This paper offers a theoretical model for designing, managing, and evaluating collaboration efforts. The parallel-pairs model is composed of a horizontal axis that specifies the participating agencies and a vertical axis that specifies the scope and significance of activities. An advantage of the model is its ability to evaluate activities individually or as a group. Two examples of how the model was used in interagency collaboration—Owsley County Elementary School, Arizona, and Albuquerque's PACCT (Parents, Children, Community Together) for Literacy—are presented. A conclusion is that a comprehensive collaboration model can provide a framework for articulating policies and purposes, designs and developments, activities, and accountability of collaboration arrangements. Three figures are included. (Contains 20 references.) (LMI)

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Introduction

The focus for organizations this decade is on "sharing," "coalitions," and "community efforts." The word "competition" is assuming pejorative meaning. Collaboration has come to be a banner under which a variety of groups are meeting shared goals. At one time, during WWII, those who collaborated received the opprobria of "the injured group. Collaborators' heads were shaved and they were seen as ultimate traitors. Today, collaboration is the balm with which to heal intergroup conflicts, as the groups work toward some common goal.

"Collaboration is one of the academic and policy catchwords of the 1990's..." (Families as Educators Newsletter, 1992, p. 3). "Collaboration" has gained the status of confusion often found with terms adopted by those who focus on the "uniqueness" of their organizational problems. Everyone agrees on the importance of the collaboration concept. yet few seem to agree on how it actively helps an organization achieve its objectives. "Given the burgeoning number of collaborations ..., the time is ripe to expand our collective knowledge about the process and outcomes of contemporary collaborations (Kagan, 1991, p. 90). The proliferation of "collaboration" continues in the absence of any clear criteria with which it can be operationalized within or
among organizations. A model is needed to articulate the categories and variables of any collaborative attempt to assure effectiveness to the agencies involved.

Review of the Literature

The newness of the concept (or at least the new interpretation of the concept) is testified to by the simplicisms associated with the articles dealing with "collaboration." "Things to do" (Clark, 1991) and checklists (Gomez et al. 1990) abound to help groups keep track of their activities. Some authors detail the specific activities needed to manage the collaboration. (Clark, 1991). These "how-to" guides suggest simple strategies for successful collaboration, e.g.,

- keep everyone informed, (Goldstein & Schlessman-Frost, 1992),
- hold meetings at regular and scheduled times (Goldstein & Schlessman-Frost, 1992)
- designate specific responsibilities.

Other writers provide an overview of the planning and management of collaboration. (Clark, 1991; Hord, 1986). In "Evaluating Interagency Coordination Efforts Using a Multidimensional, Interactional, Developmental Paradigm," Flynn and Harbin differentiate developmental stages for interagency coordination as:

Formation,
Conceptualization,

Kagan adds Brewer and de Leon’s Evaluation and Termination in her developmental stages of collaboration (p. 15). Kagan goes on to identify "shared resources," "joint planning," "shared authority and power," and "common goals" as essential to developing collaboration. She insists that the "structure match the mission of the collaboration." (p. 78). This is to say that the operational structure must match the goals of collaboration. It is clear that collaboration brings previously separate organizations into a new structure.

Paul Mattessich and Barbara Monsey of the Amherst H. Wilder Foundation have published the most methodologically promising review of literature on collaboration to date. (1992) In their synthesis of eighteen studies, they identify nineteen factors which influence the success of collaboration. These factors are tallied and placed in six categories. Appendix D of their report presents a chart which cross-references each factor with the study in which it was identified. Their Author-Factor Matrix is a sophisticated presentation which makes information easily accessible to fellow inquirers. We have critically reviewed Mattesich and Monsey’s theoretical contribution to the literature on collaboration in "Collaboration: The Confusion and a Model" (Saunders & Schlessman-Frost, in press).

Ruth Nickse and Shelley Quezada have made a distinct contribution to the literature on collaboration in their book
chapter "Collaborations: A Key to Success in Family Literacy Programs" (Dickinson, 1992). They, also, identify the need for structured inquiry into and evaluation of collaborations.

...ambiguity surrounds the outcomes of collaborations and their processes, rationales, and history.

Confusion about them rests on several failures: that of systematic investigation of collaborations as a social construct; the lack of analysis of the evolution of collaborations; and the lack of distillation of the many frameworks developed for understanding collaboration... (Nickse and Quezada, 1992)

Quezada and Nickse present "Key Elements of Collaboration in Support of Family Literacy" in a two-dimensional table which organizes three levels of collaboration; program site, local community, and state and/or corporate; in terms of members, characteristics, structure, resources committed, and facilitative activities. (in press) Nickse and Quezada offer their working model of the Massachusetts family literacy project as a descriptive contribution which "...is selective rather than comprehensive." They hope that readers may be able to generalize their descriptive model to similar situations.

Nowhere in the literature does a framework or model occur in which evaluation, specific and comprehensive, can be brought to bear on collaborative efforts, nor on the components of collaboration. How and with which criteria can a "new structure," for instance, be contrasted with an old one? Are the
components and categories, variables and activities common to each structure and set of goals? Are the delegated or assumed responsibilities and "shared power and authority" evaluated? Do these responsibilities stipulate uniform criteria for assessing individual and collective success? At what phase of growth and maturity do participating agencies contribute singly and severally to the collaboration? How will the leadership interrelate these complex and critical factors in the collaboration? How will the gains be distributed equitably among the participants? Are the gains defined the same for each agency?

What is needed is a model capable of addressing each of these concerns. A framework in which each goal, category, variable, responsibility, and activity can be articulated, and which will give the collaboration the kind of accountability essential to

- an effective collaboration
- a transportability system for use with other collaborations, and,
- an honest and ethical (Griesel, in press) collaboration in which information/communication gives each agency the data needed to make informed and equitable decisions.

Assumptions of Methodological Model Construction

This paper offers a deliberately constructed model for
"collaboration" to serve as an informing hypothesis for inquiry into any collaboration effort. The model developed is a theoretical rather than a descriptive model.1 We chose to develop the model as an "heuristic fiction" to provide a convenient conceptual device to help organize the "buzzing booming confusion" of the universe of literature on collaboration. We have tried to be constant to traditional philosophic inquiry, and not forget the epistemological origins of our model. The method is in the tradition of Dewey's instrumentalism. Even though this model construction is theoretical, the concepts are linked to and attempt to set parameters for daily experiences. We do not therefore entertain a theory/practice or idea/experience dichotomy.

This type of model construction was selected because of our efforts to be intellectually responsible and honest, methodologically rigorous, and as democratic as possible. Post-positivist theoreticians, (scientific realists, members of the few remaining pragmatist groups, or adherents to the critical theorist orientation) agree that some conceptual framework, world view, informing hypotheses, or ideology should form the basis of disciplined inquiry. We hope to be counted among those who hold "that models do indeed create and organize all meaning, and, even make 'reality' what it is" (Decker and Saunders, 1976, p. 35).

1For further discussion of model types see our work in A Model for Models (Decker and Saunders, 1976) and "A Critique of Black's 'Models and Archetypes' from A Model for Models Perspective" (Schlessman-Frost, 1984).
The Syntax of the Model

We have selected a parallel pairs model to provide a generic framework for design and evaluation of collaboration. The advantage of this syntactical model type is that it is capable of exhibiting the relationships employed in other models, specifically target and sequential models (Saunders, 1973). The other model types (target and sequential) come under special criticism when there is a need to relate pairs of categories in a more comprehensive syntactical way..., as in the formation of a comparison of pairs, where the evaluation must incorporate in the inclusions of a target model, the phasing capabilities of a sequential model, and yet provide a way to connect any and all relationals in a methodologically rigorous pattern. Thus a pattern can be expressed as a model for all models, a design in which the categories and variables, objectives and activities can be added by pattern at any time without concern for distorting or weakening the model in use for the evaluation (Engle, Saunders, & Blake, 1981, p. 71).

The choice of a parallel pairs model by Mattesich and Monsey and Nickse and Quezada in their contributions to the knowledge base on "collaboration" attests to the usefulness of this model type. Those writers may not share our concerns with the theory of model construction, but they use the parallel pairs syntax in their efforts to relate categories and variables of
collaboration. (It is also interesting that Nickse and Quezada's "Levels of Collaboration" follow the epistemological criteria established by Saunders in his cube of inquiry (Saunders, 1968, 1969, 1970; Saunders and Decker, 1981).)

THE MODEL

The collaboration model, Figure A, establishes a generic, basic, format into which each organization can input its own information and details. Criteria for guiding the user in completing the format coordinates are included when appropriate and the evaluation components are clearly distinguished from the items to be evaluated.

-----------------------------
Insert Figure A about here
-----------------------------

The horizontal axis specifies the participating agencies, possibly arranged in descending order and scope of responsibility to the collaboration. However, when using the model with collaborations, no group has felt comfortable with that option. Albuquerque’s PACCT for Literacy decided to list agencies alphabetically (See Figure C), and Owsley County Elementary opted to sequence programs in ascending order of ages of children served. On this axis each agency sets its own goals as an agency, i.e. the most overarching purpose of the organization or agency is presented as a guide to
GENERAL COLLABORATION EVALUATION MODEL

<table>
<thead>
<tr>
<th>Management Categories</th>
<th>Collaborator</th>
<th>Collaborator</th>
<th>Collaborator</th>
<th>Collaborator</th>
<th>Collaborator</th>
<th>Collaborator</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Planning &amp; Policy Making</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>The collaboration can be evaluated at each level:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Do mission, goals, and policies help realize the vision?</td>
</tr>
<tr>
<td>Coordination &amp; Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Is management and development of the collaboration effective?</td>
</tr>
<tr>
<td>Supervision &amp; Implementation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Is implementation of the collaboration efficient?</td>
</tr>
<tr>
<td>Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>What is the overall value of the collaboration?</td>
</tr>
</tbody>
</table>

Specific contributions from each collaborator can be documented for each level of participation. The unique activities in each collaboration can be represented in this generic format.

This axis allows collaborators to design their contributions to each level of the collaboration, to document participation at all levels, and to evaluate implementation of collaborative process.

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the rationale for their inclusion into the collaboration structure.

The vertical axis is presented in "levels" as a strategy to differentiate scope and significance of the activities, i.e. by placing the goals/planning/policies that guide the collaboration at the top of the column on the vertical axis, as a part of this more generic planning function, it is easier to set objectives and guidelines, and eventually training activities, in proper perspective. The divisions of policy/planning, coordination/development, and implementation/supervision are subset to indicate the type of information to be included for each agency in the corresponding coordinate beneath that agency's heading.

A comprehensive evaluation of the entire collaboration process can be completed by summarizing the vertical and horizontal axes, in terms of each coordinate and the final conjunction of the axes.

This model can be used with all collaboration designs and content, from simple family units to very elaborate corporate collaborations. The principle used is a structural system generic to all group interactions. This structure or model can be extended, new categories and variables can be added or removed without loss of model integrity, or loss of collaboration effectiveness. The structure determines the meaning and relevance, the values and perspectives of the units.

An evaluative criterion can be placed in each coordinate,
i.e. for each component in each cross-reference a criterion can be formulated to assess the success, failure, degree of progress, and anticipated outcome for each activity. The significance of the "levels" on the vertical axis can be seen most easily when the evaluations are sequentially inclusive from top to bottom.

The practical advantage of using a model that is constructed in such a way as to group like with like, and with categories on an axis different from the "levels," is that evaluations can be made for each level of activity individually, as well as evaluating activities severally. When evaluating activities individually or in a series, the expected outcomes must be explicit and not overlap or be of a different genre. Cats, dogs, and mammals cannot be on the same axis any more than "planning" can be on the same axis as the organizational unit doing the planning. When this structural error occurs, evaluating either component is at least misleading or simply not possible.

Prior to filling the model with substantive content, the levels and categories must be established. Only when this procedure is followed is it possible to evaluate ANY outcomes, especially if these results are to be integrated into a comprehensive evaluation of the effectiveness of the collaboration.

**Illustrative Examples**

Two illustrative examples of the use of this model were recently shared at a roundtable on "Evaluating Collaborative
Arrangements" at a national Even Start evaluation conference. An illustration of an intra-agency collaboration comes from Owsley County Elementary School.

-------------------------------------------------------------------------------
Insert Figure B about here
-------------------------------------------------------------------------------
Albuquerque’s PACCT for Literacy provides an example of an inter-agency collaboration.

-------------------------------------------------------------------------------
Insert Figure C about here
-------------------------------------------------------------------------------
Participants at the roundtable, whose substantive collaborations show a broad range of diversity and creative configurations, were enthusiastic about the model as a tool to assist them in design of collaborations, implementation and management of collaborations, and evaluation of their collaborations.
### INTRA-AGENCY COLLABORATION:
OWSLEY COUNTY ELEMENTARY SCHOOL

<table>
<thead>
<tr>
<th>Collaboration Activities</th>
<th>Even Start</th>
<th>PACE</th>
<th>Head Start</th>
<th>Chapter 1</th>
<th>TEEM</th>
<th>Family Resource Center</th>
<th>Forwading the Fifth</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planning &amp; Policy Making</strong></td>
<td>All ECE staff select training in fall for school year. Parents choose topics for parent training. Parents formed own support group.</td>
<td>All ECE staff select training in fall for school year.</td>
<td>Staff participate in selecting ECE training topics.</td>
<td>School level decision-making (rather than central office).</td>
<td>Parent participates in Policy Council.</td>
<td>State funded program w/ mission to identify community &amp; school gaps &amp; deficiencies.</td>
<td>Teachers, parents, &amp; staff from all federal programs &amp; Family Resource Center participate in decision-making.</td>
<td></td>
</tr>
<tr>
<td><strong>Coordination &amp; Development</strong></td>
<td>Staff development includes Family Literacy training.</td>
<td>Staff development includes state &amp; federal programs.</td>
<td>One director in central office for all state &amp; federal programs.</td>
<td>Principal is co-operative &amp; supportive.</td>
<td>Staff development for all programs.</td>
<td>Found donor of &quot;Growing Healthy&quot; curriculum.</td>
<td>Administrators at all levels coordinate program services to staff and children.</td>
<td></td>
</tr>
<tr>
<td><strong>Supervision &amp; Implementation</strong></td>
<td>E.S. coordinator supervises all para-professionals for programs birth to age 7.</td>
<td>Provide parent training.</td>
<td>Teachers work in &quot;regular&quot; classrooms.</td>
<td>FT coordinator supervises all para-professionals.</td>
<td>Funding for school nurse.</td>
<td>Grant $ provided books for parents to read in classrooms.</td>
<td>Administrators supervise services across programs.</td>
<td></td>
</tr>
</tbody>
</table>

### Evaluation

- Each program summarizes accomplishments in required reports, e.g. annual reports, continuation funding proposals, etc.
- Collaboration Model, ©1992 Schlessman-Frost & Saunders
ILLUSTRATIVE INTERAGENCY COLLABORATION: PACCT FOR LITERACY EVEN START

<table>
<thead>
<tr>
<th>Collaborating Agencies</th>
<th>Management Categories</th>
<th>Alameda Community Center</th>
<th>Albuquerque Literacy Program</th>
<th>Albuquerque Public Schools (APS)</th>
<th>Albuquerque Technical-Vocational Institute (T-VI)</th>
<th>American GI Forum</th>
<th>Child Development Project</th>
<th>Coalition for Children</th>
<th>Community Development Institute</th>
<th>Department of Human Services</th>
<th>Economic Opportunity Board-Head Start</th>
<th>Southwest Indian Polytechnical Institute</th>
<th>University of New Mexico, ARE &amp; HEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning &amp; Policy Making</td>
<td>On-going project design</td>
<td>Initial &amp; on-going project design</td>
<td>Initial &amp; on-going project design</td>
<td>Initial &amp; on-going project design</td>
<td>Initial &amp; on-going project design</td>
<td>Initial &amp; on-going project design</td>
<td>Initial &amp; on-going project design</td>
<td>Initial &amp; on-going project design</td>
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<td>Initial &amp; on-going project design</td>
<td>Initial &amp; on-going project design</td>
<td>Initial &amp; on-going project design</td>
<td>Initial &amp; on-going project design</td>
</tr>
<tr>
<td>Coordination &amp; Development</td>
<td>Development of tutoring component</td>
<td>Even Start coordinator is APS employee. Coordination of other programs including Chapter 1</td>
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<td>Even Start coordinator is APS employee. Coordination of other programs including Chapter 1</td>
</tr>
<tr>
<td>Supervision &amp; Implementation</td>
<td>Provided facility for 92-93 expansion</td>
<td>Oversees tutoring component, intake on adult &amp; parental support</td>
<td>Certified teachers at each Even Start site provide early childhood education &amp; parenting classes</td>
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</tr>
</tbody>
</table>
Conclusion

It is evident from the ongoing research and overviews of collaboration that a comprehensive collaboration model can provide a means to bring together agencies for a common purpose in a deliberate and systematic framework capable of articulating policies and purposes, designs and developments, activities and accountability. This design for collaboration can incorporate cooperation and coordination, where appropriate, and in proper sequence to assure participating agencies of success. Collaboration is an exciting opportunity to develop greater trust and future group cohesion among diverse units.

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interactional, developmental paradigm. Remedial and Special Education, 8(3), 35-44.


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