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# Teacher Utilization of Instructional Consultation Teams

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Data regarding intervention utilization among the target population are critical to interpret evidence from efficacy trials for school-based interventions. When use of the intervention is voluntary, intervention diffusion becomes a particularly critical variable. We examined the use of Instructional Consultation Teams (IC Teams), a voluntary teacher support program designed to enhance teacher skills for working with students in the general education classroom. Teachers' use of IC Teams was measured in 17 schools implementing the program over 4 years. The percentage of teachers who used the team increased over time, but utilization rates differed substantially among schools. Further, attrition of teachers

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in the project schools was high; over 48% of teachers had left the schools at the end of the 4-year study. We examined the roles of the principal and IC Teams facilitator in program utilization. Descriptive data and case illustrations suggested that schools with high utilization among teachers had effective, stable facilitators who worked in collaboration with their principals. Implications for studying utilization of educational innovations by school staff are discussed.

Evaluations of school-based interventions are needed for the allocation of limited resources to programs with the strongest evidence of success. One barrier to the efficacy of interventions is the extent and quality of implementation; interventions introduced in schools may not be implemented as intended by program developers. Researchers and practitioners often lack implementation data, leaving the extent to which a program is implemented and *implemented as planned* unknown (Hall & Hord, 2006; Hulleman & Cordray, 2009). Thus, outcome evaluations finding little evidence of efficacy are often ambiguous as a program may lack efficacy or may not have been well implemented. Program implementation is multifaceted, encompassing the extent to which the intervention is utilized by the targeted population and the degree to which the program is implemented with fidelity. This study explores teacher utilization of a school problem-solving team. Because teacher use of the team intervention was voluntary, analysis of implementation data is critical to interpreting the intervention's efficacy.

Just as medical researchers are concerned with dosage and delivery when testing a new drug, program evaluators should measure utilization and fidelity of the intervention under study (Sechrest, West, Phillips, Redner, & Yeaton, 1979). Sechrest et al. (1979) discussed the importance of measuring not only treatment integrity, that is, the "fidelity with which the treatment is actually delivered," but also treatment strength, or "the intensity with which the researcher intends that the treatment will be delivered" (p. 16). In school improvement literature, Huberman and Miles (1984) suggested that school change efforts should measure stabilization of use, institutionalization, and percentage of use. Stabilization of the program is a measure of fidelity; it assesses the degree to which the innovation is modified by the school staff. Ideally, programs are implemented as intended by developers with some fine-tuning to fit schools' specific needs. Institutionalization, the ultimate goal of school improvement efforts, assesses the extent to which the program has been incorporated into school structure. Percentage of use refers to utilization of the program among the target population within the school. In the current study, we examine utilization, defined as the percentage of teachers who voluntarily used the Instructional Consultation Team (IC Team) intervention implemented into their schools.

## INSTRUCTIONAL CONSULTATION TEAMS (IC TEAMS)

Instructional Consultation Teams (IC Teams) is a problem-solving, early intervention model promoting teachers' use of evidence-based instructional and behavioral practices (Rosenfield & Gravois, 1996; Rosenfield, Gravois, & Silva, 2014). This school-level intervention is designed to improve teaching practices and student outcomes and to align teachers' belief systems and practices with three key principles: (a) every child can learn under appropriate conditions; (b) for learning progress to be maximized, instruction and required tasks should match student skill level; and (c) teachers and other staff should work together to solve instructional and behavior problems within the general education classroom (Rosenfield & Gravois, 1996).

IC Teams represents a major shift in existing school practices and assumptions about struggling students. Traditionally, students who struggle in school are identified as having skill deficits and then provided support services outside of the general education classroom. The classroom teacher continues to provide instruction as usual within the classroom and is often uninvolved in the support services provided outside of the classroom. The IC Teams intervention rests on the assumption that the quality and delivery of classroom instruction is a primary influence on student success, and, therefore, should be the focus of targeted support. In addition to addressing the specific problem in the classroom, the importance of following the problem-solving process during consultation with teachers is emphasized (Rosenfield & Gravois, 1996). This shift in conceptualizing how to best support struggling students requires systemic change; extensive professional development for staff; and external support, especially in the early phases of program implementation (e.g., Rosenfield & Gravois, 1996).

The school's team leader and trainer is the IC Teams facilitator. The facilitator is the change agent who supports the implementation of the intervention in the school (Rosenfield & Gravois, 1996). The facilitator trains and recruits team members, promotes the program in the school, takes on record-keeping duties, and works directly with teachers as a case manager. In the first year of implementation, the facilitator is externally trained in the IC Teams model, practices consultation skills with online coaching (McKenna, Rosenfield, & Gravois, 2009), and trains school staff members interested in being on the team. Team membership is voluntary—the process for encouraging teachers to join the team varies by school and is largely the result of how the facilitator recruits members. The IC Team is interdisciplinary and often includes general educators, administrators, specialists, and special educators. In the second year of implementation, team members begin to work with teachers who request assistance from the IC Team for consultation about specific students or classroom concerns. Team members serve as case managers, working individually with teachers who have requested support.

In addition to one-on-one support for teachers requesting support, the IC Team itself serves multiple purposes: (a) assigns team members to take individual cases, (b) monitors progress of cases, (c) assists with problem-solving on specific cases as needed, (d) provides continuing professional development to team members, (e) addresses school-level problems, and (f) engages in evaluation activities. Schools implementing IC Teams are asked to complete an annual assessment of program fidelity that is designed to help the school plan continued professional development, evaluate program integrity, and examine student outcomes.

#### UTILIZATION

Given the voluntary nature of IC Teams, the extent to which teachers in a school request assistance from the team is a primary measure of implementation that has critical implications for overall program effectiveness. Utilization measures the spread of the intervention among the target population (Huberman & Miles, 1984). The number of users and their demographic information can help program implementers target specific individuals or groups who are not accessing the intervention. Utilization data also have implications for maintenance and sustainability. Especially when use is voluntary, the utilization rate may indicate the degree of intervention acceptance among the population. A culture that supports the intervention is necessary for prolonged sustainability (Fullan, 2006).

## Rate of Adoption

The process by which a group adopts change has been a focus of inquiry in several fields. It can be difficult to predict how much time is necessary before the outcomes of change efforts should be evaluated. Fullan (2001) proposed that the process might take 3 to 5 years for moderate change and more than 5 to 10 years for large-scale change. More specifically, Frechtling (2007) suggested "short-term outcomes are generally expected to occur within two years, intermediate outcomes within two to five years, and long term outcomes after five years" (p. 90). Change is difficult because people naturally resist disruption to the status quo, even when interventions or innovations seem to be clearly beneficial (Schein, 1999).

Historically, the rate of adoption for agricultural innovations has been studied, and the implications of that work were brought into other fields. For example, Ryan and Gross (1943) observed the process by which farmers came to adopt the use of more cost-effective seed and found that it could take as long as 10 years for a two-thirds majority of farmers to use the new seed. Rogers (2004) described the adoption phases among farmers to illustrate the diffusion process of a new practice. He termed the first 10% of farmer as

early adopters, who used the new practice during the first 5 years that it was introduced. Diffusion progressed quickly thereafter; an additional 52% were early majority adopters, who adopted the new practice within the next 4 years. As the number of remaining farmers dwindled, so did the diffusion rate. In the subsequent 2 years, 32% more farmers, termed the late majority, used the new practice. Finally, all but a few farmers, termed the laggards, adopted the innovation in the last 2 years. Rogers (2004) suggested that an S-shaped curve representing the adoption of a recommended farming practice likely applies to innovations in other fields.

In their work on innovations in education, Hall and Hord (2006) suggested that five categories of adopters have been described consistently across innovations and cultures: (a) *innovators*, who enjoy change and are always looking for new ideas; (b) *early adopters*, who adopt early and who are seen as sensible decision makers and whom others are likely to follow; (c) *early majority*, considered to be about 34% of potential adopters and are an essential target for innovation; (d) *late majority*, another 34%, are slow to adopt and usually do so under external pressure, approaching change with doubt and caution; and (e) *laggards*, who are resistant to change and traditional in outlook.

It is clear that systemic change can be a lengthy process. There may be a small group of dissenters in every community that consistently resists change and should not be the focus of recruitment efforts. Even when the innovation appears to have obvious advantages, it may take many years for the majority of the target population to get on board. In some communities, the rate of adoption might be quicker or slower than the average. For example, in this study, the rate of adoption for IC Teams varied greatly among schools within the same district. The literature suggests that there may be key factors that influence the rate of adoption in a given community.

## Role of Change Agents

One influence on the adoption of an innovation is the change agents' promotion efforts (Rogers, 2003). Within a school, there are often two people responsible for promoting new programs: the principal and program implementer or facilitator (Fullan, 2001).

The principal. As the school's leader, the principal can help to create an environment that supports change. Hord, Stiegelbauer, and Hall (1984) studied the principal's role in the innovation process by looking at behaviors of the principal that may influence program implementation. In a study of nine schools, Hord et al. observed specific actions of the school principal that were seen as promoting program implementation. Of the 2,000 behaviors documented over 1 year, they found that most of principal's actions were simple (e.g., making a phone call) and logistical (e.g., managing details, planning schedules). Less frequently, principals took on more complex roles,

such as leading staff meetings, monitoring teacher utilization, and reinforcing program use among staff.

Little research exists on the role of the principal specifically in promoting school problem-solving teams, although administrator support is usually considered an important aspect of team success (Rafoth & Foriska, 2006). Administrator support for problem-solving teams is likely influenced by both the principal's leadership style and characteristics and the resources that the principal is willing to provide to the team and its members. Administrator support for problem-solving teams may also include the principal's participation in team activities, as long as teacher empowerment is still emphasized (Rafoth & Foriska, 2006).

The facilitator. A change agent, or facilitator, typically introduces, leads, and supports new program implementation within a school (Hall & Hord, 2006). Facilitators are key to implementation because of their influence on the adoption of an innovation (Rogers, 2003). At the beginning of implementation, the facilitator is necessary in providing support, technical assistance, and clarity to the program. In the long term, the facilitator has the opportunity to influence the school's mastery, confidence, and ownership of the program (Fullan, 2001). With school teams, the facilitator is often responsible for training other team members (Rosenfield & Gravois, 1996); thus the facilitator must be an expert in the program model as well as a skilled communicator who will interact effectively with school staff (Hall & Hord, 2006).

The facilitator encourages and supports the school staff to integrate new behaviors into the system. Although there is little research on facilitators, there are multiple suggestions in the change literature that facilitators, along with the principal, play an integral role in achieving global, systemic change in schools (Fullan, 2001; Hall & Hord, 2006; Rosenfield & Gravois, 1996).

#### **CURRENT STUDY**

The current study was part of an experimental research project evaluating the efficacy of IC Teams on student and teacher outcomes in a sample of suburban publics schools, conducted as a partnership between university researchers and school district personnel (Rosenfield & Gottfredson, 2004). In the study reported here, we explore the teacher utilization of IC Teams in 17 schools that received training and ongoing support to implement the program for 4 years (2005–2006 to 2008–2009).

As described previously, the IC Teams program is designed to improve student outcomes by changing teacher beliefs about and instruction of struggling students. Teachers' referral to the IC Team was voluntary, and thus the percentage of teachers who used the team within the school was an important measure of how extensively the model was implemented. Although it was expected that teachers not specifically accessing the team

would still benefit from the resulting changes to school culture and practices, interventions tend to be more effective for those who receive intervention directly (e.g., Hulleman & Cordray, 2009). It was expected that schools with higher rates of utilization among teachers would reap the most benefits from the program. Because other services and processes for student support were still available in schools implementing IC Teams, teachers' voluntary utilization of the team was an indicator of the extent to which the intervention was adopted in each school.

## Research Questions

This study was designed to measure and examine the use of the team by teachers in 17 schools implementing IC Teams after 4 years. Because the first year was considered the preimplementation training year for facilitators and team members, the second, third, and fourth years were examined to assess utilization. The following questions guided our analyses:

- 1. How widely did utilization of IC Teams spread among general education teachers during 3 years of posttraining implementation?
- 2. What principal and team-facilitator factors are related to the observed differences in teacher utilization rates among schools?

#### **METHOD**

## **Participants**

Seventeen schools in a suburban school district in a mid-Atlantic state implemented the IC Teams intervention over four school calendar years. The schools in the sample had an average of 663 students (ranging from 381 to 1,026) and 26 general education teachers (ranging from 15 to 45) per school. The target population was the general education teachers in each school. Table 1 displays the demography of the general education teachers in the sample.

Attrition over the 4 years was substantial although not unusual according to national data (Marvel, Lyter, Peltola, Strizek, & Morton, 2007). The average annual teacher attrition rate for general education teachers was 29% in the second year of the study, and cumulative attrition was 40% in the third year and 47% in the fourth year. Attrition in schools implementing IC Teams was similar to the attrition rate of a comparison group of schools within the same district that did not implement the program.

The IC Teams program was supported and maintained by each school's principal and the IC Team facilitator. Table 2 shows the number of schools that experienced changes in their principal and facilitator during the study.

TABLE 1 Participant Characteristics by Year: General Education Classroom Teachers

	2005-	-2006	2006-	-2007	2007-	-2008	2008-2009	
	n	%	n	%	$\overline{n}$	%	$\overline{n}$	%
Gender <sup>a</sup>								
Female	373	92	391	92	403	92	403	92
Male	33	8	30	7	31	7	32	7
Missing	0	0	0	0	0	0	1	<1
Race <sup>a</sup>								
White	335	82	350	83	355	82	359	82
Black	39	10	38	9	46	10	45	10
Hispanic	5	1.2	6	1	8	2	10	2
Asian American/	9	2.2	9	2	9	2	8	2
Pacific Islander								
American Indian/	0	0	0	0	1	<1	1	<1
Alaskan Native								
Missing	18	4	18	4	15	3	13	3
Level of education <sup>b</sup>								
Bachelor's	34	8	48	11	38	8	34	8
Bachelor's plus coursework	145	36	136	32	150	34	144	33
Master's	66	16	83	20	91	21	98	22
Master's plus coursework	77	19	96	22	94	22	90	20
Doctorate	0	0	2	<1	1	<1	1	<1
Missing	66	16	56	13	60	14	69	16
Years of experience teaching <sup>b</sup>								
1 year or less	34	8	19	4	20	4	13	3
2–5 years	83	20	100	24	106	24	112	26
6–10 years	76	18	84	20	88	20	85	20
11–20 years	70	17	88	20	95	22	84	19
More than 20 years	80	20	75	18	64	14	68	16
Missing	63	16	55	13	61	14	74	17
Years teaching at current school <sup>b</sup>								
1 year or less	76	18	75	18	74	17	46	10
2–5 years	150	36	175	42	188	43	197	45
6–10 years	51	12	55	13	60	14	67	15
11–20 years	33	8	35	8	28	6	31	7
More than 20 years	27	6	27	6	20	4	21	4
Missing	69	17	54	12	64	14	74	17
Total	406	100	421	100	434	100	436	100

<sup>&</sup>lt;sup>a</sup>Data from school records: includes all teachers in the sample. <sup>b</sup>Data from a self-report survey: includes all teachers who responded to these items.

## Procedures and Measures

Extensive training in IC Teams was provided to the schools in three phases over a 3-year period. Data were collected annually and during a fourth year of implementation that did not involve such in-depth training. During the

Number of change in principal	Number of change in facilitator	Number of schools		
0	0	5		
0	1	4		
0	2	1		
1	0	3		
1	1	2		
1	2	2		

**TABLE 2** Number of Schools That Experienced Change in Leadership Personnel Staffing During Study (2005–2006 to 2008–2009)

2005–2006 school year, the first phase of training was implemented. In this phase, the full-time IC Team facilitators, each school's principal, and one identified team member from each school (called a "buddy") were trained. Facilitators attended a 3-day introductory IC Team training on essential IC Team components, skills, and concepts along with an overview of relevant empirically based principles and practices.

The introductory training was followed by seven monthly skill sessions for facilitators, principals, and buddies. These sessions were designed to provide additional content and hands-on practice with teachers and students. Sessions included practice assignments that participants were required to complete upon return to their schools. Additionally, each facilitator took a case in his or her school and audiotaped the consultation meetings with the teacher. Tapes were submitted to experienced IC Team facilitators in other school districts who provided feedback to the facilitators in training at each stage of the problem-solving process. This coaching was only provided to facilitators on their first case. Facilitators also participated in a 2-day training designed to build skills in team management (e.g., structuring team meetings, conducting team trainings, managing team documentation, collecting team data, etc.).

In the second phase of training completed during the second year, full teams from each school were trained. Team members, selected by the facilitator and principal, included general education teachers, special educators, and other specialists (e.g., the school psychologist, reading specialist, math specialist). Team member training included the same 3-day introductory IC Team training that facilitators and principals attended the prior year. Facilitators provided further training on consultation skills and processes to team members in their schools. To support this training, facilitators also received support from technical assistance providers to increase their own skills in problem solving and their ability to train teams in these skills.

In the third phase of training completed during the third year of the project, facilitators, principals, and team members were provided with technical support trainings focused on assisting them with integrating IC Teams into

existing school structures and aligning resources to maximize the problemsolving efforts of team members.

Program developers had set a goal that, by the fourth year of the project, two thirds of teachers in each school should have worked directly with the IC Team in order to achieve school-level outcomes. Facilitators were made aware of the need for their school's IC Team to reach this percentage of use by teachers during the first phase of training. Data on teacher utilization of the IC Team were collected annually in two ways: (a) as reported by each school's facilitator for program records and (b) as reported in annual teacher surveys.

Utilization measured from program records. The IC Teams facilitator at each school was responsible for maintaining a running record of IC Teams cases initiated throughout the year using a designated spreadsheet. A record was initiated when a case manager was assigned to a referring teacher. The record was designed to track each case that came to the team, including information about the case manager, teacher, student, nature of the referral concern, and problem-solving stages reached.

Utilization measured from teacher reports. As a second measure of use, utilization data were collected on an annual self-report survey (Vu et al., 2013), which was designed to assess multiple teacher variables as part of the larger efficacy study. Teachers voluntarily responded to this web-based survey administered through the Survey Monkey website each year of the study. One week before the survey was available, teachers received a small incentive (a notepad) and a memo describing the survey. Teachers also received a second memo with survey instructions via e-mail and hard copy on the first day of data collection. On the survey's first page, teachers gave informed consent and confirmed that their participation was voluntary; they also had the option to decline participation. Weekly reminder e-mails for 2 to 3 weeks were sent to teachers who had not yet logged into the survey until a total response rate of at least 85% was obtained.

On the survey, teachers who first indicated that they had a student with a persistent academic difficulty or behavior problem or needed help in assessing a child were then asked if they had worked or consulted with the IC Team ("Have you ever worked or consulted with an IC Team case manager about a student who was experiencing difficulty?") or been a member of the IC Team ("Have you been a member of your school's IC Team?"). Affirmative responses were coded 1; otherwise a 0 was recorded. If the participant's response resulted in 1 to either question, that participant was coded as having used the IC Team according to their self-report. Note that the sample size for respondents on this self-report measure was smaller than for the total sample because not all teachers reported having had a student with such problems.

Principal presence in IC-related activities. Principals participated in an interview about the implementation of IC Teams at their schools as part

of the program's measure of fidelity. The school district's Special Education Supervisor conducted phone interviews with principals at each school. The principal interview was part of a larger measure of implementation (McKenna et al., 2009; Rosenfield & Gravois, 1996) and contained five items about the principal's involvement with the team (e.g., taking a case), number of IC Team members at the school, professional roles of team members, and logistics of team meetings (e.g., when, where, and how often the team meets).

A measure of each school's level of principal involvement in the intervention was created from two of the interview items, each of which measured a component of IC Team implementation. The first item measured principal attendance at regularly scheduled IC team meetings. The interviewer was trained to record a 0 or 1 for this item: 1 if the principal attended at least 80% of meetings or 0 if the principal attended less than 80% of the meetings. The 80% criterion level had been established in previous evaluations of IC Teams. The second item asked if the principal served as a case manager for an IC Teams case that year. This item was also scored dichotomously; the item was scored 1 if the principal took a case or 0 if the principal did not take a case.

Administrator and facilitator stability. Changes in facilitators and principals at each school throughout the duration of the study were identified based on facilitator rosters and school information. A facilitator stability measure was derived to indicate whether the facilitator was stable (coded as 1) or whether the facilitator had changed during the study (coded as 0). A similar coding system was used for the principal (the same principal was coded as 1; a change in the principal during the study was coded as 0). These measures account for whether the facilitator and administrator in each school were consistent throughout the study; they do not account for reasons for turnover or exact entrance and exit dates of the personnel changes.

Measures of utilization. Utilization was aggregated to the school level to show the number and percentage of teachers who accessed IC Teams by school. The annual prevalence rate (APR) is the ratio of teachers using their school's IC Team at any point in the specified year to teachers working in the school that year. The program prevalence rate (PPR) is the ratio of teachers who worked in the school in the specified school year who had used the team at any point since 2005–2006 to all teachers working in the school that year. Thus, the PPR for 2005–2006 would be the same as the APR, but the PPR for 2006–2007 may differ from the APR for 2006–2007 because the PPR counts teachers who have used IC Teams in the previous year, even if they did not access the team in 2006–2007. The PPR does not include all the teachers who had used the team but only those who were still in the school during the specified year.

One goal of IC Teams is to affect fundamental change in teacher belief systems about struggling students and in teaching practices (Rosenfield &

Gravois, 1996; Rosenfield et al., 2014). Thus, IC Teams provide a structured problem-solving process for teachers to help their students in the general education setting. After a teacher has used the IC Teams process, he or she may have a reduced need in the future to seek assistance when encountering students with similar concerns because the teacher has gained knowledge about the problem-solving process in the routine. These teachers' use of the elements of IC Teams would not be captured in the APR. The PPR attempts to measure the spread of IC Teams ideas and their application to the teachers in the school. A goal of 67% PPR by Year 4 of program implementation was set by program developers. The APR is also included because consistent use of the IC Teams is still important for the continuation and integration of these ideas into schoolwide practice.

Annual prevalence and program prevalence rates were calculated for utilization data derived from both program records and teachers' report. Program developers regard the program prevalence rate derived from program records as a more accurate estimate of utilization because it captures those teachers who participated in the prescribed consultation process. However, the record for a given school is maintained by a single person, the facilitator, and is subject to possible recording errors. Thus, a survey-based measure was used as a supplement, which represents a measure of teachers' self-report that they had used the team. The survey responses, however, are limited in that they are self-reports of behavior. Having both program-reported and self-reported utilization data was advantageous because each measure provided a unique way of examining diffusion of the innovation.

Across schools, we explored the pattern of utilization from the baseline year and the three postbaseline years of implementation of IC Teams. Teachers' repeated utilization of the team across years was also examined as part of the efforts to explore how a voluntary early intervention innovation diffuses in a school.

We documented growth in use each year and also compared utilization rates with the expected criterion level of 67% program prevalence rate for use set by program developers on the basis of the work of Hall and Hord (2006). To address our second research question, we also examined correlations between utilization rate, principal involvement, administrator stability, and facilitator stability.

#### **RESULTS**

Program records on utilization were returned from all 17 schools in 2005–2006 and 2006–2007, for 15 schools in 2007–2008, and 16 schools in 2008–2009. In addition, teachers in all schools reported their own utilization of IC Teams. The response rates for the 2008–2009 survey from which those data were calculated ranged from 47% in one school to 100% in another (M = 1000).

neported osc		
	Number of general education teachers	Φ
2005–2006	343	.389
2006-2007	367	.367
2007-2008	377	.394
2008-2009	367	.391

**TABLE 3** Phi Correlations Between Program- and Teacher-Reported Use

*Note.* All correlations significant at p < .001. Includes only teachers who responded to the self-report survey.

88%). Except for the 1 school with the lowest response rate, all schools had response rates greater than 60%. The average response rates on the teacher survey were comparable across the 4 years, ranging from 85% to 91%. The phi correlations ( $\varphi$ ) calculated for program- and self-reported measures of annual utilization were positive and significant each year ( $\varphi$  ranged from .36 to .39, p < .001; see Table 3), but the relatively small sizes of the correlations for two measures that should map onto each other almost perfectly (i.e., correlation close to 1.0) suggest that the two methods of measuring use of IC Teams may result in meaningful differences in the interpretation of program diffusion.

#### Utilization of the IC Teams Intervention

Program prevalence rate (PPR). The program prevalence rate, or the percentage of general education teachers who used the team, was calculated from the program records for each school. Table 4 illustrates each school's progress toward the 67% PPR over the 4 years of the study. According to program records, 8 schools (47% of the sample) met or exceeded the two-thirds program prevalence goal by the third year of the study, with one school reaching 93% PPR. By the final year, 12 schools (70% of the sample) attained or exceeded 67% PPR. These data were not available for 2 schools in the third year and one school in the fourth year of the study.

On average, teacher self-reported PPRs across the 17 schools were higher annually than the document-recorded use (see Figure 1); an increasing trend was also observed. Teacher self-reported utilization data were available for all schools. According to teacher responses on the survey, 14 of 17 schools (82%) met or exceeded the criterion level of 67% utilization by the third year and 100% of the schools met or exceeded the level by the final year. These data included responses from teachers who were in the schools that did not report program data. However, the response rates differed among the schools and did not account for teachers who did not complete the survey.

TABLE 4 Percentage of General Education Teachers Who Have Ever Accessed Instructional
Consultation Teams (Program Prevalence Rates)

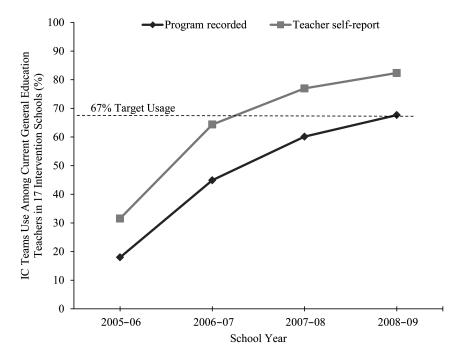
School	20	2005–2006		20	2006–2007			2007-2008			2008–2009		
	N	PR	TSR										
1	16	19	50	15	60	67	15	93	100	15	93	100	
2	23	17	57	25	44	84	27	78	96	23	87	100	
3	23	48	22	22	82	73	25	80	72	28	86	89	
4	17	29	41	18	56	72	18	67	67	19	79	89	
5	22	14	32	24	42	50	24	67	75	23	78	96	
6	23	35	39	24	63	88	27	70	89	26	77	92	
7	25	28	24	27	56	56	26	65	69	25	72	80	
8	31	10	16	30	33	37	33	61	79	39	72	85	
9	19	21	32	18	61	72	19	74	89	21	71	86	
10	37	8	8	37	46	54	43	60	65	45	71	67	
11	21	10	38	20	35	65	20	50	75	17	71	76	
12	19	21	21	22	55	64	22	50	59	19	68	68	
13	25	24	36	27	37	59	27	74	81	28	64	82	
14	33	9	48	39	31	56	34	56	74	35	57	74	
15	28	4	29	27	33	81	29	34	79	28	43	79	
16	27	4	22	27	19	63	26	19	65	26	38	69	
17	17	29	47	19	42	79	19	37	89	19	32	89	
All	406	18	32	421	45	64	434	60	77	436	68	82	

*Note.* Teachers who did not respond to the TSR were recorded as nonusers. PR = program recorded use percentage; TSR = teacher self-reported use percentage.

Annual prevalence rate (APR). Table 5 displays the annual prevalence rates in the 17 schools. Program-recorded use indicated that the annual prevalence rate of utilization, or the percentage of general education teachers who used IC Teams in a specific year, was below 67% each year, although the actual number of teachers using the team in the school increased over time in about half of the schools. Because of missing data from facilitators in 2 schools in the third year and 1 school in Year 4, we assumed 0% usage.

Teachers' responses to the survey also provided higher APRs than program-recorded rates of utilization each year in the 17 schools. In Year 2, 7 schools (41%) met the criterion level for teacher-reported APR; in Year 3, 9 schools (53%) did; and in the last year of the study, the annual rate of use by teachers completing the survey reached criterion level in 10 schools (59%).

Repeated utilization of IC Teams. According to program records of annual utilization, by the final year of intervention implementation, 32% of teachers had never used the team, 32% used the team for 1 year only, 23% used the team at least once each year for 2 years, 10% used the team at least once each year for 3 years, and 2% used the team at least once a year for all 4 years (N=436 teachers in 17 schools). These data do not include



**FIGURE 1** Program prevalence among general education teachers. IC = Instructional Consultation.

teachers who left the school district each year. Also, these data do not capture differences among the schools.

A similar trend was observed from the teachers' survey responses. Among the teachers who completed the survey, the data are that (a) 16% of the general education teachers had never used the team, (b) 24% used the team only 1 year over the 4-year study, (c) 24% used the team at least once a year for 2 years, (d) 22% used the team at least once a year for 3 years, (e) 12% used the team at least annually for all 4 years, and (f) 2% did not respond. Data on teachers' repeated utilization of the team within a school year were not available.

## Supplementary Analyses

*Membership on IC Teams.* The pattern of results for self-reported membership on an IC Team was assessed. During the baseline year when teams were being formed, 16% of teachers reported membership on the teams. This rose to 23% in the second year, and it remained high and slowly increased to 28% by the final year.

Reasons for IC Team assistance. In examining the results, the most marked changes over the years are in the percentage of teachers who ap-

<b>TABLE 5</b> Percentage	of General	Education	Teachers	Who	Have	Accessed	Instructional
Consultation Teams Eac	ch Year (An	nual Preval	ence Rate)				

School	20	2005-2006		20	2006–2007			2007-2008			2008-2009		
	N	PR	TSR										
1	16	19	50	15	53	67	15	80	93	15	87	100	
2	23	17	57	25	36	80	27	59	89	23	61	87	
3	23	48	22	22	68	68	25	64	72	28	50	75	
4	17	29	41	18	39	61	18	44	56	19	47	68	
5	22	14	32	24	29	38	24	54	71	23	52	91	
6	23	35	39	24	63	83	27	37	74	26	50	77	
7	25	28	24	27	48	48	26	38	62	25	44	72	
8	31	10	16	30	27	30	33	52	73	39	59	64	
9	19	21	32	18	61	67	19	47	79	21	52	67	
10	37	8	8	37	43	51	43	42	58	45	49	58	
11	21	10	38	20	35	65	20	50	50	17	65	35	
12	19	21	21	22	41	59	22	32	59	19	32	63	
13	25	24	36	27	19	48	27	63	78	28	54	71	
14	33	9	48	39	28	41	34	38	59	35	14	51	
15	28	4	29	27	30	74	29	14	59	28	25	36	
16	27	4	22	27	15	59	26	0	50	26	23	58	
17	17	29	47	19	42	79	19	0	79	19	0	74	
Overall	406	17	32	421	38	58	434	42	67	436	44	66	

*Note.* Because of missing data from facilitators in two schools in 2007–2008 and one school in 2008–2009, we assumed 0% usage. Teachers who did not respond to the TSR were recorded as nonusers. PR = program recorded use percentage; TSR = teacher self-reported use percentage.

proached their IC Teams for help. For instance, the percentage of teachers approaching an IC Team for help with a pupil with a persistent academic difficulty increased from 39% during the first year to 60% by the fourth year, with most of this increase occurring by the second wave. Similar patterns were observed for teachers approaching an IC Team for help with behavioral difficulties and for help with assessing a student.

School variability. Use of IC Teams varied among schools in the sample; thus, a single summary percentage does not capture the variability in the proportions of teachers who used their IC Teams. For instance, one school had a utilization rate of 61% in the first year and this school's rate increased to 90% by the fourth year. In contrast, another school's rate utilization rate increased from 14% in the first year to 70% in the fourth year. Despite these differences, most schools showed a jump in utilization rate by the second year and a leveling or more gradual increase over the remaining years.

Utilization of IC Teams in comparison schools. There were 17 comparison schools that were part of a larger experimental study. Comparison schools did not receive the IC Teams intervention, although some measures of IC Teams suggested that there was diffusion of the intervention to these

TABLE 6	Correlations Among	Use I	Rates and	Personnel	Factors
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	1.	2.	3.	4.	5.	6.	7.	8.
1. Principal at ≥80% mtg 0607	_							
2. Principal took case 0607	.26	_						
3. Principal at ≥80% mtg 0708	n/a	.04	_					
4. Principal took case 0708	.17	13	.77**	_				
5. Principal at ≥80% mtg 0809	26	71**	13	15	_			
6. Principal took case 0809	.26	35	.04	.43	.09			
7. Stable principal	.35	.28	.43	.54*	54*	.31	_	
8. Stable facilitator	.35	.69**	13	09	43	18	.07	_
9. PR APR 0506	_	_	_	_	_		_	_
10. PR APR 0607	.52	.83**	_	_	_		_	_
11. PR APR 0708	36	.35	.29	.14	_		_	_
12. PR APR 0809	18	.38	.11	.08	24	.08	.26	.21
13. PR PPR 0507	.19	.76**		_				_
14. PR PPR 0508	28	.56*	.13	.10	_		_	_
15. PR PPR 0509	04	.46	.19	.27	43	.06	.38	.25
16. TSR APR 0506	_	_	_	_	_		_	_
17. TSR APR 0607	.26	.29	_	_	_	_	_	_
18. TSR APR 0708	16	.40	.10	24	_		_	_
19. TSR APR 0809	08	.41	.07	07	38	37	.37	.20
20. TSR PPR 0507	.19	.25	_	_	_	_	_	_
21. TSR PPR 0508	.15	.34	24	55*	_	_	_	_
22. TSR PPR 0509	.19	.37	.03	25	15	34	01	.29

PR = program recorded; TSR = teacher self-reported; APR = annual prevalence rate; PPR = program prevalence rate; mtg = Instructional Consultation meetings; n/a = too much missing data. \*p < .05. \*\*p < .01.

schools. Because the comparison schools also completed the teacher survey (Vu et al., 2013), it was possible to examine their perceptions of use of IC Teams by examining their responses to the survey question about use of IC Teams. In comparison schools, teacher self-report of IC Teams use grew from 15% to 31% over the 4-year study. In schools implementing IC Teams, self-reports of IC Teams use grew from 31% to 72%. At the end of the study, teacher-reported use of IC Teams in comparison schools was equal to that in the intervention schools at baseline. Throughout the study, teachers in schools implementing IC Teams were reporting more use of the intervention; however, in the final year, 2 comparison schools' reported use of IC Teams increased markedly. Although the growth in use was not as high in the comparison group, these data provide some evidence of diffusion of the innovation to the comparison schools.

## Correlations of Between-School Variables and IC Team Use

At the school level, we explored correlations among utilization rates and principal presence as well as between utilization rates and facilitator and administrator stability (Table 6).

Principal presence. A strong, positive relationship existed between principals serving as case managers and the program-recorded APR in the year immediately following the first training year (r=.83, p<.001). Similarly, a strong, positive correlation was observed between principals serving as an IC case manager and the program-recorded PPR in the same year (r=.76, p<.001). This relationship was not found for the teacher-reported utilization rates that year. On the other hand, principals managing IC cases were associated with lower teacher-reported APR for the third year of the project (r=-.55, p<.05). Principals attending IC meetings 80% of the time or more were not associated with utilization rates.

Administrator and facilitator stability. Of 17 schools, 10 schools (58%) had a stable administrator and 8 schools (47%) had a stable facilitator, although only 5 (29%) schools had both a stable administrator and facilitator throughout the study; 2 schools had two administrators and three facilitators. Correlation trends suggested a consistent, positive relationship between facilitator stability and both measures of prevalence rates (r ranging from .14 to .73). No apparent patterns were observed between administrator stability and utilization.

For principal presence in IC Team-related activities and facilitator stability, there was a significant relationship between the principal taking a case in second year of the study and facilitator stability (r=.69, p<.01), although this relationship was not replicated with a principal taking a case in the third year of the study. There were no significant relations between principals' attendance at meetings and facilitator stability. Principals' stability was positively associated with their taking an IC Team case in the third year of the study (r=.54, p<.05) and negatively associated with their attending IC Teams meetings (r=-.54, p<.05).

#### Case Illustrations

To illuminate the data, selected informal observations were conducted to understand factors that contributed to variability in utilization rate among schools. Specifically, we were interested in descriptive information about the roles of the IC Team facilitators and principals at schools with high, average, and low program-recorded prevalence rates. Information about how the facilitator advocated for team use, as well as a report of facilitator stability, are included in the case illustrations. These case illustrations represent actual implementation situations that occurred. They are being presented in order to provide some insight as to how factors related to the facilitator and/or principal may have contributed to rate of IC Team use in a school. These examples are not meant to imply that these factors alone affected the school's prevalence rate; they are instead meant to offer some explanation of how principal and facilitator characteristics may have influenced staff use of the IC Team. Examples also highlight how training, recruitment of team members,

and encouragement of teacher use varied across schools implementing the same prescribed program.

High prevalence rate. School 3 reached an 86% program prevalence rate of IC Teams utilization by the last year of the study. In Year 1, nearly half of the teachers used the team (48%). In Year 2, the annual utilization rate was 82%; annual utilization in Year 3 stayed fairly consistent (80%).

The school's facilitator was a nationally certified teacher, focused and knowledgeable about effective instruction. He was the only male facilitator in the study. He produced a monthly school newsletter about IC Teams in which he shared success stories, raised awareness of the team, and advocated for teacher requests for assistance from the team. He also started an action research group with other facilitators to conduct school-based research on IC Teams. The facilitator's leadership and enthusiasm for IC Teams seems to have played a role in the high rates of utilization at his school.

Average prevalence rate. School 12 reached a 68% program prevalence rate, which was just above the 67% criterion. In Year 1, the annual utilization rate was only 21% but in Year 2, it more than doubled to 55% and remained stable in the second year after implementation (52%).

The increase in utilization in Years 2 and 3 may have been due to a change in the facilitator during Year 2. The initial facilitator left after Year 1 and was followed by a former special educator in the district, who was trusted by teachers and administrators. The new facilitator's style complemented that of the principal, who allowed her freedom to implement the IC Team within the school. In Year 2, the facilitator helped the principal get on board and serve as an IC Teams case manager.

The new facilitator advocated for teacher utilization and may have obtained increased utilization partially because of her credibility within the school. She made frequent presentations at staff meetings and put notes in staff mailboxes, keeping the team visible to staff. The facilitator was also efficient; she completed her own training promptly and then trained team members during the same year, unlike other facilitators who took an entire year for their own training.

Low prevalence rate. School 15 only reached a 43% program prevalence rate of utilization, which was the lowest within the sample of cases with complete data. Annual utilization started off very low (4%), increased considerably during Year 2 (30%), faded during Year 3 (14%), but increased again (25%) in the final year of the study, although never reaching a substantial number of the teachers.

The school had a different facilitator in each year of the study. The first facilitator left after Year 1, with the team only receiving a half year of training. In Year 2, the second facilitator completed her training while team members took cases without the benefit of a trained facilitator to support them. The second facilitator advocated for the IC Team by explaining the intervention during staff meetings and by meeting with teachers in each

grade level. Unfortunately, she left before the end of the year and the team was left without a facilitator for 5 months. Another facilitator was hired for Year 3 but by this time, support for IC Teams had deteriorated among school staff and some members had left the team.

#### DISCUSSION

Researchers and practitioners often lack program implementation data, so they have little information about the extent to which a program is implemented (Hall & Hord, 2006; Hulleman & Cordray, 2009). It is particularly important to measure utilization when evaluating school problem-solving teams because accessing these services is often a voluntary process. Without data on utilization, evaluation outcomes are ambiguous and can result in the discontinuation of a potentially effective program due to implementation problems or continuation of support programs with little acceptability except for a handful of teachers within the building.

#### Utilization of IC Teams

Based on the literature about utilization of innovations (e.g., Hall & Hord, 2006), we set a criterion level of 67% of the teachers by the fourth year, which would include the innovators (likely to be team members and facilitators), the early adopters, the early majority, and a beginning inroad into the late majority. After three full years of implementation, program records indicated that at least 70% of the schools in our sample met the criterion of having 67% of the teachers in their school utilize the IC Team, according to program prevalence rates. Teacher self-reports of utilization suggested that 82% of schools met this goal by the second full year of implementation and that all schools had reached the goal by the final year. There was substantial variation in utilization rate across schools, ranging from 32% to 93% according to program records and from 67% to 100% according to teacher report. The teacher report data only included those teachers who responded to the survey. The annual prevalence rate was more variable, rising in seven of the schools, falling in five, and mixed in five more. The teacher attrition rate of 48% by Year 4 of the study also added complexity to the picture.

Given Fullan's (2001) caution that "even moderately complex changes take from 3 to 5 years" (p. 52), some of the teams appear to have made solid progress after 3 years. The results are even more compelling as IC Team was not a mandated program in these schools, and as such, use by teachers was completely voluntary and dependent on the capacity of the trainers, facilitators, and principals to create a meaningful rationale for staff to access and use the team.

## Factors Limiting Teacher Use

Many factors may influence these results and deserve further investigation. Teacher turnover is one such factor. Further, the use of the team by the teachers for more than one case was not common and needs to be better understood. In addition, the complexity of the IC Team innovation and its intention to alter existing beliefs, practices, and structures would support variability in use depending upon teacher and school variables.

Attrition. Teacher turnover necessarily limited the program prevalence rate, which reflects the percentage of currently present teachers who ever availed themselves of team services. It is noteworthy that over 2 years, a third of general education teachers working in the school when the project began had left the schools, and by Year 4, that number had reached 48%. Turnover impedes any intervention that relies on training or personnel development. Further, it makes obtaining school-level effects more difficult, as turnover may impact larger school culture change. We speculate that the program under study here, and similar programs directed at the practices or attitudes of in-service teachers, may have a lesser prospect of successful implementation in schools with high teacher turnover where, perhaps, improved teacher practices may be most needed.

Multiple use of the team by teachers. Most teachers who used the team did so during only 1 year of the study. Program developers anticipate that teachers working with team case managers will learn skills and strategies that they can use on their own later with other students. Kaiser, Rosenfield, and Gravois (2009) suggested that teachers report learning skills from working with IC Teams and intend to use these skills in the future. It is unclear if one-time users in this study did not return to the team because they had developed critical new skills or if they chose not to come back for other reasons. Further analysis of teachers' perceptions about and experiences with the process would help to answer this question. For example, all teachers who were listed on the program report, including those who completed the process and those who did not, were considered users of the IC Team. Further analysis of how many of the teachers completed the process and how many achieved student goals is important to explore.

Data accounting for teachers taking cases to the team multiple times during a single year may also be informative; teachers identified as "one-time users" in this study may have worked with the IC Team on several cases throughout a single year or on one or more cases over an extended time period. The available data only indicated whether the teacher had used the team during the year rather than how often or for how many student concerns. Also missing from the analysis was the number of teachers serving on the team who received more extensive training in problem-solving skills. They might not have used the team but may have been influenced by their team membership. Future studies could also evaluate the effect of team membership on those who participated as team members.

## Issues in Measuring Utilization

We studied teachers' utilization of IC Teams using data collected from both program records and teachers' self-report. The two measures of utilization were moderately correlated, although the estimate based on teachers' self-report of utilization was higher. Both measures are subject to error. Program developers preferred program records as their choice indicator of program utilization because it was more likely to capture the degree to which teachers formally participated in the prescribed consultation process with the team. Teacher report of utilization is a broader measure that may capture informal contact with the team but not accurately distinguish participation in the prescribed consultation process. Moreover, though response rates were high, teacher report did not include all teachers in the school, as response to the survey was voluntary.

During the initial year (2005–2006), the team facilitator was being trained and took one or more cases under supervision to develop skills in consultation, and other team members were also being trained in each school. This presumably accounts for the higher rates of utilization of an instructional consultation team in intervention than in control schools during the baseline year. By the second year the distributions of utilization rates for intervention and control schools were almost nonoverlapping, and in the third and fourth years the distributions were completely nonoverlapping. Nevertheless, the rate of self-reported instructional consultation team utilization in control schools (31% overall) is high enough to make treatment diffusion (Shadish, Cook, & Campbell, 2002) a plausible threat to internal validity. Alternatively, it might suggest that the teacher survey data in the Instructional Consultation Team schools might overestimate the rate of use.

The next step in program implementation would be for researchers to design evaluations that include more comprehensive implementation data from the onset. These data could be used to inform program implementers of potential problems early on and allow time for reaching out to groups that are not using the program. One of the facilitators, along with the building school psychologist and a school psychology doctoral student, completed an action research project within one school to learn more about why teachers did or did not use the team (Schussler, Fornasar, & Neall, 2010). Additional studies would help us learn more about other factors influencing utilization.

## Facilitator Role in IC Team Utilization

The implementation literature suggests that facilitator stability is a possible factor influencing utilization variability. There was a positive relationship between utilization rate and facilitator stability across both measures of utilization. Only 8 of the 17 schools had a stable facilitator over the

3 years of the study, and a few schools had a different facilitator in each year. Facilitators are important in achieving utilization because they serve as the building change agent (Fullan, 2001). They are responsible for guiding implementation at the school level. The school case illustrations presented provide some insight as to the facilitator's role. To be effective, the facilitator should view the program goals as worthy and viable and also be skilled in the critical components of the IC Team model. Additional skills are also required in order to support school-level change to a new problem-solving model. The facilitators must not only develop their own consulting skills but also have skills to provide professional development to team members, orchestrate use of the team among teachers, and manage the range of reactions from teachers who are being asked to make fundamental changes in how they instruct and support struggling students. To be successful, the facilitator needs leadership skills and effective interpersonal skills as well as strong relationships with school staff (McMahon, 1998; Rosenfield & Gravois, 1996).

Leadership and interpersonal skills likely represent only some of the necessary components for facilitation. Thomas (2004) discussed the importance of continued research on team facilitators' preparation as well as on the skills, theories, and models of facilitation. Thomas's work highlights the importance of the facilitator role and stresses the need for comprehensive education in supporting change, not solely superficial training for certain skills. His emphasis on the consideration of necessary assumptions that facilitators must hold may be related to the lack of stability seen in the current study. Although the IC Team facilitators received skills training, it is unclear if a more comprehensive preparation program, with a greater focus on the motivations behind the required skills and tasks, would have resulted in finding facilitators who were a better fit for the role. Program implementers noted that there were considerable differences among the facilitators in terms of their motivation for the position and their skill levels. A job analysis of the facilitator role throughout the various stages of implementation may be helpful in verifying the program developers' conception of the role. Future researchers may also want to explore teacher and team member perceptions of the facilitator, as they may influence selection of facilitators as well as staff interest in using the team.

## Principal Role on IC Team Utilization

Principal support has been consistently viewed in the literature as essential to the success of innovative programs in their schools (e.g., Payne, Gottfredson, & Gottfredson, 2006). Rosenfield and Gravois (1996) described the significant role of the principal in the initiation and implementation stages for the IC Team model. Thus, it was hypothesized that the effectiveness of facilitators and IC Teams would also depend on the level of

support from their school administrators. Our data suggest that principals' taking a case in the beginning of program implementation was related to a higher percentage of teachers using the team (r ranging from .37 to .83 between principal taking a case in the first year of implementation and various measures of teacher utilization). There were no significant relationships between principal attendance at team meetings and utilization that year, and principal attendance at meetings and serving as a case manager the following year were negatively related to teacher utilization. It is possible that the principal taking a case and attending meetings may not have been the best index of administrator involvement with or support for the program or that principal support may have varying influence on teacher use at different stages of the implementation process. Further exploration of principal support for problem-solving team implementation seems warranted.

#### Limitations

Data from this study are descriptive. We attempted to quantify utilization and identify factors contributing to variability in utilization rate between schools. Relationships between utilization, facilitator stability, and principal involvement are correlational. It is possible that school or program characteristics that were not studied are responsible for the observed relationships.

This study focused on teacher utilization, but there are other important aspects of program implementation and fidelity that we did not consider here. Hulleman and Cordray (2009) presented multiple definitions of fidelity, including "treatment integrity, adherence, compliance, dose, exposure, quality of delivery, and treatment differentiation" (p. 89). The picture is even more complex for consultation researchers. Noell (2008) enumerated three different treatment integrity processes relevant to consultation: (a) the "degree to which the consultant adheres to an established consultation model," (b) "the degree to which one or more specific procedures embedded within an established consultation model are implemented as designed by the consultant," and (c) "the degree to which the consultee delivers the treatment to the client" (pp. 323–324).

Only utilization of the intervention was examined in this study. Data on fidelity to the treatment model were collected in a way that limited utility for research because it was designed to be user-friendly for practitioners implementing the model. Although we included a measure of integrity of the consultation process, it was used for formative feedback to the teams rather than as an experimental measure of fidelity (McKenna et al., 2009; Rosenfield & Gravois, 1996). The cases that were evaluated for fidelity were not randomly selected in a consistent way due to confusion in the instructions but did provide assurance that each case manager could conduct the process with fidelity.

In addition, educators in the schools were able to seek help from many sources, including other general educators, specialists, parents, counselors, and Child Study Teams. In this sense, IC Teams were only one source of support for educators experiencing student problems. Results should be interpreted in this context—IC Teams was not being compared with an alternative in which educators did not have other sources of help or support.

Data were missing for two schools, but it is unclear whether the program was not being implemented or if there was a problem in tracking teacher utilization. Those schools had either limited principal support or facilitator instability. We chose to record missing data as zero teachers utilizing the team for the year. However, this may not have been an accurate interpretation.

Finally, unlike the study of program diffusion in fields where intended users may be less mobile, school-based studies must consider teacher attrition rates. National figures on teacher mobility and attrition indicate that a substantial proportion of teachers do not return to the same school to teach the next year (Marvel et al., 2007). The teachers in our study were no exception. The hypothesis that utilization would reach 67% was based on literature in non-school-based studies, so this percentage may not have been appropriate for our study of program diffusion because our intended users were highly mobile. Nevertheless, formal documentation on program prevalence suggested that almost half of the schools reached the 67% goal by Year 3; a majority of the schools did so by Year 4 of the study. At present, teacher mobility seems to be a factor endemic to longitudinal school-based studies. Future research that emphasizes teachers as users of innovations should take into account this issue of teacher attrition. In addition to tracking teachers who have been exposed to the intervention of interest since Year 1, program evaluation researchers may also consider providing basic training to staff at regular intervals throughout the year to ensure that new staff are also exposed to the intervention.

#### CONCLUSIONS

This exploratory study provided insight into the dissemination of IC Teams, one school-based problem-solving model, across 17 schools over a 4-year period. The IC Teams program is designed to challenge the existing beliefs, practices, and structures within the school. Extensive training is in place to support successful implementation and encourage utilization among teachers, especially because teacher use is not mandated. It is essential to measure and monitor the utilization of school-based interventions among teachers, and consideration of related factors such as change agent characteristics, administrator support, and attrition is encouraged. Future research should

address key variables that contribute to high utilization and successful implementation of such interventions.

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*Note*: As president of ICAT Resources, Dr. Gravois offers consulting and training services promoting the implementation of IC Teams. ICAT Resources may commercially benefit from the results of this research.

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