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### ABSTRACT

The primary function of the Title I Technical Assistance Center (TAC) was to facilitate the implementation of the Title I Evaluation and Reporting System (TIERS) in local school districts by providing technical assistance in evaluation to state education agency and local education agency personnel involved in Title I activities. However, unanticipated outcomes could and do occur as a result of TAC activities. The objectives of this paper are to (1) depict the range of unanticipated outcomes that are likely to occur or are known to have occurred among TAC client groups, and (2) trace the etiology of the outcomes viewed in four conceptual models and discuss their implications for future research. Data for the study came from field notes, contact logs and personal experiences generated from TAC site visits conducted in several western states during the past 6 years. (Author/PN)

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# TAC Serendipity: Random Thoughts on

### Unanticipated Outcomes

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#### Abstract

The primary function of the Title I Technical Assistance Center (TAC) was to facilitate the implementation of the Title I Evaluation and Reporting System (TIERS). However, unanticipated outcomes could and do occur as a result of TAC activities. The objectives of this paper are to (a) depict the range of unanticipated outcomes that are likely to occur or are known to have occurred among TAC client groups, and (b) trace the etiology of the outcomes and discuss their implications for future research. Data for the study came from field notes, contact logs and personal experiences generated from TAC site visits conducted in several western states during the past six years. TAC Serendipity: Random Thoughts on

Unanticipated Outcomes

#### INTRODUCTION

The primary function of the Title 1 Technical Assistance Centers (referred to as TAC hereafter) is to facilitate the implementation of the Title 1 Evaluation and Reporting System (TIERS) in local school districts by providing technical assistance in evaluation to SEA and LEA personnel involved in Title 1 activities (Stonehill and Anderson, 1982; Reisner, et al., 1982). TAC effectiveness is therefore measured by the extent to which a high-fidelity implementation of TIERS occurs in the school districts. The provision of technical assistance impinges, however, not only on the immediate TAC clientele but also on the evaluation community at large and the TAC staff themselves. Unanticipated outcomes could and do occur as a result of TAC activities. The objectives of this paper are to (a) depict the range of unanticipated outcomes that are likely to occur or are known to have occurred among TAC client groups, and (b) trace the etiology of the outcomes and discuss their implications for research and evaluation of an extensive federal technical assistance effort such as TAC. Data for the present study came from field notes, contact logs and personal experiences generated from TAC site visits conducted in several western states during the past six years. While these data tended to be anecdotal, patterns and trends of TAC outcomes--both anticipated and unanticipated--were clearly discernible in most cases. Intended outcomes of TAC services have been documented



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elsewhere (e.g., Millman, et al., 1979; Reisner, et al., 1982). This paper focuses on outcomes not originally identified as part of the TAC mission.

CLIENT DEPENDENCE

As one of the most extensive federal efforts to build evaluation expertise at the local level, TAC's primary mission is to enhance local capacity for evaluation and eventually to decrease local dependence on external resources. An unanticipated outcome in this regard is that in some districts the reverse seems to be taking place. These TAC clients attribute both problems and their solution to external sources--quite often to federal regulations or TAC itself. In some cases, the dependence is compounded by perceived third-party objectivity and trust (Schmuck, et al., 1972) attributed to TAC staff and by high turnover rates among SEA and LEA evaluation personnel. In other cases, state and local agencies have resorted to contracting external evaluators to perform the required evaluations.

Sound organizational development practices call for the training of internal trainers who can deliver various components of the program to new parts of the system (Miles, et al., 1978). The multiplier approach of using external consultants to train insiders who would in turn train others was included as part of the TAC overall strategies--even in the early years of TAC before "local capacity building" was made an explicit

objective obviously has not materialized. This certainly does not bode well for TAC clients should TAC be discontinued at some future time. As Miles et al. (1978) point out; programs which do not build internal capacity and/or which build up a dependency on external consultants are probably heading for trouble.

#### CHANGE AGENT ROLE

TAC staff often serve as a catalyst for improved communication among different client groups within a single client organization (e.g., between compensatory education program staff and evaluation staff). /They are called upon to play the role of process linker (Piele, 1975; Firestone and Corbett, 1981) among subgroups of clients within a client agency. Quite often, the only time when an inter-group dialogue occurs is when the groups are attending a TAC activity.

During the early days of TAC many a measurement expert was hired by TAC to explain the functioning of TIERS to clients. These experts quickly learned that the image and role of agent-of-change are often thrust upon them by the clientele. A new set of skills is called for and the measurement experts quickly become public relations specialists. Effective political skills assume increased importance in ensuring a good TAC-client working relationship. It becomes necessary to base staff assignment on a combination of political and technical expertise which would best serve the client's needs.

Like any change effort, TAC intervention could and do create



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potential conflicts of interest among various user groups within a client agency. For example, in some cases, TAC is perceived to be a surrogate control system the use of which could become an object of competition among different units or individuals within a client agency. In other cases, involvement with TAC might offer the incentive of broadening clients' professional horizon and exposure, including out-of-state trips to attend TAC related conferences. In yet other instances, TAC could pose a potential threat to clients' career longevity or advancement. However unfounded they may seem to TAC staff, such perceptions do exist where state or county level staff are hired to perform tasks which fall within the range of TAC services. These conflict phenomena are real and cannot be described away simply as symptoms of misunderstanding or poor interpersonal relationships. The conflicts, real or perceived, are not caused by blocks in communication or failures of interpersonal relations. Rather, they stem from problems of resource allocation, divergent values, and multiple goals. In such cases, TAC work must be seen as part of a dynamic political process, growing out of the interaction among different interest groups within a client organization and impinging on the decision-making process of the organization (Baldridge, 1972). In this perspective, TAC would primarily be interested in being responsive to its tasks of providing guidance and assistance to the SEAs and LEAs and only secondarily concerned with the self-fulfillment and actualization of individual SEA/LEA staff. This mode of operation contrasts sharply with that of an expert conflict resolver who must keep the staff satisfied by defusing the conflict.

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Organizational development theory accounts, at least in part, for successes and accomplishments of TAC in many areas. If TAC is seen as an outsider attempting to impose change on its client agencies, strong resistance manifests itself in many subtle and disguised ways (Insel and Moos, 1974). Such manifestations range from legitimate questioning of the technical adequacy of the TIERS and the evaluation models to a perfunctory implementation of an evaluation model to satisfy compliance requirements. Resistance to TAC work is less where school administrators, teachers, school board members and community leaders feel that the technical assistance agenda is their own, not devised and operated by an outsider. Where resistance exists, the degree of recalcitrance appears proportionate to the amount of political clout the state is likely to wield with respect to Congress, its dependence on federal funding to operate the school system, and cultural factors. Large states with strong political clout tend to be the slowest in adopting the TIERS. States which are least dependent on the federal government for educational funding tend to be least interested in TAC assistance. Partly because of cultural factors, most of the outlying territories are most eager to embrace the change in the evaluation process and to seek TAC services to help institute the change. In such cases, an unequal status relationship typically exists in which help flows from the superior (TAC) to the inferior (client), fostering deference and dependence on the part of the help recipient.

Like any programs dealing with educational change, TAC may seem inefficient and costly (Millman et al., 1979). However, such is typical



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of change efforts using human agents (Sieber, 1972). If one were to consider only cost and "impact" of such efforts one might well decide not to use human agents as a policy tool. The primary reason for using human agents is that the situations in which change is to occur are so complex that on-site assistance is necessary. Unless policy-makers understand the complexity of the school situation, the point of using human agents as a policy variable may well be lost (Firestone and Corbett, 1981).

TAC work embodies the concepts of organizational development from both the human relations and political systems perspectives. The values and goals of TAC work involve planned change, long range attempts at improving the quality of education of disadvantaged children as well as organizational performance or productivity with the assistance of external change agents. It calls for technical and political skills and an orientation to working with power relations in the setting (Miles, et al., 1978). The paragon of TAC staff would therefore possess skills in the following areas: design and planning, entry and intervention, needs sensing, group facilitation, problem-solving, resource utilization, power and influence, communications, conflict management and resolution, and evaluation skills (CEMREL, 1978).

## ACADEMICS VS. PRACTITIONERS

Many of the TAC staff are former academics. While TAC is primarily concerned with technical consulting rather than management consulting, there is considerable overlap between "how to" and "what for" questions (Stanfield, 1981). A schism TAC staff are required to bridge pertains to

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the growing separation between academe and practice. The range of skills and temperament required for each are different, ranging from precision and methodological sophistication in the case of research analyses to the more pragmatic, decision-oriented approach of technical assistance. In . some cases this may lead to a tension between the quest for scientific ' rigor and technical excellence on the one hand, and the desire to provide responsive, timely and effective help in reaching decisions on the other. The perspective of TAC staff is undoubtedly also influenced by current debates on whether the dominant realities of evaluation are political or technical. In the former point of view, evaluation is an intimate part of the political process and its success will be partly political (Pincus, 1980). In the latter viewpoint, methodological and communications improvements will lead to success (Boruch and Cordray, 1980). In describing the widening gulf between academe and the real world, Stanfield (1981) says: "The academic view of the subject is pure, exact, permitting sophisticated methodologies in simplified and abstracted settings. The real world is pragmatic, oriented towards useful results rather than theoretical purity, and constrained by time and cost". In this regard it is important to realize that TAC staff are primarily concerned with what is "doable" in the local disarict setting rather than what constitutes the ideal. Furthermore, TAC staff are primarily concerned with client well-being rather than the advancement of knowledge. They serve first as providers of assistance and secondarily as promoter of science and knowledge. Academics are understandably often scornful of the pragmatic and eclectic approaches employed in the real



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world. The client-centered approach of TAC staff is often at variance with the theoretical approach of the academic whose primary allegiance is to the advancement of knowledge through publication rather than to client well-being.

### EVALUATION USE

In attempting to promote evaluation use, TAC staff and client groups have embarked on various projects on secondary analysis (Burstein, 1978) and data base studies. These are often projects conducted independently of the main evaluation effort, i.e., the implementation of TIERS. As a result, there has been a proliferation of studies relating to evaluation use. These independent studies often represent an effective avenue through which evaluation use is taking place.

While promoting evaluation use is undoubtedly consistent with the overall TAC mission (Millman, et al., 1979; Alkin, et al., 1982), the extent of use of evaluation data among Title 1 projects is something of a pleasant surprise even to TAC staff themselves. In a recent national survey, Alkin et al. (1982) concluded that both the Title 1 Evaluation and Reporting System (TIERS) data and other types of Title 1 evaluation data were used at all decision levels by state education agencies (SEAs) and local education agencies (LEAs). In their report to the U.S. Department of Education, the researchers maintained that the Title 1 evaluation system did, indeed, have utility. They uncovered strong evidence that evaluation data were seen as an information source in the



daily life cycle of Title 1 projects. Evaluation data contributed in incremental ways to major program decisions. At the SEA level, evaluation data were used to monitor LEA compliance, to recognize both problem areas and exemplary programs and to influence administrative and curricular actions. LEAs typically used Title 1 evaluation data to change attitudes and opinions toward Title 1 projects, to recognize situations requiring attention and to contribute to decisions on administrative and curricular actions.

The researchers found that different kinds of evaluation data had relative utility at the various organizational levels. School boards, district advisory committees and external agencies relied on summative data, such as TIERS data, more extensively than other evaluation data. At the district administrative level, TIERS data were mixed about equally with other Title 1 evaluation data developed by the district. At the building level, principals, coordinators and the like relied slightly more on TIERS than on other data. At the classroom level, TIERS data were less often used. Instead, data more closely related to the instructional programs were preferred.

Alkin et al. (1982) suggested several recommendations for improving evaluation utility as Title 1 became Chapter 1 in the new law. They believed that Chapter 1 evaluation utility could be enhanced by continued technical assistance in reformatting "TIERS-like" results to meet LEA information needs. Also, SEA and LEA evaluation units should be encouraged to design a variety of local decision-focused evaluation strategies. In particular, locally designed evaluation procedures might



provide information on the impact and costs of various materials and processes within projects.

The researchers pointed out that many local and state agency personnel required guidance in developing procedures to follow when making decisions. It was not that administrators did not want to use relevant information. They typically did not know how to incorporate the information into their decision processes. Moreover, evaluators must become aware of the vital role their personal style played in evaluation utilizaton. Training procedures for evaluators might emphasize the evaluator's role and the importance of interpersonal skills.

# KNOWLEDGE BASE

In its six years of existence TAC has vastly increased the amount of literature on evaluation and related technical issues. Hundreds of journal articles and technical papers have been generated on the evaluation models, testing, quality control, data interpretation and evaluation-use, to name only a few topics. The work of the various inter-TAC committees covers an impressive array of technical issues. A vast amount of technical writing is presented in a variety of TAC related publications.

TAC Clearinghouse, for instance, contains formally published research documents, informal reports, in-service training packages, and audiovisuals. During the year ending September 30, 1981 the Clearinghouse provided over 3,000 documents to Title 1 personnel

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(Stonehill and Anderson, 1982). In addition, the Test Information Center provided specific information on the many tests being used across the country for Title 1 evaluations.

TAC staff have become an emergent, informal group with interacting leaders and day-to-day communication through informal media and a commuting circuit of meetings and collaborative projects -- all required idiosyncrasies of an invisible college (Paisley, 1972): A set of jargon has accordingly been developed, including such insular terms as TIERS, CHIERS, ECT-I, NCE AND OOL.

Armed with the extensive knowledge base, TAC staff have served as links between the invisible college and TAC clients. It is fully expected that the authoritativeness and prestige of the invisible college and the interpersonal effectiveness of the linkers will lead to rational change in the nation's schools.

### MATERIALS DEVELOPMENT

TAC materials development has undergone something of an evolution. In the early days of TAC operation it was not uncommon for TAC staff to be equipped with a 50-page script to be (and did get) read verbatim at a workshop. Materials were highly technical--loaded with formidable looking formulae and computional procedures. These materials were quickly discarded when they proved to be impractical and ineffectual. Hour-long lectures on NCEs were replaced by the more down-to-earth "NCEs are a new type of test scores somewhat like percentiles but with equal units." Uniformity began to give way to diversity and practicality. The

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length of workshops has also undergone a radical change. Early days of TAC witnessed six- to eight-hour long standardized lectures on TIERS and related topics. Diversity has called for much shorter discussions on more immediate concerns.

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The era of diversity was, however, somewhat short-lived. Standardized workshop packages have regained prominence as more emphasis is now placed on inter-TAC collaboration on materials development. Most major TIERS topics (e.g., functional level testing, needs assessment, implementation evaluation, sustained effects evaluation) have been packaged as standard workshops.

Non-TIERS TAC work has enjoyed more participant involvment in selecting topics and specifying objectives and is highly effective. Workshops on test interpretation and time-on-task, for instance, are particularly successful because they offer concrete teacher-specific training, focus on practical problems, and are attended by principals among other project staff (McLaughlin and Berman, 1977). The inservice A agenda is relevant to the participants who understand that the processes, skills and content they learned at the workshop can be used in the very near or immediate future (Orlich and Ezell, 1975).

## TAC ACCOMPLISHMENTS

All things considered, the fact that TAC has turned out to be a success is something of a surprise in and of itself. The probability that any given change effort, in or out of school, will be successful is

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said to be .5 or less. Failures are as likely as successes (Miles, et al., 1978). In this light, the finding of Millman et al. (1979) that TAC is working and working well must be regarded as a high commendation to TAC staff and those who sponsor and supervise their work.

Moreover, contrary to previous findings that moderate change efforts with less reliance on external consultants are more readily institutionalized than large-scale programs, many aspects of TAC work (e.g., TIERS implementation) appear to have been incorporated in the administrative structure of the client agency. Evidence of this acceptance and incorporation is seen in the recent efforts of the state Chapter 1 coordinators to continue the use of TIERS when new federal guidelines do not specifically require the use of the system.

Although local capacity remains a goal to be realized, a good start in the right direction has already been made in many SEAs. Perhaps as a consequence of witnessing the successes which TAC has had in working with the LEAs, many state agencies have begun to think in terms of providing technical assistance to LEAs in such areas as program operation and improvement rather than in terms of compliance monitoring. This renewed emphasis on the service function, as opposed to the regulatory function, of the agency augurs well for the improvement of educational programs not only for the disadvantaged but also for the general student population. As Berman and McLaughlin (1978) point out, the ability of the state to nurture local district development will be a key to long-term prospects for educational improvement. Despite significant weaknesses among SEAs, they, rather than federal agencies, have the potential to supply support and assistance to the change process, implementation and capacity building in the local districts.

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### ETIOLOGY

Both anticipated and unanticipated outcomes of TAC work may be viewed from models of helping conceptualized by Brickman et al. (1982). The conceptualization consists of four models: moral, compensatory, medical and enlightenment. In the moral model, people are attributed responsibility for both creating and solving their problems. In the compensatory model, people are not blamed for their problems but are held responsible for solving the problems. The medical model holds people responsible for neither their problems nor the solutions. The enlightenment model puts the blame on people for causing their problems but does not hold them responsible for solving the problems. The four models are depicted as follows:

People responsible for problem?

No

Yes

People responsible Yes for solution?

No

Moral	Compensatory
Enlightenment	Medical



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Events leading to the establishment of TAC and its functions suggest that the medical model most closely embodies its rationale and assumptions. TAC clients -- SEA and LEA personnel -- are not seen as responsible for the state of affairs (e.g., non-comparable and non-aggregatable evaluation results) which led to the development of TIERS and the establishment of TAC. Nor was it believed that they should be held responsible for the solution. TAC clients see themselves and are seen by others as blameless and are expected to need expert help. The help givers believed necessary to bring about a better state of affairs are experts who have been trained to recognize what the problem is and to provide what service or treatment is available. Even when the solution is largely one that TAC clients can or must carry out themselves, the responsibility for prescribing the solution and for judging whether it has been successful rests with the outside expert (Brickman et al., 1982).

The advantage of the medical model from the client's standpoint is that it allows people"to claim and accept help without being blamed for their problems. In the context of TAC, SEAs and LEAs are not responsible for the problem and cannot be expected to take care of it by themselves. Indeed, many do not see the problem (e.g., non-aggregatable evaluation results) as their problem as much as a problem of the federal education agency. The disadvantage of the medical model is that it fosters dependency (Brickman et al., 1982). Thus, the more SEAs and LEAs see the problem as having originated at the federal level the more they feel comfortable depending on TAC for its solution. The risk is of course

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that once they are made to feel dependent on others, they may lose the desire or ability to do even things that they once did well. They may even "learn" to accept inadequate or coercive intervention since they see no way of (and no reason for) solving the problem themselves.

Attributing responsibility for solutions to an extental agent usually lead to temporary, rather than permanent, improvement (Brickman et al, 1982). The improvement is maintained only so long as the external.agent is salient (Kelman, 1958). Improved behavior is more likely to persist when people see it as intrinsically determined rather than determined by external forces (deCharms, 1968; Lepper and Greene, 1978). According to Brickman et al., 1982, the dilemma of helping may be resolved by using the compensatory model which justifies the act of helping (since recipients are not responsible for the problem) and yet provides help recipients with an active sense of control (since they are held responsible for using the help to find solutions).

Undoubtedly, not all SEAs and LEAs see their interaction with TAC as an exemplification of the moral model. Many can and do function according to the compensatory model. What would be of most interest would be the identification of factors which determine the choice or emergence of a particular model in different states and the effects of each model in given situations. Specifically, the pertinent research questions include:

What models appear to exist in the different TAC client states?
 Given the TAC objectives, which model is best for TAC staff?
 Given the TAC objectives, which model is best for TAC clients?

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- 4. Is one model uniformly better than the others?
- 5. Should different models be used as TAC work progresses?
- 6. Do the federal agency, TAC and client states view the overall TAC effort with the same model?

### CONCLUDING REMARKS

The unanticipated outcomes have obvious implications on TAC including its overall mission, staff selection and internal TAC functions such as materials development. They also point to larger issues which need to be addressed by the educational research and evaluation community. Among other things, these outcomes suggest the following questions for future research: Given comparable circumstances, what would be more cost-effective: a third-party evaluation or an evaluation performed by an internal staff? What would be the relationships, if any, between per-pupil evaluation cost and data quality and usefulness? What has been the impact of TIERS generated information and knowledge on educational evaluation in general? Within the TAC context, what is the relative cost-effectiveness of standardized packages versus materials tailor-made to meet needs of individual client agencies?



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#### REFERENCES

Alkin, M. C., Stecher, B. M., and Geiger, F. L. Title 1 evaluation;

- Utility and factors influencing use. Washington, D.C.: U.S. Department of Education, 1982.
- Baldridge, J. V. organizational change: The human relations perspective versus the political systems perspective. <u>Educational Researcher</u>, 1972, 1(2), 4-15.
- Berman, P., and McLaughlin, M. W. <u>Pederal programs supporting</u> <u>educational change, Vol. VIII: Implementing and sustaining</u> <u>innovations</u>. Santa Monica, California: Rand Corporation, 1978.
- Boruch, R. F., and Cordray, D.S. <u>An appraisal of educational program</u> evaluations: Federal; state and local agencies. Evanston, Illinois, Northwestern University, 1980.
- Brickman, P., Rabinowitz, V. C., Karuza, J., Coates, D., Cohn, E., and Kidder, L. Models of helping and coping. <u>American Psychologist</u>, 1982, 37(4), 368-384.
- Burstein, L. Secondary analysis: An important resource for educational research and evaluation. <u>Educational Researcher</u>, 1978, 7(5), 9-12.
  Central Midwestern Regional Educational Laboratory. <u>The Illinois Office</u> <u>of Education consulting/linkage skills awareness workshop: Context,</u> <u>activities, and implications for future training.</u> St. Louis,

Missouri, 1978.

deCharms, R. Enhancing motivation: Change in the classroom. New York: Irvington, 1976.

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Firestone, W. A., and Corbett, H. D. Schools versus linking agents as contributors to the change process. <u>Educational Evaluation and</u> <u>Policy Analysis</u>, 1981, 3(2), 5-17.

Insel, P. M., and Moos, R.H. Psychological environment: Expanding the scope of human ecology. <u>American Psychologist</u>, 1974, 29(3), 179-88.
Kelman, H. C. Compliance, identificaton, and internalization: Three processes of opinion change. <u>Journal of Conflict Resolution</u>, 1958, 2, 51-60.

Lepper, M. R., and Greene, D. The hidden costs of reward. Hillsdale, N. J.: Erlbaum, 1978.

Mclaughlin, M. W., and Berman, P. The art of retooling educational staff development in a period of retrenchment. Santa Monica, CA: The Rand Corporation, 1977.

Miles, M. B., Fullan, M., and Taylor, G. <u>OD in schools: The state of</u> <u>the art Vol. V: Implications for policy, research and practice</u>. National Institute of Education, Washington, D.C.: 1978.

Millman, J., Paisley, W., Rogers, W. T., Sanders, J. R., and Womer, F.

B. <u>Performance review of USOE's ESEA Title'l evaluation technical</u> <u>assistance program</u>. Washington, D.C.: Department of Health, Education, and Welfare, April, 1979.

Orlich, D. C. In-service education: Reflection for action. Paper prepared for the Northwest Regional Educational Laboratory, Portland, OR: undated.



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Paisley, W. The role of invisible colleges in scientific information transfer. <u>Educational Researcher</u>, 1972, 1(4), 5-19.

- Piele, P. Review and analysis of the role, activities, and training of educational linking agents. Eugene, Oregon: University of oregon, ERIC Clearinghouse on Educational Management, 1975.
- Pincus, J. (Ed.). Educational evaluation in the public policy setting. Santa Monica, California: The Rand Corporation, 1980.

Reisner, E. R., Alkin, M. C., Boruch, R. F., Linn, R. L., and Millman, J. Assessment of the Title 1 evaluation and reporting system.

Washington, D.C.: U.S. Department of Education, April, 1982.
Schmuck, R.A., Runkel, P. J., Saturen, S. L., Martell, R. T., and Derr,
C. B. <u>Handbook of organizational development in schools</u>. Eugene,
Oregon: Center for the Advanced Study of Educational Administration,
1972.

Sieber, S. D. Images of the practitioner and strategies of educational change. <u>Sociology of Education</u>, 1972, 45(4), 362-385.

Stanfield, J. <u>Management review of evaluation practice</u>. Northwest Regional Educational Laboratory, Portland, Oregon: 1982. Stonehill, R. M. and Anderson, J. I. <u>An evaluation of ESEA Title</u>

<u>1--program operations and educational effects</u>. Washington, D.C., -U.S. Department of Education, 1982.

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