A two-part report, sponsored by the Northwest Regional Exchange, focuses on the role of technical assistance in educational settings. This document, part I of the report, presents an overview of major research and literature findings, including the extant knowledge base and the state of the art in technical assistance. The introduction discusses the relationships among technical assistance, communication, and the phenomenology of change. The main body of the document describes aspects of technical assistance. Topics include (1) a definition of technical assistance and the role of the consultant, (2) the goals of technical assistance, (3) the consultant as change agent, (4) the role of the broker in technical assistance, (5) the role of the funding agency, (6) a historical perspective, (7) ad hoc consultation, and (8) new organizational designs. A summary follows, suggesting that success in technical assistance systems requires efforts in three major categories: comprehensive evaluation, appropriate preparation of consultants, and a variety of systems for diverse educational settings. A four-page bibliography is included. (TE)
PROVIDING EFFECTIVE TECHNICAL ASSISTANCE IN EDUCATIONAL SETTINGS

Part I: A Research Synthesis

by

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PREFACE

During the past three years, the Northwest Regional Exchange has sponsored the development of focused research reports whose topics have been identified by members of the Northwest Regional Exchange Advisory Board representing the states of Oregon, Alaska, Hawaii, Washington, Montana, Idaho and the Commonwealth of the Northern Mariana Islands. We have found the development of these reports to be an effective dissemination strategy that effectively and efficiently moves the research knowledge base to the user level.

Each report is in response to state-defined information needs and is intended to influence the improvement of practice. In each case, a specific knowledge base, anchored in research and development, is analyzed and synthesized. The process is more telescopic than broadly comprehensive in nature. Elements of careful selectivity and professional judgment come into play as authors examine the information against the backdrops of current state needs, directions, and/or interests. As a result, research-based implications and recommendations for action emerge that are targeted to the region.

This particular report is in response to a common regional need and has been designed in two parts. As each state carefully examines the emerging knowledge bases in such topical areas as effective schooling, instructional leadership, organizational development, and futures/trends, it becomes obvious that the roles and functions of state and district level personnel must be analyzed and realigned to support school-based change. This research report, in two parts, addresses the role and
function of technical assistance in educational settings. Part I, A Research Synthesis, explores technical assistance as a process as well as the consulting roles that relate to it. Part II, Implementing the Research: The Effective Delivery of Technical Assistance, examines selected change models for establishing technical assistance systems and implications for action. The reader may find Part I useful in acquiring some basic understandings about technical assistance. Part II, on the other hand, contains a variety of models and techniques that can be used as tools for restructuring existing technical assistance systems and roles or, if appropriate, establishing new systems and roles so that they most effectively support school-based improvement efforts.

J. T. Pascarelli
August, 1984
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ABSTRACT

Currently, there is rapid growth in the number of technical assistance organizations serving educational settings:

A technical assistance system is most properly viewed as a communications network. It is a temporary and constantly changing organization in which members initiate and maintain communication concerning specific problems and solution strategies. Everything in the technical assistance system is directed toward the initiation and maintenance of this communication. Its structure and function is partly determined by the content or information the system is appointed to deliver, partly by the characteristics of the "customers" or client organizations, and partly by the character and style of the membership of the technical assistance organization (Stedman 1980).

Based on this description of technical assistance systems as complex communications networks, a literature search was initiated to help determine specific aspects of effective technical assistance systems or organizations. Two separate studies resulted from our inquiry. Part I: "A Research Synthesis," presents an overview of major research and literature findings, including the extant knowledge base and the state-of-the-art in technical assistance. Part II: "Implementing the Research: The Effective Delivery of Technical Assistance," is more process-oriented; that is, it sequentially specifies the steps found to be effective in the successful delivery of technical assistance.

Following are the primary purposes which guided our study of effective technical assistance programs and processes:
To synthesize recent literature and research findings

To provide educational personnel involved in delivering technical assistance services to clients with comprehensive knowledge and background related to effective technical assistance

To enhance and improve the capacities of those involved in technical assistance programs so they may work more efficiently and effectively with colleagues

To provide educational personnel with appropriate information so they may make better use of technical assistance services

Both Part I and Part II of the study serve a variety of audiences including consultants, organizational development specialists, disseminators, linking agents, change agents and others currently involved in the delivery of technical assistance. In addition, both parts of the study also serve the following groups:

- Persons who are currently planning for or participating in technical assistance or in-service activities, including trainers, participants, continuing education personnel and managers/administrators
- Persons who are involved in graduate training activities including personnel in educational administration, special education, adult and continuing education and educational technology
- Persons who wish to know more about technical assistance systems and how they operate
It is our intent to present, in two parts, a synthesis of the literature and research findings regarding effective technical assistance models, processes and strategies. Additionally, in Part II, we offer a set of finite recommendations to move the findings toward implementation to help those involved in technical assistance programs to provide more effective communications networks and ultimately, better serve their client organizations. For as Ekendahl (1979) points out, the overarching goal of consultation (i.e., technical assistance) is to bring about change for the better.
I. INTRODUCTION

Technical Assistance, Communication and the Phenomenology of Change

Educational change is implicit to the role of those delivering technical assistance; hence, a discussion of change and the position taken in this study on educational change is warranted. As has been noted, there is currently rapid growth in the number of TA organizations serving educational settings. This development is a direct result of the inestimable number of innovative programs that have been put into educational practice since the beginning of the 1960s, including all educational changes through legislation, new and revised curricula as well as a host of "special projects."

Fullan (1982) identifies the main factors which relate to adoption or decisions to change and suggests the reasons why individuals or groups decide to embark on change include personal prestige, bureaucratic self-interest, political responsiveness and concern for solving an unmet need. Since the 1960s, change has become one of many "bandwagons" and "standard operating procedure" for school people. Yet regardless of the reasons that underscored the motivation to change, most of the efforts were unsuccessful and showed that planned change attempts rarely succeed as intended. Fullan (1982) suggests part of the problem lies in the confusion between the terms "change" and "progress."

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people do not have a clear, coherent sense of meaning about what educational change is for, what it is and how it proceeds. Thus, there is much faddism, superficiality, confusion, failure of change programs, unwarranted and misdirected resistance and misunderstood reforms. What we need is a more coherent picture that people who are involved in or affected by educational change can use to make sense of what they and others are doing.

Fullan and other researchers in looking at misdirected change efforts from the 1960s and 1970s suggest the problem of meaning is central to educational change. At the core of any change effort is the phenomenology of change, that is, how people actually experience change as distinct from how it might have been intended (Fullan, 1982).

To be effective, those persons involved in technical assistance must examine both the what of change (the content) and the how of change (the process). Both areas must have meaning to the client organization (Fullan 1982):

Meaning must be accomplished in relation to both these aspects. It is possible to be crystal clear about what one wants and be totally inept at achieving it. Or to be skilled at managing change but empty-headed about what changes are most needed. To make matters more difficult, we often do not know what we want, or do not know the actual consequence of a particular direction, until we try to get there. Thus, on the one hand, we need to keep in mind the values and goals and consequences associated with specific educational changes, and on the other hand, we need to comprehend the dynamics of educational change as a sociopolitical process involving all kinds of individual, classroom, school, local, regional and national factors at work in interactive ways.

*Note: For purposes of this paper, we shall use the term "consultants" to include such role specific groups as organizational development specialists, disseminators, linking agents, change agents and others.
Consultants need to understand the relationship between good theory and practice—one does not exist without the other. Often, no distinction is made between theories of change (those factors which cause change) and theories of changing (how to influence those causes) (Fullan 1980).

Consultants need to ask themselves the following question: "What is school reform for?—a question which all too frequently gets lost when we are immersed in promoting or resisting given change efforts. Fighting for or against change can easily become an end in itself" (Fullan 1982).

Many of the educational innovations introduced in schools or districts are unrelated to the stated purposes of education; they are often biased and poorly planned. Therefore, such changes do not result in progress. To be effective and sustaining, change must always be "viewed" in relation to the particular values, goals and outcomes it serves: "something which is frequently difficult to assess in education, partly because rhetoric differs from reality and consequences cannot easily be determined or measured" (Fullan 1982).

The following ten assumptions are identified as basic to a successful approach to educational change (Fullan 1982):

1) Consultants should not assume that their version of what should be is the one that should or could be implemented. Consultants should assume that successful implementation consists of some transformation or continual development of initial ideas.

2) Consultants should assume that any significant innovation, if it is to result in change, requires individual clients (implementers) to work out their own meaning. Effective implementation is a process of clarification.
3) Consultants should assume that conflict and disagreement are inevitable and fundamental to successful change.

4) Consultants should assume that people need pressure to change, even when change is desired. However, pressure to change can only be effective when clients have opportunities to react, to form their own opinions, to interact with others undergoing change, and to have access to available material and human resources.

5) Consultants should assume that change takes time; it is a process of "development in use." Consultants should expect significant change to take a minimum of two or three years.

6) Consultants should not assume that the reason for lack of implementation is rejection or resistance. Consultants should assume that a number of reasons exist for lack of implementation including value rejection, inadequate resources and insufficient time.

7) Consultants should not expect all or even most people or groups to change. Progress occurs when steps are taken to increase the number of persons affected.

8) Consultants should assume that knowledge of the change process is essential; a plan of change is necessary based on the preceding assumptions and which addresses the factors known to affect implementation. Careful planning can bring about significant change on a fairly wide scale over a period of two or three years.
9) Consultants should assume that no amount of knowledge will ever make it totally clear what action should be taken; action decisions are a combination of valid knowledge, political considerations, on-the-spot decisions and intuition. Consultants should understand that better knowledge of the change process will improve the mix of resources from which to draw, but it should never represent the sole basis for decisions.

10) Consultants should assume that change is frustrating and discouraging. If all or some of the preceding assumptions cannot be made, significant change should not be expected as far as implementation is concerned.

One way to look at technical assistance is that it "generally represents variations rather than reorientations—variations are small-scale changes that can be accommodated within existing systems, while reorientations may cause a major power shift internally or externally. In most instances, the technical assistance described does not threaten those who hold power" (Gallagher 1980).

The role of the consultant, in implementing change, is intrinsic to the broader framework of knowledge dissemination and utilization. Dissemination and utilization, as a concept, is viewed by Havelock et al. as the "transfer of messages by various media between resource systems and users" (1969). The process of knowledge dissemination and utilization involves a number of distinct yet interrelated levels, including the individual; the interpersonal; the organization; the social system; and the linking roles between resource and user, types of messages, types of media and phase models of the process (Havelock et al.)
The linking role, in turn, embodies research, development and diffusion; social interaction and problem solving. Each of these is important to and underscores the linkage model—"a series of two-way interaction processes which connect user systems with various resource systems including basic and applied research, development and practice" (Havelock et al. 1969). Successful linkage occurs between sender and receiver when each exchanges messages via two-way interactions and when each demonstrates appropriate problem solving behaviors. The resource or helping system must be fully appreciative of the user's needs and problem solving abilities, while the user must be fully cognizant of the resource system's needs assessment strategies, solution formulations and evaluation processes. Such collaboration can result in more relevant and effective solutions, as well as build mutual trust and respect. Mutual trust and respect is the key to the transfer of knowledge and skills in a rapid, effective and efficient manner, and the overriding responsibility of those involved in technical assistance.

Definitions

A review of the literature found the following definitions to be the most widely accepted and are, therefore, employed for purposes of this study:

1) Knowledge dissemination and utilization—the utilization of various media to transfer messages between resource systems and user systems.
2) Technical assistance system—a constantly changing and complex communications network; its structure and function is determined by 1) content or information to be delivered, 2) characteristics of the clients to be served and 3) characteristics of the organization delivering the services.

3) Technical assistance—a problem solving process for the transference of specialized information and skills.

4) Consultant—the person delivering the services; i.e., transferring the information and skills to the client organization.

5) Linker—a person who connects a user system with a wide variety of resources in research, development and implementation.

6) Mutual trust and respect—a major responsibility on the part of the consultant; it is the key to rapid, effective and efficient transference of knowledge and skills.

7) Innovation—a change which results in greater benefits, increased performance and accomplishments.

8) Change agent—the person who is instrumental in planning for change and innovation.

9) Model—a symbolic representation of the various aspects of a complex event or situation, and their interrelationships (Lippitt 1973).
10) Service delivery--refers to providing an array of helping activities, ideas, and resources which can aid in solving problems and assist the client organization in achieving its stated mission; delivery is the heart of the systematic technical assistance process and is preceded by planning, needs assessment and negotiation; evaluation concludes the process (Trohanis 1980).

11) Need--refers to broad programmatic concerns that are both permanent and ongoing; also describes the difference between an organization's current status and desired status; refers to specific tasks or activities an organization must undertake in order to accomplish its goals and objectives (Black 1980).
II. TECHNICAL ASSISTANCE IN EDUCATIONAL SETTINGS

Toward a Definition of Technical Assistance and the Role of the Consultant

Technical assistance, or "TA" as it will be referred to throughout this study, is defined by Clifford and Trohanis (1980) as "an intricate communication and problem solving process for providing specialized information, skills and other types of supportive help to designated clients." Richman and Clifford (1980) define technical assistance as "the transfer of specialized knowledge, skills, information and technologies from one system to another--usually from a TA system to a definable client system." Stedman (1980) sees the TA system as "an organization with unique structural and functional characteristics. Its purpose is to transfer information from one place to another. It is a network of at least two organizations. It is a system for renewal and change. It is an open system relying heavily on the creativity, endurance and advocacy posture of its membership." The critical feature in each of these definitions is clearly the transfer of information via a well-defined system for communication.

The consultant, as has been noted, is the person responsible for the transfer of information and skills to the client organization. A consultant can interact with a client in any number of ways. For example, the role of the person delivering the technical assistance may be consultative or collaborative; he or she may assist the client by providing new ideas and innovations specific to the diagnosis or by providing guidance in the process of problem-solving at any or all of the indicated stages (Havelock 1973). The first type of assistance (consultative) is content-oriented while the second type (collaborative)
is more process-oriented.

Some refer to the first type of consultant as a technical expert (Trohanis et al. 1981). This person's relationship with the client is generally objective, detached and task-oriented. A technical expert often makes concrete recommendations which are derived from the research and the expert's past experiences to solve the client's problems. The second type of consultant is often called a process facilitator (Trohanis et al. 1981). This person's relationship with the client is more personal, involved and keyed to the process of problem solving. Such a relationship is necessary to the long-term success of any TA effort as the major goal of TA is to improve the clients' ultimate ability to solve their own problems; that is, build internal capacity.


1) Effective consultants have in-depth knowledge and broad-based expertise. They are recognized authorities in their fields and are knowledgeable about the most up-to-date research findings. Additionally, they have extensive experience as consultants, which affords them widespread credibility.

2) Effective consultants are skilled in communications. They are able to listen, speak and write well.

3) Effective consultants are knowledgeable about the TA process. They understand the importance of needs assessment, problem solving, delivery of service using a variety of modes, follow-up, evaluation and so on. Effective consultants are
well-grounded in the skills of planning, problem identification and data analysis.

4) **Effective consultants are skilled in interpersonal relationships.** They demonstrate positive attitudes and enthusiasm to the client for the task at hand; additionally, they are seen as sensitive, honest and flexible persons. Effective consultants seek to establish mutual trust and respect through a climate of openness and intentionally work toward that end.

**The Goals of Technical Assistance**

There are three major goals of any sequenced TA process. The first goal is obviously "to solve the clients' immediate or long-range problem as mutually defined by the resource and user systems; for example, an educational institution wants the capabilities to develop a management information system" (Richman and Clifford 1980). A second less obvious goal is to concurrently develop "capacity" within the client; that is, enabling the client system to eventually define and solve its own problems. A third goal and equally as important, is to assist clients in becoming more skilled in using TA systems in the future.

Technical assistance systems in education are designed to foster growth and change in people—to help them acquire new skills, knowledge, methods or attitudes (Crandall and Williams 1981). Such persons may be faced with new roles or activities (and the resultant new demands, priorities and pressures) that go beyond their expertise, experience or resources. For example, Crandall and Williams (1981) give an illustration of the
teacher who has developed a new classroom program and receives funds to
make the innovation a model project. The teacher suddenly becomes a
project director, responsible for developing, refining, validating and
disseminating the program within a three-year period. This person
requires immediate, ongoing and specialized TA to reach success in the
new effort. Other examples of persons requiring TA offered by Crandall
and Williams (1981) include: a project director who is an established
expert in the content area of the project but new to the management role;
or the situation in which the project was conceived and proposed by a
grant specialist whose job is to compete for funding, not develop highly
operable work plans. These situations all require specialized technical
assistance for persons who suddenly become engaged in new, demanding and
complex tasks. Based on their work in providing TA in such situations,
Crandall and Williams (1981) offer a set of assumptions that should guide
any TA organization:

1) **TA, like change, is a process not an event.** Since clients are
   engaged in the long-term process of change, TA must be available
   for extended periods in order to support these persons as they
   pursue their objectives.

2) **Effective TA is based on systematic procedures for determining
   needs and developing plans to meet those needs.**

3) **TA takes place within the context of a formal, ongoing
   relationship that is based on mutual trust and respect.**
4) **TA services must include the use of a broad range of resources and delivery modes.**

5) **TA systems serving professionals are based on enrichment, not deficiency.** The experience and knowledge of the client can be viewed as significant resources in focusing the assistance given and in building the client's capabilities. A consultant, then, becomes the 'change agent' for the innovation: "a change which benefits the people who are changed" (Havelock 1973).

**The Consultant as Change Agent**

Havelock (1973) defines a 'change agent' as "a person who facilitates planned change or planned innovation." Persons with any number of job titles may become change agents, such as curriculum coordinators, curriculum consultants, dissemination staff, counselors, concerned parents, citizens or many others. However, persons who become the change agents for an innovation are not necessarily consultants nor those who will deliver the technical assistance. The change agents' role is to get things started by seeking answers to existing problems. On the other hand, all consultants must also play the role of change agents. The consultant must have the skills in the various stages of providing valuable assistance, as well as being an instigator of change.

Havelock (1973) suggests there are four primary roles of the change agent: 1) as a catalyst, 2) as a solution giver, 3) as a process helper and 4) as a resource linker. An effective consultant must be able to play all four roles.
1) **The Change Agent as Catalyst:**

Many people faced with change would rather maintain the status quo; they would rather keep things as they are. Consultants in this role need to overcome such reluctance and complacency.

2) **The Change Agent as Solution Giver:**

Effective consultants must know when and how to offer solutions to problems. Additionally, consultants must be skilled and knowledgeable in the use of the solution to be able to help the client adapt the solution to identified needs.

3) **The Change Agent as Process Helper:**

Consultants in this role are experts in problem solving; they provide assistance in showing the clients how to do the following:

- Recognize and define needs
- Diagnose problems and set objectives
- Acquire relevant resources
- Create solutions
- Adapt and install solutions
- Determine if the consultant is satisfying the needs

4) **The Change Agent as Resource Linker:**

An extremely important function of the consultant as change agent is that of linker—bringing the client into contact with resources, both human and material, inside and outside the client system.
Figure 1 displays the four change agent roles that should be an integral part of the consultant's repertoire of skills and knowledge.

In carrying out "helping" relationships with clients, consultants as change agents will find themselves operating along a continuum of interactive roles. Figure 2 illustrates major helping relationships ranging from primarily directive to primarily nondirective depending on the situation and the client's need. Consultants may choose any degree of consultation that is appropriate. Each position in Figure 2 is suitable under certain circumstances, once again, depending on the expressed needs of the client.

The Role of the Broker in Technical Assistance

While technical assistance may be directly arranged for by the client, often, a third party is involved—the broker. A broker is a person or group who is responsible for locating, contracting for services and managing the financial considerations of employing a consultant. The broker may be a part of the client organization such as an executive director, a board of directors or a steering committee. The broker may also be outside the client organization, such as state-level regional consulting groups, technical assistance agencies and technical assistance resource centers.

One example of the broker role is the Technical Assistance Development System (TADS), which has provided support services to model demonstration projects and state education agencies grantees of the Handicapped Children's Early Education Program (HCEEP) for over ten years. The program is administered by the Office of Special Education, OSERS, U.S.
FIGURE 1
The Consultant as Change Agent--
Four Primary Roles

The Consultant as Catalyst

Pressure To Change

Disturbance
(Identified Need)

Satisfaction/
Dissatisfaction

Application

Search

Decision To Act

Diagnosis

The Consultant as Process Helper

The Consultant as Solution Giver

The Consultant as Resource Linker

FIGURE 2

Multiple Consulting Approaches of the Change Agent

<table>
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<tr>
<th>DIRECTIVE CONSULTATION</th>
<th>Position 1</th>
<th>Position 2</th>
<th>Position 3</th>
<th>Position 4</th>
<th>Position 5</th>
<th>Position 6</th>
<th>Position 7</th>
<th>Position 8</th>
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<tr>
<td>ADVOCATE</td>
<td>EXPERT</td>
<td>TRAINER</td>
<td>ALTERNATIVE IDENTIFIER</td>
<td>COLLABORATOR</td>
<td>PROCESS SPECIALIST</td>
<td>FACT-FINDER</td>
<td>REFLECTOR</td>
<td></td>
</tr>
<tr>
<td>Persuades client as expert to provide advice to approach client</td>
<td>Persuades client as expert to provide advice to approach client</td>
<td>Develops training for client</td>
<td>Provides alternative problem solving experiences to client</td>
<td>Joins in client in solving problem</td>
<td>Assists client in problem solving processes</td>
<td>Serves to help client collect data</td>
<td>Serves as catalytic agent for client in solving the problem</td>
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<tr>
<th>NON-DIRECTIVE CONSULTATION</th>
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Department of Education. TADS acts as a broker for technical assistance on a variety of levels including face-to-face, mail and telephone interchange, client visits to consultants as well as offering TA through workshops and conferences. TADS expects more "electronic" TA in the future to reduce travel, per diem and other costs with the greater availability of computers and telecommunications equipment.

TADS has found the following broker characteristics to be central to success (Trohanis et al. 1981):

1) **Brokers are knowledgeable about procedures.** They understand the importance of identifying needs, negotiating written agreements, delivering services and reporting results.

2) **Brokers have internalized a valid TA philosophy.** They have the appropriate orientation to responsiveness and nondirectiveness, and understand the importance of timeliness in responding to client requests.

3) **Brokers have extensive knowledge regarding the clients' programs.**

4) **Brokers have the necessary skills to select appropriate consultants and utilize available resources.**

TADS has drawn on the work of Lippitt and Lippitt (1968) to identify the steps necessary for a broker to take in establishing a system for helping the client identify and solve problems (Trohanis et al. 1981). These steps include:
1) Make contact with clients.
2) Develop a contract and establish a helping relationship.
3) Identify problems.
4) Set goals and plan to achieve them.
5) Implement the plan and exchange impressions of its success or failure with the client.
6) Complete the contract.

Based on these, TADS employs a similar system in offering TA to clients. TADS views its role as a resource agency that provides comprehensive, continuous, nonevaluative support to early education projects through assistance in managing programs, clarifying methods and accomplishing goals and objectives (Trohanis et al. 1981).

Figure 3 displays the system employed by TADS in offering TA to clients. Figure 4 shows how TADS has utilized Lippitt and Lippitt's six steps.

The Role of the Funding Agency

Many of the TA systems now in existence are operating successfully with continuing support from a funding agency, often at the federal level. This usually results in a three-party relationship among the funding agency, the client system and the technical assistance organization. The objectives of the funding agency are usually based on law or regulations; the funding agency hopes to achieve their objectives through the work of the client system and the TA organization. Therefore, the consultant helps the client organization to perform activities that address the objectives of the funding agency. In education, these activities typically involve development of programs or staff, improvement of programs or services or dissemination of proven practices and programs.
FIGURE 3

TADS Technical Assistance Broker Model

### FIGURE 4
A Comparison of TADS Technical Assistance Approach and Lippitt and Lippitt’s Phases of Consultation

<table>
<thead>
<tr>
<th>TADS Technical Assistance Approach</th>
<th>Corresponding Lippitt and Lippitt Phase of Consultation</th>
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<tr>
<td><strong>Five Stages of the TADS TA Model</strong></td>
<td><strong>TADS Activities with Client</strong></td>
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<tr>
<td><strong>Program Planning</strong></td>
<td>1. Contact all clients first of each year for status check of program plans.</td>
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<td></td>
<td>2. Hold orientation workshop for all new clients each year.</td>
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<tr>
<td><strong>Needs Assessments</strong></td>
<td>3. Conduct comprehensive program review.</td>
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<td></td>
<td>4. Identify technical assistance needs and objectives.</td>
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<td></td>
<td>5. Develop plans and procedures to address technical assistance needs and objectives.</td>
</tr>
<tr>
<td><strong>Technical Assistance Agreement</strong></td>
<td>6. Review needs assessment requests and budget allocations.</td>
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<td></td>
<td>7. Negotiate a final &quot;Memorandum of Agreement&quot; with client.</td>
</tr>
<tr>
<td><strong>Technical Assistance Delivery</strong></td>
<td>8. Solicit information on project needs and other recommendations from consultant; or ask client what characteristics they would like in a consultant.</td>
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<tr>
<td></td>
<td>9. Select the consultant, confirm dates of work, and negotiate expenses and fees.</td>
</tr>
<tr>
<td></td>
<td>10. Prepare activities for client and consultant.</td>
</tr>
<tr>
<td></td>
<td>11. Await completion of consultation.</td>
</tr>
<tr>
<td></td>
<td>12. Receive consultant’s summary and recommendations for follow-up activities.</td>
</tr>
<tr>
<td></td>
<td>13. Negotiate additional consultation, if necessary</td>
</tr>
<tr>
<td><strong>Evaluation of Technical Assistance</strong></td>
<td>14. Ask for an evaluation of the consultation by both the client and consultant.</td>
</tr>
<tr>
<td></td>
<td>15. Send evaluation feedback to client and consultant.</td>
</tr>
<tr>
<td></td>
<td>16. Have client evaluate technical assistance results at the end of the contract year.</td>
</tr>
<tr>
<td></td>
<td>17. Send closure letter, for current year, to client.</td>
</tr>
</tbody>
</table>

Crandall and Williams (1980) describe the role of the funding agency:

The funding agency retains responsibility for selecting and monitoring clients, but it contracts with an outside agency to provide them with services that help achieve the objectives. The technical assistance agency may be a private profit or nonprofit organization, a university, a state education agency, or a regional educational service unit. Within many state and local education agencies, a separate unit within the agency rather than an outside agency provides technical assistance services. When supported by a grant or contract, these units are temporary systems; when part of a public agency, they most often function as ongoing sub-systems of those agencies. Several functions that the three parties in the technical assistance relationship serve are shown in Figure 5.

An Historical Perspective

Four underlying causes for the historical development of TA organizational structures within education have been proposed (Clifford and Trohanis 1980):

1) New legislation, court and administrative rulings have created a specialized climate for TA services. For example, Public Law 94-142 mandates compliance at state and local levels for numerous critical provisions, including the development of Individual Education Programs (IEPs) for handicapped students as well as for procedural safeguards and child evaluation. The result has been widespread need for assistance to respond to such an enormous and complex venture. A special nationwide network of 12 related TA projects, called the Regional Resource Center Program, was established to provide assistance to local...
FIGURE 5
Functions of the Three Parties

FUNDING AGENCY
- mandates mission and specifications
- selects contractor
- renegotiates workscope
- monitors
- receives deliverables
- evaluates impact
- designs program
- transmits information
- renegotiates workscope
- advises sponsor of needs

CLIENT SYSTEM
- requests services
- allows service delivery
- negotiates service plans
- responds to new needs
- interprets federal requirements
- assesses needs
- delivers services
- evaluates services

T.A. AGENCY
- reveals services
- receives TA
- negotiates workscope
- monitors
- receives deliverables
- evaluates impact
- designs program
- transmits information
- renegotiates workscope
- advises sponsor of needs
- requests information
- seeks input to design technical assistance
- gathers information on technical assistance contractor
- clarifies requirements
- negotiates workscope
- monitors
- assists projects
- awards grants on contracts
- reports progress
- designs program

capacity-building efforts. Funded by the U.S. Department of Education, the network serves to provide materials and training to key professionals for assistance in implementing PL 94-142.

2) There has been greater national recognition and acceptance among educators for the need for nontraditional and responsive staff development or in-service training. All professional educators, including administrators, teachers, psychologists, counselors and other specialists, continue to require the most up-to-date knowledge and skills training in their respective areas of expertise. As the educational knowledge base continues to expand, professionals see TA systems as effective and efficient means for assisting them in improving students' performance. An important aspect of recent TA efforts is the greater availability of more responsive and nontraditional means of capacity building, including the use of consultants over an extended period of time, the greater availability of specific mini-courses and correspondence courses and increased emphasis placed on internships and field visitations to learn new practices and skills. Additionally, the role of the "linking agent" to make expanding knowledge bases more easily available to the client has been given increased attention. This person often serves as a "sifter" or "selector" to exactly locate and transfer the specialized types of knowledge and skills needed by the client. Such a diverse selection of offerings allows educators to choose, from an array of TA options, the specific types of assistance they feel will be most operative. More/"traditional" methods of TA such as the limited, heavily
structured seminar, workshop or course is considered insufficient and undesirable by many educators today.

3) Increasingly, communities are responding to the cry for school reform and calling for more qualitative, cost effective and accountable educational services. Recent national reports criticizing our nation's schools, statewide student and teacher competency tests, the decline in staff productivity as well as students and parents demanding increased services from their schools have resulted in a greater need for TA services to handle the additional pressures and demands. TA systems are seen as a viable means for upgrading professional and student skills and knowledge as well as for maximizing the schools' outputs in times of dwindling resources.

4) The effect of the civil rights movement on minorities, women, the handicapped and the disadvantaged has led to a greater need for TA services. Changes in educational structures and living styles coupled with new challenges mean that educators must be prepared to effectively incorporate the innovations. TA systems are seen as the means for providing current and appropriate materials and knowledge in addition to helping clients cope and become sensitized to adjustments.

The preceding four causal factors underscore the increased emphasis being placed on TA systems in educational settings. Communities, parents, the courts, public officials and students have issued a resounding cry for more effective and cost efficient school programs. Technical assistance is seen as having the power necessary to effect change.
Gallagher (1980), in looking at the history of TA in America describes the critical relationship between a technology-advancing society and the need for better ways to communicate new ideas and skills:

Use of the term "American educational system" is inappropriate and confusing when we consider that there are more than 18,000 independently run school districts with more than two million elementary and secondary school teachers and more than fifty million children in the United States. The "system" is actually disconnected and nonsystematic. With its emphasis on local management and control and few provisions for accommodating outside influence, this educational system seems more appropriate for a simpler agricultural past than for the technologically dynamic society of the present and the immediate future.

How can we provide support systems that will allow maximum communication and the transference of new ideas and skills to diverse situations in the minimum amount of time? The few institutional or structural devices used for communication between school systems in the past have proven much too weak and slow moving for current circumstances. After all, public education today is extremely complex, unwieldy, and not easily changed or understood.

The idea of providing TA to communicate new ideas and skills cannot be considered innovative in and of itself. Agriculture and industry are two specific examples of professional fields that are deeply involved in organizational improvement and make widespread and extensive use of dissemination efforts (Rogers 1962, 1968; Argyris 1965; Thompson 1969).

Though caution is in order in comparing concepts in agriculture and industry to education, much can be learned from past efforts in these fields. Gallagher (1980) describes two types of technical assistance offered in educational settings at present: 1) ad hoc consultation and 2) new organizational designs. Serious problems were found to be associated with each as shown in the following discussion.
Ad Hoc Consultation

Ad hoc consultation has been one primary mechanism for delivering TA services—persons with well-defined areas of expertise moved from school to school, or from institution to institution, passing along limited situation-specific pieces of information. Generally, these persons were selected to deliver the service based on their close proximity to the client, for example, a professional from a nearby college might be asked to deliver services. Other times, the consultants were recommended by school staff. Such consultants were rarely involved in formal evaluations; satisfaction with the services delivered was usually minimal. There were, and continue to be, distinct disadvantages in employing ad hoc consultants. Gallagher suggests the reasons for these limitations are easily observable (1980):

1) **The experts' skills don't always match with what's needed.** The consultant usually has a well-developed, highly specialized set of skills that he or she is prepared to deliver, regardless of the needs of the clients being served.

2) **A limited time frame discourages serious or sustained consultation.** The mode of delivery is most often the one- or two-day workshop. There is inadequate time for orientation to the program and staff, for needs assessment or for follow-up activities.

3) **There is lack of time to develop mutual trust and respect.** Establishing trust and respect is crucial before any transfer of knowledge or skills can occur. Often, consultants who must
deliver a set agenda of services quickly are perceived as superior to local staff, causing resentment and disinclination to accept new ideas and skills.

**New Organizational Designs**

The second basic mechanism for delivery of TA services in the past as identified by Gallagher has been new organizational designs. Those involved in dissemination and diffusion efforts have long recognized the need for a new type of delivery system which would result in the accomplishment of, at least, minimum goals.

An attempt was made to establish complex dissemination systems such as the Educational Resource Information Center (ERIC) and Medical Literature Analysis Retrieval System (MEDLARS). Yet some researchers, including Gideonse (1969), feel that such dissemination efforts have been less than effective in producing visible educational change. Other efforts on a federal level aimed at increasing communication via elaborate diffusion systems within education included the following (Gallagher 1980):

- Instructional Materials Centers for the Handicapped (Moss 1968)
- Regional Media Centers for the Deaf (Gough 1968; Soeffing 1974)
- Regional Resource Centers
- Leadership Training Institutes
- Regional Demonstration Centers
- Regional Educational Laboratories

Outside the field of education, regional medical programs and parent and child centers were some of the attempts made to increase communication via formal dissemination mechanisms.
As with ad hoc consultations, problems have also been associated with new organizational designs. Primarily, the criticisms have been directed toward the paucity of information reaching the client or consumer: "Most of these efforts seem to end up concentrated within the organization and not in the field with the clients" (Gallagher 1980).

Past attempts at creating educational diffusion systems have been made based on some discerned need; however, the need was often unrelated to what was already known to be successful in other fields such as agriculture and industry. Gallagher (1980) reviewed the studies of a number of researchers, including the following, and came to the conclusion that one key to successful dissemination programs lies in personal contact:

1) Hagerstrand (1953, 1967) proposed an innovative wave theory which was founded on the premise that changes in agricultural practices occur through a complex set of face-to-face social networks at local, regional, national and international levels.

2) Brickell (1961) studied educational processes in New York and suggested that change occurs through the personal demonstration of new ideas and not through traditional educational channels.

3) House, Kerins and Steele (1972) found a cadre of advocates to be the key ingredient in successful change efforts through a study of program adoption in Illinois.

4) Sarason et al. (1977) in studying patterns of dissemination related to resource networks, found that the success of dissemination is dependent on the network of associations within
the client group as well as the nature of the messages or diffusion mechanism.

The evidence is clear: personal contact with clients is more likely to result in increased and sustained change in clients.

Along with increased personal contact with clients, Gallagher (1980) suggests four additional elements will help overcome the problems associated with ad hoc consultation and organizational design TA systems: 1) needs assessment including the problem solving cycle, 2) use of a talent bank, 3) written agreements and 4) mutual trust and respect. Each of these is discussed in Part II: Implementing the Research: The Effective Delivery of Technical Assistance.
III. SUMMARY

A review of the research regarding effective technical assistance efforts clearly shows that current technical assistance systems and organizations are in a constant state of flux; we can expect major reconfigurations of technical assistance operations in the future based on evolving needs of clients, the greater sophistication of technical assistance services and strategies being offered and the expanding reliance on a growing body of empirical data resulting from effective technical assistance. The goal of any technical assistance effort, as has been demonstrated, is desired and planned for change, including solving the client's immediate or long-range problem, developing capacity within the client and assisting the client in becoming more skilled in using technical assistance systems in the future. However, change does not always mean improvement. Therefore, the critical question for consultants to ask themselves is how to initiate, implement and sustain change constructively.

In planning technical assistance systems, success requires efforts in three major categories: 1) comprehensive and sustained efforts to research or evaluate the impact of the technical assistance provided, 2) appropriate preparation of consultants to provide the technical assistance or support services and 3) a variety of technical assistance systems and technologies to serve diverse educational settings.
Technical assistance systems have been characterized as communication networks linking content and service delivery organizations such as R&D centers with client organizations. A basic set of assumptions regarding effective technical assistance systems in implementing and sustaining educational change has been identified in this part of our study. Also discussed in depth were definitions related to technical assistance and the role of the consultant in the successful delivery of technical assistance.

In addition, the roles of the broker and the funding agency were presented along with a discussion of historical perspectives of past technical assistance efforts including the development of ad hoc consultation and new organizational designs.

In Part I of this study, we have attempted to present a conceptual framework for looking at the process of technical assistance. In Part II, we offer a set of recommendations to help consultants move the research findings to the implementation level. It is hoped that both parts of this study, in combination, will assist those persons currently involved in delivering or receiving technical assistance to achieve success.
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