



Illustration from **Man With Many Kamiks**

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# Delivery of Services to Rural Quebec Schools

## Abstract

**This study investigated the resource teacher model which provides support to classroom teachers having children with special learning needs in rural schools. Correlations were analysed in relation to their impact on the total amount of services provided by resource teachers. Results indicated that access (availability) factors, such as distance and staff ratio, and disposition (acceptability) factors, such as personality and competence, have a major impact on rural service delivery. While rural systems face a number of constraints, the model holds promise for improved service in rural areas.**

**During** the past decade or so educators have been subjected to an ever increasing demand for improved services to children with learning difficulties during a period of diminishing school populations and financial restraint. While rural school systems have traditionally left mildly handicapped learners in regular classes, the progressive demands to expand these services and to serve the more severely handicapped necessitate improved responses to these needs. The onus for providing better services to children with learning difficulties will remain primarily on the regular classroom teacher in rural areas. What is needed, therefore, is an appropriate system of support to the regular classroom teacher in order to facilitate the best possible learning environment for the child and to optimally utilize the available resources. The resource teacher model, in theory, is able to provide this much needed support link in rural service delivery systems. A variety of resource teacher models are already being

utilized in many rural school districts. This study describes some of these models and examines factors which influence their effectiveness in the delivery of services.

As a first step, the problem of a useful definition of rural is discussed, followed by a review of some of the more salient rural service delivery problems. Then the resource teacher model and some of its applications in rural areas are described.

The theoretical framework provided by the Hurder model was used as a conceptual base from which to examine elements which influence the amount of services provided by a service producer (resource teacher) to a client or service consumer (classroom teacher). Elements which relate to the deliverability of services are access, or availability of the service, disposition, or acceptability of the service, and organization, which is seen as an entity which encompasses and impinges upon both access and dispositional factors. This conceptual base was used to examine the effectiveness of resource teacher service delivery in school districts in rural Quebec. The results of the study are then discussed as well as implications for the use of resource teacher services.

### **Definition of rural applied to education**

Although total population size and density are the descriptors most often associated with the rural context, the term itself encompasses a broad range of physical, cultural, and economic factors. The prevailing economic bases and cultural characteristics, superimposed on the physical features, result in a composition of rural areas as diverse as farming communities, isolated fishing villages, native reserves, nucleated modern mining communities and ghost towns.

The consolidation of school districts into increasingly larger units, and the increasing size of rural comprehensive secondary schools has obscured the notion of the "rural" school.

In the present study the term rural has been used to apply to small (under 250 students) elementary schools operated by school districts providing services to the English speaking minority in the Province of Quebec. The school districts concerned have fewer than 3000 elementary students each and are from a few miles to several hundred miles removed from the major population centre of Montreal.

### **Rural special education delivery problems**

Research has only recently focussed on the necessity for unique strategies for rural education delivery services to be individually designed and applied (Helge, 1981; 1984, pp. 296-7). This search for improved rural service delivery models is in response to an increasing awareness of the needs of exceptional children and the mainstreaming movement. While urban school districts have a broad range of instructional and related professional support services at their disposal, most rural school districts have fewer resources, the costs of providing even minimum services for exceptional children is higher and, in general, the problem is much more complex.

A number of studies in Canada and the United States during the 1970s and early 1980s have identified rural service delivery problems (Chalfant, Van Dusen Pysh, and Moultrie, 1977; Ondell, 1977; O'Reilly, Bedard, Cote, Dow, Dostaler, and McBurney, 1979; Helge, 1981, 1984; Sanche, 1982). These studies cover a wide range of rural districts and focus on organizational problems, yet they concur on a number of specific problem areas. Helge (1984), in a telephone survey, gathered data from 200 rural school systems and, among other findings, identified several major problems in serving rural handicapped students. More than 50% of the respondents indicated that funding inadequacies, difficulties in recruiting and retaining qualified staff, transportation inadequacies, providing services to low incidence handicapped populations, and the need for staff development were major problems. A lengthy list of other problems are identified (p.301), however these five are listed because of the common agreement among the several studies mentioned above.

This study examines the utility of a resource teacher model in addressing many of these major service delivery problems, and others listed by Helge (1984) and other researchers. More specifically, problems related to personnel, in-service training and staff development, among others, are directly addressed by the resource teacher model under discussion.

### **Resource teacher role and competencies**

Several models of resource teacher service delivery exist, and although the names attached to the various models differ slightly, many similarities can be seen. The concept is not a new one (Dunn, 1968), and the remedial teacher of the sixties performed some of the functions of the resource teacher model being studied. The present importance of the resource teacher concept developed after the negative consequences of segregated special classes became apparent (Weiderholt, Hammill, and Brown, 1978).

The resource teacher is a broadly-based, trained specialist with cross-categorical knowledge and competencies (Harris, 1975; Doninck, 1983) who deals directly with teachers in a consulting capacity and who may offer direct services to children, parents and others as well. Although some models may define consulting teacher and resource teacher differently, as used here the terms are interchangeable. The resource teacher may be attached to a separate resource room offering categorical, cross-categorical, or non-categorical services to a specific group of children for a given period of time, or the resource teacher may provide a specific skill resource program in core subjects (McLeod et al., 1979, pp.28-9; Doninck, 1983, p.5); the resource teacher may take referred children for as little as a few periods a week for an indefinite period of time or may deal directly with the child in the regular classroom.

In all cases, the resource teacher offers some form of direct services to the child in the form of diagnosis, assessment, and instruction; consultation services to classroom teachers and others; and acts as a facilitator in bringing together all available resources in dealing with the child's learning problem. Consultation with teachers provides an opportunity for the regular class teacher to receive updated information on the child's progress. It also provides the resource teacher with information from the regular class teacher concerning any changes in the child's behaviour in the regular class. This interaction between the resource teacher and the regular class teacher is important in providing monitoring of the child's progress and in adopting appropriate program modifications as soon as significant behaviour changes are noted. The resource teacher plays an important role in ensuring coordination of educational and related services. A great deal of role flexibility is needed, but at the same time the resource teacher must frequently act as a trained specialist to detect certain specific needs the child may have and bring appropriate system resources to bear on the child's problem.

In this study, the "resource teacher" is not merely another term for a special education teacher in a segregated classroom, although a resource teacher may at times have such a room as a base for activities. Nor is resource teacher synonymous with "resource room". The resource teacher model in this study provides assessment, programming and consultation services to children, to teachers, and to administrative and professional personnel throughout the whole school(s) served.

The competencies of resource teachers are composed of two broad kinds of skills - interpersonal relations and diagnostic/prescriptive knowledge and techniques, both of which are essential to their consulting role. The resource teacher's demonstrated competencies in professional skills were shown to be a crucial factor in inspiring the confidence of regular classroom teachers (Otuyelu, 1976).

The role of the resource teacher requires a high degree of specific knowledge and skills and the personal characteristics necessary to work cooperatively in a consulting capacity with other professional personnel. The degree to which a resource teacher is able to carry out this assigned role and act as a facilitator in bringing resources to bear upon the special learning needs of exceptional children in regular class settings will have a bearing on the services the child ultimately receives.

### **Some Canadian studies**

A number of resource teacher programs in rural areas of the United States have been adequately reported elsewhere. The programs in Vermont (Fox, Egner, Paolucci, Perelman, and McKenzie, 1972), Nebraska (Chalfant et al., 1977), New Mexico (Van Etten and Adamson, 1973) and North Dakota (Prouty and McGarry, 1973) are among the most prominent examples.

The usefulness of the resource teacher model in rural special education service delivery in western Canada has been investigated in the Saskatoon region (McLeod, 1978). The Saskatoon Project was based on the SEEC (Standards for Educators of Exceptional Children in Canada) model of special education service delivery which provides for three stages of teacher preparation in dealing with exceptional children. The first stage should be achieved by all teachers, equipping them with some basic competencies in identification, diagnosis, and corrective teaching of these children. A second, more advanced stage would be provided either for a resource teacher in the same school, or one who would act as an itinerant resource teacher for a number of small rural schools. For children requiring specialized help beyond this, a more highly trained teacher would provide services at a regional Learning Assistance Centre (LAC), similar to the LAC's used in Nebraska (Chalfant et al., 1977). In this teacher preparation model resource teachers provide for diagnosis, remediation, and consultation within the regular school.

One of the questions raised by the Saskatoon Project pertains to whether contact with educationally handicapped children in regular schools affects the acceptance and knowledge of such children by the regular class teacher. A study investigating this question indicated that physical proximity of handicapped children is not enough to guarantee their acceptance by regular teachers and that it might indeed have an adverse effect (Dickson, 1975, in McLeod et al., 1979). This study concluded that there was a need to employ systematic in-service programs in conjunction with mainstreaming arrangements and to evaluate their effectiveness in conveying information and in changing attitudes about handicapped children. The implications in terms of the resource teacher model are obvious.

A related study by Haverstock (1977, in McLeod et al., 1979), investigating the extent to which regular classroom teachers rely upon the traditional model of referral to a multidisciplinary team of consultants, found that more referrals would have been made by classroom teachers, if they saw referrals being acted upon more quickly by the consultants, and if the ensuing recommendations were more relevant to the regular classroom. For rural schools, at least, the resource teacher has an important role to play in in-service training of regular teachers as well as in expertise in diagnosis and programming skills which an individual teacher may lack.

### Theoretical framework

Most writing on the topic of service delivery tends to be practical and developmental rather than theoretical. One conceptually simple model is the triad model developed by Tharp and Wetzel (1969) which suggests that an expert can deliver services to a large number of individuals through the intermediary of a trained person. The main distinctions between the triad model and the resource teacher model are related to the roles of the key actors. In the resource model the classroom teacher is not an intermediary, but the person responsible for the total service delivered to the child. The child is not necessarily the client of the resource teacher; the resource teacher attempts to meet the needs of the teacher as the teacher provides services to the student. One service delivery model was developed by the late Paul Hurder at the University of Illinois. His unpublished works describe a theoretical framework for the development, analysis, and evaluation of service delivery in the fields of health, education, and social services (Hurder, 1973, 1975; Hurder and Hurder, 1975). In this section, Hurder's model will be elaborated and applied to the task of evaluating resource teacher services in rural areas.

#### The Hurder model

The key element in Hurder's model is the transformation of a service from a **potential** state, where a service is potentially available to a client, to an **actual** state, where the service is actively received by a client (Hurder, 1973, p.2). A service is not considered to be delivered until it has been accepted by the consumer.

Service development usually begins with administrative and programmatic activities. At the policy and executive levels of an organization, decisions are made to make services available, rules are established concerning such matters as eligibility and methods of service provision, staff are hired and resources are allocated.

Meanwhile, program experts design the service programs, prepare manuals to guide service providers and prepare the staff to deliver the service. These activities make a service available to a category or class of consumers (Hurder, 1973).

At the consumer level, services are brought to a client through a variety of prescriptive and clinical processes. Such processes are usually on the basis of one service provided to one (or a small group) of clients. The client's needs are assessed and a service is offered. There is normally a significant degree of interaction between the client and the service provider in the final phase of service delivery.

The administrative and programmatic dimensions of service delivery are necessary and they are not independent of the clinical and prescriptive ones, with continual interaction between them.

**Access variables.** Service delivery is influenced by a set of access variables, which may be either administrative or clinical. They include such variables as the **availability** and **continuity** of programs, **provider-client ratio**, **time lag** between a request for a service and actual receipt of a service, **distance** of client from the provider, and **geographical area** served by a provider. In the rural school as elsewhere many exceptional children require a sustained, integrated, and comprehensive set of services. The organizational knowledge for delivering such services tends to be fragmentary and unsatisfactory (Hurder and Hurder, 1975, pp.18-24).

**Dispositional variables.** Service delivery is also affected by a set of dispositional variables which centre on the **interpersonal skills** and **perceived competence** of key actors. These variables influence one's disposition to accept a service or to provide a service to one particular client.

**Specialization.** Two components which Hurder believed to be crucial to optimal service delivery are **specialized knowledge** and **specialized personnel**. The model suggests alternative ways of providing specialized knowledge and personnel to meet the needs of clients which range from the costly option of providing expert, highly trained practitioners for every client, to the less costly option based on approaches such as the resource teacher model or the triad model.

**Organization.** The final component, organization, is the means of placing knowledge and personnel at the client's disposal. Organization is both a structure and a process. The set of organizational variables cut across administrative/programmatic and clinical/prescriptive dimensions and access and dispositional variables. Although less well-defined and less researched than the above components of the model, organizational variables seemingly



include the commitment of key administrators to a program, the provision of appropriate resources and support units and related factors.

**Evaluation.** The evaluation of service delivery, according to the model, must focus equally on the administrative/programmatic dimensions whereby service systems are developed and on the clinical/prescriptive dimensions where the services are delivered. The major set of evaluation criteria are access criteria and disposition criteria. Appropriate assessment of organizational factors will depend on the nature of the services provided, the goals to be pursued, and the setting. In terms of educational services in rural settings, evaluation models must be sensitive to the latter elements of the cultural and geographic settings of the communities where services are to be provided.

## Research Methods

### Statement of the problem

The primary purpose of the study was to examine the factors which influence the effectiveness of the delivery of services by resource teachers in rural areas of Quebec. A secondary major interest of the study was to assess the utility of the Hurder model as a theoretical paradigm for studying the administration and evaluation of special education services.

More specifically, the study addressed the following questions:

**Access variables:** Do rural resource teachers perceive that they provide more service to classroom teachers when the distance from their location to that of the classroom teacher is less, where they have fewer teachers to serve, and where they are able to respond more quickly to service requests?

**Disposition variables:** Do rural resource teachers perceive that they provide more services to classroom teachers whom they rate as more personable and more competent?

**Organization variables:** Do rural resource teachers perceive that they provide more services to classroom teachers in instances where selected organization factors are more favorable?

Further, since the relationship between the resource teacher and the classroom teacher is interactive, these same questions were examined from the perspective of the classroom teacher.

## Subjects

Lack of variability in the samples, administratively equalized staff ratios, and other methodological problems had been cited as likely reasons for a lack of substantial support for the theoretical link between access factors such as distance and staff ratio and service delivery in earlier studies (Sanche, 1972; Pyrch, 1974; Otuyelu, 1976). Thus, this study selected a large jurisdiction, the Province of Quebec, in which a provincial ministry of education provides services through nine regional offices which offer liaison and administrative support for a number of regional and local school boards, identified on a confessional basis as Roman Catholic or Protestant boards for instructional purposes.

Four of the five Protestant school boards in rural Quebec which employed resource teachers were selected for the study. None of the selected elementary schools had more than 250 students. Two of the resource teachers were school based and three were itinerant. In the case of the itinerant resource teachers: two of them served in excess of 50 teachers each.

Seventy-two classroom teachers received services from the five resource teachers, thus there were 72 possible classroom teacher ratings of resource teachers and 72 possible resource teacher ratings of classroom teachers. Five resource teachers provided the 72 ratings of the classroom teachers, however it was assumed nonetheless that resource teachers, who worked closely with the classroom teachers, were able to rate them independently, thus providing for 72 independent resource teacher ratings of classroom teachers.

## Data collection

The Data Collection Instrument (DCI) used in the present study is a four-part questionnaire in which form A is provided for classroom teachers to rate their resource teacher and form B for resource teachers to rate the classroom teachers they serve (McBurney, 1983, pp.110-137). The DCI measures the respondent's perception of the other's skill in interpersonal/personal relations, competence and knowledge related to children with learning difficulties, estimates of the amount of services delivered and the time lag between service request and delivery, and the presence of selected organizational factors.

Table 1 shows the composition of the DCI by section and item content. With the exception of items dealing with selected organization factors, the DCI was adapted with few modifications from earlier instruments (Thomure, 1971; Sanche, 1972; Pyrch, 1974) having reliability within acceptable limits (McBurney, 1983, p.65). The organization items reflect factors suggested by earlier investigators (Pyrch, 1974; McLeod et al., 1979) as important in rural resource teacher service delivery.

**TABLE 1**  
**DATA COLLECTION INSTRUMENT (DCI)**  
**LIST SHOWING SECTION AND ITEM CONTENT**

<b>Interpersonal/Personal</b> (Part I, Forms A and B)	<b>Competence in knowledge areas and performance of specific tasks</b> (Part II, Forms A and B)
<ol style="list-style-type: none"> <li>1. Receptive Communication</li> <li>2. Expressive Communication</li> <li>3. Sensitivity</li> <li>4. Receptivity to Change</li> <li>5. Flexibility</li> <li>6. Self Confidence</li> <li>7. Reliability</li> <li>8. Initiative</li> <li>9. Enthusiasm</li> <li>10. Creativity</li> </ol>	<ol style="list-style-type: none"> <li>1. Teaching Special Skills</li> <li>2. Curriculum Development, Children with Learning Difficulties</li> <li>3. Child Development, General</li> <li>4. Psycho-Social Development, Children with Learning Difficulties</li> <li>5. Diagnosis and Assessment of Learning Problems</li> <li>6. Remediation of Emotional Problems</li> <li>7. Remediation of Learning Problems</li> <li>8. Planning</li> <li>9. Thoroughness</li> <li>10. Communication, Organizational</li> <li>11. Program Evaluation</li> <li>12. Community Relations</li> <li>13. Parent Relationships</li> <li>14. Classroom Observation Activities</li> <li>15. Consultations with Teachers/Resource Teacher</li> </ol>
<p><b>Organization of Programs Services for Children with Learning Difficulties</b> (Part III, Form A; Part IV, Form B)</p> <ol style="list-style-type: none"> <li>1. Resource Teacher Role</li> <li>2. Mainstreaming</li> <li>3. Support Services (Psychologist, etc.)</li> <li>4. Administrative Support, School Level</li> <li>5. Administrative Support, District Level</li> </ol>	
<p><b>Service Delivery</b> (Part IV, Form A; Part III, Form B)</p> <ol style="list-style-type: none"> <li>1. Services to Teachers</li> <li>2. Services to Children</li> <li>3. Service Delivery Time Lag</li> </ol>	<p><b>Availability</b> (Part II, Item 26, Forms A and B)</p>

The criterion variable was the perceived rate of service delivery and was defined as the total of all professional interactions including services both to teachers and to students over the period of one year. The mean rate of services delivered as perceived by the classroom teachers ( $X=36.79$ ) is very close to the rate perceived by the resource teachers themselves ( $X=36.69$ ), with slightly more than half of the services provided to teachers and the remainder to children. The services were distributed evenly throughout the school year.

The access variables, distance and staff ratio, were obtained from the central office of each school district. Other access variables, time lag and availability, were obtained in responses to the DCI and represent perceptual data. Data concerning the number of specialists in the pupil personnel services (PPS) staff were obtained from the central offices of the school districts concerned and were used to further examine the relationship between this organizational factor and the criterion variable.

### **Validity and reliability of the instrument**

Content validity of the DCI was assumed after preliminary versions were submitted for critical review and for suggestions to knowledgeable educators and teachers having broad experience in rural service delivery. Construct validity stems from the work of Thomure (1971), Sanche (1972), Pynch (1974) and from the present study. To estimate the reliability of the scales used in the present study, Spearman-Brown split-half co-efficients were computed for both forms of the DCI. Part I and II of the DCI had co-efficients of reliability ranging from .86 to .92. The co-efficient of reliability for Part III of form A was .80, however, the co-efficient of reliability for Part IV of form B is considerably lower. The five organization items therefore were reviewed individually.

Data for this study were analyzed from two separate perceptual fields, namely, that of the consumer of services (classroom teacher), and that of the service producer (resource teacher). The questions were examined first with respect to the perceptual field of the classroom teacher, and then with respect to the perceptual field of the resource teacher, the data having been obtained from the responses to forms A and B of the DCI, respectively.

### **Results and Discussion**

According to Hurder (1975) service delivery is influenced by access, disposition, and organization variables, and the correlational analysis of the data examined these theoretical links.

The results of this analysis within the perceptual field of the classroom teacher are presented in Table 2, and for the resource teacher the results are shown in Table 3. The discussion which follows draws on both of these sources, however the classroom teacher results may bear more weight, particularly with reference to the organization variable, in that these represent separate ratings by many more individuals than in the resource teacher data.

### Access

The first question dealt with whether a higher rate of service delivery is found in the presence of more favourable access to services, namely, where distance (defined by three categories) between classroom teachers and the resource teacher was less, where the resource teacher had fewer teachers to serve and where the lapse in time between service request and its delivery was less.

The correlation for the classroom teachers and the correlation for the resource teachers indicated a significant relationship between distance and the perceived rate of service delivery. Where distance was greater, the classroom teachers as well as the resource teachers estimated that fewer services were provided by the resource teacher.

This result lent support to the Hurder model where earlier studies had failed to obtain significant findings. As anticipated, the wider dispersal of resource teachers and classroom teachers enabled a more complete study of the distance variable.

As the number of classroom teachers served by the resource teacher increased, the rate of service delivery was seen to decrease, by the classroom teachers and by the resource teachers, concurring with earlier findings. Where resource teachers have a greater number of teachers to serve, they are seen to provide fewer services.

As the lapse in time (ranked in four intervals) increased between a request for service and its delivery, the perceived rate of service delivery was thought to decrease. Although the obtained correlations were negative, the result was not significant at the .05 level. Sanche (1972) and Pyrch (1974) obtained similar results.

**TABLE 2**  
**PEARSON PRODUCT-MOMENT CORRELATIONS BETWEEN ACCESS, DISPOSITION AND ORGANIZATION VARIABLES AND CRITERION VARIABLE : CLASSROOM TEACHERS' PERCEPTUAL FIELD**

Variable	n	Services Delivered									
		1		2		3		4		5	
		Total		Teachers		Children		To Teachers: their request		To children: teacher's request	
r	p	r	p	r	p	r	p	r	p		
<i>ACCESS</i>											
1. Distance	72	-0.371	.005	-0.414	.001	-0.209	.079	-0.483	.000	-0.240	.050
2. Staff ratio	72	0.511	.000	0.534	.000	0.320	.014	0.562	.000	0.361	.006
3. Time lag	37	-0.214	.112	-0.369	.012	0.026	.441	-0.387	.009	-0.012	.474
4. Availability	52	0.275	.031	0.259	.033	0.186	.105	0.036	.015	0.198	.088
<i>DISPOSITION</i>											
5. Interpersonal	53	0.378	.004	0.351	.006	0.258	.040	0.372	.004	0.239	.051
6. Performance	52	0.430	.001	0.413	.001	0.283	.027	0.443	.00	0.262	.036
<i>ORGANIZATION</i>											
7. Organization	53	0.299	.021	0.291	.019	0.171	.125	0.328	.009	0.165	.131

**TABLE 3**  
**PEARSON PRODUCT-MOMENT CORRELATIONS BETWEEN ACCESS, DISPOSITION AND ORGANIZATION VARIABLES AND CRITERION VARIABLE: RESOURCE TEACHERS' PERCEPTUAL FIELD**

Variable	r	p	Services Delivered									
			1		2		3		4		5	
			Total		Teachers		Children		To Teachers: their request		To children: teacher's request	
r	p	r	p	r	p	r	p	r	p			
<i>ACCESS</i>												
1. Distance	-0.508	.000	-0.517	.000	-0.331	.002	-0.475	.000	-0.332	.002		
2. Staff ratio	0.732	.000	0.724	.000	0.502	.000	0.653	.000	0.445	.000		
3. Time lag	-0.179	.073	-0.127	.153	-0.182	.070	-0.153	.109	-0.207	.046		
4. Availability	0.307	.004	0.310	.004	0.203	.044	0.271	.010	0.319	.003		
<i>DISPOSITION</i>												
5. Interpersonal	0.303	.005	0.230	.005	0.207	.041	0.239	.021	0.101	.199		
6. Performance	0.174	.071	0.185	.060	0.104	.193	0.129	.141	0.014	.462		

n = 72

In order to examine the time lag variable more fully, a more detailed analysis was then performed by breaking down service delivery into 1) services provided to the teacher, and 2) services provided to children. Classroom teachers perceived a higher rate of services to themselves where their requests were met more quickly by the resource teacher. However, the correlation between time lag and services to children was not significant.

Finally, the greater the extent to which the resource teacher was seen to be available by the classroom teacher, the greater was the perceived rate of service delivery ( $r=0.28$ ). In the same way, resource teachers perceived that they provided more services to classroom teachers whom they saw as being available when needed. Thus the link between objectively observable access factors (distance, staff ratio, time lag) as well as perceived access (availability) and the rate of service delivery seems to have been clearly established.

### **Disposition**

The second question dealt with whether service delivery is enhanced by the perception on the part of either the classroom teacher or the resource teacher that the other is personable. The results indicated that both the classroom teachers and the resource teachers perceive a greater rate of service delivery where they see the other as having better interpersonal skills. This finding supports Hurder's contention that service delivery requires the consensus of both parties to the consultative process, the attitudes of each toward the other having an impact on the services which will ultimately be delivered.

With respect to demonstrated knowledge and competence in dealing with children with learning difficulties, classroom teachers perceived a greater rate of service delivery from resource teachers whom they saw as being more competent, whereas the resource teachers themselves did not perceive a greater rate of services delivered where they felt the classroom teachers were more competent. This finding suggests that the resource teacher is not hindered by a perception that the classroom teacher may be less competent in dealing with children with learning difficulties.

### **Organization**

The third question dealt with the relationship between factors thought to be important in the organization of programs and services for children with learning difficulties and the perceived rate of service delivery. The correlation obtained within the perceptual field of the classroom teacher was

significant and indicates that this set of organization factors was related to the rate of service delivery. Perplexing results were obtained, however, within the perceptual field of the resource teacher. The items within the organization variable were all seen to be correlated with service delivery, but two of the items were positive while the other three were negative (Table 4). Nevertheless, they all provide support for Hurder's position that organization variables influence service delivery.

**TABLE 4**  
**CORRELATIONS BETWEEN ORGANIZATION ITEMS AND THE CRITERION**  
**VARIABLE: CLASSROOM TEACHERS' PERCEPTUAL FIELD**

Organization Items		Rate of Service Delivery		
		n	r	p
1.	Resource teacher role as support to classroom teacher	47	0.449	0.001
2.	Mainstreaming as an important system objective	47	0.276	0.030
3.	Specialist support services are available	47	-0.067	0.328
4.	School Principal supports the resource teacher program	47	0.234	0.057
5.	Regional administrator supports the resource teacher program	49	0.194	0.096

**TABLE 5**  
**CORRELATIONS BETWEEN ORGANIZATION ITEMS AND THE CRITERION**  
**VARIABLE: RESOURCE TEACHERS' PERCEPTUAL FIELD**

Organization Items (DCI)		Rate of Service Delivery	
		r	p
1.	Resource teacher role as support to classroom teacher	0.280	.009
2.	Mainstreaming as an important system objective	-0.452	.000
3.	Specialist support services are available	-0.799	.000
4.	School Principal supports the resource teacher program	0.461	.000
5.	Regional administrator supports the resource teacher program	-0.335	.002

n = 72



Table 5 presents the results of the correlations between individual factors pertaining to organization of programs and service and the criterion variable within the perceptual field of the classroom teacher. Two of the items were found to be significantly related, while the rest were not.

Where the resource teacher model was supported and mainstreaming was seen as important, service delivery was enhanced. One item, however, was opposite in direction to the others. This item, "availability of support services, or pupil personnel services", was subjected to further study by using factual data on the numbers of support service staff engaged by the school boards and available to the students. The correlation between rate of service delivery and the actual number of available PPS staff was found to be negative and was significant (McBurney, 1983, p.83). Within the perceptual field of the resource teacher a similar finding was obtained. In the rural areas studied, itinerant teams of special services support staff provided assistance to classroom teachers for the individual cases referred to them. The services of the itinerant team and the resource teacher's services often overlapped to some extent, thus, when the itinerant team was more available the resource teacher may have felt less need to provide assistance. Given the scarcity of any kind of support to rural classroom teachers, this result may merely confirm that the resource teacher assists where the need is greatest. This may also suggest that in the absence of special support services there is a greater reliance upon the rural resource teacher in dealing with children with learning difficulties, a practice which can be advantageous with respect to expediency as well as financial accountability.

In general these findings provide support for all elements of the Hurder (1975) model. In the case of access variables the link with service delivery is now clear, whereas earlier studies found only partial support for the relationship. In the case of disposition variables these findings provide additional confirmation for the relationship already elaborated in earlier studies. In the case of the organization variable these findings support the relationship posited by the model, however the findings also suggest that the organization variable consists of a complex array of factors for which the present study provides only an exploratory analysis.

The present study has found support for the relationship between access variables and service delivery where earlier studies fell short of doing so. This may suggest that some fundamental rural/urban differences in service delivery are being touched upon. Because of a scarcity of resources and the barriers imposed by the environment, many rural areas are unable to assure equal access to those resources by administrative measures. The present study would seem to indicate, therefore, that these variables ought to be carefully considered both in the planning and

in the implementation phases of rural education for exceptional children.

### **Conclusions and implications**

This study has provided further support for the Hurder (1975) model as a conceptual framework within which to study elements of the service delivery process, the organization variable has been added to the list of elements significantly related to that process, and has addressed itself to some of the more pressing problems in the provision of special education services for children with learning difficulties in rural areas. This model emphasizes the need for practical solutions to rural problems using local staff and respecting local conditions. Local teachers and resource teachers are seen as the key figures in improving services to individual exceptional children in rural areas.

In addition to supporting the Hurder (1975) model, these findings have a number of broad implications for administrative practice in rural education.

1. Special education administrators will need to consider access, disposition, and organization variables in the planning, implementation, and evaluation of resource teacher services for rural areas.

2. Funding bodies need to become more aware of the real limitations faced by rural school districts, in particular the distances between sites and other access factors hindering service delivery.

3. School systems which use itinerant resource teachers face the restriction imposed by time lost due to travel. This factor needs to be carefully considered by administrators when assigning the resource teacher's load.

4. As a producer of services the resource teacher must be able to relate well to classroom teachers. It is therefore incumbent upon rural school districts to carefully consider this factor in selecting staff. Consideration should also be given to providing in-service training and staff development aimed at improving relations between the resource teacher and class teachers. Further, teacher preparation institutions would be well advised to include practical, applied courses in human relations and communications appropriate to rural resource teacher training programs.

5. It may well be beyond the ability of an itinerant resource teacher, no matter how personable and competent, to provide effective services to a school in which the principal's

support is weak, or, where the principal withholds his support and negates the resource teacher's efforts. Further, the delivery of services to an individual teacher may be an impossible task for the resource teacher if the classroom teacher views the services negatively. It would be well for the supervisors of resource teachers to keep these facts in proper perspective when monitoring and evaluating the progress of any individual resource teacher.

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