Characteristics of Canadian Speech-Language Pathologists Providing Classroom-Based Service Delivery

Caractéristiques des orthophonistes canadiens offrant un service en salle de classe

Margaret Dohan, MSc, MEd
Avalon East School Board
St. John's, Newfoundland

Henry Schulz, PhD
Faculty of Education, Memorial University of Newfoundland
St. John's, Newfoundland

ABSTRACT

The characteristics of Canadian school speech-language pathologists (SLPs) and the status of classroom-based delivery of speech and language services in Canada were investigated through a questionnaire mailed to a sample of SLPs working in schools. Results revealed that SLPs' characteristics and the services they provide are diverse, with variation across provinces in the areas of classroom-based assessment and intervention. Of seven service delivery approaches to classroom-based intervention, the less collaborative approaches are used by larger percentages of respondents than the more collaborative approaches. Use of the approaches was compared to respondents' personal, professional, and situational characteristics. Findings indicated that use of the approaches was not related to teaching experience or possession of a bachelor's degree in education, but that use of some approaches was related to geographical work setting.

Results are consistent with reports in the literature on the use of classroom-based approaches by SLPs. Findings reflect the SLP's role as a communication, language, and speech specialist who collaborates with teachers when planning and implementing programs for students, often delivering services within the classroom. The use of classroom-based approaches is part of a current shift in policy and practice of service delivery to students with communication disorders. Suggestions for furthering collaboration between SLPs and teachers are presented.

KEY WORDS: classroom-based intervention •
collaboration • integrated services • multidisciplinary
teams • service delivery

ABRÉGÉ

Les caractéristiques des orthophonistes scolaires canadiens ainsi que l'état de la prestation en salle de classe de services orthophoniques au Canada ont été examinés par le biais d'un questionnaire posté à un échantillon d'orthophonistes œuvrant dans les écoles. Les résultats ont révélé que les caractéristiques des orthophonistes et les services qu'ils offrent varient, notamment d'une province à l'autre, sur les plans de l'évaluation et de l'intervention en salle de classe. Sur sept méthodes de prestation employées pour l'intervention en salle de classe, les méthodes moins coopératives sont employées par un plus fort pourcentage de répondants que les méthodes plus coopératives.   On a ensuite comparé l'emploi des méthodes aux caractéristiques personnelles, professionnelles et situationnelles des répondants.   Les conclusions indiquent que l'utilisation des méthodes n'est liée ni à l'expérience pédagogique ni à la possession d'un baccalauréat en éducation, mais que l'utilisation de certaines méthodes est fonction du lieu géographique.

Les résultats obtenus concordent avec les rapports publiés sur l'usage de méthodes «en classe» employées par les orthophonistes. Les conclusions reflètent le rôle de l'orthophoniste à titre de spécialiste de la communication, du langage et de la parole qui collabore avec les enseignants à la planification et à la mise en œuvre de programmes pour les élèves et qui prodigue souvent ses services en salle de classe. Le recours aux interventions en salle de classe fait partie du changement actuel des politiques sur la prestation des services aux élèves ayant des troubles de communication. On étudie diverses suggestions pour favoriser davantage la collaboration entre les orthophonistes et les enseignants.

Present trends illustrate that public education systems in North America are undergoing vast revision. Changes within social, political, and economic domains have forced reevaluation of the effectiveness and efficiency of the delivery of educational programs (Huffman, 1992). A major consequence has been emphasis on a collaborative approach to service delivery to students with special needs. The goal of collaboration among educational personnel is to design and implement a plan that will address students' needs within the regular classroom environment. Such integration enshrines the right of equal educational access for all students while addressing concerns regarding the efficacy of traditional practices, which frequently involved learning in unnatural environments (Gerber, 1987; Idol, Paolucci-Whitcomb, & Nevin, 1986; Will, 1986; Winzer, 1993). This shift in philosophy has coincided with an expanding awareness of the fundamental roles of communication skills and language proficiency in academic and social success. School is a context that demands that students listen, speak, read, and write on a daily basis. Speech-language pathologists (SLPs), with their broad perspective on language, are ideally suited to addressing students' needs and teachers' concerns related to oral language in the classrooms (Simon & Myrold-Gunyuz, 1990; Wallach & Butler, 1984).

Capitalizing on these trends, SLPs have been extending services to work with teachers and students directly within the classroom setting. Collaboration with regular and special education teachers in the classroom can facilitate the assessment and intervention process by providing access to an increased range of information. Observations and analyses of communicative skills are enhanced through the input of two school professionals and are more "ecologically valid" because they have considered skills that are important to classroom success. Students' needs are judged within the context of the curriculum and the complex environment in which it is taught and learned (American Speech-Language-Hearing Association, 1991; Nelson, 1989; Silliman, Wilkinson, & Hoffman, 1993).

Implementation of the plan and evaluation of progress are completed in conjunction with the teacher. Examples of specific functions that the SLP can perform to assist students with communication disorders using a collaborative classroom-based approach are: (a) gathering data on students within the classroom; (b) team teaching with the teacher; (c) suggesting alternative teaching strategies; (d) modifying curriculum materials, including tests; and (e) supplying materials to reinforce speech or language goals within the classroom. By delivering some services directly within the classroom setting, SLPs can facilitate the learning and generalization of new strategies and skills through encouraging their use in a context that is relevant to students (ASHA, 1993; Cirrin & Penner, 1995; Nelson, 1990; Silliman & Wilkinson, 1991). Some authors (e.g., Anderson & Nelson, 1988; Buttril, Niizawa, Biemer, Takashashi, & Hearn, 1989; Larson & McKinley, 1987; Larson, McKinley, & Boley, 1993) advocate the use of an alternative classroom through which students with language impairments may receive credit for communication courses designed and/or implemented by SLPs.

SLPs use classroom-based intervention for younger students with language disorders or delays. A natural consequence of increased time in classrooms is to maximize opportunity for development of language skills by taking advantage of the multitude of classroom language activities. SLPs are less likely to adopt classroom-based approaches for intervention with articulation, fluency, and voice disorders, or when providing services to students in junior and senior secondary school (Achilles, Yates, & Freese, 1991; Borsch & Oaks, 1992; Brandel, 1992; Christensen & Luckett; 1990; Cooper, 1991; Cooper & Cooper, 1991; Elksnin & Capilouto, 1994; Ellis, Schlaudecker, & Regimbal, 1995; Farber, Denenberg, Klyman, & Lachman, 1992; Ferguson, 1992; Fujiki & Brinton, 1984; Gerber, 1987; Magnotta, 1991; Moore-Brown, 1992; Norris, 1989; Roller, Rodriguez, Warner, & Lindahl, 1992; Wilcox, Kouri, & Caswell, 1991). For a comprehensive review of the literature, see Elksnin (1997).

The majority of published information in the area of classroom collaboration between SLPs and teachers consists of descriptions of individual SLPs' professional experiences. There have been few studies designed to determine the prevalence of classroom collaboration between SLPs and teachers. Elksnin and Capilouto (1994) examined SLPs' practices and perceptions relating to integrated service delivery in schools by conducting a small-scale survey of 31 SLPs working in a South Carolina school district. Sanger, Hux, and Griess (1995) investigated educators' views of speech-language pathology services in schools, including SLPs' collaborative efforts, through a questionnaire completed by 628 teachers, principals, and school psychologists.

The rationale for the current study was based on the need for broad descriptive information on SLPs' use of classroom-based service delivery as reported by SLPs themselves. The purpose of the study was to examine Canadian SLPs' collaboration with teachers within the classroom, focussing on use of classroom-based service delivery. A part of the investigation assessed the relationship between SLPs' use of classroom-based approaches and a number of diverse characteristics that were selected as descriptive variables possibly related to use of classroom-based services. For example, SLPs' possession of teaching experience may have been relevant to use of approaches requiring classroom collaboration between SLPs and teachers. In this study, collaboration was defined as "a style for direct interaction between at least two coequal parties voluntarily engaged in shared decision making as they work toward a common goal" (Friend & Cook, 1992, p. 5). The questions to be answered by the study were:

1. What percentages of SLPs are using classroom-based intervention?

2. Is use of classroom-based intervention related to the following personal and professional characteristics of SLPs: gender, years of speech-language pathology experience in schools, teaching experience, possession of a bachelor's degree in education, possession of a master's degree in speech-language pathology, or certification status?

3. Is use of classroom-based intervention related to the following situational characteristics of SLPs: caseload number, grade levels served, or geographical work setting?

Method

Data were obtained through a questionnaire mailed to a sample of SLPs in Canada.

Survey Instrument

The survey instrument was a 33-item questionnaire with three sections. The first section requested information on respondents' personal characteristics (e.g., years of experience as a school SLP), features of existing speech and language services (e.g., grade levels served), and percentages of total assessment and intervention time spent in classrooms. The second section, based in part on Elksnin and Capilouto's (1994) survey, gathered information on the use and judged success of seven classroom-based

intervention approaches, which were detailed on the instrument. The third section related to perceived advantages and disadvantages to classroom-based intervention approaches. The survey instrument was pilot-tested with seven school-based SLPs, and minor revisions were made (see Appendix).

Participants

Selection of participants was through national and provincial or territorial association membership lists, using a weighted stratified random sampling procedure. The one stratification variable chosen was province or territory, with random samples drawn from each stratum. This sampling technique was used to obtain a sample that would most accurately represent the population of SLPs working in Canadian schools. Based on CASLPA's (1990) and Rubin's (1990) demographic studies and on information provided by CASLPA (P. Flemington, personal communication, January, 1996), an estimated 1200 to 1500 SLPs worked in schools at the outset of the study.

Lists of school SLPs obtained for six provinces or territories[1] and lists of SLPs employed in all settings obtained for five provinces comprised the sampling frames. Due to small populations, Yukon and the Northwest Territories were combined. Proportions of SLPs sampled varied according to province to ensure that provincial sample sizes were of a sufficient size, ranging from 10% in provinces with larger populations of SLPs (e.g., Ontario) to 100% in provinces with smaller populations of SLPs (e.g., Newfoundland). Proportions in the five provinces where membership lists included SLPs in all settings (Nova Scotia, New Brunswick, Manitoba, Alberta, and British Columbia) were doubled to provide reasonable assurance that the obtained sample size of school-based SLPs would approximate the desired size of 300 (Table 1). Response rates for these five provinces were estimated using the number of SLPs who worked in schools and completed the survey and those who returned the letter in which they indicated that they did not work in schools (e.g., for Nova Scotia 55 surveys were sent out and 47 surveys or letters were returned, yielding a response rate of 85%; of these 47 returns, 18 surveys were from SLPs who worked in schools). Weighting procedures based on Jaeger (1984) and Satin and Shastry (1993) were used to ensure that the sample did not overrepresent smaller provinces and provinces with higher response rates and underrepresent larger provinces and provinces with lower response rates.

Procedure

The questionnaire, a letter of transmittal, and a stamped return envelope were mailed to 519 SLPs employed in all settings in March, 1996. Two follow-up letters were subsequently sent to potential respondents who had not returned the questionnaire. In June, 1996, 264 questionnaires had been received

Table 1. Percentage and Number of Speech-Language Pathologists Receiving and Responding to Questionnaires by Province.

Province	Sampling Fraction	n receiving	Response (%)	n of SLPs responding (All)	School-based
NF	100*	36	92	–	33
NS	50**	55	85***	(47)	18
PEI	100*	9	78	--	7
NB	50**	42	86***	(36)	9
QC	10*	24	71	–	17
ON	10*	29	69	–	20
MB	50**	69	83***	(57)	32
SK	100*	51	86	–	44
AB	20**	90	88***	(79)	32
BC	20**	108	73***	(79)	36
YK, NWT	100*	6	83	–	5
Total		519	82		253

*Sample or census was from subpopulation of school SLPs who were members of the provincial association. **Sample or census was from subpopulation of all SLPs who were members of the national association and resided in the province: these were SLPs who work in all settings, schools and other, as they could not be distinguished from one another. ***Response (%) was computed from number of returns by SLPs in all settings (number in parentheses), while School-Based is the number of school-based SLPs who responded.

from SLPs employed in school settings. Eleven returned questionnaires were not used, nine because respondents did not complete large portions of the questionnaire and two because the respondents were no longer working as SLPs. The 253 usable questionnaires yielded a national response rate of 82%, based on the estimated national population of SLPs employed in school settings (Table 1).

A majority of items had only two response choices, which produce population estimates in the form of a proportion. The largest confidence interval occurs when a proportion is 50% and there is no correlation between the stratification variable and the item. Based on the sampling procedures and the response rate, the upper bound estimate for a 95% confidence interval for a proportion of 50% is ±8.2%, from 41.8% to 58.2% (Jaeger, 1984). Therefore, all reported proportions would be accurate to within eight percentage points, or less, at the 95% confidence level.

Data Analysis

For each question to be answered by the study, a list of corresponding questionnaire item numbers was prepared. For descriptive analyses, percentages and means were calculated; for relational analyses, chi-square tests were conducted.

Results

Results presented are restricted to the first and second sections of the questionnaire since the focus of this paper is on characteristics of SLPs and their use of classroom-based delivery of service. As a consequence of weighting procedures, portions of the sample are described in terms of percentages rather than as numbers of respondents who chose a given option.

Personal and Professional Characteristics of Respondents

All respondents were SLPs working in schools. Respondents were 93% female and 7% male, identical to proportions in Potter and Lagace's (1995) study of Canadian SLPs. The mean number of years worked was 9.6, with 59% of respondents having less than 10 years of experience. Specifically, 17% had less than five years of experience, 42% had five to nine years of experience, 19% had 10 to 14 years of experience, and 22% had over 14 years of experience. Provincial means for years worked as school SLPs varied, ranging from 3.9 years in Newfoundland to 11.9 years in Nova Scotia. A total of 10% of respondents had worked as teachers, with a mode number of years of one.

A large majority of respondents, 80%, held a master's degree. Provincial percentages varied from 50% in Alberta to 100% in Nova Scotia, Prince Edward Island, New Brunswick, and Ontario. Less than 1% of respondents possessed a doctorate degree. Approximately 17% held a bachelor's degree in education, with provincial figures ranging from none in Prince Edward Island and New Brunswick to 34% in Saskatchewan.

Of respondents, 80% were certified by the Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA) or were members of the College of Audiologists and Speech-Language Pathologists of Ontario (CASLPO). In Quebec, SLPs are affiliated with the provincial registrar, the *Ordre des orthophonistes et audiologistes du Québec.* Of the respondents from Quebec, 35% were certified by CASLPA. In Nova Scotia, Alberta, British Columbia, and the territories, 100% of respondents were certified by CASLPA. A total of 21% of respondents were certified by the American Speech-Language-Hearing Association (ASHA). No respondents from Prince Edward Island, Quebec, and the territories were ASHA-certified. However, 39% of respondents from Saskatchewan and 44% of respondents from Manitoba were certified by ASHA. This may have been attributable to the fact that many SLPs in these provinces completed their training and internships in the U.S. due to lack of university programs in these provinces. The percentage of respondents who were not certified or registered by CASLPA, CASLPO, or ASHA was 8%. These respondents were from four provinces: Newfoundland (12% uncertified), Prince Edward Island (14%), Saskatchewan (18%), and Quebec (65%).

Situational Characteristics of Respondents

Both assessment and intervention services were provided by 97% of respondents, whereas solely assessment services were provided by 3% of respondents. Approximately 84% of respondents spent time on classroom-based assessment in a typical year, with the mean percentage of time spent during students' school hours being 17.5%. Percentages of time spent on assessment in classrooms ranged from 7.5% in Prince Edward Island to 26.7% in Ontario. Of respondents, 73% spent time on intervention in classrooms, with the mean percentage of time spent 22.1%. Percentages of time spent on intervention in classrooms ranged from 4.2% in Prince Edward Island to 28.2% in Alberta. In Prince Edward Island, the relatively low percentages of time spent in classrooms may have been due to the fact that speech and language services to school-aged children are under the auspices of the Department of Health and Community Services. All respondents performed some administrative duties. The mean percentage of time spent on administration in a typical year was 23.0%, with provincial means being similar to the national mean.

The mean caseload size of respondents was 95 students, with a median caseload size of 80 students. Mean caseload sizes for provinces varied from the national mean, ranging from 31 students in the territories to 166 students in Saskatchewan, where communication assistants were frequently reported in margin notations. Over half of respondents (58%) had relatively small- to moderate-sized caseloads. Specifically, 21% had relatively small caseloads, 50 or fewer students; 37% had moderate-sized caseloads, 51 to 100 students; 17% had relatively large caseloads, 101 to 150 students; and 25% had very large caseloads, over 150 students. The large range of numbers reported, from 10 to 500, was probably attributable to respondents' differing interpretations of the question and to the varying factors that determine caseload size (e.g., student population-to-SLP ratio in a district, severity of student disorders, number of schools served, and travel time between schools).

A large majority of respondents provided services to students in Kindergarten to Grade 3 and Grades 4 to 6, 89% and 88%, respectively. A smaller majority of respondents served students in Grades 7 to 9, 63%, and a minority of respondents provided services to Grades 10 to 12, 46%. These figures indicated that the majority of respondents provided services to students in more than one grade level category, primarily at the Kindergarten to Grade 6 level. Of those respondents who provided services to students in all four grade level categories, the largest mean percentage of time was allocated to Kindergarten to Grade 3 students, 70.0%. A smaller mean percentage of time was devoted to students in Grades 4 to 6, 23.1%. The smallest mean percentages of time were allotted to students in Grades 7 to 9 and Grades 10 to 12, with 9.4% and 6.5% of time spent,

respectively. For the Kindergarten to Grade 3, Grades 4 to 6, and Grades 7 to 9 categories, provincial means for time allocation were similar to the national mean. However, for the Grades 10 to 12 category, the percentage of Quebec respondents providing services was 15% larger than the national mean. The anomalous finding for Quebec may be partly explained by the fact that a number of Quebec respondents reported serving students with special needs in segregated classes at all grade levels.

A total of 70% of respondents worked in an exclusively urban setting, which was defined using the standard for urban and rural designations established by the Government of Newfoundland and Labrador as having a population of more than 5000; 20% worked in an exclusively rural setting, which was defined as having a population of less than 4999; and 10% worked in a combination of urban and rural settings. Provincial percentages varied from the national percentages, with the figures for respondents working in urban settings ranging from none to 88% and for respondents working in rural settings from none to 78%. Discrepancies among provinces mirror the vast regional disparities in size and distribution of the general Canadian population.

Use of classroom-based intervention approaches

Seven service delivery approaches to classroom-based intervention were listed on the questionnaire (Table 2). The approaches, adapted from Elksnin and Capilouto's (1994) taxonomy of service delivery approaches based on Friend (1992), ranged from least collaborative (Approach One) to most collaborative (Approach Seven).

Respondents were asked to indicate whether they had used each of the seven approaches for intervention within either the regular or special education classroom. Approaches One and Two were used by a majority of respondents, 76% and 63%, respectively. A minority of respondents had used the remaining five approaches, with 19% to 34% of respondents having used these approaches (Table 2). For results describing respondents' use and perceived effectiveness of the approaches with specific

Approach		% of respondents indicating use of each approach
One	Within the classroom, either the SLP or the teacher observes, while the other asssumes primary instructional responsibility	76%
Two	Within the classroom, the SLP or the teacher assumes primary instructional responsibility while the other assists students with their work, monitors behaviour, corrects assignments, etc.	63%
Three	The SLP and the teacher divide instructional content into two parts. Within the classroom, groups are switched so that all students receive instruction from each individual.	23%
Four	Within the classroom, the SLP and the teacher each instructs separate parts of the group, simultaneously addressing the same instructional objectives.	27%
Five	Within the classroom, the SLP or the teacher instructs students who have mastered the material to be learned, while the other reteaches students who have not mastered the material.	19%
Six	Within the classroom, the SLP or the teacher presents the lesson using a standard format, while the other adapts the lesson for students who cannot master the material.	31%
Seven	Within the classroom, both the SLP and the teacher present the lesson to all students. This may be through shared lecturing or having one begin the lesson while the other takes over when appropriate.	34%

Table 2. Service Delivery Approaches Listed on the Questionnaire* and Percentages of Respondents Indicating General Use of Each.

*Adapted from Elksnin and Capilouto's (1994) taxonomy of integrated service delivery approaches.

disorder types and grade level categories, see Dohan (1997) and Dohan and Schulz (in press).

Use of classroom-based intervention approaches and personal and professional characteristics of SLPs

The relationship between the use of Approach One and gender was significant ($p < .05$), with more males than females using this approach, but all other relationships were not significant (Table 3). A significant relationship was also found between the use of Approaches Two and Three and years of experience as a SLP in schools, with more SLPs with under 10 years' experience using Approach Two ($p < .05$). Despite the significant finding for Approach Three, no clear pattern of use according to experience was apparent (Table 4). The remaining relationships were not significant. Use of the approaches was not significantly related to teaching experience or to possession of a bachelor's degree in education (Tables 5 and 6). A significant relationship did exist between the use of Approach Four and possession of a master's degree in speech-language pathology, with significantly more respondents who held a master's degree reporting use of this approach ($p < .05$); however, no other relationships were significant (Table 7). The use of Approach Three

Table 3. Use of Approaches by Gender.

Approach	Female	Male		
% of respondents	93%	7%	χ^2 (1, N = 253)	p
One	75	100	5.67	.017
Two	64	47	1.95	.163
Three	24	6	3.00	.083
Four	26	41	1.86	.169
Five	19	18	.02	.885
Six	31	18	1.41	.235
Seven	34	47	1.30	.255

Table 4. Use of Approaches by Years of School SLP Experience.

Approach	<5 yr	5 to 9 yr	10 to 14 yr	>14 yr		
% of respondents	17%	42%	19%	22%	χ^{2*}	p
One	82	73	85	68	5.58	.134
Two	68	71	52	53	8.66	.034
Three	18	22	40	14	10.53	.015
Four	29	28	29	20	1.64	.650
Five	25	19	16	18	1.28	.735
Six	27	40	24	21	7.37	.061
Seven	48	32	33	27	4.93	.177

*df = 3, Ns ranged from 252 to 253.

Table 5. Use of Approaches by Teaching Experience.

Approach	Teaching experience	No teaching experience		
% of respondents	10%	90%	χ^{2*}	p
One	85	75	1.32	.250
Two	59	63	.17	.683
Three	23	23	.00	.994
Four	26	27	.01	.906
Five	8	20	2.42	.119
Six	41	29	1.43	.232
Seven	31	34	.15	.703

* df = 3, Ns ranged from 252 to 253

Table 6. Use of Approaches by Possession of a Bachelor's Degree in Education.

Approach	BEd	No BEd		
% of respondents	17%	83%	χ^{2*}	p
One	66	76	1.93	.164
Two	64	63	.01	.905
Three	20	24	.23	.632
Four	28	26	.05	.830
Five	12	21	1.85	.174
Six	25	32	.74	.369
Seven	39	33	.51	.474

*df = 1, Ns ranged from 252 to 253.

Table 7. Use of Approaches by Possession of a Master's Degree.

Approach	Master's	Other		
% of respondents	81%	19%	χ^2 (1, N = 253)	p
One	77	73	.30	.582
Two	61	71	1.93	.164
Three	24	21	.16	.691
Four	30	16	4.07	.044
Five	20	16	.49	.503
Six	29	36	1.04	.307
Seven	34	35	.005	.826

Table 8. Use of Approaches by Certification Status.

Approach	Certified	Noncertified		
% of respondents	92	8	χ^2 (1, N = 253)	p
One	77	67	1.17	.280
Two	64	48	2.27	.132
Three	75	100	6.81	.009
Four	28	14	6.81	.186
Five	19	14	.33	.567
Six	30	33	.09	.763
Seven	34	29	.30	.584

was significantly related to certification status, with more noncertified than certified respondents using this approach ($p < .01$), but the remaining relationships were not significant (Table 8).

In summary, of the 42 relationships analyzed, five were significant at the .05 level and one of these was significant at the .01 level. No pattern of significant findings existed to suggest that use of the approaches was related to personal and professional characteristics of respondents.

Use of classroom-based intervention approaches and situational characteristics of SLPs

A significant relationship existed between the use of Approach One and caseload size ($p < .05$); however, all other relationships were nonsignificant (Table 9). The small percentage of respondents who provided services to the higher grade precluded analysis that would yield interpretable results. Therefore, statements regarding the relationship of respondents' use of the approaches to grade levels served cannot be made. Significant relationships existed between respondents' use of Approaches Four ($p < .05$), Five ($p < .01$), and Seven ($p < .01$) and geographical work setting (Table 10). All other relationships were not significant. Thus, use of three out of the seven approaches was significantly related to geographical work setting. The data suggested that Approaches Five and Seven are used more by SLPs who work in urban settings, by 24% and 39% respectively, than by those who work in rural settings. It is worth noting, however, that use of these two approaches in general was not high.

In summary, of the 14 relationships analyzed, four were significant at the .05 level and two of these were significant at the .01 level. Three of the four significant relationships were between use of the approaches and geographical work setting, with the data suggesting that the greatest use of Approaches Five and Seven is by SLPs who work in urban settings.

Discussion and Conclusions

Approximately three-quarters of respondents provided some assessment or intervention or both in classrooms. Respondents who did provide classroom-based services spent approximately 40% of their time on classroom-based assessment and intervention. These results were somewhat different from those obtained in the study by Sanger et al. (1995), which found that over one-third of SLPs used solely a pullout approach to service delivery. However, the Sanger et al. (1995) study was conducted three years prior to this study, an interval during which there was increased support of and demand for classroom-based services. In addition, the Sanger et al. (1995) study gathered information on speech-language pathology services through a large-scale survey of teachers, principals, and school psychologists, leading to potentially inaccurate accounts of actual practices of SLPs.

Table 9. Use of Approaches by Caseload Size.						
Approach	**<50 %**	**51 to 100%**	**101 to 150%**	**>150%**		
% of respondents	**21 %**	**37 %**	**17 %**	**25 %**	**χ^{2*}**	**p**
One	77	85	71	67	7.89	.48
Two	60	69	61	57	2.75	.431
Three	23	26	20	21	.79	.851
Four	17	31	31	27	3.79	.285
Five	15	20	22	18	.90	.826
Six	35	31	16	36	5.92	.116
Seven	29	40	33	30	2.43	.489

*$df = 3$, Ns ranged from 252 to 253.

Table 10. Use of Approaches by Geographical Work Setting.					
Approach	**Urban**	**Rural**	**Urban and rural**		
% of respondents	**70%**	**20%**	**10%**	**χ^{2*}**	**p**
One	77	69	81	1.69	.429
Two	66	53	65	2.63	.268
Three	24	22	18	.46	.793
Four	30	29	4	8.30	.016
Five	24	10	0	11.65	.003
Six	33	24	27	1.62	.444
Seven	39	12	38	12.82	.002

*$df = 2$, Ns ranged from 252 to 253.

SLPs most often use classroom-based approaches that require a lesser degree of collaboration with teachers, such as observation of students and assisting students with their work, Approaches One and Two in the study. They less often use approaches that require a greater degree of collaboration, such as station teaching, parallel teaching, remedial teaching, supplemental teaching, and team teaching, Approaches Three to Seven in the study. SLPs' focus on less collaborative approaches is likely related in part to the additional planning time required by SLPs and teachers who adopt highly collaborative approaches (Dohan, 1997). These results agree somewhat with those of Elksnin and Capilouto's (1994) survey of 31 SLPs in a South Carolina school district, which indicated that Approaches One and Two were among the three most frequently used approaches, with Ap-

proach Two the most frequently used. Findings also relate to results of studies by Sanger et al. (1995) and Tomes and Sanger (1986), which indicated that teachers estimated SLPs' collaborative contributions to be notably fewer than contributions in other areas of SLPs' services.

SLPs' use of classroom-based intervention approaches is independent of gender, years of school speech-language pathology experience, teaching experience, possession of a bachelor's degree in education, possession of a master's degree in speech-language pathology, certification status, or caseload size. It is conceivable that SLPs who have a bachelor's degree in education and teaching experience are not in the classroom significantly more than those without an education background because they have chosen a second career in speech-language pathology as an alternative to being in the classroom on a regular basis. Lack of an education background deters some SLPs from using classroom-based approaches, yet neither of these characteristics is prerequisite to use of these approaches (Dohan, 1997). Geographical work setting is an influence on the use of classroom-based approaches. Those SLPs who work in urban settings are somewhat more likely to use these approaches, possibly due to less time spent on travel between schools. No previously reported research has investigated relationships between the use of classroom-based intervention and these characteristics.

Results of the study indicate that, although the majority of SLPs use some classroom-based approaches, SLPs spend a minority of their time on classroom-based assessment and intervention. In addition, SLPs use classroom-based approaches that require less rather than more collaboration. Use of the approaches is not related to teaching experience or possession of a bachelor's degree in education, but use of several approaches is related to geographical work setting.

These findings underscore the necessity to encourage further collaborative efforts between SLPs and teachers. A number of practical suggestions, designed to include all members of the multidisciplinary educational team, are that (adapted from Dohan, 1997):

1. SLPs continue to collaborate with teachers, and seek further collaboration by enlisting their support and that of administrators. For guidelines on gaining support, see Montgomery (1990) and Prelock, Miller, and Reed (1995).

2. SLPs continue to offer workshops for teachers in areas such as classroom management of communication disorders and the connection between oral language and literacy learning.

3. SLPs continue to expand their knowledge through availing of continuing education opportunities relevant to classroom-based approaches.

4. District and school administrators provide support for classroom-based approaches by allowing planning time and scheduling flexibility, particularly in districts where schools are geographically dispersed, and by facilitating SLPs' attendance at pertinent workshops and conferences.

5. District administrators, SLPs, and other members of the educational team regularly review, revise, and disseminate district policies on delivery of speech and language services, to include classroom-based assessment and intervention. For recent discussions of service delivery options, see Cirrin and Penner (1995) and Ontario Association of Speech-Language Pathologists and Audiologists (1996).

Canadian SLPs are meeting students' communicative needs through collaboration with regular and special teachers, frequently by the use of classroom-based assessment and intervention. Shifting traditional service priorities requires the flexibility to reshape roles and responsibilities of SLPs and teachers, who must be willing to take risks while developing innovative educational practices. The adoption of collaborative classroom-based approaches is not a discrete event but a process that is accomplished through ongoing commitment over time. The major advantage of such approaches is in increasing students' communication skills in a meaningful context, ultimately having a positive effect on academic performance and social interaction.

Endnote
[1]To avoid awkward syntax, the one term "province" (and its derivations) will be used throughout the remainder of the study to include both provinces and territories, unless otherwise specified.

Please address all correspondence to: Margaret Dohan, Avalon East School Board, 101 Larkhall St., St. John's, NF, A1B 2C5.

References

Achilles, J., Yates, R. R., & Freese, J. M. (1991). Perspectives from the field: Collaborative consultation in the speech and language program of the Dallas Independent School Distrct. *Language, Speech, and Hearing Services in Schools, 22,* 154-155.

American Speech-Language-Hearing Association. (1991, October). A model for collaborative service delivery for students with language-learning disorders in the public schools. *Asha, 33,* (Supplement 5), 44-50.

American Speech-Language-Hearing Association. (1993, October). Guidelines for caseload size and speech-language service delivery in the schools. *Asha, 35,* (Supplement 10), 33-39.

Anderson, G. M., & Nelson, N. W. (1988). Integrating language intervention and education in an alternate adolescent language classroom. *Seminars in Speech and Language, 9,* 341-353.

Borsch, J. C., & Oaks, R. (1992). Implementing collaborative consultation: Effective collaboration at Central Elementary School. *Language, Speech, and Hearing Services in Schools, 23,* 369-370.

Brandel, D. (1992). Implementing collaborative consultation: Full steam ahead with no prior experience! *Language, Speech, and Hearing Services in Schools, 23,* 369-370.

Buttril, J., Niizawa, J., Biemer, C., Takashashi, C., & Hearn, S. (1989). Serving the language learning disabled adolescent: A strategies-based model. *Language, Speech, and Hearing Services in Schools, 20,* 185-204.

Canadian Association of Speech-Language Pathologists and Audiologists. (1990). *A demographic study of speech-language pathologists and audiologists in Canada and Canadian students in speech-language pathology and audiology programs.* Ottawa, ON: Author.

Christensen, S. S., & Luckett, C. H. (1990). Getting into the classroom and making it work! *Language, Speech, and Hearing Services in Schools, 21,* 110-113.

Cirrin, F., & Penner, S. (1995). Classroom-based and consultative service delivery models for language intervention. In M. Fey, J. Windsor, & S. Warren (Eds.), *Language intervention: Preschool through the elementary years.* Baltimore, MD: Paul H. Brookes.

Cooper, C. S. (1991). Using collaborative consultative service delivery models for fluency intervention and carryover. *Language, Speech, and Hearing Services in Schools, 22,* 152-153.

Cooper, E. B., & Cooper, C. S. (1991). A fluency disorders prevention program for preschoolers and children in the primary grades. *American Journal of Speech-Language Pathology,* 28-31.

Dohan, M. (1997). *The speech-language pathologist's changing role: Collaboration within the classroom.* Unpublished master's thesis, Memorial University of Newfoundland, St. John's, NF.

Dohan, M., & Schulz, H. (in press). The speech-language pathologist's changing role: Collaboration within the classroom. *Journal of Childhood Communication Disorders.*

Elksnin, L. K. (1997). Collaborative speech and language services for students with learning disabilities. *Journal of Learning Disabilities, 30,* 414-426.

Elksnin, L. K., & Capilouto, G. J. (1994). Speech-language pathologists' perceptions of integrated service delivery in school settings. *Language, Speech, and Hearing Services in Schools, 25,* 258-267.

Ellis, L., Schlaudecker, C., & Regimbal, C. (1995). Effectiveness of a collaborative consultation approach to basic concept instruction with Kindergarten children. *Language, Speech, and Hearing Services in Schools, 26,* 69-74.

Farber, J., Denenberg, M. E., Klyman, S., & Lachman, P. (1992). Language resource room level of service: An urban school district approach to integrative treatment. *Language, Speech, and Hearing Services in Schools, 23,* 293-299.

Ferguson, M. L. (1992). Implementing collaborative consultation: The transition to collaborative teaching. *Language, Speech, and Hearing Services in Schools, 23,* 361-362.

Friend, M. (1992, October). *Visionary leadership for today's schools.* Paper presented at the meeting of the International Council for Learning Disabilities, Kansas City, KS.

Friend, M., & Cook, L. (1992). *Interactions: Collaboration for school professionals.* New York: Longman.

Fujiki, M., & Brinton, B. (1984). Supplementing language therapy: Working with the classroom teacher. *Language, Speech, and Hearing Services in the Schools, 15,* 98-109.

Gerber, A. (1987). Collaboration between speech-language pathologists and educators: A continuing education process. *Journal of Childhood Communication Disorders, 11*(1), 107-123.

Huffman, N. P. (1992). Challenges of education reform. *Asha, 34*(10), 41-44.

Idol, L., Paolucci-Whitcomb, P., & Nevin, A. (1986). *Collaborative consultation.* Rockville, MD: Aspen.

Jaeger, R. M. (1984). *Sampling in education and the social sciences.* New York: Longman.

Larson, V. L., & McKinley, N. L. (1987). *Communication assessment and intervention strategies for adolescents.* Eau Claire, WI: Thinking Publications.

Larson, V. L., McKinley, N. L., & Boley, D. (1993). Service delivery models for adolescents with language disorders. *Language, Speech, and Hearing Services in Schools, 24,* 36-42.

Magnotta, O. H. (1991). Looking beyond tradition. *Language, Speech, and Hearing Services in Schools, 22,* 150-151.

Montgomery, J. K. (1990). Building administrative support for collaboration. In W. A. Secord (Ed.), *Best practices in school speech-language pathology: Collaborative programs in the schools: Concepts, models, and procedures* (pp. 75-79). San Antonio, TX: The Psychological Corporation.

Moore-Brown, B. J. (1992). Moving in the direction of change: Thoughts for administrators and speech-language pathologists. *Language, Speech, and Hearing Services in Schools, 22,* 148-149.

Nelson, N. W. (1989). Curriculum-based language assessment and intervention. *Language, Speech, and Hearing Services in Schools, 20,* 170-184.

Nelson, N. W. (1990). Only relevant practices can be best. In W. A. Secord (Ed.), *Best practices in school speech-language pathology: Collaborative programs in the schools: Concepts, models, and procedures* (pp. 15-27). San Antonio, TX: The Psychological Corporation.

Norris, J. A. (1989). Providing language remediation in the classroom: An integrated language-to-reading intervention method. *Language, Speech, and Hearing Services in Schools, 20,* 205-218.

Ontario Association of Speech-Language Pathologists and Audiologists. (1996). *Speech-language pathology services in Ontario schools.* Toronto, ON: Author.

Potter, R. E., & Lagace, P. (1995). The incidence of professional burnout among Canadian speech-language pathologists. *Journal of Speech-Language Pathology and Audiology, 19,* 181-186.

Prelock, P. A., Miller, B. E., & Reed, N. L. (1995). Collaborative partnerships in a language in the classroom program. *Language, Speech, and Hearing Services in Schools, 26,* 286-292.

Roller, E., Rodriguez, T., Warner, J., & Lindahl, P. (1992). Implementing collaborative consultation: Integration of self-contained children with severe speech-language needs into the regular education classroom. *Language, Speech, and Hearing Services in Schools, 23,* 365-366.

Rubin, R. L. (1990). A demographic overview of speech-language pathologists serving the school-aged population. *Communication Exchange, 1*(1), pp. 4, 7.

Sanger, D. D., Hux, K., & Griess, K. (1995). Educators' opinions about speech-language services in schools. *Language, Speech, and Hearing Services in Schools, 26,* 75-86.

Satin, A., & Shastry, W. (1993). *Survey sampling: A non-mathematical guide* (2nd ed.). Ottawa, ON: Statistics Canada.

Silliman, E. R., & Wilkinson, C. (1991). *Communicating for learning: Classroom observation and collaboration.* Gaithersburg, MD: Aspen.

Silliman, E. R., Wilkinson, C., & Hoffman, L. P. (1993). Documentating authentic progress in language and literature learning: Collaborative assessment in classrooms. *Topics in Language Disorders, 4*(1), 58-71.

Simon, C. S., & Myrold-Gunyuz, P. (1990). *Into the classroom: The speech-language pathologist in the collaborative role.* Tucson, AZ: Communication Skill Builders.

Tomes, L., & Sanger, D. D. (1986). Attitudes of interdisciplinary team members toward speech-language services in public schools. *Language, Speech, and Hearing Services in Schools, 17,* 230-240.

Wallach, G., & Butler, K. (1984). *Language learning disabilities in school-age children.* Baltimore, MD: Waverly.

Wilcox, M. J., Kouri, T. A., & Caswell, S. B. (1991). Early language intervention: A comparison of classroom and individual treatment. *American Journal of Speech-Language Pathology, 1* 49-62.

Will, M. (1986). *Educating students with learning problems: A shared responsibility.* Washington, DC: U.S. Department of Education. (ERIC Document Reproduction Service No. ED 279 149).

Winzer, M. (1993). *Children with exceptionalities: A Canadian perspective* (3rd ed.). Scarborough, ON: Prentice Hall.

APPENDIX
Questionnaire on Service Delivery

1. Your gender:
   Female   ❑
   Male   ❑

2. Years you have worked *in schools* as a speech-language pathologist (SLP): _____

3. Have you worked in schools as a teacher?
   Yes   ❑ If Yes, how many years? _____
   No   ❑

4. Degrees or diplomas you have earned (check *all that apply*):
   BEd or equivalent   ❑
   Other Bachelor's   ❑
   Master's   ❑
   Doctorate   ❑
   Any other (please specify) _____

5. Your certification status (check *all that apply*):
   CASLPA certified   ❑
   ASHA certified   ❑
   Not certified   ❑

6. Your approximate caseload number: _____

7. Grade levels you are mandated to serve (check *all that apply*):
   Kindergarten (K)-Grade 3   ❑ % of time you currently spend on services to K-3 ____
   Grades 4-6   ❑ % of time you currently spend on services to 4-6 ____
   Grades 7-9   ❑ % of time you currently spend on services to 7-9 ____
   Grades 10-12   ❑ % of time you currently spend on services to 10-12 ____

8. Your geographical work setting (check *all that apply)*:
    Urban (> 5000 population)   ❏
    Rural (<4999 population)   ❏

9. Do you provide both assessment and intervention services?
    Yes   ❏
    No   ❏

10. Over a typical year, what percentage of your total time do you spend on *administration*? This may include record keeping, report writing, etc.
    Please specify: _____

11. Over a typical year, what percentage of your total time spent on assessment do you spend on *assessment in classrooms (regular or special) during the school day* (e.g., 9 a.m. to 3 p.m.)?
    This may include classroom observation, curriculum-based assessment, etc.
    None   ❏
    Other (please specify) _____

12. Over a typical year, what percentage of your total time spent on intervention do you spend on *intervention in classrooms (regular or special) during the school day* (e.g., 9 a.m. to 3 p.m.)?
    This may include supportive learning activities, team teaching, etc.
    None   ❏
    Other (please specify) _____

Classroom-Based Intervention Approaches

This section asks about your use and rating of seven service delivery approaches *for intervention within either the regular or special education classroom*. It asks you if you have used each approach for intervention and with which disorders and grades, its level of success for disorders and grades, and its appropriateness for disorders and grades *even if you have not used it. Even if you have not used the approach, please indicate in the far right column whether you would consider it appropriate for disorders and grades.*

13. Approach One: *Within the classroom* either the SLP or the teacher observes, while the other assumes primary instructional responsibility.

	Check *if you have used* this approach: **Y yes** **N no**		If yes, rate its success: **G good** **F fair** **P poor**		Whether or not used, is it appropriate? **A appropriate** **N not appropriate**		

Disorder. Any Grade

	Y	N	G	F	P	A	N
Language	❏	❏	❏	❏	❏	❏	❏
Articulation	❏	❏	❏	❏	❏	❏	❏
Fluency	❏	❏	❏	❏	❏	❏	❏
Voice	❏	❏	❏	❏	❏	❏	❏

Grade. Any Disorder

	Y	N	G	F	P	A	N
K-Grade 3	❏	❏	❏	❏	❏	❏	❏
Grades 4-6	❏	❏	❏	❏	❏	❏	❏
Grades 7-9	❏	❏	❏	❏	❏	❏	❏
Grades 10-12	❏	❏	❏	❏	❏	❏	❏

14. Approach Two: *Within the classroom*, the SLP or the teacher assumes primary instructional responsibility while the other assists students with their work, monitors behaviour, corrects assignments. etc.

	Check *if you have used* this approach:	If yes, rate its success: **G good**	Whether or not used, is it appropriate?

| | **Y yes** | | **F fair** | | **A appropriate** | | |
| | **N no** | | **P poor** | | **N not appropriate** | | |

Disorder. Any Grade

	Y	N	G	F	P	A	N
Language	❑	❑	❑	❑	❑	❑	❑
Articulation	❑	❑	❑	❑	❑	❑	❑
Fluency	❑	❑	❑	❑	❑	❑	❑
Voice	❑	❑	❑	❑	❑	❑	❑

Grade. Any Disorder

	Y	N	G	F	P	A	N
K-Grade 3	❑	❑	❑	❑	❑	❑	❑
Grades 4-6	❑	❑	❑	❑	❑	❑	❑
Grades 7-9	❑	❑	❑	❑	❑	❑	❑
Grades 10-12	❑	❑	❑	❑	❑	❑	❑

15. Approach Three: The SLP and the teacher divide instructional content into two parts. *Within the classroom,* groups are switched so that all students receive instruction from each individual.

Check *if you have used* this approach:	If yes, rate its success:	Whether or not used, is it appropriate?
Y yes	**G good**	
N no	**F fair**	**A appropriate**
	P poor	**N not appropriate**

Disorder. Any Grade

	Y	N	G	F	P	A	N
Language	❑	❑	❑	❑	❑	❑	❑
Articulation	❑	❑	❑	❑	❑	❑	❑
Fluency	❑	❑	❑	❑	❑	❑	❑
Voice	❑	❑	❑	❑	❑	❑	❑

Grade. Any Disorder

	Y	N	G	F	P	A	N
K-Grade 3	❑	❑	❑	❑	❑	❑	❑
Grades 4-6	❑	❑	❑	❑	❑	❑	❑
Grades 7-9	❑	❑	❑	❑	❑	❑	❑
Grades 10-12	❑	❑	❑	❑	❑	❑	❑

16. Approach Four: *Within the classroom,* the SLP and the teacher each instructs separate parts of the group, simultaneously addressing the same instructional objectives.

Check *if you have used* this approach:	If yes, rate its success:	Whether or not used, is it appropriate?
Y yes	**G good**	
N no	**F fair**	**A appropriate**
	P poor	**N not appropriate**

Disorder. Any Grade

	Y	N	G	F	P	A	N
Language	❑	❑	❑	❑	❑	❑	❑
Articulation	❑	❑	❑	❑	❑	❑	❑
Fluency	❑	❑	❑	❑	❑	❑	❑
Voice	❑	❑	❑	❑	❑	❑	❑

Grade. Any Disorder

	Y	N	G	F	P	A	N
K-Grade 3	❑	❑	❑	❑	❑	❑	❑
Grades 4-6	❑	❑	❑	❑	❑	❑	❑
Grades 7-9	❑	❑	❑	❑	❑	❑	❑
Grades 10-12	❑	❑	❑	❑	❑	❑	❑

17. Approach Five: *Within the classroom* the SLP or the teacher instructs students who have mastered the material to be learned, while the other reteaches students who have not mastered the material.

Check *if you have used* this approach:	If yes, rate its success:	Whether or not used, is it appropriate?
Y yes	**G good**	
N no	**F fair**	**A appropriate**
	P poor	**N not appropriate**

Disorder. Any Grade

	Y	N	G	F	P	A	N
Language	☐	☐	☐	☐	☐	☐	☐
Articulation	☐	☐	☐	☐	☐	☐	☐
Fluency	☐	☐	☐	☐	☐	☐	☐
Voice	☐	☐	☐	☐	☐	☐	☐

Grade. Any Disorder

	Y	N	G	F	P	A	N
K-Grade 3	☐	☐	☐	☐	☐	☐	☐
Grades 4-6	☐	☐	☐	☐	☐	☐	☐
Grades 7-9	☐	☐	☐	☐	☐	☐	☐
Grades 10-12	☐	☐	☐	☐	☐	☐	☐

18. Approach Six: *Within the classroom*, the SLP or the teacher presents the lesson using a standard format, while the other adapts the lesson for students who cannot master the material.

Check *if you have used* this approach: **Y yes** **N no**	If yes, rate its success: **G good** **F fair** **P poor**	Whether or not used, is it appropriate? **A appropriate** **N not appropriate**

Disorder. Any Grade

	Y	N	G	F	P	A	N
Language	☐	☐	☐	☐	☐	☐	☐
Articulation	☐	☐	☐	☐	☐	☐	☐
Fluency	☐	☐	☐	☐	☐	☐	☐
Voice	☐	☐	☐	☐	☐	☐	☐

Grade. Any Disorder

	Y	N	G	F	P	A	N
K-Grade 3	☐	☐	☐	☐	☐	☐	☐
Grades 4-6	☐	☐	☐	☐	☐	☐	☐
Grades 7-9	☐	☐	☐	☐	☐	☐	☐
Grades 10-12	☐	☐	☐	☐	☐	☐	☐

19. Approach Seven: *Within the classroom*, both the SLP and the teacher present the lesson to all students. This may be through shared lecturing or having one begin the lesson while the other takes over when appropriate.

Check *if you have used* this approach: **Y yes** **N no**	If yes, rate its success: **G good** **F fair** **P poor**	Whether or not used, is it appropriate? **A appropriate** **N not appropriate**

Disorder. Any Grade

	Y	N	G	F	P	A	N
Language	☐	☐	☐	☐	☐	☐	☐
Articulation	☐	☐	☐	☐	☐	☐	☐
Fluency	☐	☐	☐	☐	☐	☐	☐
Voice	☐	☐	☐	☐	☐	☐	☐

Grade. Any Disorder

	Y	N	G	F	P	A	N
K-Grade 3	☐	☐	☐	☐	☐	☐	☐
Grades 4-6	☐	☐	☐	☐	☐	☐	☐
Grades 7-9	☐	☐	☐	☐	☐	☐	☐
Grades 10-12	☐	☐	☐	☐	☐	☐	☐

This section asks you about the previous seven classroom service delivery approaches for intervention *in general*. **Even if you have not used these approaches,** *please rank the choices listed from 1 to 3, with 1 indicating your highest rank.*

For example, to indicate the *greatest advantage* of these approaches, put *1* in the blank provided.

To indicate the *next greatest advantage* of these approaches, put *2* in the blank provided.

To indicate the *next greatest advantage* of these approaches, put *3* in the blank provided.

20. Advantages of these approaches to the *SLP* (*rank* order):
   Increases teacher's awareness of SLP's role   ___
   Increases number of students served   ___
   Promotes carryover of skills to classroom   ___

21. *Advantages* of these approaches to the *teacher* (*rank* order):
     Decreases class interruptions
     Promotes carryover of skills to classroom   ____
     Increases knowledge of relationship between language and curriculum   ____

22. *Advantages* of these approaches to *caseload students* (*rank* order):
     Integrates speech-language goals and instructional goals   ____
     Decreases stigmatization   ____
     Promotes carryover of skills to classroom   ____

23. *Advantages* of these approaches to *non-caseload students* (*rank* order):
     Provides opportunity for leadership role   ____
     Increases exposure to language activities   ____
     Provides cooperative instruction   ____

24. *Disadvantages* of these approaches to the *SLP* (*rank* order):
     Requires additional planning time
     Requires classroom behaviour management   ____
     Requires incorporation of speech-language goals and instructional goals   ____

25. *Disadvantages* of these approaches to the *teacher* (*rank* order):
     Requires additional planning time
     Decreases teacher's instructional time   ____
     Requires sharing professional territory   ____

26. *Disadvantages* of these approaches to *caseload students* (*rank* order):
     Emphasizes caseload student's impairment   ____
     Requires tracking instructional goals   ____
     Decreases individualization of programming   ____

27. *Disadvantages* of these approaches to *non-caseload students* (*rank* order):
     Increases boredom level of high-functioning students   ____
     Decreases teacher's instructional time   ____
     Decreases level of expectation in the classroom   ____

28 *Things that encourage* use of these approaches (*rank* order):
     Flexibility of scheduling   ____
     Material resources   ____
     Teacher support   ____

29. *Things that discourage* use of these approaches (*rank* order):
     Lack of administrative support   ____
     Lack of time   ____
     Lack of teaching background of SLP   ____

30. Is there a need for more information for SLPs who adopt these approaches?
                Yes ❑
                No ❑ **If No, please go to question 33 below.**

31. Areas of need for more information for SLPs who adopt these approaches (*rank* order):
     Curriculum content   ____
     Classroom behaviour management   ____
     Instructional techniques   ____
     Other (please specify)_____

32. Your preferred ways of obtaining additional information on use of these approaches (*rank* order):
     Inservices/conferences   ____
     Journals   ____
     Commercial programs   ____
     Other (please specify) _____

33. **Thank you for responding. If you would like to clarify a response or make a specific comment on service delivery to students within the classroom, use the space below. Please return the questionnaire in the enclosed envelope.**