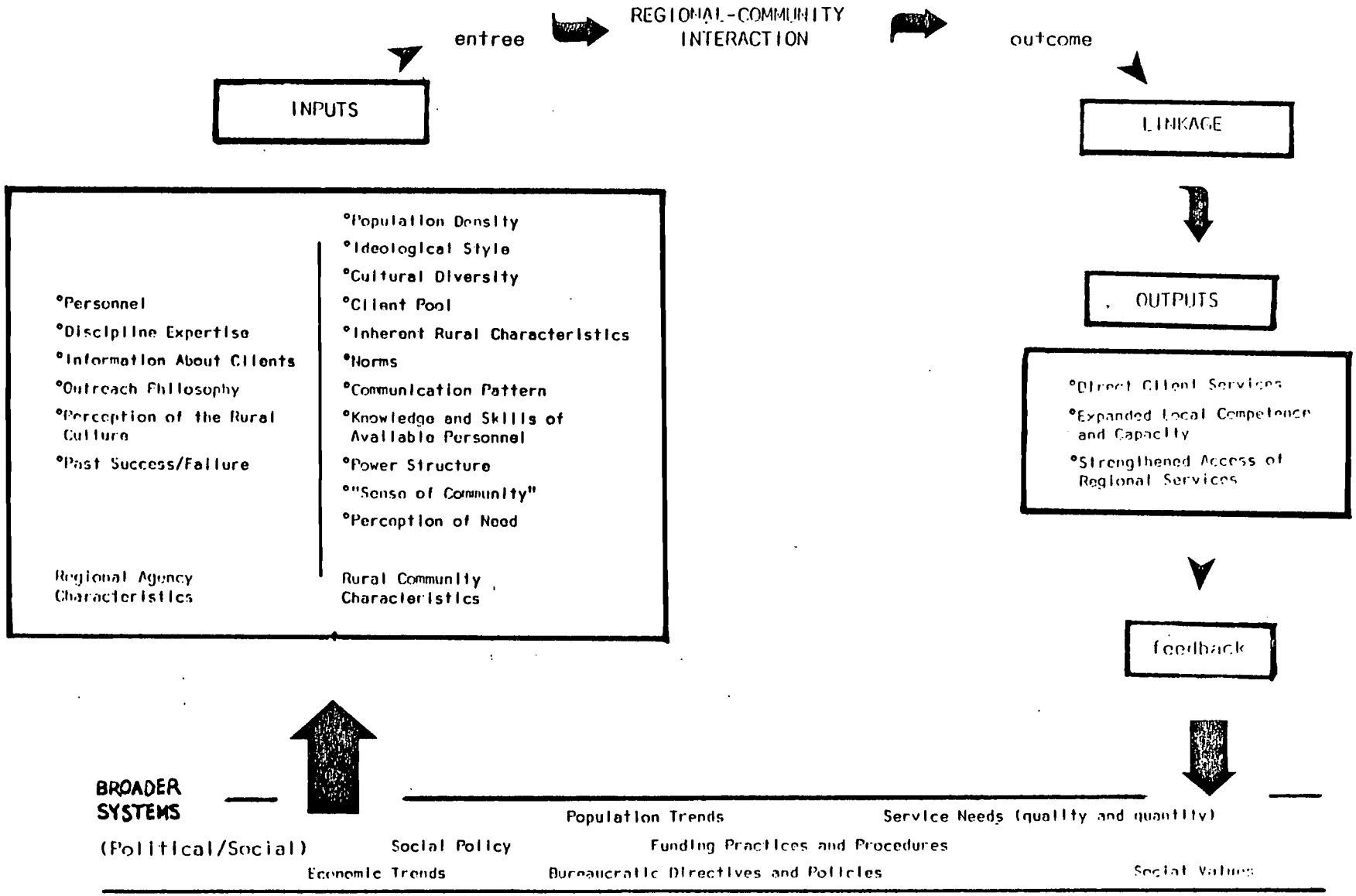


Figure 1

A Systems Perspective of Regional-Community Linkage

reflecting a regional-community interdependency. As both regional and community agencies do not exist in a vacuum, output from the established linkage impacts not only the designated agencies but other components of the immediate human service network as well as broader political systems. It is the application of systems perspective within the context of the unique charactertistics of the rural culture that provides a basis for understanding the issues of regional rural service delivery emphasizing a linkage concept. Thus, the initial point in delivering services successfully in rural areas must be to understand the people and their community structure and the process of change.

The literature documents the following generic characteristics of the rural culture: individualism, traditionalism, religious fatalism, action orientation (Looff, 1971; Warren, 1965; Weller, 1965). These characteristics lead to an inner-directedness and a strong orientation toward independence and self-sufficiency. Furthermore, rural systems appear to be held together by norms of obligation (Looff, 1971). Thus, perceived responsibility for and success in meeting its citizens' needs are infinitely tied to the rural community's own image of self. This may be manifest as a "we take care of our own" orientation. These criteria are most strongly applied in relation to human service needs. The rural community's strong "sense of community" reinforces the traditional view that locus of responsibility rests predominantly with the family and the "community" as it reflects an extension of the family. The preceding are not negative characteristics. Rather they represent adaptations by the rural system to the constraints placed upon it by the broader geographic, social, and political environments. However, this inner-directedness often cuts the system off from that same environment (i.e., outside institutions) and from cooperative participation with "outsiders" in defining and attempting to solve local problems. These responses of the rural system may be misinterpreted as resistance or apathy when external resources are underused. Thus, the primary objective of the rural system as a collective body to be responsive to and meet the needs of its own citizens may not be met.

Components of the community system, both formal (e.g. legal, political, human service networks) and informal (e.g. religious and ethnic systems), possess designated functions relative to the achievement of the

rural system's objective to meet its citizens' needs. However, the perception of whether a problem is inside or outside the rural community and whether it is a "felt need" of the community affects the strategy selected to address it and the degree to which the community is open to intervention from the larger environment. Given the interaction of these variables within the context of the unique characteristics of a particular rural community system, it becomes apparent that linkages developed must be designed to build upon the strengths and independence of the community in order to increase local capacity and competence in analyzing and addressing their own client needs. It is only then that regional expertise can be fully accessed and comprehensive services to rural areas maximized.

Establishment of linkages by external agencies within dynamic systems, such as communities, mandates a process orientation. Drawing upon literature and assumptions evolving from the field of communications, this process can be viewed as social change, i.e., that process by which change occurs in the structure and function of a social system. Within this context, the barriers encountered become understandable given the complexity and continuing nature of the dynamics involved. Rogers and Shoemaker (1971) suggest three sequential stages in the social change process: (a) invention, the process by which new ideas are developed; (b) diffusion, the process by which these new ideas are communicated to the members of a given social system; and (c) consequences, the changes that occur within the social system as a result of the adoption or rejection of an innovation. Furthermore, change may be considered as either imminent, when local systems develop and diffuse an idea without external influence, or contact, when external sources introduce an innovation. Contact change can be either selective, when local systems are exposed to external influences and adopt or reject an innovation on the basis of their needs, or directed, when outsiders intentionally seek to introduce an innovation in order to achieve goals they have defined. Most models of rural service delivery reflect the diffusion stage of social change, for example, transporting or communicating an educational program to rural child-family units. Within this context, external regional systems typically initiate the development of more productive relationships with local human service systems. Should no prior satisfactory relationships exist, community entry begins with directed contact change strategies. However, it is critical that the preferred

strategy of selective contact change be viewed as the desirable consequence of these efforts. Thus, an effective regional rural linkage model would have as a primary goal the improvement and expansion of local capabilities and competence to analyze their own needs and, therefore, become competent to direct change, i.e., procure/access service innovations, as new or additional needs arise.

Basic Assumptions

Although the principles underlying the program model have been derived from various fields (i.e., sociology, communication, and social change), an interactive perspective is clearly evident. The following assumptions reflect the conceptual base for establishing an effective regional rural service delivery model based upon a systems perspective:

1. Rural communities have a distinct and separate identity reflecting both generic and unique characteristics which impact delivery of human services.

2. Service delivery to rural areas can be maximized through mobilizing and integrating existing resources rather than creating larger systems.

3. Communities and agencies are dynamic rather than static systems.

4. Effective linkage development is based upon initial and continuing comprehensive analysis and strategic planning actions.

In addition to these underlying principles, the following set of assumptions guide the implementation of this perspective as a program model:

1. Collaboration (i.e., partnership) is an essential element of community change strategies and adult learning.

2. The effectiveness of developmental intervention is enhanced through a deliberate pooling and exchange of information, knowledge and skills, crossing and recrossing traditional disciplinary boundaries by various team members.

3. Comprehensive analysis and systematic planning are required for the development and maintenance of service linkages within the human services network.

These assumptions have several process implications for expansion of service delivery to rural areas:

1. The "innovation" must be consistent with community norms to be accepted in any real sense.

2. The development of personal ties with key opinion leaders must precede community entry.

3. Interaction must be based on a partnership concept based upon mutual respect for the strengths of both regional and community personnel and clarity of mission and roles.

4. Informal communication and power structures play a significant role in rural communities and must be considered during community entree.

5. Communities must "own" the delivery system.

6. Systemtic analysis, planning and feedback must be built into the operational aspects of the delivery system.

Based upon the preceding conceptual base and underlying assumptions, a five phase model for regional rural service delivery has been formulated. This process includes community analysis, community entree, development of formal linkage agreements with targeted organizations within the community, and mechanisms for solidifying the linkage and for monitoring and maintaining the linkage (Figure 2).

Program Model

Central to the delivery of effective comprehensive services to handicapped and high-risk infants in rural areas is the concept of linking regional based "clusters" of expertise and local community agencies and care providers. To maximize the consistency of intervention as well as acknowledge the magnitude of the role community agencies play in the daily lives of children and families, a deliberate pooling and exchange of information occurs. This approach is designed to increase local competence through role expansion for local providers with regional agencies providing a professional support base. The development of such linkages must begin with an understanding of the community structure and its people and must be strategically planned, collaboratively developed and systematically maintained. Thus, the program model reflects three key dimensions: (a) delineation of the linkage development process and related strategies; (b) a transdisciplinary approach reflected in the delivery of in-home

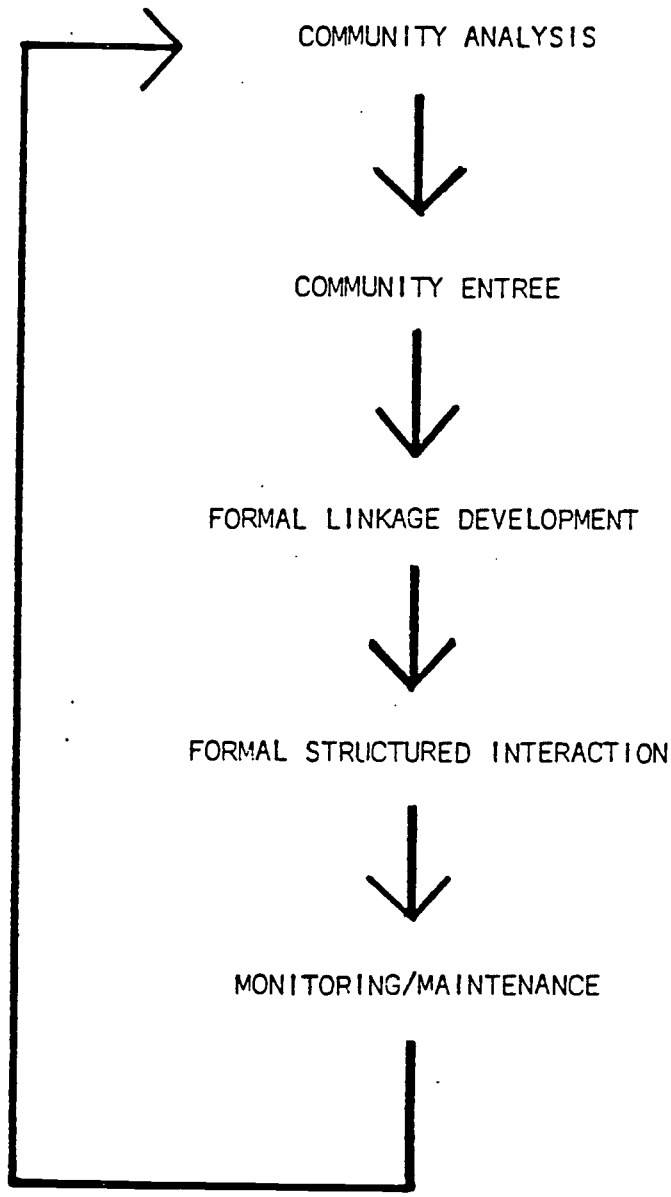


Figure 2
LINCS Model

developmental stimulation; and (c) systematic and multi-level monitoring of the linkage.

The resultant program model depicted in Figure 3 reflects a collaborative process designed to address the needs of children and families. Three interrelated components comprise the operational aspects of the model: (a) development of community linkages, (b) strengthening of the linkage through the collaborative provision of developmental intervention and/or other comprehensive services, and (c) continued support and maintenance of the linkage. As communities and regional agencies are dynamic rather than static systems, information derived from the latter component cycles back to the initial analysis phase to allow adaptation and/or expansion to occur. Thus, a continuing "goodness-of-fit" can be achieved.

Entry into the community occurs through a linkage development process. Through this process the regional agency gathers information regarding community resources/contraints in order to negotiate an effective and mutual regional/local linkage. Comprehensive analysis of the community's structure and the human service network provides a basis for determining the degree to which designated service options can be incorporated into the existing community system (including the specific agency or agencies) and the selection of an effective community entree strategy. Formalization of the linkage occurs through an analysis of the agency and a collaborative process between regional and local staff which culminates in a documented interagency agreement.

The formal structured interaction phase of the model (reflected here as the direct service/training component) translates the negotiated agreement into an operational program and strengthens the established linkage. Emphasis in the program model is two prong: (a) provision of in-home developmental stimulation based upon a Piagetian/ecological curriculum and/or other therapeutic services to developmentally delayed infants and toddlers, and (b) expansion of the scope of services of local agencies through provision of training and technical assistance to individual direct service providers. Utilizing a transdisciplinary approach, local service providers are provided technical assistance by regional personnel to expand their traditional role boundaries to provide or access a more comprehensive service base for the children and families they serve. Analysis of the

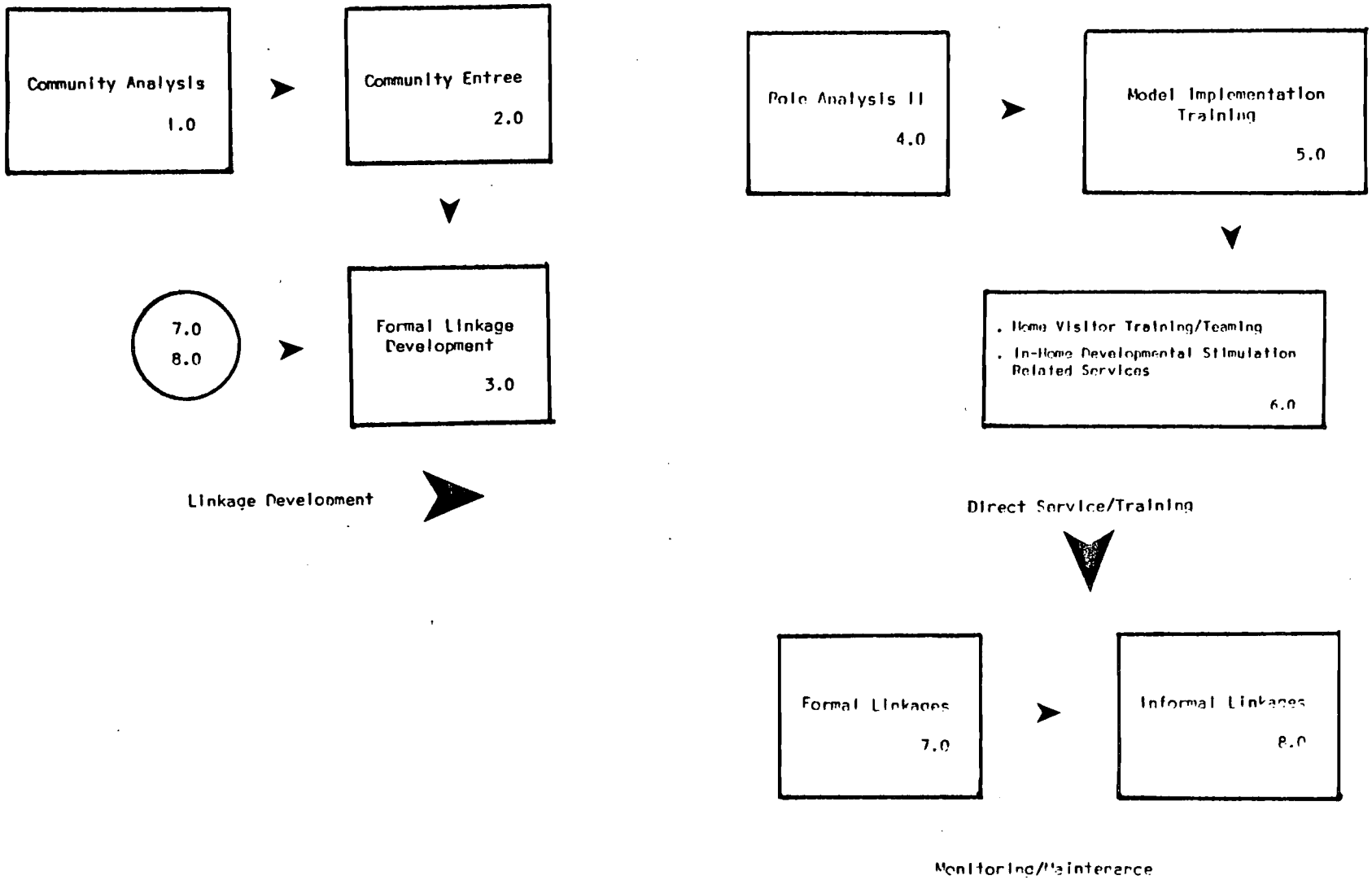


Figure 3
LINCS Demonstration Program

service provider's current role establishes a base for problem-solving leading to identification of those functions that may allow for expansion. Initial training designated Model Implementation Training clarifies the interface between local and regional direct service provision and lays the foundation for future transfer of information between these levels. Specifically, local service providers receive information and skill development in the following areas: screening, referral procedures, accessing diagnostic and evaluative results from a regional facility, and program planning and implementation. The process is implemented with a specific case and expanded to others so that direct application is a major focus of the training process. Following completion of this initial phase, a teaming approach is implemented focusing on stratetgies for home visiting. Individual discussion sessions are followed by joint home visits to designated families on the service provider's caseload. Opportunity is provided for the home visitor to utilize the skills stressed in individual sessions on the home visit by implementing developmental programming and/or designated specialized therapies. As the home visitor gains competence, the regional role shifts from instruction to consultation, information sharing, performance feedback, and collaborative problem-solving. Increasing independence demonstrated by the home visitor is reflected by a transition to a monitoring and technical assistance role for regional personnel.

The monitoring and maintenance component provides a framework for expanding and solidifying the regional-local linkages established during the initial linkage development and home visitor training processes. While the approach for linkage development is important, a process for maintenance of the linkage is critical. A systematic-adaptive approach is utilized to insure continuation of the collaborative relationship between regional and local care providers and a "goodness-of-fit" between the regional and community systems. The formal linkages within an agency are tracked in terms of change in both care providers and administrators to insure agency institutionalization of the services, to predict agency change and to provide a basis for adaptive problem-solving. However, agencies do not operate in a vacuum. The human service network as well as the larger community reflect informal linkages impacting effective service delivery. Through both group interaction and personal contact strategies, informal linkages are monitored in order to maintain current community analysis

information, to broaden the base of cooperative interaction, to ensure continued local capacity building, and thereby predict continued successful regional-local linkage.

Consideration has been given in this chapter to providing an overview of the program model reflecting the integration of a systems perspective to linkage development and those aspects which may be unique to this project. An extensive discussion of each program phase, including processes, procedures and considerations for implementation, is presented in the following chapters.

II COMMUNITY LINKAGE DEVELOPMENT

Although professionals may recognize the need for developing linkages in rural areas, there is always the danger that "real" needs will be ignored in favor of external interpretation of needs. Or perhaps worse, urban problem-solving methods will be used that will be incongruent with the context in which they are applied. Thus, the initial point in delivering services successfully in rural areas must be to understand the people and their community structure. The essential difference between program success and failure does not reside within individuals or bureaucratic organization. Rather, the critical variable is orientation. A lack of awareness of community issues, concerns, attitudes and perceptions can lead to premature formulations, unreasonable promises and inadequate or unused services. To be effective, the complexities of the rural community must be not only acknowledged but appreciated. Problems due to the lack of in-depth knowledge stemming from being a citizen in the community must be anticipated and resolved.

The basic premise of the linkage development process reflects general concepts geared toward providing a different perspective of rural communities, toward exploring resources existing in these communities in a new way, and finally, toward the effective use of community resources in relation to an infant population. This process is based on an interactional model emphasizing comprehensive analysis and strategic planning. Other specific underlying assumptions include:

1. Communities are dynamic systems made up of various "subsystems" created by mutual relationships between individuals, organizations and their environments.
2. For children and their families frequently in need of specialized human services, the social, educational, and medical service delivery systems are most important.
3. Rural communities have a distinct and separate identity reflecting the strong values of individualism, traditionalism, action orientation and a sense of "community".
4. The likelihood of an innovation's being adopted by a larger population is increased if it is first supported by a smaller group of opinion leaders.

These assumptions have several process implications.

1. Service linkages should be developed within the community's human service network.

2. The innovation must be consistent with community norms to be accepted in any real sense.
3. The informal communication and power structures of the community must be recognized during community entree.
4. The development of personal ties with key opinion leaders must precede community entree.
5. Interaction must be based on a partnership concept where regional and community personnel stand as equals with both contributing to the work at hand.

The community linkage development component reflects three phases of the LINCS model: community analysis, community entree, and the development of formal linkage agreements with targeted organizations within the community (Figure 4). Effective linkage development requires a process orientation. Figure 5 illustrates community linkage development as a process.

Community Analysis

Analysis of the community is conducted in order to determine feasibility and viability of regional-local linkage development. Initially, a community typology (Table 1) is used to identify a "typical" rural community. This process allowed comparisons and generalizations to be made regarding a specific community and determination of the most reliable data gathering strategies. A community is "typed" according to scoring on three dimensions (Figure 6). The "strongest" dimensions are then noted and used as a framework for determining specific analysis techniques (Table 2).

Feasibility is determined by content analysis of various existing data bases. Specific statistical data are obtained for all communities in a designated regional linkage service area and organized into chart form to allow for systematic comparison (Figure 7). Information concerning major geographical characteristics, population centers and economic, governmental and political structures are obtained from county and community profiles (Figure 8). These profiles also provide initial information regarding community resources which is useful in developing a matrix of available services (Figure 9). This collective information is analyzed with regard to critical indicators of need, i.e., sufficient client pool, geographic location and indentified human services network. Based upon this data it can be determined whether or not a community is a feasible point of

1.1 COMMUNITY ANALYSIS

Purpose: The community analysis phase is implemented to establish a data base for determining feasibility and viability of regional-local linkage interaction. By gathering information regarding critical community variables, resources and constraints to collaborative service linkages can be identified and used to formulate a successful community entree.

Procedure	Outcomes	Materials Required for Implementation
1.1.1 Analyze existing data bases	*Objective data base of overall community obtained* *Critical population data obtained* *Available agencies/organizations identified* *Potential contact person(s) identified*	Statistical Comparison Chart Service Matrix Community Profile
1.1.2 Determine "goodness-of-fit"	*Determination of feasibility*	Feasibility Indicator
1.1.3 Analyze new information	*Community attitudes/issues/concerns assessed* *Critical influential/active agencies/organizations identified* *Personal contact established* *Knowledge of available services obtained* *Attitudes towards model potential assessed* *Need awareness assessed* *Interagency linkages/attitudes identified*	Specific Needs Survey Orientation Outline Service Matrix
1.1.4 Determine "goodness-of-fit"	*Determination of viability* *Potential linkages identified*	Viability Indicators

1.2 COMMUNITY ENTREE

Purpose: The community entree phase is conducted in order to develop a data based strategy that is predictive of effective efficient formal linkage development and model implementation.

1.2.1 Conduct resource/constraint analysis	*Entree data base*	
1.2.2 Formulate alternative entree strategies	*Prioritized modes of entree*	Resource/Constraint Analysis Form
1.2.3 Select "best" entree strategy	*Entree implementation plan*	

1.3 FORMAL LINKAGE DEVELOPMENT

Purpose: The formal linkage development phase is implemented to establish a data base for determining feasibility and viability of model use by a potential linkage agency.

1.3.1. Conduct agency orientation	*Critical information obtained re: potential for model implementation*	Orientation Outline Brochure/Fact Sheet
1.3.2. Conduct agency analysis	*Feasible/viable agencies tarteted*	Referral and Intake Overview
1.3.3. Conduct role analysis I	*Identification of personnel constraints*	Home Visitor Profile
1.3.4. Determine "goodness-of-fit"	*Roles/responsibilities clarified*	Eligibility Criterion
1.3.5. Conduct negotiations	*Commitment letter from agency administrator*	Linkage Agency Participation Criteria
1.3.6. Develop interagency agreement		

Figure 4

Community Linkage Development

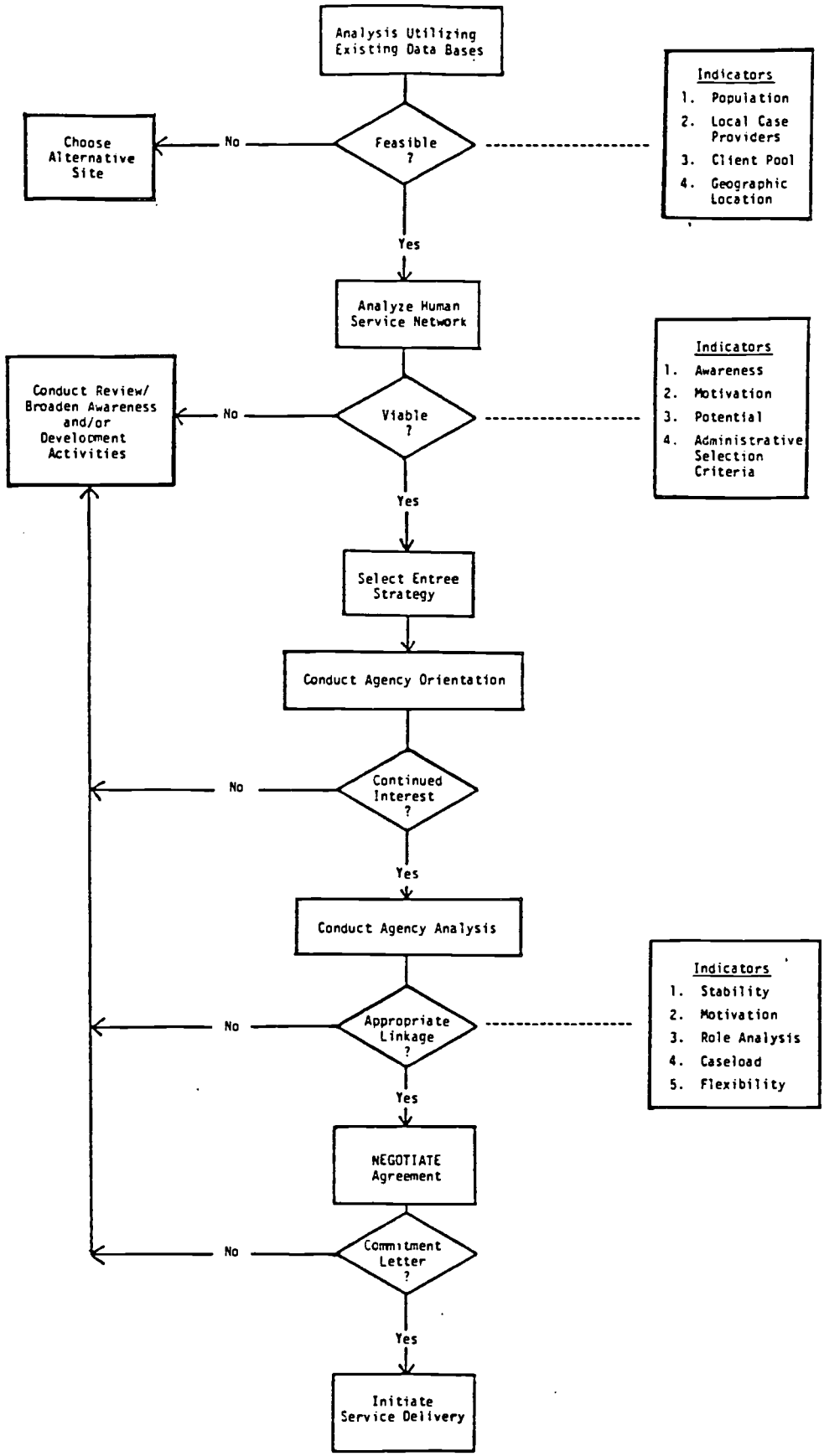


Figure 5

Community Linkage Development as a Process

Table 1

Community Typology

Type	Identification	Interaction	Linkages
Integral A cosmopolitan as well as a local center. Individuals are in close contact. They share many concerns. They participate in activities of the larger community.	+	+	+
Parochial A neighborhood having a strong ethnic identity or homogeneous character. Self-contained, independent of the larger community. Has ways to screen out what does not conform to its own norms.	+	+	+
Diffuse Often homogeneous setting ranging from a new subdivision to an inner-city housing project. Has many things in common. However, there is no active internal life. Not tied into the larger community. Little local involvement with neighbors.	+	-	-
Stepping Stone An active neighborhood. A game of "musical chairs." People participate in neighborhood activities not because they identify with the neighborhood but often to "get ahead" in a career or some other nonlocal point of destiniation.	-	+	+
Transitory A neighborhood where population change has been or is occurring. Often breaks up into little clusters of people - frequently "oldtimers" and newcomers are separated. Little collective action or organization takes place.	-	-	+
Atomic It's really a non-neighborhood. Highly atomized; no cohesion. Great social distance between people. No protective barriers to outside influences making it responsive to some outside change. It lacks the capacity to mobilize for common actions from within.	-	-	-

From: Warren, D. I. & Warren, R. B. (1980). The neighborhood organizer's handbook. South Bend, IN: University of Notre Dame Press.

TYPING THE COMMUNITY

The Three Dimensions:

1. Identification:
   - ☐ People feel they have a great deal in common
   - ☐ People give a name to the area
   - ☐ People plan to stay in the area
2. Interaction:
   - ☐ People visit with nearby neighbors at least once a week
   - ☐ People meet in organizations or social groups - not necessarily in the neighborhood but with neighbors
   - ☐ People see others in the neighborhood as getting together often even if that's not their own pattern
3. Linkages:
   - ☐ People belong to a lost of organizations outside of their neighborhood
   - ☐ People know about someone who is a community leader or has connections
   - ☐ People see others as having "connections" if not they themselves

DIRECTIONS: There are three chances to say "yes" on each dimension. Place a "+" in each box which indicates a statement which you feel is true of the community. Review each of the answers and determine which of the three dimensions of the community is the "strongest", that is which has the most boxes marked with a "+". Next give the community a "+" for each of the three dimensions in which 2 or more boxes have a "+". Give each dimension with one or fewer boxes marked with a "+" a minus ("-"). If at least two of the three examples within each dimension are not "yes", the neighborhood is probably not strong in that attribute. Finally, using Warren's classifications of communities, "type" the community as integral, parochial, diffuse, stepping stone, transitory or anomic.

Figure 6

Typing the Community

Table 2

Community Structures in Relation to Data-Gathering Strategies

Community Structures	Key Informant	Survery Sampling	Enthnographic
Integral	+	+	+
Parochial	+-	+-	+
Diffuse	-	+	+-
Stepping Stone	+-	+-	+
Transitory	-	-	+-
Anomic	-	+-	+-

Plus and minus signs by each combination refer to the "efficiency" or "power" of a given method in terms of assessing social structure in a valid and reliable manner. A plus/minus combination means a given method is average in efficiency for a given neighborhood.

STATISTICAL COMPARISON OF COUNTIES

County	County Population			Largest Town in County			Identified Handicapped	High Risk Births		Live Births		
	Total	0-3	0-5	Name	Population Total	Population 0-3	0-3	1982	1983 Jan/Jul	1980	1981	1982
Benton	12,183	444	624	Warsaw	1,494	54	1	15	11	137	109	146
Boone	100,376	3,977	6,437	Columbia	62,061	1,954	16	130	45	1,438	1,496	1,517
Callaway	32,252	1,479	2,140	Fulton	11,046	359	12	43	19	479	472	461
Carroll	12,131	580	881	Carrollton	4,700	206	0	19	9	194	152	161
Chariton	10,489	464	684	Salisbury	1,975	77	8	12	5	147	152	146
Cooper	14,643	610	1,002	Boonville	6,959	295	4	24	6	237	210	224
Howard	10,008	387	658	Fayette	2,983	66	2	16	4	141	144	175
Moniteau	12,068	540	839	California	3,381	144	4	33	12	216	180	190
Morgan	13,807	580	807	Versailles	2,406	104	15	29	14	167	163	172
Phelps	36,378	1,630	2,481	St. James	20,927	851	12	41	14	530	540	531
Randolph	25,460	1,222	1,861	Moberly	13,418	659	0	46	20	415	442	362
Saline	24,919	1,152	1,768	Marshall	12,781	618	2	58	18	402	360	397

Figure 7

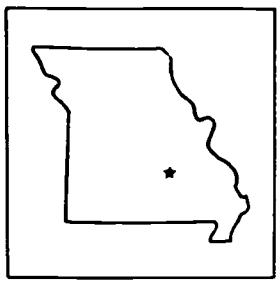
Statistical Comparison of Counties Chart

COMMUNITY PROFILE

St. James, Missouri

Phelps County

February 1983 — Member Missouri Community Betterment Program



Population

	1980	1970	1960
City	3,333	3,009	2,384
County	33,725	29,567	25,396

Taxes

Assessed value of city property: $ 5,396,000

Basic tax levy for latest year (per $100 assessed value):

City $ 1.65 County $ 1.40 School $ 3.00

Jr. College $ _____ State $ .03 Other $ .15

Total $ 6.23

Sales Tax: City $ _____ County $ _____

Government

Type of local government: Mayor/Council

Comprehensive city plan: yes X no _____

City zoning: yes X no _____

County zoning: yes _____ no X

Subdivision ordinance with design standards: yes X no _____

Fire department personnel: 2 full-time 16 volunteer

Fire insurance rating: In city 8 Outside city 10

Number of full-time policemen: 6 City _____ County

City engineer employed: yes X no _____

Garbage service provided: (X) public ( ) private ( ) none

Industrial Development Authority with bonding capacity: (X) city ( ) county

Commercial Services

Financial:	Number	Assets
Banks	1	$ 22,722,000
Savings & Loan Associations	1	$ 300,000,000

Communications:

Telephone service company: Continental Telphone Co.

Newspapers: _____ Daily X Weekly

Number of radio stations: 6

Number of TV channels received: 12

Cable Television serves city: yes X no _____

Number of channels: _____

Post office: 1st (class)

Telegraph: yes _____ no _____

Industrial:

Number of machine shops within 30 mi./48 km: 5

Number of tool & die services within 30 mi./48km: 1

Number of electric motor repair services within 30 mi./48 km: 6

Other industrial services: yes X no _____

Names: St. James Community Ind. Corp; Meramec Reg. Planning Comm.

Community Facilities:

Number of motels: 3 Total rooms _____

Number of hotels: _____ Total rooms _____

Capacity of largest banquet room: 150 persons

Number of churches in city: Synagogue _____ Protestant 12

Catholic 1 Other _____

Number of shopping centers: _____

Number of department stores: _____

Public libraries: 1 Volumes 22,433

Figure 8

Community Profile

Industrial Sites

Site Name	East Ind. Park			
Total Acreage: Acres/Hectares	79/31.6			
In City or distance from: miles/km	In City			
Owner	City			
Option - Local I.D. Group				
Railroad Access	Burl. Northern			
Highway Access	I-44			
Navigable River at Site	NO			
Electricity at Site	YES			
Water Main at Site (size: in/cm)	6"/15cm			
Gas Main at Site (size: in/cm)	NO			
Sewer Line at Site (size: in/cm)	15"/37.5cm			
Zoning Classification	Ind.			
Fire Department Service	YES			
Fire Insurance Rating	8			
Tax Rate/$100 Assessed Valuation	$6.23			

Utilities

Water:

Water supplied by: X municipal _____ private

Name of supplier: St. James Municipal Utility

Address: St. James, MO

For rate information contact: City Hall

Phone: (314) 265-7011

Source of city water: Deep Wells

Water supply approved by State Board of Health: X yes _____ no

Capacity of water plant: 1,450 gallons/minute 5,510 liters/minute

Capacity of water plant: 2,088,000 gallons/day 7,934,400 liters/day

Average consumption: 240,000 912,000

Peak consumption: 500,000 1,900,000

Storage capacity: _____ gallons _____ liters

Natural Gas:

Natural gas serves city: yes _____ no X

New hookups available: yes _____ no _____

Name of supplier: _____

Address: _____

For rate information contact: _____

Phone: (_____) _____

Sanitation:

Type of sewage treatment plant: Oxidation Ditch

Treatment plant certified by state: yes X no _____

Characteristics of waste treatment plant:

Measurement	Capacity	Present Load
Gallons per day	462,600	300,000
Liters per day	1,757,880	1,140,000
Population equivalent	4,620	3,000

Sewer use charge: yes X no _____

Electricity:

Supplier: X municipal _____ private _____ co-op

Name of supplier: St. James Municipal Utilities

Address: St. James, MO

For rate information contact: City Hall

Phone: (314) 265-7011

Name of distributor: Union Elec. Co.

Address: St. Louis, MO

For rate information contact: _____

Phone: (314) 342-1000

Other Fuels:

Fuel oil distributor: _____

Phone: (_____) _____

Coal: _____

Phone: (_____) _____

LP gas distributor: _____

Phone: (_____) _____

Figure 8 (continued)

Transportation

Rail:

Railroad(s) serving community: Burlington Northern

Number of freight stops per day: on demand

Distance to nearest piggy back service: 35 mi. 56 km

Air:

Distance to nearest public airport: 13 mi. 21 km

Longest runway: 5,500 ft 1,677 meters

Surface: sod ___ hard X ; Runway lighted: yes X no ___

Private aircraft storage available: yes X no ___

Aircraft maintenance available: yes X no ___

Fuel available: yes X no ___

Nearest commercial air transportation: 45 mi 73 km

Location and name of airline(s) serving point: 1-Ft. Leonard Wood

Nearest air freight service: 45 mi. 73 km

Barge:

Name of adjoining navigable river(s): ___

Barge dock available: Public ___ Private ___

Channel depth: ___ ft./meters: Length of season: ___ month(s)

Motor Carrier:

Package delivery service: yes X no ___

Highway bus service available: yes X no ___

No. of highways serving city: Interstate 1 U.S. ___ Mo. 1

Distance to nearest Interstate interchange: City mi. ___ km

Motor freight carriers serving community:

Name	Terminal Facilities (or mi./km to nearest)
Beaufort Transfer	Rolla
Frisco Trans. Co.	Rolla
Highway Trans Co	Rolla
UPS	Rolla

Distance to Major Metropolitan Areas:

City	Miles	Kilometers	Days by Railroad	Days by Motor Freight
Atlanta	651	1,048	3	2
Chicago	400	644	2	1
Cleveland	627	1,009	3	2
Dallas	545	877	3	2
Denver	815	1,312	3	2
Kansas City	210	338	2	1
Los Angeles	1,750	2,816	5	4
Memphis	300	483	2	1
Minneapolis	559	899	2	1
New Orleans	670	1,078	2	2
New York	1,075	1,729	3	2
St. Louis	90	145	1	1

Education

Public Schools: Classification AA

Type	Number	Teachers	Enrollment
Elementary	2	40	721
Junior High			
High School	1	47	806

Area vocational school utilized: Rolla Area Vo-Tech

Colleges or universities: University of MO-Rolla; Lincoln University, Jefferson City

Private Schools:

Type	Number	Teachers	Enrollment
Elementary			
High School			

Colleges or universities: ___

Local Development Organizations

Economic Development:

Name of group: St. James Community Ind. Corp.

Person to contact: Charles G. Kirgan

Address: Jefferson St.

St. James, MO 65559

Phone number: Business: (314) 265-3500

Home: (314) 265-7303

Chamber of Commerce:

Chamber of Commerce: yes ___ no ___

Full-time manager: yes ___ no ___

Legislative Districts

Missouri Senate District 16th

Missouri House District 144 & 149th

U.S. Congressional District 8th

Published by
Missouri Division of Community & Economic Development
P.O. Box 118, Jefferson City, Missouri 65102

Figure 8 (continued)

Labor

Phelps County
Civilian labor force: (Dec, 1982)* .. 15,317

Unemployed 1,299

Unemployed as % of work force 8.5%

Total employment 14,018
1981 Avg.

Nonagricultural employment 11,342

Manufacturing employment 1,093

Nonmanufacturing employment 10,249

*Formularized estimate-Missouri Division of Employment Security

Health Services

Hospital(s)_____ Number of beds_____

If no hospital, distance to nearest facility: 10/16* mi./km

Clinic in community: yes X no_____

Medical personnel: MD(s) 2 DO(s) 5 DC(s) 0

Dentist(s) 2 DVM(s) 1

Nurses: Registered_____ Practical_____

* Phelps Co. Memorial Hosp.

Major Employers

Name	Product /Service	Employment Male-Female	Union Affiliation
California Mfg.Co.	Men's & Boys Jackets	27-180	ACWA
Manchester Packaging Co.	Plastic Packaging Prods.	7-2	None
Murdon Co.	Precast Concrete Products	6-1	None
Eschenroder & Sons, Inc.	Offset Printing	10-2	
Vicenti Inc. Plant #2	Coordinated Sportswear	7-88	ILCW
St. James School System	Education	83	MSTA
Missouri Veterans Home	Soldier's Home	140	

Work stoppage occurrences within the last five years affecting five percent or more of the labor force in the area: 0

Climate

Temperature:

Coldest month: January Normal 33.0 °F 0.5 °C

Hottest month: July Normal 78.0 °F 25.0 °C

Precipitation:

Dryest month: January Normal 1.7 in 4.3 cm

Wettest month: June Normal 5.4 in 13.7 cm

Annual average: Rain 40 in 100 cm

Snow 13 in 33 cm

Altitude: _____feet _____meters

Recreation Facilities

Number of recreation facilities in city or within 10 mi./16 km:

2 Public swimming pool(s): 4 Public tennis court(s):

3 Public park(s): 2 Public golf course(s):

2 Country club(s): _____YMCA: _____YWCA

Movie theatre(s): _____Indoor _____Outdoor

Nearest public access lake or river: 8 mi. 13 km

Activities allowed: Swimming - yes X no_____;

Fishing - yes X no_____; Motor boating - yes_____ no X ;

Water skiing - yes_____ no_____

Other recreation facilities or special features: 55,000 Ac /22,000HA.
Lake of the Ozarks 68mi/109km; 100 ac./40 HA. Fishing
lake 5 mi/8km

Figure 8 (continued)

PROJECT LINCS

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SERVICE MATRIX

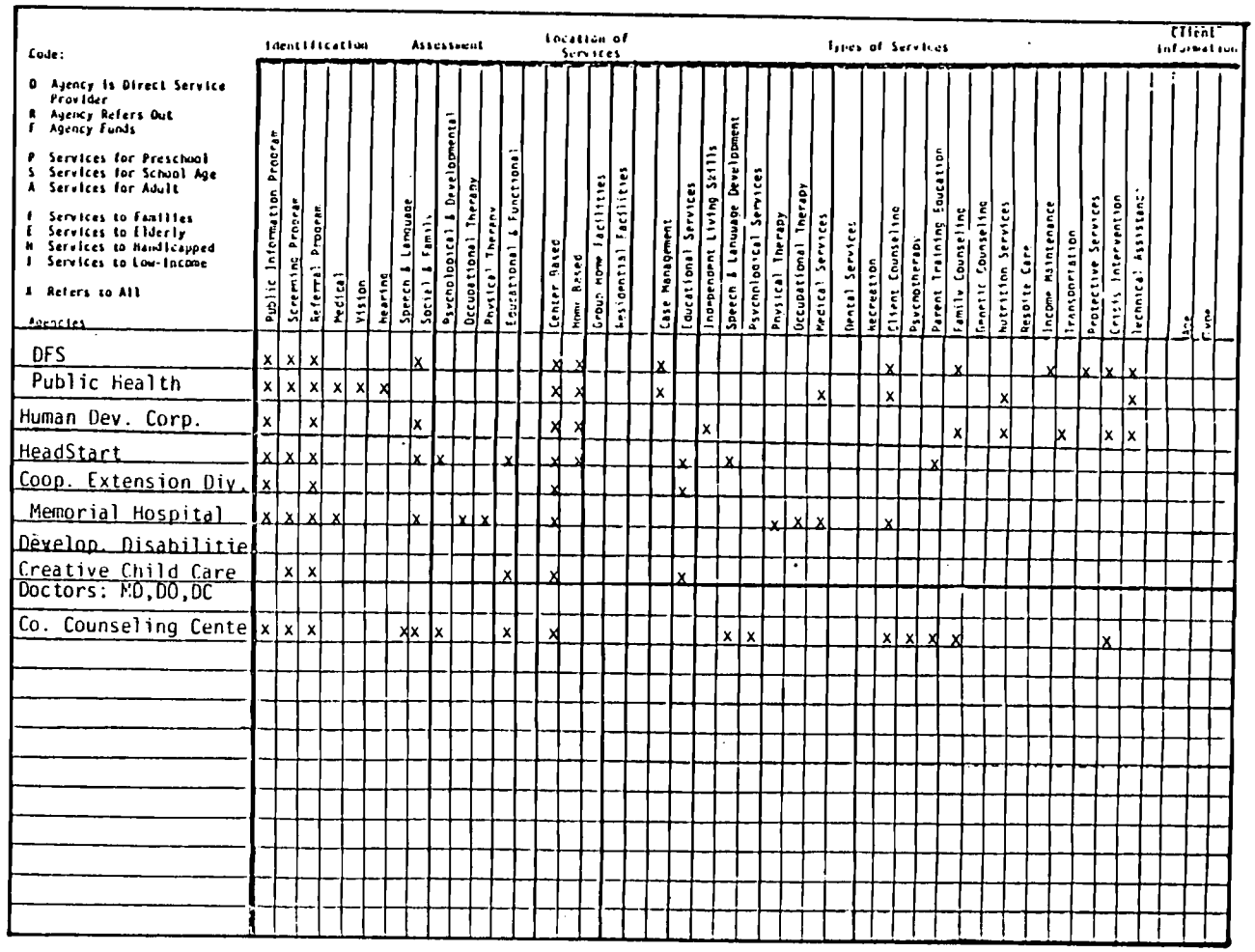

Figure 9

LINCS Service Matrix

intervention or if it would be more appropriate to choose an alternative site.

Viability analysis of the community requires the gathering of new information. Participant observation and survey sampling data gathering techniques are combined to provide relevant ethnographic information. Through a reputational analysis of the community and projected service focus influence, key informants are selected. By conducting structured personal interviews with these key community and agency representatives, community issues and attitudes are identified and documented. Through this same process the matrix of available services can be verified and expanded. The interview protocol is presented in Figure 10. Personal contact in the community is a reliable mechanism for determining if awareness, motivation and flexibility levels warrant continued outreach efforts or whether further awareness oriented activities are required. Such comprehensive analysis provides a basis for determining the degree to which and where designated service options can be incorporated into the existing community system and selection of an effective entree strategy.

Community Entree

This phase of the community linkage development process concentrates on (a) selection of targets within the community human service network which exhibit potential for becoming successful formal agency linkages and (b) development of a strategy for establishing this formal linkage that reflects an awareness of regional and community dynamics as they affect service delivery. Fundamental to achievement of these objectives is the adoption of a three-step strategic planning process.

The initial step, resource/constraint analysis, involves the evaluation and synthesis of community analysis data into a format for decision-making (Figures 11, 12 and 13). Individual perceptions of major community trends, needs, issues and concerns, gathered through the interview process, must be evaluated for relevance, accuracy and validity. The resultant data is synthesized into a form that can be used as a basis for the development of an action strategy. Without such evaluation and synthesis, these perceptions represent a narrow perspective of the community and, thus, a limited data base for decision-making.

Strategy formulation, step two, involves specifying "alternative strategies" for effectively coping with identified constraints. The

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COMMUNITY ANALYSIS SPECIFIC NEEDS SURVEY

Name: A.H.

Title/Position: Social Worker, County Memorial Hospital

Primary Focus

Organization/Agency President, Interagency Council

Primary Focus Forum for social and professional exchange of ideas

1. Community efforts of the past five years Friends of Historic St. James on the National Registry; Festival of the Arts

2. Who was most responsible for these accomplishments?

Individuals	Groups
	Chamber of Commerce
	City Council
	School Board
	Friends of Historic St. James
	Service Clubs

3. What are the (three) most pressing needs in the community at this time?

4. What are the (three) main issues/concerns? Transfer of Training School into a minimum security prison; unemployment

5. What characteristics does this community have which are "typical" of a rural community? agri-business economy problems

6. What qualities make this county unique? history; location

Figure 10

Community Analysis Specific Needs Survey

7. In reference to human services please list:

a. community needs lodging and help for the unemployed

b. agency needs Senior citizen housing

c. rewards the usual satisfactions

d. frustrations money

8. How would you describe the relationship between human service agencies in this community? positive

9. How would you describe this community's support of human services?
fair

10. Who are the primary service providers for 0-3? handicapped? high risk?
WIC, DFS, HEAD START, Dr. Peters

11. Do you feel there is a NEED for a project such as this one in this community?
Don't know

12. Is there any POTENTIAL for LINCS to work with this community?
I'm not sure, contact Dr. Peters

* Questions/Comments:

Figure 10 (continued)

CONTACT TREE

	MOST ACTIVE "Doers"	MOST INFLUENTIAL "Decision-Makers"
Community Wide	Farm Bureau	
Human Services	Ministerial Alliance	
Services to Handicapped	MR/DD	MR/DD
Services to Children	Susan Howe	Dr. Peters

In reference to Human Services,

Who does new things? HDC has several new programs

Who makes sure things get done?

They may not be aware of it, but is there anyone who may hinder services?

no off hand

Who do you feel is most appropriate for further discussion of this project?

Dr. Peters

Free Advice . . .

Good luck! We need all the help we can get.

Figure 10 (continued)

TYPE OF LINKAGE	LINKAGE AGENCY					
	HDC	HS	DFS	PH	HOSP.	PED.
Funding	+R	+R				
Clientele				L+	L+	L+
Facilities						
Personnel	L+		L+			
Volunteers						
Community Support Base	+		+			
Other (Specify)						

Indicate presence of linkage (+) and whether is regional (R), local (L) or both (B)

Comments:

SOURCE OF ATTITUDE	HUMAN SERVICE AGENCY					
	HDC	HS	DFS	PH	HOSP	PED
General Public	+/-	+/-	+/-	+/-	+/-	+
Other Human Service Agencies (Staff)	+	+	+	+	+	+
Administration	+	+/-	+/-	+	+	+
Clientele Served	+	+	+/-	+	+/-	+
Interagency Cooperation	+	?	+/-	+/-	+	+
Early Intervention/ Prevention	+	+	+	+	-	+
Other (Specify)						

Indicate relationship as positive (+) or negative (-)

Comments:

Figure 10 (continued)

PHELPS COUNTY

PROJECT LINCS

Department of Special Education
University of Missouri-Columbia

ANALYSIS SUMMARY

Resources	Constraints
1. Active Interagency Council	1. Lack of objective information base from the Extension Community Development Specialist
2. Perceived need	2. Interagency Council President is unfamiliar with the target population
3. Openness to outside "help"	3. Low statistical need compared to other area counties
4. Potential linkage agencies (3) available	4. Community Analysis Survey answers vague
5. No community/specific issues or concerns voiced	5. Several "new" programs may cause time management difficulties
6. Several new programs indicate innovative capacity	

Strategies

1. Conduct analysis survey with the Interagency Council President
2. Contact Dr. Harris, pediatrician, for introduction to the community's children's services network, support base and influence
3. Contact other key people to set up orientation/planning session as indicated on the contact tree

Figure 11

County Resource Constraint Analysis

AGENCY # 1

PROJECT LINCS

Department of Special Education
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ANALYSIS SUMMARY

Resources	Constraints
1. Positive attitude toward LINCS	1. Administrator seen as a "talker not doer"
2. Designated Home Visitor active in the community	2. Administrative commitment uncertain
3. Only one administrator for two administrative positions	3. The worker designated as the home visitor is outside the official linkage agency: therefore, communication problems may arise
4. Designated Home Visitor has prior written contract for home visiting	4. Caseworkers not as involved as may be necessary
5. Potential/need awareness high	5. Worker/designated home visitor is involved in multiple projects
6. Management concerns - time/numbers and paperwork	

Strategies

1. Resource #4 and Constraint #5 (may) cancel each other out
2. Administrator may not need to be actively involved as long as verbal support and written letter of commitment obtained/ use advisory council names to lend crediability to the project.
3. Minimize complications involving time/communications by clearly outlining the exact process involved: plan: be brief: stress fitting into their schedule
4. Maintain regular open communication via process
5. Document communication problems due to two separate agencies for future use
6. Utilize influentials in the local community to support
7. Stress statewide replication efforts
8. Stress professional development: schedule community workshop as soon as possible

Figure 12

Agency Resource/Constraint Analysis

AGENCY #2

PROJECT LINCS

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ANALYSIS SUMMARY

Resources	Constraints
1. MCH nurse is new (December); feels a need for training	1. MCH nurse appears very shy with outsiders
2. Administration positive	2. MCH nurse "wears several hats"
3. Administration feels the agency's public image is much improved	3. MCH activities are scheduled 1 day/ week to include all services to children (i.e., immunizations, home visits, screening.)
4. Human service network has reacted positively to the MCH nurse as a professional	4. A very busy office -- scheduling may be a problem

Strategies

1. Down play "outsider" role by emphasizing how skill training and resource development will be available
2. Need to be very aware of their heavy schedule and be as flexible as possible
3. Be very sensitive to interagency communications

Figure 13

Agency Resource/Constraint Analysis

strategy formulation process emphasizes utilization of identified resources. Such an approach allows for the generation of multiple viable options to planned community entree.

The final step, strategy evaluation and selection, included application of criteria based on regional agency objectives for entering the community to determine the likely future consequences of each strategy. The following criteria guided LINCS in selecting community entree strategies: (a) presence/absence of existing target systems; (b) orientation to interagency collaboration; (c) index of innovation potential; and (d) presence/absence of target components within the community human service network (i.e., children, ages 0 to 3 years; handicapped/high risk; home based oriented). Based on these assessments, strategies for entering a community are priority ranked given the available alternatives.

Formal Linkage Development

This phase involves the establishment of selected agencies as formal linkages through orientation of agency personnel, agency analysis and actual agreement negotiation via the designated entree strategy. Agency orientation provides service implementors an opportunity to acquire additional information, expands the support base for service implementation and further determines the feasibility and viability of the actual service linkage. Personal contact has been established prior to formalized linkage development through the specific needs survey conducted with key community and agency leaders during community analysis. This contact is used extensively to lend support and credibility to agency orientation efforts.

The agency analysis process also begins with the initial interaction between LINCS staff and a representative of the community agency. Subjective though it may be, an impression of enthusiasm and commitment to innovation and flexibility of the agency's program model and service delivery is gained. Interest is indicated through the types of questions asked, the amount of time spent, and the amount of spontaneous sharing that occurs by agency personnel. The speed of ascertaining information and evoking interest among staff and colleagues to arrange a formal agency orientation session creates an image of cooperation and leadership by the agency administrator. These subjective impressions are recorded and then tested against the more objective data of the **Agency Analysis Questionaire** (Figure 14) and **Home Visitor Profile** (Figure 15). A decision is then made

PROJECT LINCS

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AGENCY ANALYSIS

Name of Organization: Phelps County Health Unit

Address: 663 Nichols Street
St. James, MO 66679

Telephone: (913) 887-0938

Name and Title of Chief Executive Officer E.S., Administrator

General Information

1. Does this agency operate under an official city, county, state or federal mandate: yes
   If so, please state the document in which that mandate is recorded.
   County Court and Missouri Division of Health
2. What are the general long range goals and purposes of this agency?
   Promotion of citizen's health and prevention of disease
3. What are the objectives of this agency for the next two year period?
   Provide nursing services to residents of Phelps County as outlined by Missouri Division of Health and physician orders
4. How does this agency fit into regional, state and/or national systems?
   Part of Division 3, MO Division of Health
5. What are the geographic parameters for services provided by this agency?
   Phelps County
6. With what other agencies and organizations in the local community are services coordinated?
   DFS, Memorial Hospital, WIC, HDC
7. With what agencies and organizations regionally are services coordinated?
   District 3, Division of Health
8. Referral sources include (estimate %)

____self	____central referral system	30 hospital
____health clinic	____mental health	70 doctors
____welfare	____other (list major sources)	

9. Number of different families served annually. This information is not readily available.
10. Is this agency currently participating in or sponsoring any pilot or short term special projects? Explain briefly.
    Not at this time.
11. What physical facilities are available to this agency for
    * ____individual conferences
    * ____small group (0-8 people) work sessions
    * ____workshops and seminars 12 people maximum

Figure 14

Agency Analysis Questionnaire

Administrative Information

1. Staff includes (specify number)

____paraprofessional	____social worker	____speech specialist
5 nurse	____physical therapist	____hearing specialist
____volunteers	____occuoational therapist	____doctor
____educator	____child development spec.	1 clerical ____other (List)

2. Please diagram the administrative structure of this agency indicating interaction of all department and program components, program heads, and FTE for each.
One R.N. administrator; two additional R.N.s; two L.P.N.s; five home health aides; one secretary - all working together as a single nursing unit

3. Programmatic decisions are made by ___*___board, ___*___director, ___*___direct service staff.

4. Policy decisions are made by ___*___board, ___*___director, ____direct service staff.

5. Funding sources for each program in the agency include:

Program	Funding Source
This unit is tax-supported with the greater part of funding coming from the county, a lesser % from the state including MCH and WIC funds.	

6. Please provide a weekly schedule of agency activities and programs.

Home nursing; office nursing; clinics

7. The professional development program of this agency includes:
*____preservice orientation consisting of nursing programs leading to licensure
___*___regularly scheduled inservice training sessions for ___*___administrators,
___*___supervisors, ___*___direct service staff; and are held ____weekly,
____biweekly, ___*___monthly, ____quarterly, ____annually.
limited financial support for attending conferences and seminars for ___*___administrators,
___*___supervisors, ___*___direct service staff.
___*___release time for attending conferences and seminars for ___*___administrators,
___*___supervisors, ___*___direct service staff.

8. Membership and participation in professional organizations is ____mandated,
___*___encouraged, ___*___up to the individual.

9. Professional organizations typically joined by the staff include:
ANA: NPHA

10. What resources in family and child development and related fields are available to the staff? Workshops, seminars, films, literature

Figure 14 (continued)

11. What opportunities for professional advancement are available within this agency?

Continuing education programs; time and limited financial assistance made available for attending workshops and seminars

12. Which programs of the agency include

home visits Nursing, MCH, CHC

center based services to families Nursing, WIC clinics, immunization clinics

center based services to 0-5 years MCH visits, CHC & WIC

13. Please provide job descriptions of personnel who provide direct service to infants and young children and their families.

S.G. is the MCH nurse; other staff nurses available as needed.

RELEVANT LINCS INFORMATION

1. Identify conditions inside your agency which may put constraints upon its participation in the LINCS model.

Heavy caseloads for all nursing personnel

2. Identify conditions outside your agency which may affect its participation in Project LINCS.

3. Identify those qualities and special programs within your agency which may enhance the effectiveness of Project LINCS.

Several of our programs, specifically WIC, MCH, CHC and immunization clinics may be sources of referrals.

4. List in order of priority, the major role functions and estimate the percentage of time devoted to each function for each individual who will be assigned to Project LINCS. (i.e., record keeping, visiting, consultation, etc.)

	Name	Role Function	% of Time
1)	S.G.	MCH nurse	2 days/week
2)			
3)			

Figure 14 (continued)

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HOME VISITOR PROFILE

I. THE HOME VISITOR'S PERCEPTIONS OF PARTICIPATION IN PROJECT LINCS

	Observations	Recommendations
1. Purpose of role	ok	
2. Apprehensions	Feels "developmental milestones" is a need	Provide information
II. SCHEDULE		
1. Caseload Information a. Kinds of cases b. Number of 0-3 cases c. Referrals	10 General Maternal Child Health 9-10 High Risk Maternity	Sufficient caseload
2. Length of time spent home visiting	1 day per week (Tuesdays/ Thursdays)	Only works 2 days per week; Scheduling could be an issue.
3. Planning time	4 hours per week	
4. Clinics	2 days per month (WIC)	
5. In-Office Appointments	2 days per month office duty for immunizations; any in-office procedures. No formal in-office appointments.	

Figure 15

Home Visitor Profile

	Observations	Recommendations
6. Professional Development	Second Friday of each month. Topics include quality assurance, high risk identification	Agency emphasizes professional development.
7. Consultation with other professionals	Agency personnel with whom share cases	
8. Educational Sessions	Enrolled part-time at UMC	
9. Traveling	1 day per week/home visits	
III. PAPER WORK AND REPORTING		
1. Copies of all forms	To forward to LINCS	
2. Screening/Assessment a. What is used b. When c. Perceptions	DDST/PDQ .. 1 per year per child	Need to clarify LINCS documentation needs.
IV. PROFESSIONAL BACKGROUND		
1. Education and training	Penn Memorial Hospital/ R.N.	
2. Special interests	Bachelor of Science in Nursing	

Figure 15 (continued)

regarding "goodness-of-fit" between the services to be offered, community needs, regional agency constraints and the specific community agencies to be involved. Linkage criteria (Table 3) are reviewed jointly with agency personnel. Issues and concerns are identified and negotiated through this review process. Thus, the linkage is formalized through analysis of the agency and a collaborative process between LINCS (i.e., regional) and agency personnel. This process culminates in the delineation of roles and responsibilities and a documented interagency agreement (Figures 16 and 17).

Considerations

This section delineates significant factors which affect the effective implementation of the linkage development process.

Recognition of the Informal Community Network and Structure

Entry into the community as a whole must precede the development of linkages with specific agencies. Typically, strategies for change and entree utilize formal community structures. Such an approach reflects an "urban" orientation which is contradictory to the rural culture. Entree and change within the rural culture is governed by the informal communication and power structures rather than the more obvious formalized systems. Thus, prior to entry a process must be delineated for identifying this network and/or individual community "gatekeepers." Entry and change will be effective to the extent that these channels are acknowledged and are supportive or neutral to the linkage.

Personal Contact

Change in the rural culture is governed more strongly by informal than formal structures and patterns of communication. Relationships rather than formal documents and bureaucratic processes are the basis for action and collaboration. These dynamics within the rural community have the following implications for the development of effective linkages: (a) the development of relationships with key opinion leaders as early in the process as possible is imperative to securing firm support for future interaction; (b) the goal of interaction is partnership and collaboration, i.e., development of a "relationship" with the informal network; and (c) personal contact is critical to community entry and development of the linkage. Individual personal contact is particularly critical during initial contact with key community informants and opinion leaders. This

Table 3

Linkage Agency Participation Criteria

Area	Criteria
Agency Commitment	A. It is expected that the model will be implemented for a period of at least one year. B. An agreement will be reached regarding the allocated time and schedules for regular joint home visits, case consultation, technical assistance, record keeping, model implementation training and individual staff development.
Case Loads	A. Linkage agencies will be able to identify a case load of at-risk or handicapped infants, ages 0-24 months, sufficient to provide adequate learning opportunities for each assigned home visitor. Usually this will average home visitis to at least three families per week for each home visitor. B. In addition to the identified LINCS cases, the home visitor will have a sufficient case load from which generalization of concepts ans skills acquired through teaming and technical assistance may occur.
Linkages	In an effort to maximize service delivery, linkage agencies will actively seek to initiate and/or develop formal and informal linkages among human service agencies and program within the community.

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ROLES/RESPONSIBILITIES

LINCS	AGENCY
*provide a method of identifying those 0-3 children and families whose needs warrant developmental intervention	*provide home visitor serving 0-3 children and their families to receive LINCS training
*provide direct case consultation and home visitor competency development via a teaming relationship between a LINCS home trainer and an agency home visitor	*provide case management (continuation of current status)
*provide technical assistance (workshops, seminars, learning packages, etc.) to reinforce abilities of agency staff in meeting the developmental needs of the 0-3 population	*provide letter of commitment to work with LINCS for duration of training cycle (one year)
*provide documentation of agency's participation as an initial LINCS training site	

LINCS/AGENCY

*incur no financial obligation

*negotiate training schedule (time and caseload)

*identify from regular caseload those 0-3 children and their families who warrant developmental intervention

*arrange a comprehensive assessment to those identified 0-3 children and their families

Figure 16

Roles/Responsibilities Chart

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DEMONSTRATION AGREEMENT

The Phelps Healthagency agrees to implement on a demonstration/trial basis the Project LINCS model of services to children. Issues critical to this mutual agreement are as follows:

1. The program will be implemented jointly by:

Susan Olson	Paul Bacon

2. Clients will be drawn from regular caseloads. The number of clients for the 12 month period will be approximately 6.
3. Participation will include regular home visits as needed (usually every two weeks, although this is flexible and based on indicated need).
4. Participation involves no financial arrangement of any kind; this is a service arrangement only.
5. Initial commitment is for a 12-month period. Further participation will be by mutual agreement.
6. No formal contract is required. This agreement is for clarification and future reference only.
7.
8.

Agency Administrator	LINCS Representative
October 17, 1983	
Date	

Figure 17

Demonstration Agreement

process assists in dispelling the community's often negative perception of "outsiders". It further recognizes the individuals who serve as the community's gatekeepers and the strength of the informal "governance" structure as well as the way in which things are done within the rural culture.

Participant-oriented Strategies

Although diversity characterizes rural communities, certain generic characteristics exist which are closely tied to the value structure and tradition of the rural culture. The combined characteristics of individualism and action orientation lead to a strong sense of independence and self-determination. Thus, to effectively impact service delivery in rural communities, emphasis must be on participant oriented strategies characterized by the concept of "joining" the community.

The development of trust within the rural community is based on the regional system's ability to enter into partnership with rather than intrude into the community structure and to reflect action rather than rhetoric. Recognition of the importance of active participation within the community is critical to this process. The inclusion of participant-oriented strategies strengthens both awareness of the need for service and the collaborative action required for an effective linkage.

Flexibility in Negotiation of Issues

Linkages based upon a systems perspective of communities and agencies require an adaptive approach. The joint identification of issues and flexibility when negotiating their resolution is imperative. The regional program can and often must adapt to the tone and general climate of the agency within its specific community setting. Both regional and community agencies operate within specific bureaucratic and other constraints. However, adaptation in the development and maintenance of the linkage must reflect collaboration and compromise from both parties in achieving a "goodness of fit."

Maintenance for Continuing "Goodness of Fit"

Within dynamic systems, such as agencies and communities, it is anticipated that initial agreements will require change. If not change, problems or issues arise which require resolution if the linkage is to be effective. It must reflect more than another document mandating services

which in reality are not implemented or if implemented, underused. Thus, there must be built into the linkage a systematic and adaptive process for monitoring linkage maintenance. Such a process for early recognition and resolution of issues that may arise.

"Innovation" Adoption

Expansion of programs and services to communities as a function of regional outreach efforts appears to follow a process similar to adoption of an innovation. As regional agencies are often mandated to provide services to a specific geographic area, they are placed in the position of convincing their target audience (i.e., communities or clients) of the need for the service or program. Often these attempts meet with resistance or apathy. To enhance acceptance of the program or services, it must be presented in a way that meets the current perceived needs of the client or community. As a result, the regional delivery option(s) may need to be adapted to more adequately meet the perceived need or it may be necessary to build an awareness of need. Agencies and administrators must realize that this latter process takes time, if it is to be effective.

III FORMAL STRUCTURED INTERACTION (DIRECT SERVICE/TRAINING)

A characteristic of rural communities is their geographic isolation from a large service pool that can deliver comprehensive services to high risk/handicapped children, particularly ages 0-3 years, and their families. When educational or therapeutic services are warranted for a child residing in a rural community, service acquisition necessitates the family leaving the community periodically to travel to a regionally located center or more densely populated service area. Such an approach imposes a geographic, financial and personal distance between the families and the services they need. Thus, the underlying assumption of the direct service/training component is that those professionals closest to the site of need are best suited to deliver additional services. Further support of this perspective may be found within the "rural culture" where the local service provider often has an established relationship with the families of this target population. Such a relationship strengthens the link between the family and the resources a particular agency may provide. Thus, in implementing the direct service/training component of LINCS, personnel within the community human service network are regarded as the most appropriate to deliver needed services due to their established role and their routine access to this population and their families.

The direct service/training component forms the basis for the formal structured interaction between LINCS and community linkage agencies. The scope of services of local service agencies to the rural 0-3 population are expanded through facilitating their collaborative efforts at both the local and regional levels. This process becomes the operational negotiated agreement and strengthens the established linkage. Emphasis in this component is two prong: (a) provision of in-home developmental stimulation based upon a Piagetian/ecological curriculum and/or other therapeutic services to developmentally delayed infants and (b) expansion of the scope of services of local agencies through the provision of professional development and technical assistance to individual direct service providers in the agency.

Utilizing a transdisciplinary approach, **local service providers**(i.e., designated as **home visitors** in the model) receive training and technical assistance from **LINCS personnel** (i.e., designated as **home trainers** in the

2.1 ROLE ANALYSIS II:

Purpose: The role analysis, phase II, is implemented to determine the current level of Home Visitor skill in delivering in-home developmental stimulation. By gathering information regarding the Home Visitor's current abilities in delivering infant stimulation and the Home Visitor's personal style of working with families and children, a training plan can be formulated which will reflect areas within the Home Visitor's role which can be expanded.

Procedure	Outcomes	Materials Required for Implementation
2.1.1 Conduct Observational Home Visit	*Baseline of home visitor skills in delivering services to target population* *Determination of competency level at which the home visitor will enter training*	Home Visitor Procedural Checklist

2.2 MODEL IMPLEMENTATION TRAINING

Purpose: This phase concentrates on the equipping of the home visitors to start the target population in a cycle of service. Training focuses on development of skills that will assist the home visitor in performing screenings, the identification of caseload, intake procedures and program planning.

2.2.1 Provide Screening Training	*Home visitor competency in use of a screening tool* *Refinement in current competency in use of a screening tool*	DDST Training Materials DDST Update Schedule
2.2.2 Provide Intake Process Training	*Local/regional linkage with regional diagnostic facility* *Home visitor competency in acquiring services for child/family*	Referral Worksheet Due Process Forms Intake Process Outline
2.2.3 Provide Individual Service Plan (ISP) Training	*Home visitor knowledge of the requirements of ISP* *Home visitor competency in collaborative development of ISP* *Home visitor knowledge of child/family functioning levels* *Written plan of service for each referral*	What is an ISP? ISP Forms ISP Development Guidelines
2.2.4 Provide Curriculum Training	*Home visitor knowledge base of infant stimulation curriculum* *Home visitor competency in programming for infant stimulation*	LINCS Activity Manual How-to guide for LINCS Activity Manual

2.3 HOME VISITING TRAINING/TEAMING

Purpose: This phase makes up the major portion of this component. Thirty minute training sessions are held for expansion and refinement of home visitor skills in theory/best practice information. Following these sessions are joint home visits where the home visitor is able to observe the home trainer as well as apply information covered during the training sessions.

2.3.1 Provide Individual Training Sessions	*Home visitor knowledge of theory and research behind targeted competencies* *Home visitor knowledge in conducting a developmentally focused home visit*	Workpackets: Working With Families Infant Development The Environment Collaboration Home Visit Procedures
2.3.2 Provide Joint Home Visits	*Documentation of home visitor competency in conducting a developmentally focused home visit* *Home visitor competency in recording intervention efforts, child progress, planning strategies*	Home Visitor Observation Form Program Planning/Monitoring Form
2.3.3 Provide Feedback Sessions	*Home Visitor knowledge of progress in delivering in-home developmental stimulation program* *Strategy selection for problem areas in delivering in-home developmental stimulation*	Home Visitor Competency Development Log

Figure 18

Formal Structured Interaction

model) that enables them to provide directly and/or access a more comprehensive service base for the children and families they serve. Such a collaborative approach mobilizes a transactional process of information sharing through the establishment and maintenance of a relationship between regional and local service providers. The following discussion focuses on the process used to soldify the linkage process and to expand local competence. Figure 18 provides an overview of each phase in this process and the resultant outcomes.

Role Analysis II

Analysis of current roles becomes critical when seeking to enhance or add to the existing responsibilities of an agency service provider. LINCS role analysis procedure is used to identify the service provider's current role and those role functions that may allow for expansion, including home visiting. Several variables impact role expansion as designated in the LINCS model. These include (a) the length and frequency of home visits, (b) frequency with which other major roles are performed, (c) service provider perceptions of those major roles and functions, and (d) categories of clientele (particularly, target population percentage of the total caseload). By gathering information regarding the current role, competency level, and the identification of possible role constraints, a base is established for problem-solving activities. This information facilitates formulation of an in-service plan as well as predicts training outcomes. A description of the data gathering procedures comprising the role analysis process follows.

Delineation of Role Functions and Constraints

The initial step in the role analysis procedure occurs during the formal linkage development process. The initial contact between the home trainer and home visitor has been structured through the use of the **Home Visitor Profile** (Figure 15, page 38) to identify designated and actual role functions. The collaborative approach which characterizes the subsequent stages of interaction is initiated during this step.

Baseline of Home Visitor Competency

Determining a baseline of present home visiting competency through an observational home visit is the second step in the role analysis procedure. Competency is measured using the **LINCS Home Visit Procedural Checklist**

(Figure 19). This observational checklist reviews home visiting skills emphasizing a developmental focus and allowance for parent involvement including decision-making. Behavioral indicators which occur during a home visit are recorded and matched to the skills noted on the checklist. Baseline data is converted into a percentage and used to determine the level at which training will begin and the level of home trainer assistance required during the later stage of joint home visits.

Model Implementation Training

The initial training phase is termed Model Implementation Training. The home visitor acquires the knowledge and skill base to successfully interface with the regional facility. The collaborative relationship between local and regional service providers is initiated during this phase and provides the foundation for future transfer of information between those levels. The content of Model Implementation Training includes skill development in conducting developmental screenings, accessing diagnostic and evaluative results from a regional facility as well as program planning and implementation. Table 4 provides a representation of the direct service intake cycle and the parallel home visitor training phase followed by application.

Screening Process Training

Frequent contact with a wide range of young children provides a broad perspective of child development. Often concerns are raised relative to the developmental pattern of a particular child. Yet these impressions may reflect only intuitive judgments. Training in developmental screening provides a mechanism to verify and quantify the impressions and concerns that direct service providers and others may have in regard to a child's development.

Screening training includes instruction in basic screening concepts as well as skill development in the administration of the **Denver Developmental Screening Test** (**DDST**). The **DDST** was selected due to its ease of administration, its wide use among health professionals and its mandate as a component of Missouri's High Risk Infant Project. Training in the administation of the **DDST** can be accessed either through LINCS, Missouri Cooperative Extension Programs, or the Missouri State Bureau of Local and Community Health Services in conjunction with the Bureau of Maternal/Child Health Consultants. An additional LINCS component includes instruction on

PROJECT LINCS

Name S.G.

Date 12/4/82

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HOME VISITOR PROCEDURAL CHECKLIST

____	1.	The Home Visitor allows opportunity and encourages the parent to give feedback regarding the previous week's intervention activities.
✓	2.	The Home Visitor provides positive reinforcement for parent involvement in the intervention strategy.
✓	3.	The Home Visitor validates parent information by observing and recording child progress.
____	4.	The Home Visitor refines and expands parent knowledge and abilities by using information from parent input and activity observation.
✓	5.	The Home Visitor elicits concerns from parent regarding child progress.
____	6.	The Home Visitor engages parent in problem-solving relative to concerns.
____	7.	The Home Visitor selects a developmentally appropriate activity based upon parent/child abilities.
____	8.	The Home Visitor models and/or instructs the parent in implementing the activity.
____	9.	The Home Visitor assists parent to determine when the activity may most appropriately occur.

Comments: 3/9 (34%) Baseline measure of skills during the observational home visit

Figure 19
Home Visit Procedural Checklist

Table 4

Integration of Home Visitor Training and Direct Service Intake Cycle

Model Implementation Training	Direct Service Intake Cycle
Screening Process Training	
	Child Find (selection of target child)
	Screening (DDST administration/review)
Intake Process Training	
	Referral for Assessment
	Assessment
ISP Training	
	ISP Review
	ISP Staffing
Curriculum Training	
	In-Home Developmental Stimulation
	Related Services
	Structured Developmental Programming

use of the **DDST** and its results within the LINCS program and curriculum model. The **DDST** is administered and scored as one of the initial criteria for referral and is readministered at three-month intervals as a part of the instructional review process.

Application. After criterion has been achieved in the administration and scoring of the **DDST** the home visitor's current caseload is reviewed to identify a target child for whom concerns relative to development have been raised. The **DDST** is then administered to this child. Where **DDST** screening has already been routinely conducted, this step is omitted from the training process.

Intake Process Training

Vital to the linkage model is the ability of the home visitor to link children from their caseload with appropriate therapeutic and stimulation services at the regional level. Through intake process training, skills are developed in accessing comprehensive child screening and assessment from a regional facility and ensuring active parent involvement during the intake process. Significant emphasis is placed on confidentiality and information transfer. Instruction is tailored to reflect the referral/intake procedures of a specific regional agency and includes initial contact, information transfer from the local agency via the **Referral Worksheet** (Figure 20), assessment scheduling, an overview of the actual assessment process and transmittal of results and recommendations.

Application. **DDST** protocools are reviewed to identify a target child whose score indicates the need for further evaluation. A **Referral Worksheet** is completed. This form structures the gathering of referral information and assists in determining the child's eligibility for referral by matching this information with regional agency referral criteria. The home visitor initiates referral to the appropriate regional agency for assessment by sharing information with the parents (e.g., concerns, what to expect during the assessment process, etc.), gaining consent and release, and facilitating scheduling and other logistics for securing the asssessment.

Individual Service Plan (ISP) Training

The concept of service plan development becomes crucial when attempting to provide comprehensive services to an at-risk or handicapped population, ages 0-3 years. Integral to implementation of this process is a home visitor who understands the service plan concept and regional and local

REFERRAL WORKSHEET

Child: S.S. Address: Box 123, Rte. 6
St. James MO 66780
D.O.B. 8/28/82 Phone: 913 555 - 1256
Parent/Guardian: K.S. Agency: Phelps County Public Health
Referral Source: S.G.

I. REFERRAL CONSIDERATIONS

1. yes 9 - 80 months

2. yes Is there a consistent primary caregiver?
   Who? K.S.
   Relationship to child: Mother

3. yes Is the child seen on a regular basis via home visit?
   How often? weekly
   By whom? S.G.

4. no Does the child exhibit one or more areas of concern on a screening procedure?
   Tool used: DDST
   Date of last administration: 6/13/83
   Areas of concern:

5. no Does the child possess potential for delay based on dysfunctional parent/child relationship?
   Description:

6. yes Does the child have a confirmed handicapping condition?
   Nature of handicap? Macrocephalic
   Diagnosed by whom? Dr. Peters

II. BACKGROUND INFORMATION

A. Primary Health Care Provider(s)

Name Dr. Peters Telephone 913 999-0756
Address 437 Main St. James MO 666890
Service Description Pediatrician

Name Karna Smith, R.N. Telephone 314 882-6655
Address University Health Science Center
Service Description Birth Defects Clinic

B. What relevant services, follow-up, examinations and/or evaluations has or is the child currently receiving?

Physical: (general medical, neurological, orthopedic, dental, vision, hearing)

Type	Provider	Address/Phone	Approx. Date
Neurological	Dr. Price	UHSC	3-months
Child Health Clinic	S.G.	Phelps Public Health	

Educational: (schools/day-care, physical/occupational therapy, speech and language)

Type	Provider	Address/Phone	Approx. Date
NA			

Social: (public health, social work, financial assistance - Crippled Children's, SSI, etc.)

Type	Provider	Address/Phone	Approx. Date

Figure 20
Referral Worksheet

roles in its development and implementation. The service plan becomes the operational linkage between the regional and community systems. This training acquaints the home visitor with the purposes, components and procedures in service plan development, including active parent participation.

Application. Development of the ISP and determination of the home visitor's role in this process and subsequent implementation is the responsibility of the regional linkage facility. In the LINCS model, the home visitor participates in an in-house staffing with the home trainer. At this staffing, evaluation results and recommendations from the Child Development Unit, Mid-Missouri Mental Health Center, are reviewed. This information is discussed jointly to gain a clear understanding of both child and parent skill levels and to review possible service alternatives and their access. Prior review of this information with the home visitor facilitates agency participation during the formal ISP staffing with the parents.

Curriculum Training

Paramount to delivery of direct services is the ability to utilize an appropriate curriculum. Within the LINCS model, curriculum emphasis is based on a developmental stimulation model. This model is most appropriate for high risk or mildly handicapped children who need stimulation rather than specific therapy or structured educational programming. Curriculum training for role expansion skills relative to specialized services or structured intervention is discussed in the section describing the program expansion option of this component of the LINCS model. However, all children on the home visitor's caseload regardless of developmental functioning levels benefit from normal daily stimulation and enhancement of parent-child interaction. The curriculum developed to implement this model utilizes a Piagetian/ecological based approach (Dunst, 1981). The following major intervention domains comprise the curriculum which has been organized to parallel areas and items on the DDST: personal-social, fine-motor adaptive, language, gross motor and cognitive. Figure 21 illustrates a sample parent activity sheet and a corresponding resource guide for the home visitor.

Training emphasizes familiarity with and use of the **LINCS ACTIVITY MANUAL (LAM)** and developmental stimulation concepts. Specific areas include

GRASPS RATTLE:

Infants are born with an involuntary, reflexive ability to grasp objects. This is seen especially when a new baby wraps his fingers around his mother's. When he does this, he is demonstrating that involuntary reflex since a baby's grasp is stimulated by the application of pressure to his palm. This reflex begins to diminish around three months of age.

The intention of these activities is to afford opportunities to the child which will help him transfer a reflexive behavior to an intentional or learned behavior.

RESOURCE READINGS:

Dunst, Carl J., Infant Learning: A Cognitive-Linguistic Intervention Strategy, Hingham, Massachusetts: Teaching Resources Corporation, 1981, 70.

Caplan, F., The First Twelve Months of Life, New York: Bantam Books, Inc., 1973, 107-116.

ACTIVITIES:

To Facilitate:

1. Lay your baby on a shaggy rug or blanket on his stomach. Watch him grab and pull at the threads in the rug or the folds of the blanket.
2. When diapering or feeding your baby, hold your face close to him. Let him feel your face, tug your nose, or grasp your hair.

To Orient:

3. Touch or rub objects against the side of your baby's hand. This will make him use his hands even more to get what he wants.

To Build:

4. Place a favorite object in your baby's hand. If he does not grasp it, shape his fingers around it for him. Gently pull at the object. This will make your baby hold on tighter.

To Expand:

5. Vary the size, weight, shape, or texture of objects and do the same activity.

GRASPS RATTLE: Your baby can use his hands to explore and learn about things around him.

1. Lay your baby on a shaggy rug or blanket on his stomach. Watch him grab and pull at the threads in the rug or the folds of the blanket.
2. When diapering or feeding your baby, hold your face close to him. Let him feel your face, tug your nose, or grasp your hair.
3. Touch or rub objects against the side of your baby's hand. This will make him use his hands even more to get what he wants.
4. Place a favorite object in your baby's hand. If he does not grasp it, shape his fingers around it for him. Gently pull at the object. This will make your baby hold on tighter.
5. Vary the size, weight, shape, or texture of objects and do the same activity.

Figure 21

LINCS Activity Manual and Resource Guide

the philosophical basis for the curriculum approach (i.e., Piagetian and ecological), the relationship between the curriculum and screening /assessment results, the philosophical base for parent involvement, strategies for enhancing parenting skills, home visiting procedures, and program planning and monitoring.

Application. Home visitors have two options for implementing the curriculum:

1. For children enrolled in LINCS, the following guidelines assist the home visitor in selecting appropriate curriculum items:

KEY I: The long term goal listed on each child's ISP will always match a developmental area on the DDST.

KEY II: The short-term objectives listed on each child's ISP will always match an item on the DDST.

Using these two keys, home visitors independently identify activities the child and family can perform between home visits.

2. Activities from the manual may be used with any children who may benefit from developmental stimulation. The following guidelines structure the use of the curriculum for children not designated on the LINCS caseload:

   a. Administer the Denver Developmental Screening Test and score the items.

   b. Identify areas of need from the DDST scores. If too many deficits are uncovered, use the referral guidelines to determine if referral for further additional assessments is appropriate.

   c. Based on the child's needs, develop long term goals for each area of concern (e.g., personal-social; fine motor-adaptive; language; gross motor)

   d. Specify a list of short term objectives that will help to meet the overall long term goals. These short term objectives that will actually be items failed on the DDST or items which will reflect skills the child should be attaining in the near future.

Regardless of the option selected, the home visitor identifies one to two activities from the **LAM** for presentation during a home visit. Activities are selected based on previously determined objectives including parent priorities.

A highly critical element in the delivery of developmental stimulation is a simple yet accurate method of recording intervention efforts. To fill this requirement, home visitors receive training in how to record efforts

using a **Program Planning and Monitoring Form** (Figure 22). Taking into account both monitoring and planning tasks and child performance level, the form provides the home visitor with a useful organizing tool that does not require significant amounts of time to complete.

At this point in the training process, the home visitor has acquired the prerequisite knowledge for accessing services from a regional facility and in providing in-home developmental stimulation. The focus of training shifts to an emphasis on role expansion and home visiting processes rather than content skills.

Home Visiting Training/Teaming

Home visiting training and teaming derives its base from a transdisciplinary approach to serving the target population. The actual skill expansion concept and the utilization of those skills reaches a practical level at this point in the training process. The teaming approach to training becomes critical at this stage. The home trainer and home visitor work collaboratively in individual sessions and during joint home visits to assure appropriate implementation of specified programming and services. The home visitor takes an active role in service delivery by incorporating the new skills stressed during individual training sessions into his or her home visits. During these home visits, the home trainer acts as a consultant by modeling appropriate developmental stimulation strategies, by sharing new information, and by evaluating and responding to the home visitor's performance using designated skills.

Theories of adult learning form the basis for activities expanding the competence of those who are presently performing in a professional capacity. Several assumptions reflecting adult learning theory underlie the LINCS training and teaming processes:

(a) Adult learners are selective about material they will learn. Selection is based first on need, second on special interests. Adults seldom feel they can afford the extra time for superfluous information.

(b) Adult learners enter with a set of skills and knowledge into which new learnings can be integrated. Essentially, new learning is based on old learning.

LINCS training utilized a hierarchy of learning opportunities that operates parallel to these assumptions. Individual training sessions and joint home visits provide the structure for these learning opportunities.

Project LINCS

Child L.S.

Page 2

Goal To increase spontaneous language

PROGRAM MONITORING			PERFORMANCE ANALYSIS	PROGRAM PLANNING	
Date	Activity	Activity Analysis		Parent/Home Visitor Teaming	Critical Variables For Planning
4/26	Imitates housework	Mrs. S. said that J. helped her prepare the table for dinner.	Independent	Mrs. S. agreed to keep these activities going. J. imitated words that her older sister said.	Encourage Mrs. S to include the older sister.
5/3		J. still enjoys helping to set the table.	Independent	Mrs. S. said she would continue with similar activities but indicated that it took J. too to finish the task.	Have Mrs. S. suggest an activity.

Figure 22
Program Planning and Monitoring Form

Individual Training Sessions

Four basic concepts are critical to role expansion emphasizing a developmentally focused home visit as defined in the LINCS model. A set of competencies has been selected which, once attained, reflects proficiency in addressing the critical developmental and environmental factors necessary for facilitating child growth and development. These competencies have been adopted from competencies developed for the Child Development Associate (CDA) National Credentialing Program of Bank Street College of Education. While LINCS endorsed all the CDA competencies, the following were those abilities required for the effective use of LINCS procedures:

1. Working with Families

   The home visitor will be able to maintain an open, friendly, and informative relationship with each child's family.

2. Infant Development

   The home visitor will be able to encourage parents to provide activities and experiences that will promote the physical, cognitive, and communication development of their children.

3. Learning Environment

   The home visitor will be able to encourage parents to consider space, materials, and routines as resources for constructing an interesting and enjoyable environment that encourages exploration and learning in children.

4. Collaboration

   The home visitor will demonstrate techniques and strategies for effective utilization and facilitation of interagency and family systems for meeting designated needs.

Individual training sessions are held for approximately one-half hour weekly. Content for these sessions revolves around work packets designed to strengthen the outlined competencies. Combining best practice information with opportunities for practical application, each work packet addresses three learning domains: cognitive, affective, and behavioral.

1. Cognitive: Emphasis is on presentation of key concepts rather than extensive discussion of abstract theory.
2. Affective: Affective tasks focus on the examination of attitudes and their impact during the home visiting process.
3. Behavioral: Behavioral tasks allow the home visitor to experiment with and evaluate techniques which relate to the cognitive and affective material in the package.

Key concepts of the work packets are discussed and expanded. Application to specific situations are reviewed. Behaviors critical for implementing a

home visit in which the development of the child is formally addressed are discussed. Specific target behaviors to be emphasized during the home visit are jointly identified. These individual sessions are followed by joint home visits to designated families and children.

Joint Home Visits/Feedback Sessions

During this phase the ultimate benefit of skill development is transferred to both the parents and children whom the home visitor serves. The home visitor applies the information received during the individual training sessions during a home visit by translating it to the parent. Emphasis is on assisting the parent to provide a more stimulating environment and to develop a mutually satisfying relationship with the child. The role of the home trainer during this phase is primarily facilitative. The type of assistance provided is matched to home visitor need and fluctuates in response among modeling, supporting, advising, and reinforcing skill development.

The intervention process has been designed to reflect a system of balances that will take into account parental level of motivation and skill as well as individual child need. To facilitate such a balance, specific procedures are incorporated during each home visit (Figure 23). Initial baseline data of the home visitor's use of each procedure during a home visit was established during the role analysis process. Specific home visiting skills and CDA competencies are tracked during this phase of training and the subsequent maintenance phase through the **Home Visiting Procedural Checklist** (Figure 24) and an anecdotal approach using the **Home Visitor Competency Development Log** (Figure 25). The home trainer records all of the home visitor's efforts at achieving the procedures during each home visit. When a particular step in the procedure is used, it is recorded on the **Checklist** and also documented on the **Competency Development Log**. Cumulative home visitor progress is determined by tallying the percentage of home visit procedures used at each home visit and recording this information on the **Home Visit Procedure Progress Chart** (Figure 26). Review of this information is the opening activity of the next feedback session as a basis for refining the use of the home visiting procedures. Home visitor response and joint problem-solving relative to areas of need are addressed. Outcomes of this process result in a recycling of the home visiting procedures at subsequent home visits with continued observation and anecdotal feedback.

HOME VISIT PROCEDURES

1. Allow opportunity and encourage the parent to give feedback regarding the previous week's intervention activities:

Your sensitivity to parental perceptions of the intervention will largely determine its success or failure. You must give the parent an opportunity to verbalize those perceptions duringthe home visit. From this you will be able to obtain meaningful cues that will be useful in determining the direction of the intervention.

2. Provide positive reinforcement for parent involvement in the intervention strategy:

Terms such as "involvement" or "progress" are used relatively when implementing developmental intervention. Whatever level of involvement or progress by parent or child must be viewed as acceptable at the present time. Therefore,it becomes very important for you as a home visitor to extract and reinforce those positive behaviors, at whateverlevel, and encourage the parent.

3. Validate parent information by observing and recording child progress:

This will give the parent an opportunity to display their skills as well as give you a time to observe the child's progress. Some parents may feel nervous or embarrassed to perform for you. If so, be sure to give them as much assistance as they need.

4. Refine and expand parent knowledge and abilities by using information from parent input and activity observation:

The key here is to let them know first why and how their involvement is benefiting their child. By doing so, the parents are given the chance to develop more self-confidence which can be used to generalize their skills into other creative strategies for meeting their child's needs.

5. Elicit concerns from parent regarding child progress:

At this time, you will want to interview the parent to have them identify specific areas of concerns about the child. Be sensitive as well to comments regarding the total family unit and how any circumstances may impact the intervention.

6. Engage the parent in problem-solving relative to concerns:

The parent is the decision-maker. If you as a home visitor impose decisions upon them in response to any concerns, the parent may become too dependent upon you for direction. Conversely, they may totally reject the intervention if they feel the control of the situation has been taken from them.

7. Select a developmentally appropriate activity based upon parent/child abilities:

Present the activity to the parent as a synthesis of their input and concerns. By explaining how well their problem-solving matches an activity from the LINCS Activity Manual, they will see the value of their input.

8. Model and/or instruct the parent in implementing the activity:

Give the parent a copy of the activity from the LINCS Manual. Make sure they understand how it is done by either verbally instructing them or by performing the activity with their child.

9. Assist the parent to determine when the activity may most appropriately occur:

The intervention will be most successful if it can be seen as useful to specific situations and when it can be incorporated into an established daily routine. Remember, the goal of the intervention is to provide for daily, ongoing stimulation rather than "task teaching."

Figure 23

Home Visiting Procedures

PROJECT LINCS

Name: S.G.

Date: 4/19/83

Cycle Step Independent

Department of Special Education
University of Missouri-Columbia

HOME VISITOR PROCEDURAL CHECKLIST

Total Visit	LINCS Focus		
____	✓	1.	The Home Visitor allows opportunity and encourages the parent to give feedback regarding the previous week's intervention activities.
____	✓	2.	The Home Visitor provides postive reinforcement for parent involvement in the intervention strategy.
____	✓	3.	The Home Visitor validates parent information by observing and recording child progress.
____	✓	4.	The Home Visitor refines and expands parent knowledge and abilities by using information from parent input and activity observation.
____	✓	5.	The Home Visitor elicits concerns from parent regarding child progess.
____	✓	6.	The Home Visitor engages parent in problem-solving relative to concerns.
____	____	7.	The Home Visitor selects a developmentally appropriate activity based upon parent/child abilities.
____	✓	8.	The Home Visitor models and/or instructs the parent in implementing the activity.
____	✓	9.	The Home Visitor assists parent to determine when the activity may most appropriately occur.

Comments: 8/9 (89%) First independent try using the checklist

G. has needed little assistance in using the sequence.

Sequence:

Figure 24

Home Visiting Procedural Checklist

HOME VISITOR COMPETENCY DEVELOPMENT LOG

Home Visitor: L.L. Agency Phelps Health Unit

GOAL: The Home Visitor will engage the parent in problem-solving relative to concerns

Competency Area: Working with Families

Date	Observation	Home Visitor Response
11-22-83	You allowed Mrs. S. to see that milage costs could be dealt with using alternative options.	
11-29-83	You guided Mrs. S. to pursue a second opinion concerning Corey's illness. In addition, you tried to get her to realize that a regular pediatrician would be helpful rather than jumping from doctor to doctor.	
12-9-83	You need to pursue Mrs. S.'s comments about behavior more. The information concerning the respite program was a helpful response; however, it didn't really solve the problem ... it did get the problem into the open.	I was not sure how to offer useful information on dealing with the specific behavior, particularly the tantrums.

Figure 25

Home Visitor Competency Development Log

Home Visit Procedural Checklist

PROGRESS CHART

Name: S.G. Agency Phelps County Public Health

Home Visit	Assistance Level	% Completed	Comments
1	Team	66%	
2	Independent	88%	
3	Independent	88%	
4	Independent	99%	
5	Maintenance	77%	Content of visit focused on the new baby.
6	Maintenance	88%	
7	Maintenance	99%	
8	Maintenance	99%	
9			
10			
11			
12			

Figure 26

Home Visit Procedure Progress Chart

Program Expansion Model

To facilitate application of the direct service/training component to more clinically-oriented regional centers and to reflect the diversity of needs manifested by many young handicapped children, the program expansion model was developed. The underlying assumptions and collaborative orientation remain unchanged. However, the implementation sequence has been altered to reflect established referral processes. The sequence for this option follows: intake process, service provider identification including role analysis, ISP implementation review, and training/consultation, as appropriate. Figure 27 compares the sequences for both program delivery options.

Intake Process

Children enter the regional system from a variety of referral sources (i.e., community agencies, parents, medical facilities). Referral processing and assessment are conducted via the procedures outlined by regional agency policy. The process concludes with development of a plan of intervention that includes goals and identification of required services.

Case Provider Selection

Limited resources in rural areas requires careful examination of existing services. The design of creative strategies for utilizing those services forms the basis for this phase. A list of current direct service providers is formulated. This initial list is expanded to include service providers in the community who are viewed as potentially appropriate for providing the services outlined in the Individual Service Plan. The service matrix developed as a part of the community analysis process is the data base for this information. Once this list has been established, an analysis of each agency is conducted in regard to personnel constraints, appropriateness of expertise and skills of individual providers, and training needs. From this data base primary agency personnel are selected whose skills or potential best match child needs and implementation goals.

Preparation for ISP Implementation

This phase initiates the service delivery cycle and collaborative action between the regional and community personnel. A comparison of service provider skills with child need is made to determine those

DIRECT SERVICE/TRAINING

2.1 ROLE ANALYSIS II
- 2.1.1 Conduct Observational Home Visit

2.2 MODEL IMPLEMENTATION TRAINING
- 2.2.1 Provide Screening Training
- 2.2.2 Provide Intake Process Training
- 2.2.3 Provide Individual Habilitation Plan (IHP) Training
- 2.2.4 Provide Curriculum Training

2.3 HOME VISITING TRAINING/TEAMING
- 2.3.1 Provide Joint Home Visits
- 2.3.2 Provide Feedback Sessions

PROGRAM EXPANSION MODEL

2.1 INTAKE PROCESS
- 2.1.1 Compete referral processing
- 2.1.2 Conduct child/family assessment
- 2.2.3 Develop Individual Service Plan (ISP)

2.2 CARE PROVIDER SELECTION
- 2.2.1 Identify potential/current care provider(s)
- 2.2.2 Conduct Role Analysis I and II
- 2.2.3 Select primary care provider(s)

2.3 PREPARATION FOR ISP IMPLEMENTATION
- 2.3.1 Conduct ISP review with primary care provider(s)
- 2.3.2 Determine competencies/resources necessary for ISP implementation

2.4 ISP IMPLEMENTATION
- 2.4.1 Provide joint home visits
- 2.4.2 Provide feedback sessions

Figure 27

Comparison of In-Home Stimulation and Program Expansion Options

competencies or resources necessary for implementing the intervention plan. A time commitment is established both for training and service delivery. The plan of intervention becomes operational.

ISP Implementation

ISP implementation constitutes the major portion of the Program Expansion Model. Training sessions are transdiciplinary reflecting the expansion and refinement of service provider skills as outlined in the previous phase. Emphasis tends to be more case or skill specific (i.e., feeding program designed by the physical therapist) rather than the developmental stimulation curriculum model implemented by LINCS. A modeling-teaming-observation format is used whereby the service provider gradually moves from observation of the demonstrated skill to independent delivery of intervention depending upon legal constraints.

Considerations

This section delineates significant factors which affect effective implementation.

Solidifying the Linkage: Initial Success and Building Trust

The rural culture's value of action can become of prime importance during the interaction between regional and community personnel during this phase of the model. In translating the written agreement into a viable service, it is important for regional personnel to structure situations which ensure positive experiences until several satisfactory joint activities are completed. This action assists in the building of trust, thus strengthening the relationship between regional and community levels. In addition, trust forms the basis for joint problem-solving when issues do arise.

Participant-oriented Strategies

Although diversity characterizes rural communities, certain generic characteristics exist which are closely tied to the value structure and tradition of the rural culture. The combined charactertistics of individualism and action-orientation lead to a strong sense of independence and self-determination. Thus, to effectively impact service delivery in rural communities, emphasis must be on participant-oriented strategies characterized by the concept of "joining" the community.

The development of trust by the rural community is based on the regional system's ability to enter into partnership with the local service network and to reflect action rather than rhetoric. However, the nature of the relationship must be one which does not foster dependency but increases local competence includeing professional competence. The inclusion of participant-oriented strategies strengthens both individual competence and the collaborative action required for an effective linkage.

Trainee Selection

Selection of home visitors with administrative or dual program responsibilities is not ideal due to conflicts in priorities which are manifest in time commitment available for training and scheduling difficulties. These factors increase the importance of a role analysis process.

Management

During training local agency personnel are filling a dual role function. Thus, the value of training may not be fully recognized until procedures are routinely used and integrated into their current role. Training must be "packaged" in such a way that it clearly illustrates the purposes of activities and careful monitoring of concerns, particularly management issues, must occur. Adaptations relative to paperwork, format for reporting, and scheduling may assist in alleviating the intensity of these issues.

Child or Parent Focus

Within a home-based model program emphasis is as much on the parent as the child. The goal is to assist parents successfully facilitating their child's development while enhancing parent-child interaction. Home visits provide an opportunity to "model" appropriate parenting techniques consistent with the parents' level of development and comfort for interacting with the child. This approach also provides minimal disruption of the natural parent-child relationship by considering parenting skill/comfort level. It is important to remember that the parent and child should be viewed as equals in the intervention; the abilities of one affect the other in a reciprocal process.

Many of the families seen by the linkage agency are multiple problem families due to financial, social, and related issues. Frequently, the

number and immediacy of such issues cloud intervention attempts. These issues must be addressed before before developmental programs can be integrated into the home visiting routine. Parents will be more receptive to the time and demands of developmental programming when these issues are being resolved.

IV DIRECT SERVICES TO CHILDREN/FAMILIES

Integral to the development and maintenance of the regional-local linkage concept implemented by LINCS are the direct services delivered by community agencies with regional support. The major outcome of the linkage is enhancement of the provision of comprehensive services to high risk and handicapped infants and their families in rural areas. The preceding section described the direct service component from an agency linkage perspective, i.e., in terms of regional facility interface relative to a specific community agency. Emphasis in this section is on the service cycle for children and families within the established linkage. Figure 28 illustrates the sequence of the steps involved from screening to the actual provision of services. This flowchart tracks the movement of the target child identified during home visitor training and subsequent children through the intake and intervention processes. The following sections describe in detail the major components of these processes.

Referral

Referrals to LINCS are initiated in two ways: (a) from a review of agency personnels' current caseloads and (b) from referrals directed to that agency specifically for in-home developmental stimulation. The initial route for referrals ws review of the home visitor's current caseload. From this process it is determined which children meet minimum eligibility criteria. Figure 29 depicts this decision point and related criteria. Children meeting these initial criteria enter the screening phase of the intake process.

Direct referrals for in-home developmental stimulation resulted from LINCS increasing visibility within the regional and community networks and direct community education activities conducted as a part of the monitoring and maintenance phase of the model. Regional medical facilities often designated LINCS in-home developmental stimulation as a recommendation for follow-up of high risk infants returning to their home communities. This interface occurred predominantly with the Department of Child Health, University of Missouri Health Science Center. LINCS role in this process was the identification of agencies in which personnel had been trained to provide this service. As assessment information is available at the time of

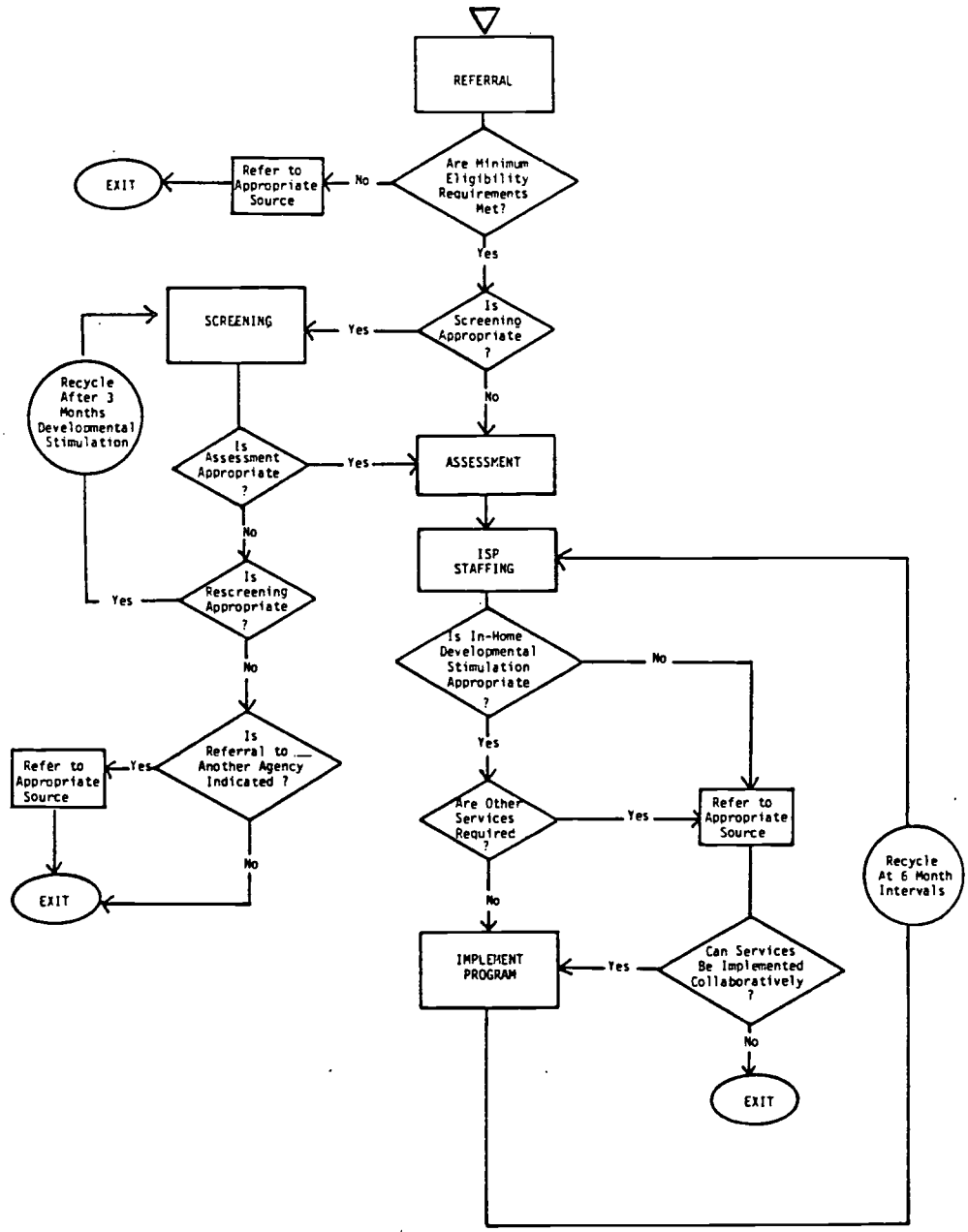
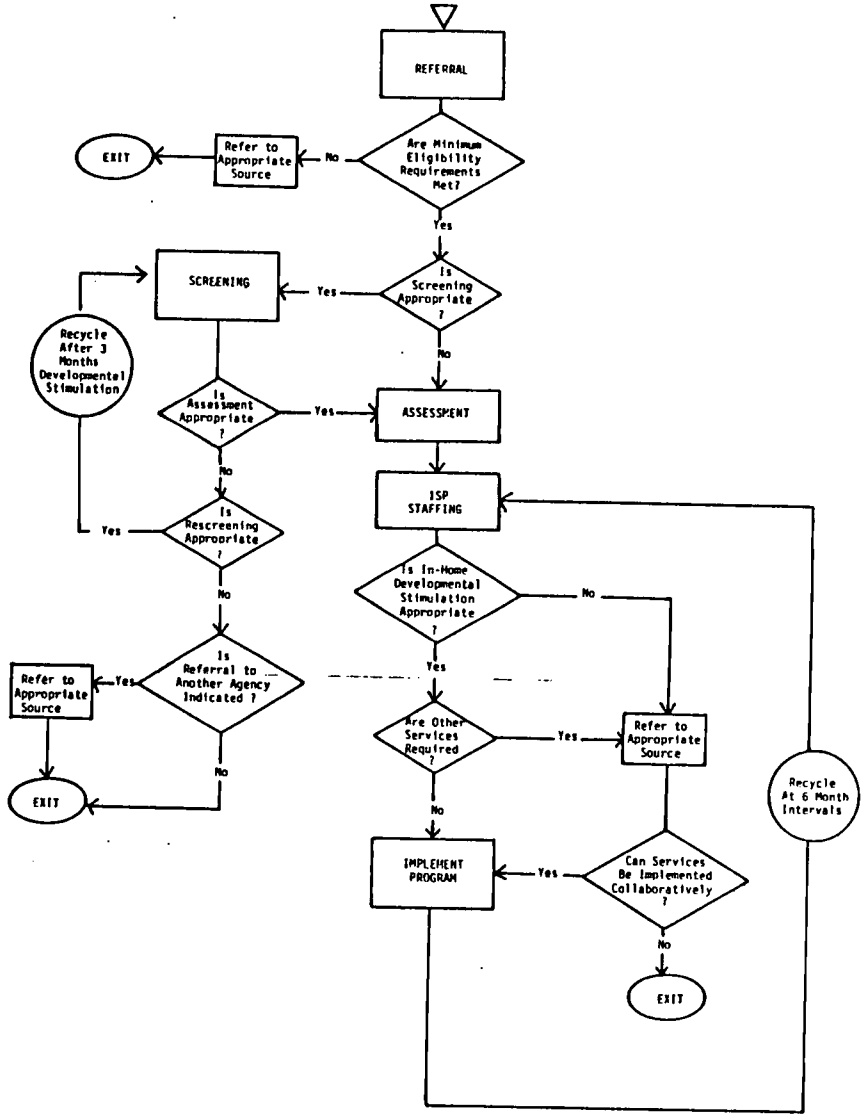


Figure 28

Intake Process



Decision Points and Criteria

1. Are Minimum Eligibility Requirements Met
   - a. Child between birth and 30 months
   - b. Geographic service area
   - c. Child or family eligible for linkage agency services
   - d. Potential for developmental delay suspected

2. Is Screening Appropriate
   - a. No previous diagnosis has been made
   - b. No previous screening has been completed
   - c. Concerns relative to developmental status have been raised by parents, agency personnel or others

3. Is Assessment Appropriate
   - a. Child has been diagnosed as having a handicapping condition
   - b. Child scores ABNORMAL on DDST (one or more areas of concern indicated)
   - c. Potential for delay exists based on parent-child interaction variables

4. Is Rescreening Appropriate
   - a. Child passes screening but prognosis for continued normal development is suspect
   - b. Child scores QUESTIONABLE on initial or previous DDST

5. Is Referral to Another Agency Indicated
   - a. Child passes screening but prognosis for continued normal development is suspect
   - b. Concerns are raised relative to environmental and/or health factors

6. Is In-Home Developmental Stimulation Appropriate
   - a. Verified high-risk condition based on physical, environmental or parent-child interaction factors; diagnosed syndrome; or confirmed handicapping condition
   - b. Child/family would appear to benefit from this type of program
   - c. Consistent caregiver is present in the home
   - d. Agency personnel are currently or wish to establish a regular schedule of home visits with this family

7. Are Other Services Required
   - a. Services beyond stimulation are indicated in the ISP
   - b. Specific therapies and/or structured programming are indicated

8. Can Services Be Implemented Collaboratively
   - a. Programs/instructions can be written for parent/home visitor implementation
   - b. Providers are open to direct collaboration including the transdisciplinary model

Figure 29

Intake Decision Points and Related Criteria

referral, these referrals are processed directly into the program development phase of the intake cycle.

Screening

Screening involves determining the child's eligibility to progress through the remaining steps of the intake process. A developmental screening is conducted using the **Denver Developmental Screening Test (DDST).** Following administration and scoring of the **DDST** protocols and additional background information are reviewed by the home visitor to determine the need for: (a) referral for LINCS assessment, (b) rescreen preceded by 3 months of developmental stimulation activities, and/or (c) whether referral to another agency is indicated. Figure 29 identifies criteria used to determine the most appropriate option at this point in the process.

Assessment

A two stage multi-disciplinary assessment process is completed. Primary assessment includes an evaluation of child developmental level using the **Uzgiris-Hunt Scales** of **Infant Psychological Development**, an observation of parent/child interactional patterns using the **Teaching Scale** (Barnard, 1978), and a parent interview to obtain a social history/problems assessment. If the areas of speech/language or motor development are suspect, a secondary level assessment is completed by the appropriate clinician (speech/language pathologist, occupational therapist, or physical therapist).

All assessments are performed at the regional level by the Child Development Unit, Mid-Missouri Mental Health Center on children progressing to this point in the intake process. When assessments have been completed, the results, interpretations and recommendations are forwarded to the LINCS home trainer for review and Individual Service Plan (ISP) development.

ISP Staffings

Assessment information is reviewed by both the home trainer and home visitor to gain a clear understanding of child/family skill levels and to discuss possible service alternatives based upon the recommendations. ISP staffings are held in the referral family's home, with active parent participation serving as the focus of this process. Parents are encouraged

to participate as a major decision-maker in regard to priority of child needs, service alternatives, and delivery mode.

During the staffing the assessment data and results are shared with the parent, a review is made of the child's present level of functioning, child needs, long-term objectives, and potential service options. Information for the ISP is drawn from assessment information and recommendations, home visitor impressions and knowledge of the child and family, and the screening protocool. Parents are interviewed to add to or expand on the information obtained during the assessment process. As a final step in ISP development, parents are asked to priority rank their child's needs.

The final decision to be made in the intake process is whether or not LINCS services are appropriate. This decision includes consideration of child needs, parent views and needs, agency constraints, community options for services including collaboration, and the degree to which a match exists between these variables and the LINCS curriculum model. If consideration of these factors leads to consensus that LINCS is a viable program option, then determination is made considering the resources required to implement the ISP. The program implemented for most high risk infants is an in-home developmental stimulation curriculum which emphasizes parents as the primary facilitators of development and intervention. However, for some children other specific therapies are required in addition to developmental stimulation. In these instances, appropriate resources are obtained within the community or collaborative service provision via the regional-agency linkage is implemented.

In-Home Developmental Stimulation

Children and families receiving services are provided weekly, bi-weekly, or at times monthly home visits. Variation in the frequency of visits reflects caseload demands, family and child needs, and time constraints of the home visitor. Specific aspects of the home visit address: (a) mechanisms for meeting basic conditions of life; (b) development of an enriched physical environment for the child; (c) development of positive parent-child interaction; (d) an increase in the parents' awareness of child care, development, and management; and (e) developmental needs of the child. During the visit, parent(s) or primary caregivers are instructed in intervention procedures through a modeling approach.

Developmentally appropriate tasks and activities presented through stimulation rather than direct teaching strategies formed the core of intervention. This mode of intervention is based upon the belief that change within an organism, particularly an infant, is dependent upon the natural, day-to-day, active transactions occuring between the individual and his/her environment. Stimulation procedures also address parent/infant interaction patterns emphasizing the natural interactional process between parent and child. Direct instructional periods of "task teaching" may inhibit this process. Through the use of LINCS home visit procedures, parents are given the opportunity for voicing both personal concerns and child concerns, for joint problem-solving, and for selection of activities and routines for use in programming.

Curriculum

The curriculum developed to implement a stimulation model of intervention is based upon a Piagetian/ecological approach. Piagetian constructs and stages form the basis for structuring the curriculum content. Specific tasks and activities designed to facilitate skills and concept development have been developed and organized to reflect ecological programming strategies suggested by Dunst (1980). The following intervention domains comprise the areas of programming and curriculum: personal-social, fine-motor adaptive, language, gross motor, and cognitive. Figure 30 illustrates a sample activity sheet from the curriculum which is reviewed and given to the parent during the home visit.

Parent Participation

Parent participation in the intervention process is essential to effect and maintain change. Parents are viewed as the primary interventionists. The home visitor and regional personnel are secondary support systems for these efforts. Thus, emphasis is placed upon the enhancement of parenting skills as well as the child's development. Training "parents as teachers" addresses only a portion of the intervention issue, particularly with infants. Instructing the parent to teach specific skills without taking into account the interactional skills between parent and infant produces limited long-range effects. Intervention which addresses only the development of the child and fails to consider parent-child interactional level could interfere with rather than enhance,

PART I FINE MOTOR-ADAPTIVE SKILLS

GRASPS RATTLE: Your baby can use his hands to explore and learn about things around him.

1. Place a favorite object in your child's hand. If he does not grasp it, shape his fingers around it for him. Gently pull at the object. This will make your baby hold on tighter.

2. Vary the size, weight, shape, or texture of objects and do the same activity.

3. Lay your child on a shaggy rug or blanket on his stomach. Watch him grab and pull at the threads in the rug or the folds in the blanket.

4. Touch or rub objects against the side of your baby's hand. This will make him use his hands even more to get what he wants.

5. Place several of your baby's favorite toys around him in the crib or on the floor. He will try to reach for them all alone. Be sure to keep them close enough that he can reach them.

Figure 30

Sample LINCS Activity Sheet

mutually pleasurable interactions. Long range effects in terms of child development, parenting skill development, or the interaction between these two factors may be diminished. The focus of the stimulation process and home visit procedures is to strengthen parental enjoyment, sensitivity, responsiveness, and skills that create a relationship between parent and child in which the parenting role is enhanced and the child progress facilitated.

V MONITORING AND MAINTENANCE

The monitoring and maintenance component provides a framework for expanding and solidifying the regional-local linkage relationships established during the community linkage development and home visitor training processes. While the approach for linkage development has been stressed, maintenance of the linkage is critical. Maintenance of the linkage is viewed as a continuation of the change process begun during the project's initial entry into the community and the agency. Thus, underlying this component are several asssumptions which provide a perspective of the change process within agencies, organizations, and communities. There assumptions are:

1. Change is a process not an event. Therefore, change occurs over a period of time.
2. There are identifiable stages and levels of the change process.
3. Change is a highly personal experience. Thus, personal concerns become an important part of change.
4. Individual change is predictive of institutional change.
5. Relevant and supportive intervention should be based on the concerns of the recipient.

Three implications for facilitating change and its maintenance are derived from these assumptions:

1. Individuals need to be the primary focus of intervention in an agency.
2. Training and technical assistance can be best facilitated by use of a diagnostic/perscriptive mode.
3. Individuals need differing amounts and types of implementation support.

Within the LINCS model, a adaptive approach is employed. Such an approach is designed to ensure continuation of the collaborative relationship between regional and local care providers and a "goodness of fit" between the regional and local systems while simultaneously moving towards increasing local autonomy in services to the target population.

The monitoring and maintenance component of the model is divided into two phases (Figure 31). Phase one includes monitoring formal linkages within an agency emphasizing maintenance of the linkage and professional development. The second phase addresses the informal linkages

3.1 MONITOR/MAINTAIN FORMAL AGENCY LINKAGE(S)

Purpose: Local community linkages are monitored in this step of the model to insure institutionalization of the LINCS processes as a part of agency functioning

Procedure	Outcomes	Materials Required for Implementation
3.1.1 Monitor/Update ISP Implementation	*Data base reflecting child progress*	DDST
	Formulation of appropriate ISP goals/objectives	ISP Form
3.1.2 Monitor Home Visitor Competency	*Determination of home visitor competency using Home Visiting Procedures*	CBAM Levels of Use and Stages of Concern Questionnaires
	Measure of home visitor level of use	Home Visitor Competency Observation Form
	Profile of home visitor needs/concerns	Home Visit Procedures Checklist
	Individualized technical assistance plan (ITAP)	ITAP Form
3.1.3 Provide Technical Assistance	*Refinement or expansion of home visitor knowledge base in targeted areas of technical assistance*	(As defined in ITAP)
3.1.4 Monitor/Maintain Linkage Agreement	*Appropriate professional development activities*	CBAM Levels of Use and Stages of Concern Questionnaires adapted for use with change facilitators
	Measure of agency level of use	
	Measure of agency issues/concerns	
	Effective problem-solving	
	Measure of regional linkage expansion/retention	

3.2 MONITOR/MAINTAIN INFORMAL COMMUNITY LINKAGES

Purpose: Informal community linkages are monitored in order to maintain current community analysis data which can then be used to validate interventions, broaden community support base and predict continued successful regional-local linkage interaction

3.2.1 Monitor Community Need	*Measure of community interest/support*	Regional Analysis Matrix
	Measure of community needs	Brochure/Fact Sheet
	Ongoing community analysis	Community Education Format
3.2.2 Provide Community Education	*Enhanced community awareness*	
	Increased community interest/support	
	Linkage expansion	

Figure 31

Monitoring and Maintenance

characterizing the broader community within which the agency functions. This latter phase emphasizes building local competence and capacity.

Monitoring/Maintenance of Formal Agency Linkages

Maintenance of the formal linkage is structured around the systematic monitoring of change in individual personnel as a basis for agency change and of adaptive problem-solving to insure agency institutionalization of the services and linkage. The change process is tracked relative to comprehensive service provision and the concerns and degree of model implementation of both direct service providers and agency administrators.

As the ultimate goal of LINCS is to expand comprehensive services to individual infants, the initial monitoring function begins with tracking child progress and implementation of the individual service plan. Child progress on specific activities is monitored by the home visitor during each home visit. At three month intervals, the **Denver Developmental Screening Test** is re-administered to track the child's progression through the developmental phases identified by Dunst (1981). Implementation of the ISP, family participation and home visitor documentation efforts (i.e., **Program Planning and Monitoring Form**) are jointly reviewed by the home visitor and home trainer as a basis for ISP revision. A full re-evaluation by the regional linkage occurs one year after the date of service initiation for all children, with more frequent evaluations provided, as appropriate.

The concept of role expansion assumes that linkage personnel possess a basic competency level appropriate to their professional position. The LINCS model training expands this competency in areas needed to meet the needs of families with at risk or handicapped infants. Thus, monitoring of the formal linkage seeks to identify maintenance of the skill levels established at the completion of training and the degree to which home visitors have incorporated the new program into their designated role. Formal monitoring reviews provide a basis for determining current status as well as identifying needs for increasing effectiveness. Figure 32 illustrates the content and phased schedule of contact initiated by the regional facility. Competency level is monitored through maintenance probes gathered during observational home visits. Data gathered using the **Home Visit Procedural Checklist** is compared with baseline and previously established training levels. The degree of role expansion is tracked using procedures adapted from the Concerns Based Adoption Model (Hall and Loucks,

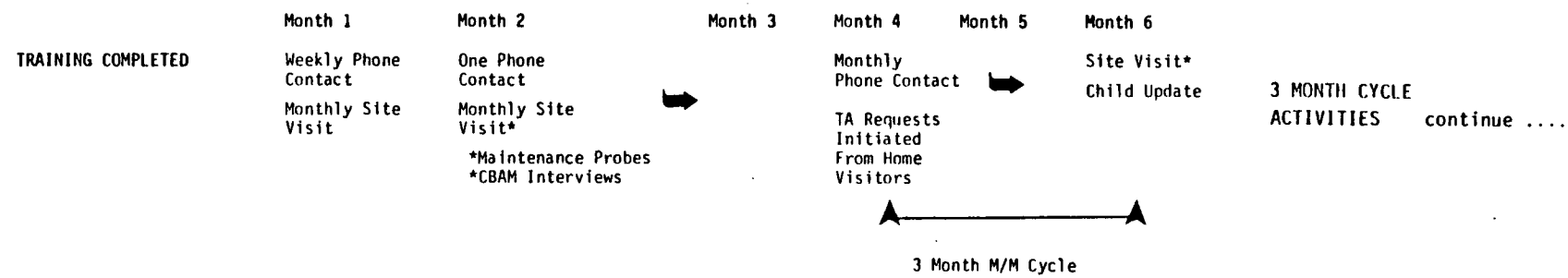


Figure 32

Monitoring/Maintenance Schedule

1977). CBAM Levels of Use (LoU) and Stages of Concern (SoC) data further provide a mechanism for effective problem-solving and intervention toward linkage maintenance and agency institutionalization of the LINCS model. Consistent with CBAM procedures, structured interviews (Figure 33) are conducted to determine the degree to which the home visitor has incorporated LINCS procedures and materials into the provision of direct service. Analysis of the interview responses assists in determining actual use of the key elements of the LINCS model by comparing related role behaviors with CBAM's Levels of Use dimension criteria (Figure 34). Any issues or potential problems with use of the LINCS model and/or specific cases are monitored using a concerns based questionnaire (Figure 35). Table 5 identifies the accompanying progression of concerns and shifts in focus which have been identified in the CBAM process. This information is combined with case reviews to identify target areas for technical assistance and collaborative problem-solving (Figure 36).

Critical to the LINCS concept of effective linkage development are the processes for accessing and the provision of assistance reflecting expertise existing at the regional level. The process underlying the accessing of this assistance is critical to solidifying and expanding the linkage. Personal contacts focusing on real rather than hypothetical situations result in effective linkages, decreased professional isolation and expansion of services. To reinforce local competence while maintaining access to regionally based expertise, structured contact focuses on a technical assistance model. At the completion of model implementation training, a mechanism is established to facililitate continued interaction in the form of technical assistance. The **Individual Technical Assistance Plan (ITAP)** provides a format for summarizing and documenting current skill level, LoU and SoC data and monitoring technical assistance activities (Figure 37). It is reviewed and updated regularly during monitoring reviews and in response to individually initiated requests for assistance. Technical assistance requests focus on case specific issues, skill development/refinement and information needs. The format for delivering technical assistance varies from individually designed learning packages, formal training oppportunities through other regional agencies, written information, loan of materials/references and case specific consultation and

Name G.A.
Date 6/2/83
Interviewer P.B.

Levels of Use Interview

	Yes	No
1. Are you using the LINCS model?		
2. Within the LINCS model are you utilizing the		
a) LINCS home visit procedure		
b) Denver Developmental Screening Test (also PDQ)		
c) LINCS Activity Manual		
# Uses PDQ first, then DDST if necessary		
# "How can you do without it?"		
3. Have you expanded use of the LINCS model to include families other than those on the official LINCS caseload?		
How many families?		
# Two		
4. What do you see as the strengths and weaknesses of LINCS in your particular situation?		
#Strengths: Seeing improvement in interaction between mother and child; improvement in child development		
#Weaknesses: Transportation for families for LINCS kids to get assessments		
Have you made any attempts to do anything about the weaknesses?		
# Voiced complaints to personnel involved at CDU		
5. Are you currently looking for any information about LINCS?		
For what purpose?		

Figure 33
LINCS Home Visitor LoU Interview

	Yes	No
6. Do you ever discuss LINCS with others? Who? > Other health professionals and prospective families What do you tell them? # Purpose # Operations of the program		
7. What is your evaluation of the effectiveness of Project LINCS? # Almost too early to tell. Seems at present to be achieving purpose. How have you determined this?		
Is your agency formally or informally evaluating LINCS? How?		
Have you had any feedback from parents regarding LINCS? # All positive - example: father voicing concerns about child when he was never interested before		
8. Have you made any changes in the way you use LINCS? What? # Changed activity based on parent concern without consulting the home trainer		
Why? Father could handle it and the child needed it; therefore, it was appropriate.		
When?		

Figure 33 (continued)

	Yes	No
Are you considering changes?		
# Not at present but will if it works better		
9. As you look ahead to later this year, what plans do you have regarding use of LINCS?		
# Plan to continue and hopefully do it verbatim		
10. Are you now working with new people or in a different way with others in the community?		
# More aware of looking and trying to assess development		

SUMMARY:

Knowledge: IVA routine
Acquireing Information: IVA routine
Sharing: IVA routine
Assessing: IVB refinement
Planning: IVA routine
Status Reporting: IVA routine
Performing: IVA routine

OVERALL RATING: Routine IVA ... solidly into routine use. One example of the evaluation of effectiveness appears to be based on client need rather than personal or agency need, therefore, she appears to be moving toward the refinement stage.

Figure 33 (continued)

LEVELS OF USE OF THE INNOVATION:
TYPICAL BEHAVIORS

LEVEL OF USE	BEHAVIORAL INDICES OF LEVEL
VI RENEWAL	THE USER IS SEEKING MORE EFFECTIVE ALTERNATIVES TO THE ESTABLISHED USE OF THE INNOVATION.
V INTEGRATION	THE USER IS MAKING DELIBERATE EFFORTS TO COORDINATE WITH OTHERS IN USING THE INNOVATION.
IVB REFINEMENT	THE USER IS MAKING CHANGES TO INCREASE OUTCOMES.
IVA ROUTINE	THE USER IS MAKING FEW OR NO CHANGES AND HAS AN ESTABLISHED PATTERN OF USE.
III MECHANICAL USE	THE USER IS MAKING CHANGES TO BETTER ORGANIZE USE OF THE INNOVATION.
II PREPARATION	THE USER IS PREPARING TO USE THE INNOVATION.
I ORIENTATION	THE USER IS SEEKING OUT INFORMATION ABOUT THE INNOVATION.
0 NONUSE	NO ACTION IS BEING TAKEN WITH RESPECT TO THE INNOVATION.

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Figure 34
CBAM Behavioral Indices of Levels of Use

Stages of Concern Questionnaire

Name B. G. Agency Phelps Health Unit

Date 3/5/83 Title MCH nurse

Interviewer P. B. Interview # 3

0 Irrelevant 1 Not true of me now 2 3 Somewhat true of me now 4 5 6 Very true of me now 7

1.	I am concerned about families attitudes toward LINCS	0	1	2✓	3	4	5	6	7
2.	I now know of some other approaches that might work better.	0	1	2✓	3	4	5	6	7
3.	I don't even know what LINCS is.	0✓	1	2	3	4	5	6	7
4.	I am concerned about not having enough time to organize myself.	0	1✓	2	3	4	5	6	7
5.	I would like to help other people in their use of LINCS.	0	1	2	3	4	5	6✓	7
6.	I have a very limited knowledge about LINCS.	0✓	1	2	3	4	5	6	7
7.	I would like to know the effect of LINCS on my professional status.	0	1✓	2	3	4	5	6	7
8.	I am concerned about conflict between my interests and my responsibilities.	0	1✓	2	3	4	5	6	7
9.	I am concerned about revising my use of LINCS.	0	1	2	3	4	5✓	6	7
10.	I would like to develop working relationships with both our staff and other agencies using LINCS.	0	1	2	3	4	5	6	7✓
11.	I am concerned about how LINCS affects families.	0	1	2✓	3	4	5	6	7
12.	I am not concerned about LINCS.	0✓	1	2	3	4	5	6	7
13.	I would like to know who will make the decisions in the new system.	0	1	2✓	3	4	5	6	7
14.	I would like to discuss the possibility of using LINCS.	0✓	1	2	3	4	5	6	7
15.	I would like to know what resources are available if we decide to use LINCS.	0	1✓	2	3	4	5	6	7
16.	I am concerned about my inability to manage all that LINCS requires.	0	1✓	2	3	4	5	6	7
17.	I would like to know how my home visiting or administration is supposed to change.	0	1✓	2	3	4	5	6	7
18.	I would like to familiarize other departments or persons with the progress of this new approach.	0	1	2	3	4	5	6	7✓

Figure 35

Stages of Concern Questionnaire (Home Visitor)

	0 Irrevelant	1 Not true of me now	2	3 Somewhat true of me now	4	5	6 Very true of me now	7
19.	I am concerned about evaluating my impact on families/staff.						0 1 2 3 **4** 5 6	
20.	I would like to revise LINCS instructional approach.						0 **1** 2 3 4 5 6	7
21.	I am completely occupied with other things.						**0** 1 2 3 4 5 6	7
22.	I would like to modify our use of LINCS based on the experiences of our families/agency.						0 1 2 **3** 4 5 6	7
23.	Although I don't know about LINCS, I am concerned about things in the area.						**0** 1 2 3 4 5 6	7
24.	I would like to excite my families/staff about their part in this approach.						0 1 2 3 4 **5** 6	7
25.	I am concerned about time spent working with non-home visiting problems related to LINCS.						0 **1** 2 3 4 5 6	7
26.	I would like to know what the use of LINCS will require in the immediate future.						0 **1** 2 3 4 5 6	7
27.	I would like to coordinate my effort with others to maximize LINCS efforts.						0 1 2 3 4 5 6	**7**
28.	I would like to have more information on time and energy commitments required by LINCS.						0 **1** 2 3 4 5 6	7
29.	I would like to know what other home visitors are doing in this area.						0 1 2 3 4 5 6	**7**
30.	At this time, I am not interested in learning about LINCS.						**0** 1 2 3 4 5 6	7
31.	I would like to determine how to supplement, enhance, or replace LINCS.						0 1 **2** 3 4 5 6	7
32.	I would like to use feedback from families/staff to change the program.						0 1 2 **3** 4 5 6	7
33.	I would like to know how my role will change when I am using LINCS.						0 1 **2** 3 4 5 6	7
34.	Coordination of tasks and people is taking too much of my time.						0 1 2 3 4 **5** 6	7
35.	I would like to know how LINCS is better than what we have now.						0 1 **2** 3 4 5 6	7

Adapted From
Procedures for Adopting Educational Innovations/C8AM Project
R&D Center for Teacher Education, The University of Texas at Austin

Figure 35 (continued)

Table 5

STAGES OF CONCERN:
TYPICAL EXPRESSIONS OF CONCERN ABOUT THE INNOVATION

	STAGES OF CONCERN	EXPRESSIONS OF CONCERN
I M P A C T	6 REFOCUSING	I HAVE SOME IDEAS ABOUT SOMETHING THAT WOULD WORK EVEN BETTER.
	5 COLLABORATION	I AM CONCERNED ABOUT RELATING WHAT I AM DOING WITH WHAT OTHER INSTRUCTORS ARE DOING.
	4 CONSEQUENCE	HOW IS MY USE AFFECTING KIDS?
T A S K	3 MANAGEMENT	I SEEM TO BE SPENDING ALL MY TIME IN GETTING MATERIAL READY.
S E L F	2 PERSONAL	HOW WILL USING IT AFFECT ME?
	1 INFORMATIONAL	I WOULD LIKE TO KNOW MORE ABOUT IT.
	0 AWARENESS	I AM NOT CONCERNED ABOUT IT (THE INNOVATION).

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STAGES OF CONCERN SUMMARY

Name: S.G. Agency: Phelps County Public Health

Date: 2/15/83

Interview #: 2

Summary	Intervention(s)
An extremely high intensity of concern appears on the profile in the area of collaboration. S. felt comfortable with all areas of LINCS and its use, which can explain the low levels of concern in all other stages. The effectiveness of the interventions from the first SoC profile has been limited. DFS has shown little initiative in working with S.	1. Continue efforts with DFS for more collaborative work with the shared cases. Arrange a joint case consultation 2. Utilize S. in disseminating information about LINCS 3. Utilize S. in disseminating information about her involvement with LINCS.

Figure 36

Stages of Concern/Intervention Summary

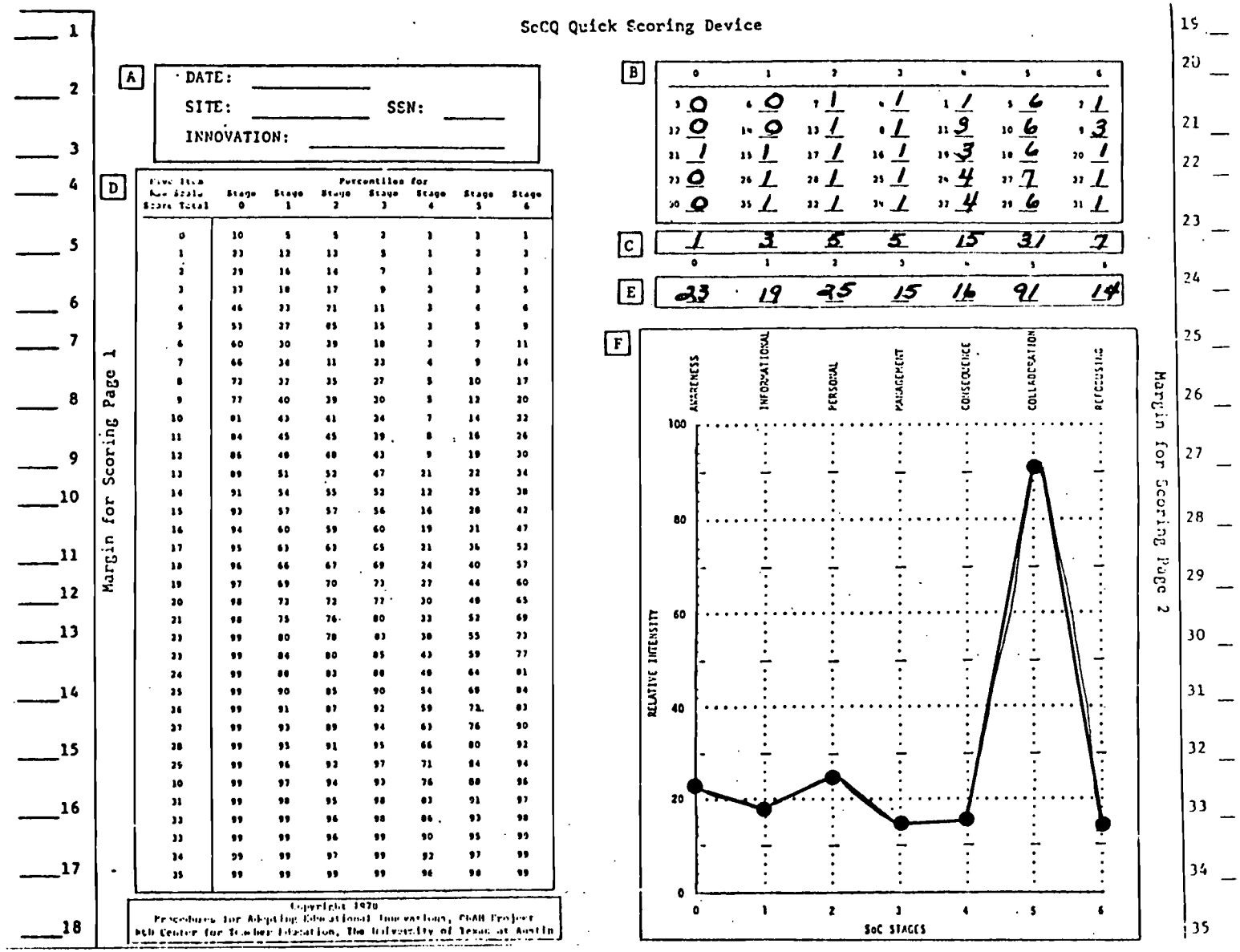


Figure 36 (continued)

PROJECT LINCS

Department of Special Education
University of Missouri-Columbia

Individual Technical Assistance Plan

Name S.G. Phone (913) 642-7605

Agency County Nursing Service

Address 509 Loch

St. James MO Zip 66680

Training Summary

LoU Overall rating Routine IVA - slowly moving toward refinement stage

SoC Highest concern at Collaboration stage, 91%. All other concerns vary between 15-25%.

HVP Generally completing 8/9 items at home visits.

CDA

1. Home Visitor maintains an open, friendly and informative relationship with each child's family.

   Overall, good. Tries not to be judgmental. Tries to put herself in her place.

2. Home Visitor encourages parents to provide activities and experiences that develop questionning, probing, creativity, exploration and problem solving appropriate to the developmental levels and learning styles of individual children.

   Using Denver book
   Encourages parents to provide stimulating activities, variety in daily routine

Figure 37
Individualized Technical Assistance Plan

3. Home Visitor encourages parents to consider space, materials and routines as resources for constructing an interesting and enjoyable environment that encourages exploration and learning.

   Encourages parents to provide variety in daily routines, use of toys. Encourages also to get children outside.

4. Home Visitor encourages parents to use a variety of equipment, activities and opportunities to promote the physical development of their child.

   Through use of Denver Activity Manual

5. Home Visitor encourages parents to provide opportunities for children to understand, acquire and use verbal and nonverbal means of communicating thoughts and feelings.

   Tells them to talk to their children, even as babies

6. Home Visitor is a manager who uses all available resources to ensure an effective program for each child. The Home Visitor is a competent organizer, planner and record keeper.

   Sees this as a basic requirement for working

Figure 37 (contined)

Technical Assistance Log

1. Case Consultation/Monitoring Schedule

How often once per week

Call Schedule A.M. Tuesdays/Thursdays

Regional Contact P.B.

2. Technical Assistance Requests

Request	Date	Technical Assistance Provided	Date
1. Improve ability to assess home environments and parent skills and abilities	6/3/83	Send Bromwich materials	7/29/83
		Schedule workshop on H.O.M.E. through the School of Nursing	8/30/83
2. Improve methods for involving parents in intervention	8/30/83	Consult with MCH nurse in adjacent county / send name and phone number	9/15/83

Figure 37 (continued)

training. Figure 38 illustrates the interactive nature of these monitoring and maintenance processes.

In order that change may last, it must have overt and on-going support at every level of the organization. Thus, linkage agreements are monitored by regular formal and informal contacts with the agency administrator. Formal contacts are scheduled quarterly to assess the administrator's perception of concerns relevant to the agency's use of the model and to measure overall agency level of use. The CBAM structured interview format and concerns questionnaire are used (Figures 39 and 40). Contact is made in person, preferably, in order that the relationship built during linkage development can be reinforced and expanded. Such interviews allow for collaborative problem-solving relative to implementation issues and maintenance of a "goodness-of-fit" between agency perceived needs and LINCS professional development and community education activities.

Monitoring/Maintenance of Informal Community Linkages

As discussed in the community linkage development component, agencies do not operate in a vacuum. The human service system, as well as, the larger community, reflect informal linkages that impact effective service delivery. Thus, broader awareness and education activities are indicated in order to facilitate local interagency collaboration and promote an environment conducive to regional and community interaction including local competence and capacity building.

In keeping with the assumptions regarding an adaptive approach and local autonomy, community need is monitored by regular monthly attendance at local interagency councils. This procedure provides an efficient and effective method for broadening the base of cooperative interaction as well as tracking changes in community analysis information. Thus, in response to community identified needs and issues, various community education activities are then either provided directly by project personnel, as appropriate to their expertise and role, or accessed through regional analysis information. Through both group interaction and personal contact strategies, informal linkages are monitored in order to maintain current community analysis information, to broaden the base of cooperative interaction, to ensure continued local capacity building, and to predict continued successful regional-community linkage. As a result, changes in community analysis information can be tracked more effectively and used as a

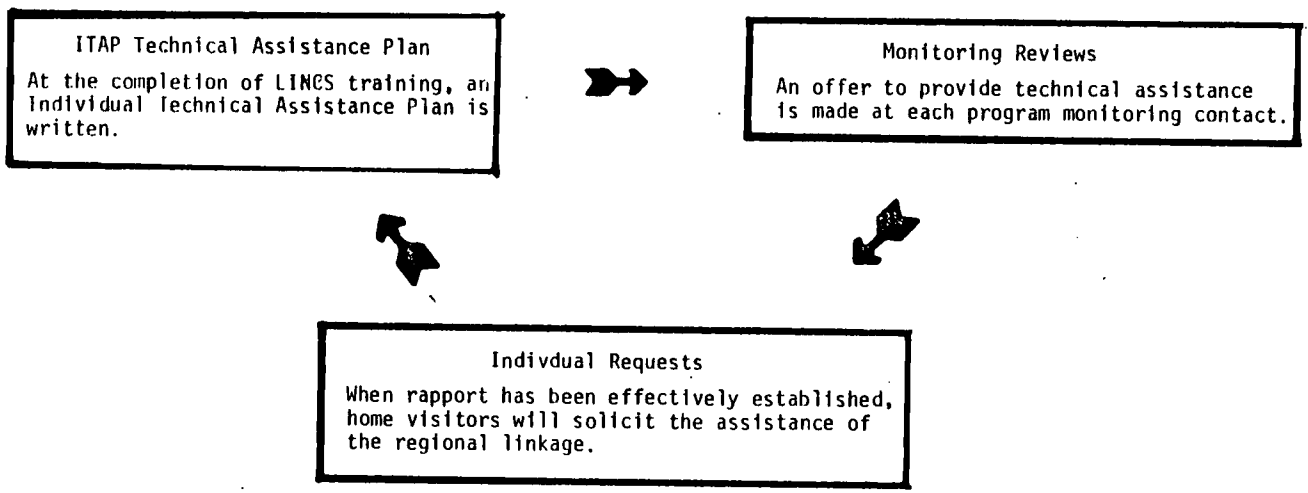


Figure 38
Technical Assistance Cycle

Level of Use Interview

Name R. C. Agency Phelps Public Health

Date 10/15/83 Title Administrator

Interview # 2 Interviewer T.C.

COMMENTS: Haven't been at it quite a year, but feel it will develop into more of a resource ... education for our staff ... only wish more staff could be involved

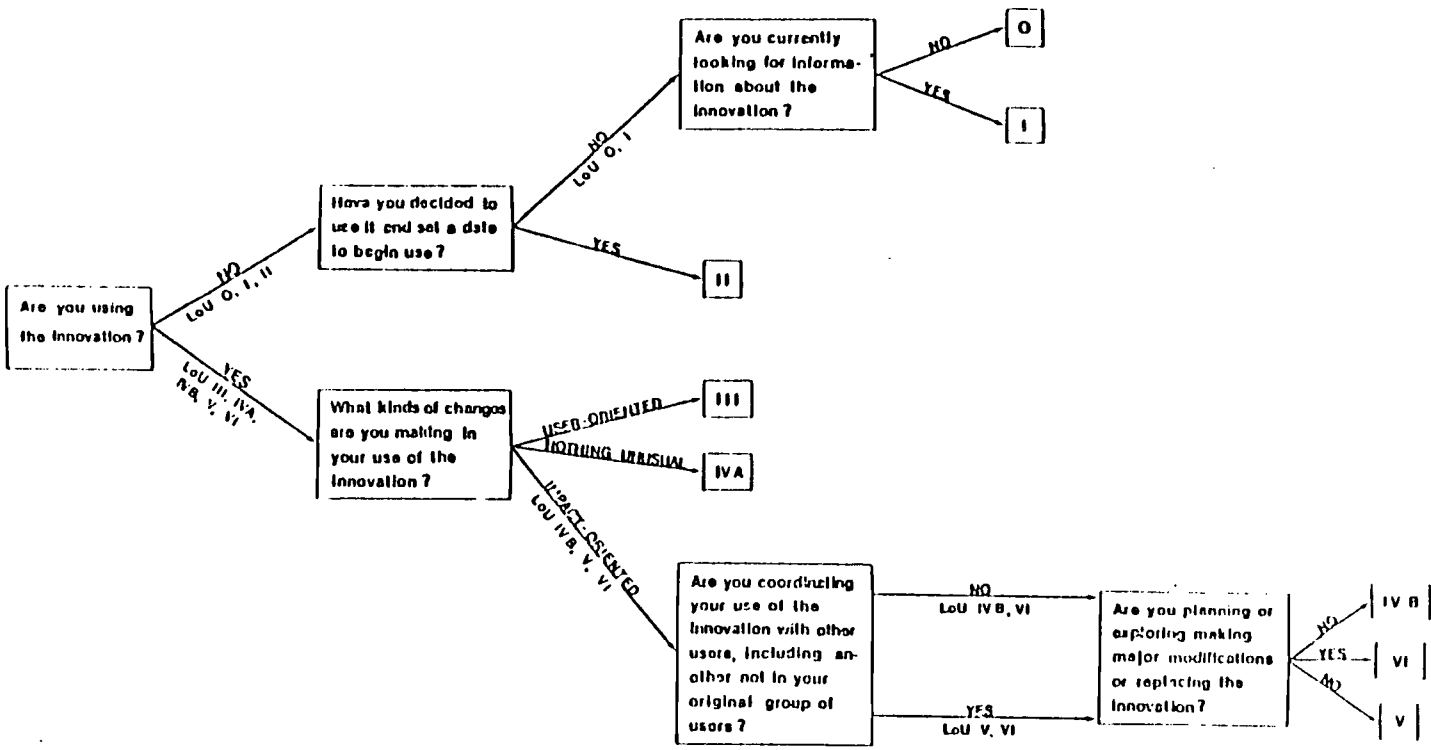
I'm real happy with the program, I haven't heard anything negative.

Overall LoU IVA Routine

Figure 39

LINCS Administrator LoU Interview

BRANCHING FORMAT FOR LoU INTERVIEW



From: Loucks, S.F., Newlove, B.W., & Hall, G.E. Measuring levels of use of the innovation: A manual for trainers, interviewers, and raters. Austin: Research and Development Center for Teacher Education, The University of Texas, 1975.

Figure 39 (continued)

Stages of Concern Questionnaire (CF)

Name R. C. Agency Phelps Public Health

Date 10/15/83 Title Administrator

Interviewer T. C. Interview # 2

1. Are you aware of LINCS? Yes No

2. Are you using LINCS? Yes No

3. How do you feel about it?

Worthwhile, anything that can expand services

4. Do you have any problems or concerns regarding LINCS? Yes No

I don't have any.

5. Does it affect you? * Yes No

Others you are involved with? Yes No

* It's helping our visibility in the community.

6. Is there anything you question or wonder about? Yes No

Why it hasn't been done before. Why hasn't more been done before to educate agencies as to what's out there. We don't have a good orientation or organized way to get assessments.

7. Do you have any reservations about it? Yes No

8. Would you like any information about it? Yes No

None, other than what I already have.

Figure 40

Stages of Concern Questionnaire (Administrator)

basis for both regional and community decision making. Through these processes the regional linkage becomes a resource for and a part of the broader community network.

Considerations

This section delineates significant factors which affect effective implementation.

Multi-level Tracking of the Linkage.

LINCS model of regional-community linkage reflects a process rather than a task or skill specific "end." Thus, maintenance of the linkage must reinforce a broader view of the process rather than focusing only upon service delivery and/or a specific program. Monitoring and systematic problem-solving is critical at the policy levels as well. Maintenance/expansion of the linkage is dependent upon not only the direct service provider but the agency administrator. In many respects within this model of service delivery, the agency administrator assumes the role of change facilitator. Management concerns impacting individual service providers may need to be resolved at the administrative level. Furthermore, it is the administrator who provides the resources and on-going support for implementation of the model. Thus, systematic-adaptive problem-solving must occur at this level as well as at the direct service level.

Interpersonal Basis for Maintenance

Linkage between regional-community agencies emphasized the concepts of "joining" and developing a "relationship" with the community. The importance of the informal communication structure of the rural culture further supported this approach. Thus, the interpersonal nature of the linkage is a critical aspect to consider during maintenance.

A major avenue to effective maintenance is **personal contact.** When individuals meet at frequent intervals, communication is inevitable. Such information exchange builds trust which leads to a firmer interpersonal relationship. This process strengthens the regional-community linkage and assists in building positive perceptions. The result of these dynamics is a more meaningful and effective exchange of the formal official messages between the systems involved.

Emphasis on personal contact implies a second dimension: a people orientation. Ultimately, particularly in rural areas, it is the individuals involved, both at the regional and community levels, that make the linkage

concept work. Thus, agreements for service delivery must not become the central concern of the linkage if effective implementation and maintenance are to be realities (i.e., not another "paper implemented" set of services). Rather such written agreements offer opportunities for professional interaction and development. This orientation is particularly critical in areas characterized by scarce resources and a strong sense of the value of the individual as found in rural areas.

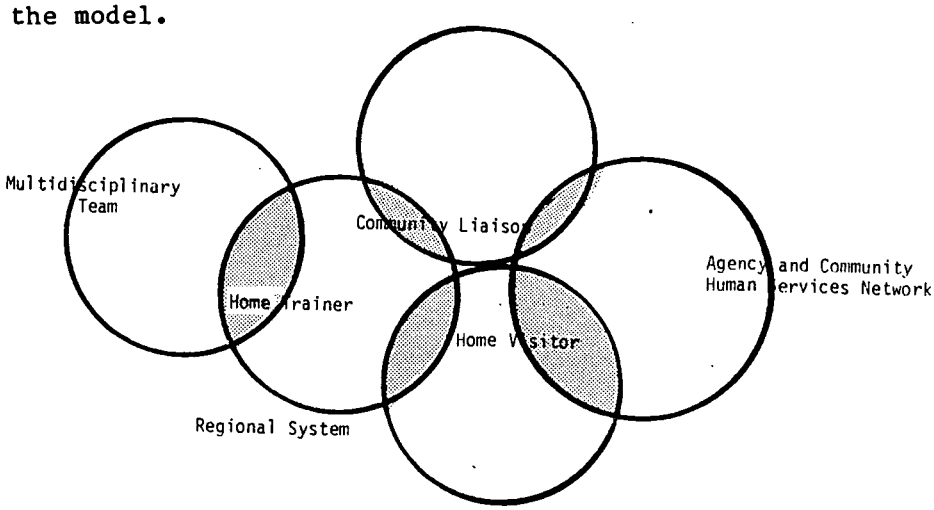
The potential for conflict or the raising of issues is an outgrowth of not only personal contact but a function of the dynamic nature of both regional and community systems. An established and systematic process for joint problem-solving is imperative to linkage maintenance. A number of models are available for implementation including the Concern's Based Adoption Model (Hall & Loucks, 1977). However, within any model, a critical component of the process is the interpersonal aspect of objectivity. Effective joint problem-solving is based on confronting issues without passing judgment. To influence an outcome, it is necessary to realistically analyze the other side's position as well as one's own. Such an approach provides a basis for negotiation and compromise by both parties of the unresolvable constraints inherent in a particular linkage. The use of CBAM, in particular, provides a vehicle for more specifically identifying the nature of the concern as a basis for developing and implementing appropriate and thus effective intervention. Such an approach removes the concerns from personalities to focus on the problem itself.

Needs Based Assistance: The Cyclical Nature of Monitoring/Maintenance

Any relationship established between two systems, especially regional and community systems must be systemic and adaptive by design. New information from both systems must be gathered on a systematic basis and cycled back into the community and agency analysis information bases. Thus, an information base continually updated from the community, agency or regional systems forms the basis for regional and community decision-making. Within this process, the most useful resources can be provided at the "right" time in"community" relevant ways.

VI STAFFING CONFIGURATION

Critical to the effectiveness of any program is the staffing pattern and model of interaction occurring between personnel. Implied in the LINCS model is a sharing of responsibilities and expertise across professional domains. Thus, role clarity, delineation of the interface of roles, and an identifiable transaction model at both regional and community levels provide a basis for effective service provision and personnel satisfaction. A transdisciplinary, collaborative orientation enhances both aspects. Figure 41 depicts this transaction pattern within the context of overlapping systems of the model.



Shaded areas of overlap reflect formal transdisciplinary interactions that occur due to the program model and/or integration of roles. However, the diagram fails to identify the informal interactions which occur as a function of the collaborative strategies used in program implementation and of case specific consultation and collaboration within both systems.

Staffing Pattern

The following pages identify the roles and key functions of personnel critical to implementation of Project LINCS during the demonstration period.

Project Co-Directors

Establishment of project policy.
Recruitment, hiring and dismissal of personnel.
Personnel supervision and evaluation.
Fiscal management of the project.
Liaison with the University and funding agency.*

Submission of required reports to the appropriate agencies.

Liaison with the project's Advisory Council.

Establishment of project goals and direction(s).

Review of project implementation.

Organization and coordination of resources.

Monitoring and finalization of summative evaluation data.*

Approval of contractual agreements with linkage agencies.

Approval of reports, products and processes developed as a part of the project.*

Dissemination at the state and national levels.*

Development and monitoring of the staff development program.

Development of sources for continuation (including liaison with state agencies).*

Multidisciplinary Team (Child Development Unit, Mid-Missouri Mental Health Center)

Conduct initial and follow-up assessment of children referred by community agencies.

Recommend needed services based upon assessment data.

Assist in the development of the individual service plan.

Provide case specific consultation to the home trainer, home visitor, and parent.

Provide information reflecting their own discipline in response to technical assistance requests from the Home Visitor, as appropriate.

Community Liaison (Regional linkage personnel)

Identify potential linkage communities.

Implement community analysis procedures.

Determine community linkage feasibility/viability.

Coordinate development and implementation of community entree strategy.

Identify potential linkage agencies.

Conduct agency orientations.

Conduct agency analyses.

Determine feasibility/viability of formal agency linkages.

Coordinate negotiation processes.

Supervise development of interagency agreement.

Monitor/maintain formal linkage agreements.

Monitor administrative use/concerns.

Monitor community needs/concerns.

Monitor and update community analysis data bases.

Coordinate community education efforts.

Coordinate interagency collaborative efforts at the regional level.

Participate in regional staffings to update and review linkage information data base and resolve issues

Assist in final documentation of project components and the model.*

Develop component specific dissemination and training materials.*

Participate in local, state and national dissemination.*

Home Trainer (Regional linkage personnel)

Conduct role analyses procedures on linkage agency home visitors.

Provide individual training sessions to home visitors in the following areas: intake process, screening procedures, ISP development, curriculum usage, home visiting procedures.

Provide joint home visits with home visitor.

Monitor competency usage in home visitors.

Provide technical assistance to home visitors.

Collaboratively problem-solve issues.

Collect evaluation data on home visitor skills and use of the model.

Monitor child progress, including review and update of the ISP.

Participate in regional staffings to update and review linkage information data base and resolve issues.

Assist in final documentaion of project components and the model.*

Develop component specific dissemination and training materials.*

Participate in local and state dissemination.*

Home Visitor (Community linkage personnel)

Identify children/families for services.

Obtain assessment services from regional facility.

Assist in the development of the individual service plan.

Assist in the development of stimulation programming.

Implementing developmental stimulation programs during home visits as outlined by the ISP.

Collaborate with other service providers in delivering services specified in the ISP.

Record and document child progress and intervention activities.

Participate in scheduled case consultations.

Access technical assistance from the home trainer.

Product Development Specialist

Selection and/or devlopment of training materials in response to technical assistance requests.

Collection of summative evaluation data on home visitors (i.e., LoU interviews).

Development of specialized workshops that result from community development efforts.

Preparation of parent education materials coordinated with the **LINCS Activity Manual.**

Preparation of replication training activities.

Updating of project documentation, as assigned.

Project LINCS was implemented as a regional linkage program through a collaborative arrangement between a university and a regional mental health center. The division of roles and responsibilities reflect implementation of this specific configuration. Those responsibilities which are specific to this configuration or reflect demonstration foci are identified by an asterisk (*). However, other configurations are viable models for implementation. The administrative model and specific role responsibilities of direct service personnel will vary dependent upon the characteristics of the program's implementation setting.

Project Personnel

All personnel positions delineated in the previous staffing pattern have been filled during the three years of the project. Table 6 depicts the budgeted positions, individuals selected and their percentage of full-time employment. Turnover following the initial eight months of project implementation significantly delayed the establishment of initial agency linkages. However, role flexibility during this period significantly enhanced subsequent project development and implementation. The qualifications of project personnel exceded expectations based upon fiscal and geographic constraints. Vitae for the professional positions are included in the Appendix.

Professional Development

Professional development is viewed as the process of achieving a "goodness-of-fit" between implementation of the project model and the

Table 6

Project Personnel 1981-1984

Position	Name	Percentage FTE
Project Co-Director	Sandra W. Gautt	30%
Project Co-Director	Joel R. Ray	20%
Project Manager	Nancy Jo Pope	50%
Home Trainer	Martha Smith	100%
Home Trainer	Sharon Clifford	100%
Secretary	Susan Kurtz	75%
Changes for the second project year were:		
Community Liaison	Tanna Coffman	100%
Home Trainer	Nancy Jo Pope	100%
Home Trainer	Paul Bacon	100%
Changes for the third year of the project were:		
Project Director	Sandra W. Gautt	50%
Training/Materials Coordinator	Nancy Jo Pope	100%-50%

required roles and responsibilities whereby professional growth can be maximized. The following narrative delineates the process implemented to achieve this concept of match.

Personnel roles and minimum qualifications are specified in job descriptions associated with each position. Further delineation of roles and specification of competencies evolve as project goals and objectives are refined as project implementation occurs. The role delineation process is approached through a three-step procedure. Role expectations based upon responsibilities related to current objectives are reviewed by each staff member and the Project Director. Concurrent with this process, job descriptions are reviewed and revised relative to actual roles and responsibilities. The second step involves an individual conference to review the designated and actual roles and to determine the degree of "goodness-of-fit" with personnel competencies. Competency areas and specific competencies required for effective role functioning are reviewed. The third step evolves directly from the project's quarterly planning process. Further clarification of roles relative to the current status of model implementation occurs as a component of this process. During review of projected quarterly objectives, personnel assignments and technical assistance needs are discussed relative to each objective. Resources, including other personnel, references, and formal technical assistance, are delineated. Such an approach is designed to maximize the attainment of project objectives including consideration of shifts in roles.

Through the role delineation and quarterly planning processes personnel are able to identify their own perceived in-service training needs. These training needs are discussed with the Project Director relative to meeting project objectives and individual professional growth options. Goals, objectives and resources for their attainment are delineated in a formal professional development plan. Formal professional development received by project personnel are delineated in Tables 7, 8, and 9. These activities reflect formal activities but fail to identify the informal sharing of information, resources, feedback and joint planning that occurred during project implementation. Significant individual professional growth has been an outcome of this latter process.

Table 7

Summary of Professional Development Activities: July 1, 1981 - June 30, 1982

Activity	Topic/Content	Participating Staff	Staff to Whom Information Was Disseminated
Continuing Education	Career Planning	Home Trainers	
	Technical Perspectives of Management	Home Trainer	
State and National Conference/Workshops	SEP/HCEEP Orientation	Project Co-Director	All Project Personnel
	HCEEP/DEC Conference	Project Co-Directors	All Project Personnel
	Conference on Interagency Collaboration, 94-142 and Infant Education in the Public School System (ACRES)	Project Manager	
	Missouri Conference on the Young Years	Home Trainer	Home Trainer
	Missouri Perinatal Conference	Project Co-Director	All Project Personnel
	HCEEP/DEC Conference Planning Committee	Project Co-Director	
	HCEEP Rural Network Conference	Project Manager	
	Marketing Workshop (LINC Resources, Inc.)	Home Trainer	Project Co-Directors Project Manager
Formal Inservice	HCEEP Orientation/Model Overview	Project Manager Home Trainers	
	Ordinal Scale of Infant Development/Infant Learning (Dunst)	Project Manager Home Trainers	
	Rural Infant Health	Home Trainers	
	New Directions in	Project Co-Directors	
	Assessment and Evaluation	Project Manager Home Trainers	
	Parent Behavior Progression Scale	Home Trainers	
	Project Review: Issues and Problems	All Personnel	

Table 8

Summary of Professional Development Activities: July 1, 1982 - June 30, 1983

Activity	Topic/Content	Participating Staff	Staff to Whom Information Was Disseminated
Continuing Education	Child Abuse/Neglect Training - Division of Family Services	Home Trainer	
State and National Conferences	HCEEP/DEC Conference	Project Co-Directors	All Project Personnel
	Child Health Seminar	Home Trainer	
	American Council on Rural Special Education (ACRES)	Home Trainer	Project Co-Directors
	National Conference for Trainers of Rural Special Educators	Home Trainer	
	Central Missouri AEYC Legislative Seminar	Home Trainer	
	Missouri Advocacy Day	Community Liaison Home Trainers	
Formal Inservice	Nursing Child Assessment Scale Training and Certification	Home Trainers	
	H.O.M.E., Barnard Teaching And Feeding Scales and Sleep Assessment	Home Trainers	
	Concerns Based Adoption Model (CBAM)	Community Liaison Home Trainers	
	Administration and Programming Using the Uzgaris-Hunt	Home Trainers	
	Project Dissemination	Community Liaison Home Trainer	Project Co-Directors

Table 9

Summary of Professional Development Activities: July 1, 1983 - June 30, 1984

Activity	Topic/Content	Participating Staff	Staff to Whom Information Was Disseminated
Continuing Education	Introduction to Marketing	Project Director Community Liaison	
State and National Conferences	N.A.E.Y.C.	Home Trainer	
	HCEEP Outreach Planning	Project Director	All Project Personnel
	HCEEP Project Directors Conference	Project Director	
	HCEEP/DEC Conference	Home Trainer	All Project Personnel
	Missouri Child Care Associates Advocacy Training	Product Specialist	
	National Conference on Citizen Participation	Community Liaison	
	Missouri AAMD	Project Director Community Liaison Home Trainer	
	INTERACT	Project Director Home Trainer	

Considerations

The identification of roles and responsibilities is only one factor in establishing a staffing configuration which provides for model implementation and maximizes the effectiveness of a linkage model of intervention. Consideration should be given to the following factors:

Role Functions as a Staffing Pattern Alternative

Model demonstration activities dictated the delineation of discrete roles and responsibilities for designated positions. This is evidenced quite clearly in the overlapping roles of the community liaison and home trainer. Primary responsibility for community linkage development activities belonged to the community liaison. However, once the linkage was negotiated, the locus of responsibility shifted to the home trainer during the implementation of direct service/teaming. Joint responsibility emerged as a function of the monitoring/maintenance processes.

Following initial implementation of the model, it became apparent that demonstration activities, including documentation, comprised a major component of these roles and that regional facilities would implement the model with current personnel through role expansion. Thus, it becomes necessary to conceptualize the staffing configuration for model implementation in terms of role functions rather than discrete personnel positions. Community analysis processes and data may already be a component of current regional planning units. Outreach staff and/or case managers may have within their roles the development of linkages with specific communities. Staff development units may provide personnel for LINCS training activities with monitoring and maintenance assumed by the case manager. Role functions critical for model implementation are: awareness, community analysis, strategic planning, negotiation, training, monitoring, technical assistance and community education. These functions may already be incorporated within individual and/or unit responsibilities within the regional agency. However, implementation through a multiple unit configuration is cautioned relative to two related considerations discussed in the following sections: (a) the need for systematic and planned communication among those responsible for implementation and (b) personnel continuity. These must be considered when developing a role function configuration within a complex system such as a regional center.

Personnel Continuity

During the initial stages of linkage development, clarity and consistency of communication between the regional and community systems is important. These aspects are facilitated if contact occurs with the same regional agency practitioner. Such an approach allows for maximum continuity, decreases the opportunity for miscommunication and thus, may decrease the chances of negative experiences which may reinforce previously conceived negative perceptions and impact future interactions.

Systematic and Planned Communication at the Regional Level

Due to the complexity of regional systems, a process must be developed for implementing systematic and planned communication. Group process plays a significant role in effective implementation. Thus, the concept of "linkage staffings" is proposed. Such staffings provide an opportunity for the following:

1. Update of all personel to reduce internal and external miscommunication.
2. Consensus on action(s) to be taken.
3. Utilization of group process strategies as the basis for decision-making.
4. Consideration of multiple data from various perspectives (i.e., trainer, case manager, assessment team).
5. Expansion of the expertise-potential of regional personel.
6. Development of adaptive behavior on the part of the regional system to internal and community changes.

It is recommended that these be held separately from regular staff meetings due to time and to not delude the major objectives of the process. The more complex the regional system, the more this is a necessary and continuing component of the model.

Administrative Flexibility

Administrative flexibility is required in the adjustment of work requirements which recognizes differences in responsibilities and time committed and which facilitates scheduling training, travel and home visiting. This is critical at both the regional and community levels, particularly during the initial direct service/teaming period. A priority investment of time at this phase of the process substantially decreases the time required once maintenance occurs.

Transdisciplinary Interaction

Critical to implementation at both the regional and community levels as well as across levels is a transdisciplinary perspective. Substantial evidence indicates that a developmental-interactionist perspective is critical to effective intervention for at risk or developmentally delayed young children. A critical factor in maximizing this perspective in specific intervention approaches appears to be the model of interaction among those providing intervention. The transdisciplinary approach, which has recently evolved as a separate model, holds potential for facilitating such integrative programming, particularly in areas with limited resources.

A transdisciplinary stance may be conceptualized as a commitment to teaching/learning/working together with other service providers across traditional discipline boundaries. The exchange of role functions is extended to include, to the maximum extent possible, a systematic trading of skills across disciplines. Such an approach enhances the effectiveness of intervention while enlarging the common core of knowledge and competence of each team member including parents. It implies mutual respect for the skills and competence of each and role expansion and release among professionals. While legal constraints may preclude the transfer of some skills, the trandisciplinary perspective is as much an attitude of interaction as the related role behaviors.

SUMMARY

This initial volume of the final report document has presented an overview and substantive description of the LINCS model of regional rural service delivery including factors critical to its implementation. Throughout the discussion a process orientation has been emphasized. Significant detail has been given the attitudinal and philosophical perspectives, sequence of steps, and processes critical to implementation. Variables forming the core of the model and its effective implementation can be summarized as follows. There must be philosophical congruence with the model within the regional system at both the administrative and direct service levels. LINCS is an orientation as much as it is a delineation of strategies. Thus, actions must be systematically planned using information gathered through the delineated analyses processes. Initial community, agency and role analyses not only provide a data base for decision-making but aid in predicting problem areas. Such an approach allows proactive planning to occur. Secondly, increased competence provides the vehicle for strengthening the "written" linkage. Thus, the initial training program focus must be narrow, skill specific and reflect a perceived need. The underlying goal is the establishment of an ongoing relationship as occurs through the LINCS process for formal structured interaction. Finally, maintenance of the "relationship" between the regional and community systems must be planned, viewed as a basis for support and expansion and reflect a problem-solving/adaptive approach. Recognition of these variables within the context of the LINCS process assures effective implementation and enhanced service delivery.

Regional rural service linkages may be established by a variety of models. LINCS has demonstrated that efficiency and effectiveness is enhanced by adhering to the process described in this document. The problems and issues of rural service delivery are complex; however, the LINCS model provides a process for resolution which allows for the unique characteristics, resources and constraints of individual communities and regional systems.

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Looff, D.H. (1971). Appalachia's children: The challenge of mental health. Lexington: University of Kentucky Press.

Loucks, S. F., Newlove, B. W. & Hall, G. E. (1975). Measuring levels of use of the innovation: A manual for trainers, interviewers and raters. Austin: University of Texas, Research and Development Center for Teacher Education.

Rogers, E.M. & Schoemaker, F.F. (1971). Communication of innovation. New York: Free Press.

The systems approach: A planning and management guide. (1980). The Grantsmanship Center News. Los Angeles: The Grantsmanship Center.

Threet, S. (Ed.). (1981). Interagency coordination: A necessity in rural programs. (A Rural Network Monograph). Macomb, IL: Western Illinois University Press.

Warren, D. I. & Warren R. B. (1980). The neighborhood organizer's handbook. South Bend, IN: The University of Notre Dame Press.

Warren, R. L. (1965). Studying your community. New York: Russell Sage Foundation.

Weller, J. E. (1965). Yesterday's people: Life in comntemporary Appalachia. Lexington: University of Kentucky Press.

APPENDIX

Personnel Vitae

VITA

Sandra W. Gautt

Education

B.S. University of Missouri-Columbia, Columbia, Missouri, Education, cum laude, Elementary Education and Special Education, 1965.

M.Ed. University of Missouri-Columbia, Columbia, Missouri, Education, Major: Special Education: Supervision and Administration. 1966.

Doctor of Philosophy University of Missouri-Columbia, Columbia, Missouri, Special Education (Behavior Disorders/Child Development). 1977.

Related Experience

Associate Professor - Department of Special Education, University of Missouri-Columbia (Responsibilities include: coordination and instruction of the graduate program in Early Childhood Special Education).

Assistant Professor - Department of Special Education, University of Missouri-Columbia (Responsibilities include: instruction in undergraduate and graduate Special Education courses, development and coordination of a teacher training program in Early Childhood Special Education). 1977-1981.

Project Director - Early Intervention Program, Department of Special Education, University of Missouri-Columbia (Responsibilities include: overall project management, evaluation and supervision; personnel selection, employment and training, interaction with cooperating agencies, school districts and university departments; interaction with the Advisory Council; dissemination at local, state and national levels; contact with funding agency and university personnel). 1978-1981.

Conference Planning Committee - Preschool Exceptional Children: Issues and Perspectives, Kansas City, Missouri. 1980.

Peer Monitor Review Team - Missouri State Department of Elementary and Secondary Education. 1979-1980.

Grant Review Panels - Division of Personnel Preparation, Bureau of Education for the Handicapped, U.S. Office of Education. 1979-1980; 1980-1981.

Early Childhood Special Education Advisory Committee - Missouri State Department of Elementary and Secondary Education. 1975-1978.

Supervisor - Itinerant Services, Department of Behavior Disorders and Learning Disabilities, Special School District of St. Louis County, Missouri, Town and Country, Missouri, (Responsibilities included: administration of itinerant services provided for children with behavior disorders and/or learning disabilities, supervision of teachers, member of diagnostic and evaluative clinic staff). 1970-1971.

Itinerant Teacher - Learning Disabilities, Special School District of St. Louis County, Missouri, Town and Country, Missouri. 1979-1970.

Instructor - Education (Supervising Teacher), Hospital School, University of Missouri-Columbia, Columbia, Missouri. 1968-1969.

Teacher - Trainable Mentally Retarded pupils, CA range 8 - 15, Woodhaven Learning Center, Columbia, Missouri. 1966-1968.

Publications

Kukic, M., Gautt, S., and Howard, C. Social Interaction Skills Program. Project PRIME - USOE/BEH. 1974.

Diagnostician's Manual, In Meyen, E., Gautt, S., and Howard, C., Instruction Based Appraisal System. Belleview, Washington: Edmark Publishing Company, 1976.

Gautt, S., "The Discrimination, Learning Processes of Behaviorally Disordered Children." Monographs in Behavioral Disorders, Vol. 1, No. 1, Summer, 1978.

Gautt, S., Friar, R., Fagiolo, M., Smith, M., and West, D. Early Intervention Program: An Ecological Approach to Intervention for Infant and Preschool Handicapped Children and Their Families Dissemination Manual. Columbia, Missouri: University of Missouri-Columbia, 1981.

Gautt, S. Early Intervention Program: An Ecological Approach to Intervention for Infant and Preschool Handicapped Children and Their Families. Final Report. Columbia, Missouri: University of Missouri-Columbia, 1981.

Previous Grant Awards

Gautt, S. "Early Intervention Program: An Ecological Intervention Approach." Handicapped Children's Early Education Program, Bureau of Education for the Handicapped, U.S. Office of Education. 1977-1981.

Gautt, S. and Hoffmann, S. "Early Childhood Education/Early Childhood Special Education: Program Planning and Development." Missouri Department of Elementary and Secondary Education. 1980.

Gautt, S. "Project LINCS: Linking Infants in Need with Comprehensive Services." Handicapped Children's Early Education Program, Special Education Programs., U.S. Department of Education. 1981-1984.

VITA

Paul Edward Bacon

Education

B.S. University of Missouri-Columbia, Columbia, Missouri
College of Education, Department of Special Education. 1979.

Related Experience

Home Trainer, Project LINCS: Linking Infants in Need with Comprehensive Services, Research Associate, Department of Special Education, University of Missouri-Columbia. Responsibilities include: development, documentation and implementation of direct services component to 0-3 at risk and handicapped children and their families; development and implementation of developmental stimulation training program for linkage agency home visitors; monitoring of home visitor and target population skill acquisition and maintenance; development and delivery of technical assistance programs to home visitors; development of Activity Manual and Resource Guide for program curriculum; development of Model Implementation Training Manual for personnel training program; development and documentation of project processes. 1982 - present.

Head Teacher, Early Childhood Learning Center, Columbia Public Schools, Columbia, Missouri. Responsibilities include: delivery of direct intervention services to multihandicapped children 3-5 years; administration of achievement, adaptive behavior, and criterion-referenced assessment to determine individual program needs and instructional methods; direct suprevision of interdisciplinary classroom team; training and supervision of paraprofessionals and volunteers; development and implementation of parent involvement program which included biweekly home visits; participation in inservice training. 1980-1982.

Teacher, Adaptive Development #3 Classroom, Woodhaven School, Inc., Columbia, Missouri. Responsibilities include: direct classroom service for severely handicapped students 6-12 years; administering and evaluating the results of criterion-referenced assessments; developing, implementing and monitoring individual student programs; training, supervising and evaluating classroom volunteers and aides; participation in the interdisciplinary organization of the school. 1979-1980.

Professional Presentations

March, 1983 - Conference Presentation - "Training and Technical Assistance - New Alternatives to Delivery," American Council of Rural Special Educators (ACRES), Murray, Kentucky.

April, 1983 - Presentation, Graduate Seminar - "Project LINCS - Direct Services/Training," University of Missouri-Columbia, Department of Special Education, Columbia, Missouri.

June, 1983 - Presentation - "Project LINCS: Service Delivery," Callaway County Child Services Organization, Fulton, Missouri.

June, 1983 - Conference Presentation - "Project LINCS: Linking Infants in Need with Comprehensive Services," Association for Retarded Citizens, Missouri Chapter, St. Charles, Missouri.

July, 1983 - Conference Presentation - "LINCS Activity Manual," Missouri State Maternal and Child Health Conference, Columbia, Missouri.

VITA

Sharon E. Clifford

Education

B.S. University of Missouri-Columbia
Columbia, Missouri
Education, Major: Physical Education. 1973.

Related Experience

Self-employed as Day Care Provider - Provided Day Care for five children. The children ranged in age from nine months to four years. In addition to routine care, structured daily learning activities were provided. 1980-1981.

Recreation Therapist - Mid-Missouri Mental Health Center, Columbia, Missouri. Duties included the evaluation and remediation of motor development and the planning and implementing of a recreation program for in-patients. Regularly served as a case manager for both in-patients and out-patients. Frequently, site visits were made to homes, preschools, and schools. Also served as a liaison with other agencies, such as the Division of Family Services, Public Health, and the Public Schools. For a six month period, was responsible for the supervising and reorganizing of the day care program. For approximately six months was also responsible for evaluating the social/adaptive behavior of children. Served on several administrative committees by assignment from supervisors. 1973-1979.

VITA

Tanna L. Coffman

Education

B.A. University of Missouri-Columbia, Columbia, Missouri, Child Psychology, 1976.

M.S. University of Missouri-Columbia, Columbia, Missouri, Community Development, Agency Administration, 1982.

Related Experience

Research Associate/Community Liaison - Responsibilities inlcuded: design, implementation, and evaluation of feasibility/viability studies, need assessment processes, community and agency analyses, and strategic planning and decision-making relevant to community and agency entree; also, development and maintenance of interagency contractual agreements; establishment and maintenance of collaborative working relationships with linkage communities and agencies; development and implementation of a master dissemination plan.

Graduate Research Assistant - Conducted a pilot project for the University of Missouri-Columbia, Department of Community Development aimed at developing research instruments and procedures with which to measure the impact of the community development process. May to December 1982.

Graduate Research Assistant - Worked with the University of Missouri-Columbia Department of Family and Community Medicine to conduct a feasibility study on elderly daycare for a local county citizen group. Responsibilities included community education in the areas of problem-solving and decision-making. January to May 1982.

Advisor/Consultant - Conducted Agency analysis and designed to volunteer management and fund raising programs for The Jacobs Center, Inc., a daycare center for developmentally disabled adults, 1981.

Teacher - Worked with the Missouri Division of Youth Services, Boys Training School teaching remedial reading and basic education. Responsibilities included individual and peer group counseling, crisis intervention, staff development, group facilitation, treatment program planning and implementation, educational curriculum development and implementation, educational testing and evaluation. 1977-1980.

Professional Presentations

An Effective Community Linkage Development Model, Council for Exceptional Children, Washington, D.C., April, 1984.

Community Development Impact Study Committee (C-DISC) Project Report, International Community Development Society annual conference, Madison, Wisconsin, August, 1982.

Community Development Recruitment Perspectives Seminar, University of Missouri-Columbia, Columbia, Missouri, February, 1982.

VITA

Nancy Jo Pope

Education

B.S. University of Louisville, Louisville, Kentucky
Theatre & Oral Interpretation. 1968.

M.A. University of Akron, Akron, Ohio
Child and Family Development. 1979.

Related Experience

Project Manager, Project LINCS - During initial year of funding, researched and developed draft products and procedures relating to Community and Agency Analysis, Advisory Councils, Interagency Agreements. Worked jointly with other staff to develop direct service component. Represented LINCS at HCEEP Rural Network Conference and ACRES Conference.

Missouri State Day Care Supervisor - Administered state child care licensing program under division of family services. Supervised staff of 60 statewide, lobbied state legislature, coordinated program with other DFS units, represented child care at HHS regional meetings, church groups and civic groups. 1980-1981.

Child Development Specialist - Member of diagnostic/treatment team at Child Development Unit of Mid-Missouri Mental Health Center. Participated in evaluations, outreach program, day care staff training, coordination of services to families, family intervention, infant stimulation, workshop and conference presentations. 1978-1980.

Head Teacher, UMC Lab Day Care - Taught six hour beginning lab course and managed full day care lab at University of Missouri Child and Family Development Department. Responsible for lecture/discussion and coordination of lab student responsibilities for 264 class. Also planned and implemented ongoing day care curriculum, food service and parent education/parent involvement program. 1976-1978.

CDA Trainer, Instructor - Child Development Associate pilot project at Bemidji State University, Bemidji, Minnesota served northern half of state, providing Head Start Supplementary Training and day care staff development. Developed individualized training program of center staffs, workshops and presentations and edited monthly newsletter. Worked with Chippewa Indians and with Minnesota Migrant Program. 1975-1976.

Presentations

"Fostering Creativity in the Home" - Five session workshop for parents. Broadway Christian Church, Columbia, Missouri. October 1983.

"Fostering Creativity in the Classroom" - Workshop presented at Columbia Public School Teachers' Conference. November 1983.

Publications

Pope, Nancy Jo; Fifteen Minutes A Day: Activities for Infant Day Care;
Child Development Training Program
Bemidji State University, 1975.

Organizations

Conference Planning Committee - Home Visitor Conference, Columbia, Missouri 1982, 1983.

Central Missouri Association for the Education of Young Children, President 1982-1984.

Child Care Planning Committee - City of Columbia, Columbia, Missouri 1984.

VITA

Joel S. Ray

Education

B.A.	University of Missouri At Kansas City, Psychology, 1968.
M.A.	Western Michigan University, Psychology, 1971.
Doctor of Philosophy	George Peabody College for Teachers, Clinical/Developmental Psychology and Special Education (Early Education of Handicapped), 1974.

Related Experience

Director and Clinical Psychologist - Child Development Unit, Mid-Missouri Mental Health Center, Columbia, Mo: Administrative and clinical responsibility for 17 member, interdisciplinary unit serving developmentally and/or emotionally delayed children (0-6 years) and their families; clinical supervision, consultation. 1977 - present.

Postdoctoral Intern - Edmond Guidance Center, Edmond, Ok: Individual, group, marital, and family therapy with children and adults; psychodiagnostics; consultation. 1976-1977.

Consultant - Project Head Start (Jackson, Macon, Haywood counties, NC) 1974-1976.

Associate Director - Developmental Evaluation Center, Western Carolina University, Cullowhee, NC: Responsibilities included:

1) Program development, budget and proposal preparation;
2) Community education and consultation; and
3) Assessment and intervention with developmentally disabled children and their families (neonates to six years).

1974-1976.

Director - Family training and Respite Care Center, Clover Bottom Developmental Center, Donelson, TN. 1971-1973.

Previous Grant Awards and Publications

Ray, J.S. The family training center: Annual reports. Tennessee Department of Mental Health, 1971-1972.

Ray, J.S., Ludwig, L.P., & Waterman, J.R. Some behavior patterns of developmentally delayed and non-delayed toddlers. Unpublished manuscript, George Peabody College, 1973.

Co-Investigator (with Richard Porter), NSF Biomedical Research Grant (No. RR0787): Space utilization and social interaction in a heterogeneous group of delayed and non-delayed children. 1973-1974.

Ray, J.S. Behavior of developmentally delayed and non-delayed toddler age children: An ethological study. Man-Environment Systems, 1973, 4, 239-240.

Ray, J.S., & Ponder, Jr., H. Developmental assessment and intervention in rural Appalachia. Paper presented to the annual meeting of the American Association On Mental Deficiency, Region VII, Louisville, Kentucky, November, 1975.

Ray, J.S., & Ponder, Jr., H. Serving handicapped children in rural Appalachia. A changing strategy. In J.S. Ray (Chm.), Early identification, assessment, and treatment of developmentally disabled children. Symposium presented to the 100th annual meeting of the American Association on Mental Deficiency, Chicago, Illinois, June, 1976.

Ray, J.S. Primary prevention: Fact or fantasy. Paper presented to American Association on Mental Deficiency, Denver, Colorado, 1978.

Ray, J.S. Child development services in community mental health. Paper presented DHEW Midwestern Conference on Mental Health Services for Preschool Aged Children, Kansas City, Missouri, April, 1979.

Ray, J.S., Kasten, J.L., & McGrady, K.R. A mosaic D_1-trisomy child: Growth and development at five years. In press, Pediatrics.

Ray, J.S. A play group of normal and retarded toddlers: Behavior and context. In press, Child Development.

Ray, J.S. Child Development Services in Community Mental Health, In press, Journal of Community Psychology.

Kashoni, J.A., and Ray, J.S. Depression in Preschoolers, In press, Journal of Child Psychiatry and Human Development.

VITA

Martha Baker Smith

Education

B.S. University of Missouri-Columbia
Columbia, Missouri, Home Economics,
Child and Family Development. 1978.

Related Experience

Integrated Classroom Manager - Early Intervention Program, Department of Special Education, University of Missouri-Columbia, Columbia Missouri. Responsibilities include: model development of a preschool program for children birth - five years with high risk and handicapping conditions; conducting evaluations, screenings, IEP's and instructional programs; training and supervision of practicum student teachers, parents and volunteers; cooperative teaching with Child and Family Development personnel; as well as inservice training. 1979-1981.

Dissemination-Replication Specialist - Early Intervention Program, Department of Special Education, University of Missouri-Columbia, Columbia, Missouri. Responsibilities include: assessment of potential replication sites; coordination of technical assistance to replication sites; conference and workshop presentations; editor of parent newsletter. 1980.

Head Teacher - Leavenworth Developmental Services, Leavenworth, Kansas. Responsibilities include: provision of educational services for high risk and developmentally delayed infants and preschool children; IEP development; training and supervision of parents, paraprofessionals and volunteers; member of interdisciplinary team. 1978-1979.

Previous Grant Awards and Publications

Gautt, Sandra W.; Friar, Ruth; Fagiolo, Mary; West, Debra; Eschenfelder, Cora; and Smith, Martha Early Intervention Program, Program Development Manual. University of Missouri-Columbia. 1981.

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