School psychologists who work in rural areas face difficult problems because of the setting in which they practice. Traditional models for delivering psychological services in urban and suburban schools are not typically generalizable to rural service delivery. Rural school districts tend to be closed and rigid, reflecting the nature of the community structure. School management may rely heavily on tradition and attempts to promote innovations are often met with opposition. Monetary constraints are faced by nearly all rural schools. These conditions make the implementation of special education services in rural settings difficult. Rural areas present difficulty in recruiting and retaining qualified special education staff, community resistance to change and suspicion of outside interference, and geographical problems. The practice of rural school psychology faces similar problems. The rural school psychologist must be a program planner and evaluator, taking a multilevel, multidimensional perspective. The rural practitioner must engage in needs assessment, program planning and development, implementation, and outcome evaluations. Despite potential problems and implications for training, rural school psychologists, in order to be effective, must adopt innovative methods of practice.

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Evaluation of Special Education in Rural Settings

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Rurality and Rural Life

Rurality can be defined in a number of ways, such as by population structure, sociodemographic characteristics, population distribution, and similar variables (Flax, Wagenfeld, Ivens, & Weiss, 1979). In reality, "typical" rural environments do not exist. Rural subcultures are as diverse as urban subcultures. Nevertheless, at a global level, there are some differences between rural, suburban, and urban areas. For the purposes of discussion, the definition of rurality proposed by the National Rural Research and Preparation Project (NRP) will be used (Helge, 1981). In this definition, a region is classified as rural if its inhabitants number less than 150 per square mile or if 60% or more of the population live in communities with no more than 5,000 persons.

Hamblin (1981) notes that at the outset, about 95% of all families in this country were found in rural areas. However, with increased industrialization a major outmigration to urban areas has occurred over the years where better jobs and services could be found. Thus, a disproportionate loss of the youngest and best-educated members of rural societies has resulted in fewer employment-aged adults, more children, and more older people, resulting in higher than average rate of poverty (Heller,
Typical poverty groups include the working poor, families with young children; families with older and/or disabled persons as heads of the household; disabled and/or older individuals who live alone; as well as racial and cultural minorities and farmworkers (Baumheier, Derr, & Cage, 1973).

Hassinger (1976) studied personality characteristics of rural people in relation to urban dwellers and found them more likely to be conservative, religious, puritanical, work oriented, ascetic, ethnocentric, isolationist, intolerant of heterodox ideas, uninformed, authoritarian, and family centered. Additionally, the style of life in rural areas is often quite different from urban lifestyles. Due to the reduced size of rural communities, social units are smaller and more manageable, people experience greater personal involvement in ongoing events, and the individual tends to have access to more segments of the community (Heyman, Note 1). Quite often, rural people have extended families (and sometimes common relatives) who influence their behavior considerably, as do the primary social institutions which tend to dominate rural life: the church, the family, the court system and the schools (Coles, 1969; Looff, 1971).

Rural Schools and Special Education

Clearly, rural school districts are not homogeneous entities either (Sher, 1977). However, some variables do
appear to describe many rural districts. Hamblin (1981) notes that they tend to be closed and rigid, reflecting the nature of the community's structure. Nepotism and professional isolation often obfuscate growth and development within the school system. School management, rather than exploring creative alternatives for problem resolution, may rely heavily on traditional responses. In addition, rural residents are frequently suspicious of outside influences; and attempts to promote innovations are often met with opposition. Finally, monetary constraints are a problem faced by nearly all rural schools (Heller, 1975). Low population density and higher than average poverty levels combine to lower tax bases for financing educational programs, while at the same time per child costs may be higher in rural areas.

Therefore the implementation of special education services can be more difficult in rural settings. Helgesen (1981) identified a number of problems in implementing P.L. 94-142 (The Education for All Handicapped Children Act of 1975) in these areas. The three most frequently reported obstacles were: difficulty in recruiting and retaining qualified special education staff, attitudinal variables (e.g., resistance to change and suspicion of outside interference), and geographical problems (e.g., distances between schools, poor road conditions, mountainous areas). In fact, all of the major aspects of P.L. 94-142
(e.g., least restrictive environment provisions, due process procedures, individualized education plans, and parental involvement) were identified as problems by survey respondents.

**Rural School Psychological Practice**

The practice of rural school psychology is likewise problematic. Traditionally, persons in rural areas have adopted modes of functioning that have been generalized from urban and suburban practices. In a suburban school district where there may be a school psychologist for every 2000 pupils and a host of other specialists available (e.g., learning disabilities consultants, social workers, diagnosticians), the psychologist can accept (and keep up with) referrals made to an interdisciplinary team which assesses, plans interventions for, and annually reviews the progress of children with special educational needs. Often the psychologist can also become involved with other forms of program development and consultation (e.g., screening program development, consultation with administrators).

In contrast, the rural school psychologist may serve upwards of ten school buildings housing considerably more schoolchildren and geographically dispersed over a wide region. Special education programs may be underdeveloped or non-existent, and resources for developing these limited. Under such circumstances, adopting the traditional mode of accepting referrals, assessing children, participating in classi-
fication decisions, and developing individual education plans (IEP) can be both frustrating and counterproductive.

While there is clearly no one service delivery model that fits all rural (or any other) situations, a fundamental assumption in this paper is that one appropriate function for the school psychologist in rural areas is that of program planner and evaluator. The viability (and perhaps necessity) of this activity is tied to the presumption that across all levels of the organization, special education service delivery systems (programs) are likely to be underdeveloped or non-functional in rural schools. It follows, then, that the school psychologist, in order to develop effective and efficient programs for exceptional children must take a multilevel, multidimensional perspective.

Special education programs exist at the individual level (e.g. the IEP), group level (e.g. resource room), and organizational level (e.g. the department of special education). Further, clients of the special education effort include not only handicapped (and potentially handicapped) children, but also parents, regular teachers, special education staff members, administrators, and other groups. There are therefore many kinds of special education programs, each designed to meet the needs of particular clients at specific levels. For example, a screening program attempts to identify children who are educationally
handicapped to provide the services they require. A special class for the learning disabled serves a group of children with similar needs and problems. Personnel development activities seek to enhance the ability of regular and special education teachers to work with exceptional children. A parent training program for behaviorally disordered children across the district intends to foster the maintenance and generalization of behavior management techniques and strategies being used with this population. And, the administrator of the special education program tries to coordinate the various special educational services to insure their effectiveness and efficiency in meeting both child and organizational needs.

To the degree that the rural school psychologist can, in an integrated manner, impact upon these levels and dimensions, a more effective special education program will result, and children will be better served. The emerging area of program planning and evaluation encompasses a broad array of methods and strategies which can facilitate this endeavor, and increase the relevancy of rural school psychological practice. A more detailed description of some of these methods follows.

Program Planning and Evaluation as Practice

The impetus for the recent development of program planning and evaluation into a distinct specialty can be traced to a number of factors. Flaherty and Morell (1978)
note four main trends, including greater requirements for accountability in publicly funded programs, increasing interest by researchers in social relevance, scarcity of resources, and refinements in the methodologies available for use in applied settings. At this stage, the field has developed to the point of being distinguishable from other endeavors, such as traditional and evaluation research.

While it draws heavily from the technologies available in these areas, program planning and evaluation has a different focus. First, it seeks to inform a different audience. Summative judgments about programs and innovations become less important, as information about a program's progress toward its goals to the program's manager, its participants, and to other relevant audiences is increasingly stressed. Also, the lack of experimental control in many applied settings gives rise to the use of a broader set of techniques and strategies, oftentimes applied in less than fully rigorous ways. Out of necessity, then, the "rules of evidence" in program planning and evaluation are different from those in other kinds of research. While these methods can be conceptualized and categorized in a variety of ways, for the purposes of this paper four general domains will be discussed in relation to rural practice: needs assessment strategies, planning and development strategies, implementation evaluation strategies, and outcome evaluation strategies.
Needs assessment strategies

Needs assessment is a process for determining the discrepancy between the current state of affairs and some desired state (Pharis, 1976; Stewart, 1979). Organizations, as service delivery systems, must be responsive to the changing needs and problems of their clients if they are to survive. Needs assessment can be seen as a self-monitoring and environmental-monitoring process in which already available information is compiled, new information is developed, and all of this is synthesized and made available to decision makers (e.g. program planners and implementers).

Siegel, Attkisson & Carson (1978) describe three general kinds of needs assessment approaches: indicator analysis, surveys, and group strategies. Indicator approaches utilize already available data which are routinely collected by the organization to make inferences about the degree of need. Schools accumulate vast amounts of data, but tend to utilize very little in decision-making about programs and practices. The needs assessor, in planning the special education effort at various levels (individual, group, organizational) might examine pupil achievement data, teacher behavior ratings, IEP data, disciplinary referrals, service delivery information, data collected for the district's Annual Plan for Special Education, Child Find data, regional epidemiological estimates, and innumerable other sources.
Survey approaches seek to develop information which is not already being collected. Methods vary, and include the use of questionnaires, interviews, and telephone and mail surveys. With regard to special education, there are a variety of audiences or groups which can be surveyed to ascertain their current perception of needs in particular domains (e.g. teachers, parents, children).

Group approaches utilize human interactional processes to clarify the parameters of outstanding needs. Examples of this approach include the community forum, nominal group technique (Delbecq & Vande Ven, 1971), Delphi technique (Dalkey & Helmer, 1963), and the key informant interview (Tremblay, 1957).

Of all the potential program planning and evaluation activities which the rural practitioner might engage in, needs assessment may be the most appropriate and useful. Resources are limited and must be utilized as effectively and efficiently as possible in programming, which requires explicit knowledge about the needs of those involved with the special education effort. Further, needs assessment data increases the evaluability (Wholey, 1977) of special education programs, which may increase their responsiveness. Finally, needs assessment data may be useful as a basis for obtaining additional funding from local, regional, state, and national sources.
Planning and development strategies

Generally program planning and development refers to the process by which the need for the program is agreed upon, the specific goals and activities for the program are delineated, the program itself is assembled (packaged) and readied, and plans for program implementation and evaluation are determined. It is assumed that to the degree that these steps are carried out systematically, the risk of program failure due to being inadequately operationalized, inappropriately implemented, or unevaluable is reduced.

There are a wide variety of planning and development approaches available. For example, the development of goals for a specific program, especially when these are stated in observable or measurable terms (e.g. behavioral objectives), can help to focus the activities (e.g. methods, materials) of the program and increase its evaluability. Wholey (1977) has proposed a method called "evaluability assessment", in which the evaluator determines the degree to which the program's goals and activities have been specified (and operationalized) before proceeding with further evaluation. Maher (1980), in discussing an evaluation system for prevention programs, stresses the need to assess such factors as the specification of clients, goals, goal indicators, program components, validity assumptions, and evaluation design in determining a program's evaluability.
One strategy, which has been derived specifically to enhance program evaluation, is goal attainment scaling (Kiresuk & Lund, 1978), in which current levels of functioning are stated operationally and a range of potential outcomes (changes) are predicted. This approach yields data about programs that can be quantified and aggregated in many ways. Another group of planning and development techniques relate to the specification, prior to implementation, of the program's process, which facilitates monitoring and coordination. The Program Evaluation Review Technique (PERT) is an example of this.

In rural areas, it is not uncommon for programs to be inadequately planned and specified. This tends to lead to program redundancy, wasted resources, and a lack of information useful for programmatic decision-making. By helping program managers (e.g., IEP team, special education coordinator, administrators) engage in program planning and development more systematically, these problems can be reduced.

**Implementation evaluation strategies**

Implementation evaluation involves ensuring that all of the program activities occur as planned. Monitoring of the methods, materials, personnel, and context of the program is paramount, with performance feedback given as necessary. A program's effects cannot be measured if its full implementation in undetermined (Charters & Jones, 1973).
Hall & Lucks (1977) propose a developmental model for assessing the degree to which treatments (programs) are implemented. Their Levels of Use of the Innovation Scale postulates a range of possible implementation states including non-use, orientation, preparation, mechanical use, routine, and refinement states. The authors have operationalized each stage and developed methods for determining the status of a particular program in relation to these. Similarly, Charters and Jones (1973) have described four aspects relevant to assessing program implementation from an organizational perspective. An extensive review of the implementation evaluation literature can be found in Fullan and Popham's (1977) seminal article.

The methods available for this type of evaluation are diverse, and include naturalistic observation, reviewing work samples, and permanent products, periodic reviews using logs or other materials, and systematic supervision. Effective use of implementation evaluation is especially critical in rural special education to prevent wasteful expenditure of resources. As discussed previously, personnel implementing programs in rural areas are often times not as well-trained, or may be functioning outside of their area of expertise. Also, there are particular problems which occur when implementing programs in rural schools. Thus, the school psychologist who understands the problems and prospects inherent in rural special education,
and who can utilize a systematic approach to dealing with these, can perform an invaluable service.

Outcome evaluation strategies

Here, the evaluator is assessing a program's goal attainment. Such information serves decision-making about program continuation or program modification. That is, a judgment about the value of the program is made.

There are various sources of data for such decisions, and multiple methods available for collecting, analyzing, and disseminating this data. Typically, direct measures of performance (e.g. pre-post achievement data compared to controls, observational data on behavior changes using single-subject methodology) are desirable. However, program evaluators also seek information from multiple perspectives, and might generate consumer satisfaction (Larsen, Attkisson, Hargreaves, & Nguyen, 1979), social indicator (Sheldon & Parks, 1975), and related data to assess the social validity (Kazdin, 1977) of the program.

Obviously, when change can be demonstrated, decision-makers should take notice, whether the setting be rural or otherwise. However, in rural areas, particular attention needs to be paid to not only the experimental validity of the program, but also to its perceived and real utility. Program managers particularly need to know whether clients and others see the program as useful, and the rural school psychologist familiar with valid methods for assessing.
Implications

While it may be clear that there is justification in linking program evaluation and rural school psychology, there are problems associated with the implementation of the role. Organizational readiness for and acceptance of the activity needs to be thoroughly considered prior to attempting any specific evaluation service. There may be factors inherent in the organization which preclude these activities, or diminish their likelihood for success (e.g. social, historical, and political factors and events; perceived value of special services; generalized resistance to change). Also, the school psychologist may not have attained sufficient entry and credibility to carry out the necessary activities.

A related possibility is that of inducing role conflict by proposing such a model. Rural schools are often run autocratically in a "management by tradition" style, and care must be taken to stress the consultative aspect of the proposed role so as not to threaten primary decision-makers. Explicit sanctions should always be obtained.

Resources for evaluation services will typically be limited, requiring creativity and perseverance on the part of the prospective evaluator. Moreover, utilization of proffered services, as well as of information generated,
is an issue of concern. The manner in which available services are advertised, and the conduct and dissemination of initial evaluation activities, may determine the level of use of the innovation.

Finally, advocating a broader role for rural school psychologists has implications for their training. Practitioners who work in rural settings must have skill in assessing the demand characteristics of their work setting (i.e., be able to take a school-community perspective). They must also be trained to engage in the broad array of program planning and evaluation functions. Thus, training programs must consider the settings in which graduates will work and the skills they will need to function effectively when deciding about training content and focus.

Despite these potential problems, it seems clear that rural school psychologists, in order to be effective, must adopt innovative methods of practice. Program planning and evaluation skills may serve as useful tools for these practitioners.
Reference note

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