

The In-School Team: A Preventive Model of Service Delivery in Special Education^{*}

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Twenty-two elementary schools in a large suburban school board participated in a study to determine whether In-School Teams facilitate the implementation of a preventive model of special education service delivery. Resource teachers acted as internal consultants in a prereferral intervention system where assessments were based on an ecological observation system. The teams referred fewer than half of the children discussed to psychologists or other consultants, and very few children to special classes.

Vingt-deux écoles primaires d'une importante commission scolaire de banlieue ont participé à une recherche visant à déterminer si la présence d'équipes au sein même des écoles facilitent l'implantation d'un modèle préventif d'enseignement à l'enfance en difficulté. Les enseignants choisis comme personnes ressources ont fait office de conseillers internes au sein d'un système d'intervention pré-renvoi faisant appel à des évaluations fondées sur des observations écologiques. Les équipes ont dirigé moins de la moitié des enfants observés vers des psychologues ou d'autres conseillers et très peu d'élèves vers les classes pour enfants en difficulté.

Many school boards use In-School Teams (ISTs) as a form of service delivery in special education. These teams gather data in schools, suggest programming to regular classroom teachers, and decide on referrals to consultants and assessment staff. In the 22 schools that participated in our study, each IST consisted of some combination of principal or vice-principal, diagnostic and resource teacher (DART), special educa-

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tion teacher, regular classroom teacher, school psychologist and other consultant.

The theoretical issue we explored was the degree to which ISTs, also referred to as Preferral Intervention Teams (Graden, Casey & Christenson, 1985), Teacher Assistance Teams (Chalfant, 1979), and Intervention Assistance Teams (Graden, 1989), can be used as the cornerstone of a preventive model of service delivery (Keeton-Wilson, 1983). The preventive model has the following characteristics:

1. collaborative consultation between regular classroom teachers, special educators and other consultants is a key component (Graden, 1989; Pugach & Johnson, 1989a). This means that most problems are solved by regular educators, decision-making power rests with the classroom teacher, the expertise of regular classroom teachers is valued, and all problems do not need the same combination of educators for their solution;
2. decision-making is based on data from informal observations of child functioning in the classroom and trial teaching—what Graden, Casey, and Bonstrom (1985) call an ecological observation system—as opposed to formal tests (Keeton-Wilson, 1983). This requires confidence in regular classroom teachers' observations and assessments of students (Graden, 1989; Pugach & Johnson, 1989a). Further, a substantial portion of meeting time is allocated to discussion of classroom-based interventions (Keeton-Wilson, 1983; Ysseldyke, 1983);
3. there is strong commitment to the idea that, to whatever extent possible, students with special needs should be taught in regular classrooms. Regular classroom teachers thus receive immediate practical assistance for teaching students with learning and behavioural problems (Keeton-Wilson, 1983), and only pupils with severe problems are referred to school psychologists and placed in special classes (Ysseldyke, 1983);
4. a major benefit for regular classroom teachers, special educators, principals and consultants is continuous learning about the nature of learning and behavioural problems and about classroom-based intervention strategies (Keeton-Wilson, 1983).

Although researchers generally agree on characteristics of the preventive model, there is debate about whether ISTs are an appropriate vehicle for their implementation (Graden, 1989; Casey & Bonstrom, 1985; Pugach & Johnson, 1989a). We here present a case study of ISTs in one school board that has most of the features of the preventive model, describe the ISTs' procedures in sufficient detail to permit replication by other school boards, and document participants' satisfaction.

METHOD

ISTs were introduced into this particular school board in September 1983, and evaluation was conducted throughout 1985 and 1986. The study took place *in situ*, thus excluding a traditional experimental paradigm. The school board requested an evaluative study after using ISTs in one area of the board for two years. As no information had been gathered before the introduction of ISTs on the perceptions of principals, teachers, consultants or DARTs about service delivery, we could not compare pre- and post-inception views of ISTs.

Subjects

IST members and regular classroom teachers in the 22 elementary schools comprising one area of a large suburban school board in Ontario participated in the study. All IST members in each school, 88 members in all, received a questionnaire. Two regular classroom teachers from each school, 44 teachers in all, randomly selected from those teachers who had referred children to the IST, received a second questionnaire. A third questionnaire was given to the two superintendents, four psychological services staff, three special education consultants, behaviour resource teacher, speech pathologist and attendance counsellor working out of the area office—in all, twelve consultants and administrators.

Based on questionnaire results, we selected four of eight volunteering elementary schools to represent the 22 schools in the area with regard to size (three schools of 500 or more pupils), amount of activity of team (one school with less than 10% of population discussed, two with 10%–20%, and one with more than 20%), and ethnicity. From each of these schools, we interviewed the principal or vice-principal (depending on who attended meetings regularly), the team chairperson, at least one other regular team member and two referring teachers. The team member and referring teachers were selected by the principal. We thus interviewed two principals and two vice-principals (two of whom acted as chairpersons), four DARTs (two of whom were chairpersons), three other regular team members and eight referring teachers. The number of interviews from the four schools totalled 19. In addition, the senior psychologist, one psychometrist selected at random and the two special education consultants were interviewed at the area office, bringing to 23 the total number of interviewees.

The four case study schools in which interview data were collected also participated in the observational part of the study. The subjects for this

were the referring teachers (8), IST members (11), and consultants (2) who participated in two IST meetings conducted at each school.

Measures and Procedures

Questionnaires

We developed three questionnaires,¹ one for IST members, one for referring teachers and one for consultants/administrators. The three were similar in form and content, with wording changed to accommodate the perspective of the referring teacher (who may have participated in the IST on two or three occasions), the IST member (who worked on one team on an ongoing basis), and the consultants and administrators (who had intermittent contact with several teams).

The questionnaires had a section on experience and opinions, and another on outcomes of the use of ISTs. Questions were designed to obtain a description of IST functioning in terms of team composition, roles of team members, referral rates, referral process, reasons for referral, preparatory organization, scheduling and time allocation during IST meetings, follow-up procedures, parental involvement and inservice training. Respondents were first asked to describe aspects of team functioning, such as the above, and then to indicate their level of satisfaction with them. The outcomes section dealt with the effect of the IST on pupils, referring teachers, team members, and consultants and administrators. Questions referred to the IST's effect on assessment, placement, programming and professional development.

The questionnaires contained four types of items. Dichotomous items typically required a yes/no response. Estimate items required the respondent to estimate the percentage of students, teachers or team members who fell into a particular category or the percentage of time devoted to a specific activity. Multiple choice items allowed the respondent to choose the answer that best fitted her/his experience. Finally, items using a four-point Likert scale required the respondent to indicate level of agreement with a specific statement or degree of satisfaction with a specific aspect of IST functioning.

The questionnaires were distributed two months after the evaluation study began. Response rates for IST members, referring teachers, and consultants/administrators were 94%, 75% and 92% respectively.

Interviews

We developed three interview protocols—again, one each for IST

members, referring teachers, and consultants/administrators—similar in form and content but adapted to the different perspectives of the three groups of respondents. The purpose of the interviews was to probe respondents on issues raised by the questionnaire results. Thus, we asked respondents their opinions about composition and roles of team members; the referral process; productivity, goals and outcomes for the referring teacher, team member and pupil; personal outcomes; and beliefs about service delivery in special education. Questions were open-ended, with probes for respondents who did not elaborate in order that they might raise issues and points overlooked or underemphasized by the final categories of the questionnaire. Interviews were conducted by a research officer, usually in a private room during school hours. They were audiotaped, transcribed verbatim, and later analyzed for content.

Observations

The purpose of the observational data was to assess time allocation in IST meetings. Observers used rating scales to code the time participants spent describing pupil characteristics, relating anecdotes about the pupil, discussing the pupil's family, discussing assessment results, discussing programming strategies and teaching alternatives, and outlining other steps. The meetings were audiotaped so that potential coding problems could be reviewed at a later date. At 10-second intervals the observer coded both the type of activity occurring, and the type of participant speaking (that is, referring teacher, chairperson, principal, DART, other). Two researchers observed and coded the interactions of IST members at two regular IST meetings in each of the four schools; this permitted us to assess inter-rater reliability. We calculated inter-rater reliability conventionally, dividing the number of agreements by the number of agreements plus disagreements. The reliability coefficient was .91.

RESULTS

The questionnaire, interview and observational data are integrated under the headings of general procedures, group functioning, outcomes and satisfaction. Data presented are means from the questionnaires sent to referring teachers, IST members and consultants/administrators. Results are typically reported this way when there are no significant between-group differences.

General Procedures

All ISTs consisted of the principal or vice-principal, the DART, and the referring teacher. Twelve schools also had one or two other regular classroom teachers, 14 had one or two special education teachers in addition to the DART, and 13 had one resource person, such as the English as a second language (ESL) teacher or guidance teacher, or the psychological services staff member on the team. All schools invited specialized or consulting staff (such as the school psychologist or speech pathologist) to meetings about specific children when their expertise was required. Teachers additional to the referring teacher who worked with the child were also frequently invited. While parents did not attend IST meetings, they were usually informed that the meeting would occur and told the outcome.

The IST chairperson played a key role. In 14 of the 22 schools, the chairperson was the DART. In the 8 schools where the meetings were chaired by the principal, vice-principal, or other special education teacher, or where the chair rotated, the DART still provided leadership. The DART's role was seen to be: to discuss the case with teachers prior to the meeting, to ask relevant questions of the referring teacher, to clarify data presented, to provide information and to discuss recommendations with referring teachers. DARTs also scheduled meetings and coordinated follow-up.

On average, 13% of the student population of each school was referred to the IST (range = 4%–38%). In 13 of the 22 schools, 10% or more of the student body were referred to the IST. Forty-seven percent of referred students were discussed at only one IST meeting, 31% were discussed at two, 18% at three, and 4% at four or more meetings.

Ninety-six percent of the team members and teachers who responded to the questionnaire reported that after reviewing records and discussing the child with other teachers who worked with him/her regularly, teachers informally consulted the DART prior to referral to the IST. DARTs' responses to teachers' concerns typically involved observing the child in the classroom, testing informally, or suggesting some program modifications. The DART and teacher then jointly decided whether an IST referral was appropriate or should be delayed until program modifications developed on the basis of the informal consultation proved unsuccessful. If the program modifications did not substantially change the child's behaviour, the teacher, with the DART's approval, usually referred the child to the IST.

The next step, as reported both by team members and referring teachers, was the compilation of the pupil profile, often with the

DART's assistance. IST discussion took place an average of ten days after the profile was completed. Generally, ISTs met at lunch time or after school, and discussed two children during a one-hour meeting.

Questionnaire data showed that schools' follow-up procedures varied. In many cases (45% of schools), the child's program and progress were reviewed at a second IST meeting, especially if the child was placed in a resource room program or given remedial work outside the regular classroom. Sometimes (for 39% of the pupils referred) a team member was specifically directed to follow up with the referring teacher; at other times (42% of pupils referred) the follow-up simply involved an informal inquiry in the hallway or staff room. For 5% of students referred, there was no follow-up with the referring teacher even though the child remained in the class. Interview data suggested referring teachers were expected to follow through on the IST's program recommendations. Referring teachers would receive help from other team members—particularly the DARTs—in the form of specific materials and/or development of specific programs suggested by the IST.

Group Functioning

The allocation of time to different tasks in the IST meetings was assessed through observation of eight IST meetings and through the questionnaire. Both sources indicated that the bulk of meeting time ($\bar{X}=51\%$ as reported in the questionnaire, and $\bar{X}=40\%$ as observed by the researchers) was spent discussing pupils' classroom functioning. Time allocations for other activities (discussing pupils' family assessment results, program strategies, teaching alternatives, and other steps, and relating pupil anecdotes) ranged from 3% to 13%. It is especially noteworthy that the mean time allocation for reporting formal assessment results was 9% according to the questionnaire results and 3% according to observers. Intervention was discussed between 29% of the time (questionnaire) and 25% of the time (observation). Intervention was often the main focus when the child was being discussed for the second time.

The proportion of meeting time that referring teachers, chairpersons, and team members spoke was measured during regular and simulated IST meetings. The referring teacher spoke for a greater proportion of the meeting time (33%) than any other team member, including the chairperson. The referring teacher's contribution, however, occurred mainly during discussion of the child's background, and current functioning and difficulties, and diminished significantly during discussion of intervention strategies. Observations also showed the final

decision tended (in 78% of cases) to be made in a group discussion in which the two main participants were the principal and the DART, not the referring teacher. Other participants, including the referring teacher, were usually asked whether they were satisfied or agreed with the decision.

Teachers, team members and consultants identified five factors that made IST meetings productive: (1) extensive preparation by team members (helping referring teachers fill out the pupil profile, observing the referred pupil in the classroom, reading the profile thoroughly) and by referring teachers (observing the referred child carefully in the classroom, describing program modifications already tried, completing the pupil profile form); (2) group discussion issues, such as starting on time, full participation in discussion by everyone attending, and having a chairperson keep participants on task; (3) participants sharing a similar philosophy of education and a commitment to the IST; (4) presenting referring teachers with specific and realistic program suggestions; and (5) attendance of people with specific kinds of expertise (e.g., psychological services staff).

Factors leading to an unproductive IST meeting were mainly the converse of those leading to a productive meeting, but included also failure of the IST to come up with a viable plan of action. This generally occurred when the person whose expertise was needed did not attend the meeting or when a referring teacher reacted negatively to all suggestions offered, but sometimes resulted from the complexity of a child's problems.

Outcomes

Through questionnaires and interviews, teachers and team members indicated that most team meetings had a clear purpose, to formulate either recommendations for classroom teachers, or decisions about referral for further assessment.

Outcomes for Pupils

Table 1 shows the types of decisions made for pupils discussed by the IST. Since more than one outcome may be applicable to a pupil, the percentages do not add up to 100. The most frequent outcome was for the student to remain in the classroom but for the program to be modified. For 48% of the pupils, the outcome was further assessment, usually to determine more precisely the child's problem, to indicate whether further intervention such as remedial assistance from the DART would be necessary, or to provide information required for

TABLE 1
IST Meeting Decisions by Percentage of Students

	<i>Percentage of students</i>	
	<i>Mean</i>	<i>Standard deviation</i>
Students remained in regular classrooms with modifications	54.3	30.4
Students remained in regular classrooms but were withdrawn for special programming	35.4	25.7
Students were moved to a self-contained class	10.3	12.0
Students required further assessment	48.4	33.7
Students were referred to IPRC	27.8	22.1
Other	4.7	7.4

referral to an Identification, Placement, Review Committee (IPRC). Referring teachers were given some suggestions for modifying the program of each child awaiting assessment, however, so that pupils experiencing difficulties received some immediate help.

Outcomes for Teachers

Teachers, team members and consultants were asked to indicate for how many teachers certain pre-specified outcomes had been a consequence. These results are shown in Table 2. During the interviews, team members indicated that referring teachers, by participating in the IST, gained insights about, and learned program strategies for, both the child referred and children with learning and behavioural problems in general. Team members also claimed that, as a result of participating in the IST, referring teachers become more aware of children with special needs, become more analytical, and are more able both to focus on children's problems or needs and to program effectively to solve them. Moreover, members suggested that teachers, through the IST, begin to see that resource room or special class placement is not necessarily appropriate for every pupil with special needs; with the help of other teachers, such as the guidance teacher and the DART, teachers can program for most of these children in their regular classrooms.

The referring teachers themselves stated that they learned more about children with special needs by participating in the IST. They said the

TABLE 2
Respondents' Perceptions of IST Outcomes for Teachers

<i>Outcomes</i>	<i>N</i>	<i>All (%)</i>	<i>Majority (%)</i>	<i>Minority (%)</i>	<i>None (%)</i>
Immediate practical assistance for teaching, in a classroom, a student with learning or behavioural problems	121	5	79	14	3
Continuing follow-up from Team members with respect to a particular student	120	19	63	15	3
Increased understanding of the nature of learning and behavioural problems	120	9	64	26	1
Assistance in referring a disruptive student to an IPRC for special placement	111	15	44	35	5
Increased confidence in the value of the teacher's observations and assessments of students	121	22	70	7	1
Unwarranted infringement on teacher's time and independence	119	1	5	55	40
Increased ability to develop teacher's programs and strategies for teaching students with various problems	119	7	64	29	0
Increased understanding of the contributions that can be made by other disciplines to the teaching of students with problems	118	6	62	31	2
Increased commitment to the idea that to the extent possible students with special needs should be taught in the regular classroom	117	6	65	24	5
Decreased commitment to the idea that to the extent possible students with special needs should be taught in the regular classroom	114	4	24	49	24

IST collaboration enables them better to identify children with special needs, to see how programs can be modified to accommodate a wide span of achievement, and to distinguish between children whose needs can be met within the regular classrooms and those whose needs cannot. Further, teachers claimed that through the IST collaboration they learned about special education as a field of study and had become motivated to learn more about special education. Thus, teachers suggested that the IST set-up itself was a tool for professional development.

Outcomes for Team Members and Consultants

The questionnaire asked team members and consultants to indicate the degree to which several possible outcomes of the IST applied to team members. Their ratings, given in Table 3, indicated that the majority of team members and consultants perceived many positive, and very few negative, consequences for team members who served on the IST. Only 10% of team members claimed that the IST was an "unwarranted infringement" on their "time and independence." During interviews team members further claimed that working on the IST helped them learn from other team members, and to learn more about children's school problems, the children in the school (this comment was usually advanced by principals or vice-principals), and the system. They stated that job satisfaction resulted from being able to provide programs for children, meeting the needs of parents, and working with people committed to helping children. Although all team members expressed some concerns about the time commitment, they did not see it as a major problem.

Consultants' pattern of responses closely paralleled those of the team members, given in Table 3, and in interviews they cited further positive outcomes of participation on the IST. They heard useful background information about children who would later be referred to them; the Team made them feel integral to the school staff instead of like outsiders; their appreciation of teachers' expertise increased; and they found satisfaction in knowing that children were better served.

Participants' Satisfaction with the IST

As shown in Table 4, questionnaire respondents were highly satisfied with virtually all aspects of IST functioning. While the interview responses generally corroborated the high satisfaction levels indicated by the questionnaire, some interviewees also offered specific explanations.

TABLE 3
Respondents' Perceptions of IST Outcomes for Team Members

<i>Outcomes</i>	<i>N</i>	<i>Strongly agree (%)</i>	<i>Agree (%)</i>	<i>Disagree (%)</i>	<i>Strongly disagree (%)</i>
Increased understanding of the nature of learning and behavioural problems	89	38	53	7	2
Increased confidence in the value of my observations and assessments of students	88	38	61	1	0
Unwarranted infringement on my time and independence	88	2	8	56	34
Increased ability to develop my own programs and strategies for teaching students with various problems	85	18	68	14	0
Increased understanding of the contributions that can be made by other disciplines to the teaching of students with problems	86	24	66	9	0
Increased commitment to the idea that to the extent possible students with special needs should be taught in the regular classroom	86	29	54	15	2
Decreased commitment to the idea that to the extent possible students with special needs should be taught in the regular classroom	85	1	17	53	29

A major theme was that the IST succeeded because it supported teachers and created a comfortable environment in which they could air their concerns. It was perceived as providing a valuable service because "two heads are better than one." All the referring teachers claimed they learned greatly from their association with team members.

At least two thirds of those interviewed, however, suggested that

TABLE 4
Satisfaction with Functioning of the IST

<i>Satisfaction with</i>	<i>N</i>	<i>Very satisfied (%)</i>	<i>Somewhat satisfied (%)</i>	<i>Somewhat dissatisfied (%)</i>	<i>Very dissatisfied (%)</i>
Composition	123	76	21	1	2
Referring teachers' contributions	91	64	31	6	0
Team members' contributions	121	71	24	5	0
Chairperson's contributions	118	71	24	4	1
Consultants' contributions	115	71	24	5	0
Referral process	121	65	22	10	3
Time allocation in meetings	119	54	41	3	3
Program assistance given to teachers	120	33	55	9	3
Follow-up procedures	119	45	46	8	2
Own participation	119	55	42	2	1

consultants such as psychological services staff, speech pathologists or behavioural resource teachers should be invited to attend IST meetings more frequently, because when they attended they provided immediate interpretations of a child's behaviour and suggestions for appropriate intervention strategies, and became familiar with children who would be referred to them. Interviewees also indicated, however, that a consultant's presence was not always necessary. Consultants too wished to be more often invited to IST meetings, as more frequent attendance would make it easier for them to be seen as part of the team.

Interview data indicated a gap between formulation and implementation of recommendations. For the most part, referring teachers and team members concurred that recommendations were usually valid, helpful and easy to implement. They also claimed that sometimes simply bringing the problem into focus and sharing it with the group had a

positive outcome for referring teachers. The problem, however, seemed to be limited resources, including few spaces in self-contained special classes, and busy DARTS, special education and ESL teachers. Suggested solutions included hiring teacher aides, involving parent volunteers, and decreasing class size.

Questionnaire results showed that satisfaction with the length of the referral process, especially with the interval between completion of the pupil profile and discussion of the child at an IST meeting, was related to satisfaction with most aspects of IST functioning. It took an average of ten days from profile completion to IST discussion. Seventy-four percent of respondents claimed that the wait was reasonable under the circumstances, 19% that the wait was a little too long, and 7% that it was much too long. Twenty-six percent of respondents who found the wait too long estimated an interval above the ten-day mean. T tests were done comparing respondents who indicated the wait was reasonable with those who said it was too long, with regard to several aspects of satisfaction with IST functioning (see Table 5). Questionnaire respondents who claimed that the wait for an IST meeting was too long were significantly less satisfied with most aspects of IST functioning, with the exception of referring teachers' contributions and the composition of the IST, than those who thought the wait reasonable. The results suggest that speed in dealing with teachers' concerns is a major virtue of the IST and may be an index of a particular team's effectiveness.

Referring teachers, team members and consultants indicated their level of agreement with three statements regarding the IST and preventive models. In general, respondents favoured a preventive model. Although 96% of respondents agreed that the IST provides a worthwhile method for assisting pupils, a substantial minority (18% to 19%) disagreed with statements implying that mainstreaming is a valid mode of service delivery. Interview data indicated that most staff viewed mainstreaming as viable for pupils with mild to moderate problems but not for severely handicapped children.

DISCUSSION

The ISTs described above functioned in a manner consistent with the four characteristics of the preventive model given in the introduction.

1. Problems were solved by collaborative consultation. As recommended by Graden (1989), the IST was indeed a mechanism for tapping expertise within the school. Our data indicated that the role of the DART resembled that of an internal consultant (Lippitt & Lippitt, 1978). Ninety-six percent of the referrals to the IST first went to the

TABLE 5
*Relationship Between Waiting Period and Satisfaction with IST**

<i>Satisfaction variables</i>	<i>Wait reasonable (n=82)</i>		<i>Wait too long (n=29)</i>		<i>p</i> <
	<i>Mean</i>	<i>S.D.</i>	<i>Mean</i>	<i>S.D.</i>	
Satisfaction with team members' contributions	1.2	0.5	1.6	0.8	0.02
Satisfaction with contributions of resource people	1.2	0.5	1.6	0.7	0.03
Satisfaction with referring teacher's contributions	1.3	0.5	1.6	0.7	0.09
Satisfaction with chairperson's contributions	1.3	0.3	1.8	0.8	0.001
Satisfaction with preparatory organization	1.2	0.5	2.0	1.0	0.001
Satisfaction with follow-up procedures	1.5	0.6	2.0	0.9	0.01
Satisfaction with composition of the IST	1.9	0.4	1.5	0.8	0.03
Satisfaction with allocation of activities	1.4	0.5	1.9	1.0	0.06

*Means refer to a four-point scale, with 1 being very satisfied and 4 being very dissatisfied.

DART. The DART suggested program modifications that were tried and monitored prior to IST referral.

Most teams consisted of regular and special education staff, with area office special services staff being invited only to meetings requiring their expertise. One should not minimize the importance of teachers communicating with each other about students. There is considerable evidence that effective schools have mechanisms to facilitate such discussion (Fullan, 1982). According to Little (1981):

School improvement is mostly surely and thoroughly achieved when: teachers engage in frequent, continuous and increasingly concrete and precise talk about teaching practice (as distinct from teacher characteristics and failings, the social lives of teachers, the foibles and failures of students and their families, and the unfortunate demands of society on the school). By such talk, teachers build up a shared language adequate to the complexity of teaching, capable of distinguishing one practice and its virtue from another. (pp. 12-13)

2. Discussion about children in the IST was based mainly on teachers' observations about classroom functioning, not on formal test results. The focus on teachers' observations was not surprising because of the teams' within-school location, and the separation of the decision-making and consultation between IPRCs and ISTs. The ISTs in our study actually achieved the goal set by Graden, Casey and Bonstrom (1985) of basing description of the children on an ecological observation system. There are two possible reasons why an ecological observation system was the main assessment approach in the ISTs. First, the pupil profile form included a classroom behaviour checklist and asked teachers to list program modifications they had tried. Thus, teachers were given a means of reporting their observations systematically. Although the form included space for standardized test results, it was not mandatory that this section be filled in. Second, the "in-school" composition of the teams meant that teachers, not psychologists, took leadership roles. Teachers reported the information that was most relevant to them—their observations of classroom functioning.

On average, 25%–29% of meeting time was devoted to discussion of interventions, which appears to satisfy the preventive model's requirement that a substantial portion of meeting time be allocated to discussion of classroom-based intervention. However, we conclude that the portion of time so allocated was insufficient, because our respondents called for more time to be devoted to such discussion.

3. Although there was a strong commitment to the idea that to the extent possible students with mild and moderate disabilities should be taught in the regular classroom, a few teachers expressed concern that they often did not receive adequate practical assistance. While they appreciated the fact that the ISTs discussed their concerns quickly, they were less satisfied with the quality of the ISTs' suggestions for classroom-based programming and assistance in implementing these recommendations. The teachers attributed these problems to scarcity of resources and time. Coupled with the somewhat low portion of meeting time devoted to discussion of programming, these findings suggest that further staff inservice in classroom-based programming may be required.

The corollary of the idea that most students should be accommodated in the regular class is that only children with severe problems should be referred to psychological services and special education. Ysseldyke (1983), however, noted that establishing teams in schools often causes *more* referrals, because there is then a mechanism to identify more children. Ysseldyke's warning did not apply to the ISTs in our study, since less than half of the pupils discussed were referred for further

assessment (about 28% to IPRC, and only 10% to special classes). Thus, DARTs and the ISTs assisted regular classroom teachers with many children who did not need to be identified as exceptional nor to receive formal special education services.

4. Teachers stated that the IST itself provided a professional development opportunity in that they learned how to identify children with learning problems more proficiently and developed skills in programming to resolve them. Lippitt and Lippitt (1978) say the essence of a consultation is that consultees not only receive a solution to the problem at hand, but also develop their own problem-solving skills. Team members and referring teachers said they acquired these skills from each other.

In conclusion, Graden, Casey and Bonstrom (1985) stated that the prereferral intervention system "demonstrates initial promise" for assisting teachers to teach more effectively and for helping students to "learn to the best of their ability in the least restrictive environment" (p. 495). Our study showed that the IST can facilitate long-term implementation of a preventive model and is positively received by elementary teachers, principals and consultants.

NOTE

- ¹ Copies of all measures and of the pupil profile form may be obtained from the first author.

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