

## **From Central Guidance Unit to Student Support Services Unit: The Outcome of a Consultation Process in Trinidad and Tobago**

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*In this article, we report on a multiyear consultation project between a consulting team based in the United States and the Ministry of Education in Trinidad and Tobago. The project was initiated with a request for training in counseling for secondary school students but ended with the training of personnel from the Ministry of Education in diagnosis and assessment at the elementary school level. Outcomes included manuals with national norms on phonemic awareness, oral reading fluency, and parent and teacher rating scales for the elementary-age students in Trinidad and Tobago and on a depression screener and an anxiety measure for secondary school students. Details on the consultation process are discussed as are lessons learned.*

If you google the term *consultant*, you come up with a variety of businesses and services being offered ranging from information technology and computer specialists to individuals providing tutoring to students. Many of the growing cadre of professional consultants are probably unaware of the sizeable research literature on consultation (e.g., Brown, Pryzwansky, & Shulte, 2011; Caplan, 1963; Kratochwill & Bergan, 1990; Rosenfield, 1987; Sheridan, Kratochwill, & Bergan, 1996) and most have probably never had coursework or training in consultation. However, in school psychology practice, *consultation* is a technical term based on a well-established literature

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(e.g., Erchul & Martens, 2010; Erchul & Sheridan, 2008; Lambert, Hylander, & Sandoval, 2004; Rosenfield & Gravois, 1996) referring to specific types of interactions between consultants and consultees.

In this article, we use the following definition of consultation as a starting point for our discussion:

A process of interaction between two professionals—the consultant, who is a specialist, and the consultee, who invokes the consultant's help in a current work problem that he believes is within the consultant's area of specialized competence. The work problem involves managing or treating one or more clients of the consultee, or planning and implementing a program to cater to the clients. *Client* is used to denote the layperson who is the focus of the consultee's professional operations; the client could be a teacher's student, a nurse or physician's patient, a clergyman's congregant, or a lawyer's client. (Caplan & Caplan, 1999, p. 11)

This definition highlights several of the aspects of consultation that undergird the project described in this article. First, the consultants all had specific areas of expertise. Second, the consultants were invited to use their expertise in helping with a work-related problem. In this project, the consultees were managers in an educational system—rather than individuals seeing clients—making this a case of organizational consultation or organizational development.

In the following pages, we describe an 8-year consultation process (1998–2006) that involved three researchers based in the United States and two supervisors at the Central Guidance Unit of the Ministry of Education in Trinidad and Tobago. We discuss issues of entry and the roles that the consultants undertook as the consultation process evolved, and we highlight the challenges that the consultation process posed. We close with changes to system that were sparked by the consultation process as well as the areas in which the consultation process did not make much headway. Before describing the consultation process, we provide a brief overview of Trinidad and Tobago and its educational system to provide a context for the consultation project.

## TRINIDAD AND TOBAGO

### Country Description

Trinidad and Tobago is a twin island republic and the southernmost islands in the Caribbean chain. Located between 10 and 11 degrees north of the equator, and seven miles from the northeast corner of Venezuela, the islands have a tropical maritime climate with two seasons—a hot dry season from January to May and a hot rainy season from June to December. Often

referred to as T & T by its inhabitants, the country has a population of about 1.2 million people (49.3% female) and is one of the most cosmopolitan of the Caribbean islands, with a population that includes people of African (37.5%), East Indian (40%), and Mixed (20.5%) descent as well as smaller numbers of people of Chinese, European, and Syrian descent. English is the official language of the country.

T & T is also one of the more prosperous of the Caribbean nations due to substantial deposits of oil and natural gas. Although the country ranks 158th in the world in population, it ranks 62nd in gross domestic product per capita (Central Intelligence Agency, 2012). T & T boasts a literacy rate of 98.6%, although it is not clear what percentage of the population is *functionally* literate (Worrell, 2006). The best available data suggest that at the time of the project, 80% of elementary-age children attended school and 65% to 75% of older children attended secondary school, with percentages fluctuating by region of the country (Central Statistical Office, 1998; United Nations Development Programme, 2001).

## Educational System

The educational system in Trinidad and Tobago is based on the British model of schooling from the mid-1900s. There are 14 years of school—7 in the elementary grades and 7 in the secondary grades—although the government's goal is to provide universal schooling for 12 years. Students typically enroll in elementary school at 5 years of age and write an examination in the 7th year of elementary school at age 11 to determine their secondary school placement. There were three tiers of secondary schools at the time the project was conducted, although these tiers are not always acknowledged officially. Tier 1 secondary schools required the highest scores on the secondary entrance exam and typically have seven grades (Forms 1 to Upper 6). Tiers 2 and 3 secondary schools typically had five grades (Forms 1 to 5), and many Tier 3 schools were paired junior (Forms 1 to 3) and senior (Forms 4 and 5) secondary schools.

The final 2 years of secondary schooling (Lower and Upper 6) are typically reserved for the students with the highest achievement levels who are preparing to attend universities, and entrance into Lower 6 is determined by performance on the examinations administered at the end of the Form 5 year—previously the Cambridge University General Certificate of Education Ordinary Level examinations, which were replaced with examinations administered by the Caribbean Examinations Council. In the past decade, the government began offering Form 6 classes at some Tier 2 and Tier 3 schools, and in 2010, all Tier 3 schools were converted into 5- or 7-year schools. Both elementary and secondary schools have three terms. Term 1 runs from September to December, Term 2 from January to April, and Term 3 from April to July.

The country is divided into eight educational regions, seven of which are in Trinidad, and Tobago constitutes the eighth region. Teacher training was not a major priority of the Ministry of Education until relatively recently, in part due to a shortage of individuals qualified to be teachers and previous policy. Elementary school teachers needed to have passing grades in five subjects in their Form 5 examinations, including English Language, Mathematics, and a science (George & Quamina-Aiyejina, 2002) and secondary school teachers required a degree in the subject area in which they were teaching. On the basis of seniority and availability, elementary school teachers were seconded to a teachers' college for teacher training in a 2-year diploma program (roughly equivalent to an Associate degree), and both elementary and secondary teachers could also take a part-time 1-year in-service program at the School of Education at the University of the West Indies leading to a Certificate in Education (for elementary school teachers) and a Diploma in Education (for secondary school teachers). With the opening of the University of Trinidad and Tobago in 2004, the entry requirement for elementary school teachers is now a 3-year Bachelor of Education degree.

A stratified random sample of elementary school teachers conducted in the 2001–2002 year indicated that approximately 90% of them had completed the teachers' college diploma, 18% had or were pursuing the Certificate of Education, and 7% had university degrees (Worrell, Watkins, & Hall, 2006). Older data indicate that the percentage of secondary school teachers with degrees ranges from a high of 87% in the Tier 1 schools to 44% in some of the Tier 3 junior secondary schools (Central Statistical Office, 1998), and typically fewer than half of these teachers had received formal teacher training (Worrell, 2006). It is probable that the percentage of secondary school teachers with degrees has increased over time and the percentage of these teachers who have received teacher training has decreased.

## THE CONSULTATION PROJECT

### Entry

#### INITIAL INVITATION

In 1997, the government of Trinidad and Tobago issued a mandate to the Ministry of Education under the auspices of a project called Continuous Assessment of Progress (CAP). CAP's goal was to identify students who were not making educational progress and provide them with service to improve their academic skills. CAP was assigned to the Central Guidance and Special Education Units of the Ministry of Education (MoE), and in December of 1997, the supervisors of these two units asked the third author, a native of the country, to provide the Guidance and Special Education Officers (GSEOs)

working in secondary schools with training in counseling strategies. After an extended discussion with the two supervisors to understand the rationale for the request, it became clear that there was a sizeable cohort of secondary school students who did not have the academic skills necessary to engage in academic work at that level. The supervisors also shared a document detailing the CAP project and the expectations for the project.

The author who received the initial request asked for some time to consider the issue and brought the issue and the CAP document to two colleagues. They all agreed that (a) counseling would not remedy the skill deficits of the secondary school students, (b) the teaching of skills would be more appropriate, and (c) there was a need to put in place a system that minimized the number of students who arrived at secondary school without the appropriate academic skills. As the MoE officials had no frame of reference with regard to the appropriate type of services, the consultants suggested providing three miniworkshops to the GSEOs, with the workshop topics based on the nature of the problems that the consultants perceived.

Although not confirmed with data, conversations with the MoE supervisors strongly suggested that the students of concern had limited reading abilities. Thus, the first workshop was on reading instruction with an emphasis on teaching prereading skills and early assessment, diagnosis, and remediation of reading difficulties. The second workshop was on behavior modification with an emphasis on classroom management, given that the students of concern were all students who were considered unmanageable in the classroom. Because there were a limited number of GSEOs, who each had a set of schools that they were responsible for, and our belief that prevention and early intervention needed to be an integral part of the system, consultation was chosen as the third workshop topic.

The idea of the miniworkshops was discussed with the two MoE supervisors, who were told that the workshops would highlight the training needs that the consultants felt would best address the problems as described and were intended to support the types of tasks that the GSEOs were being called upon to perform under the CAP project. The two supervisors were also assured that these workshops would be offered at no cost to the MoE and that the supervisors would make the final decision about which training activities would eventually be delivered. Funding for the trip and workshops was solicited from several units at the consultants' academic institution.

With the approval of the supervisors, the GSEOs and their supervisors attended the three miniworkshops conducted over a 2-day period in May 1998. The 2-day program included diagnosing and remediating reading problems (Day 1 morning), behavior management (Day 1 afternoon), consultation strategies (Day 2 morning), and completing an integrated case study (Day 2 afternoon). An evaluation with Likert-scale and open-ended questions was completed by the GSEOs at the end of the 2nd day and the three consultants met with the two supervisors on the morning after the workshops to take a

preliminary look at the evaluation responses and to discuss if and how the project would move forward.

#### FORMAL INVITATION

The two supervisors were enthusiastic at the debriefing meeting and indicated that they were definitely going to engage in a consultative relationship with the team. They had attended the workshops and had witnessed the positive responses of the GSEOs over the course of the trainings. Moreover, a preliminary review of the evaluations indicated that they were all positive. A formal evaluation report was written and submitted to the two supervisors. This report indicated that the mean ratings of the presenters (6.71) and the utility of the topics (6.50) were quite high on a 7-point scale, and the comments mirrored the numerical ratings.

Over the next few months, there were several conversations with the two supervisors and their deputies working out the details of the process, including content and structure of workshops as well as how the project would be funded. One issue that had to be resolved involved who should receive the trainings that were being offered. Most of the Guidance Officers had training in social work and saw themselves as clinicians, whereas the Special Education Officers had been trained as teachers and saw themselves as academic specialists. One midlevel supervisor, whose training was clinical, argued strongly for the separation of training, suggesting that the training in reading assessment and intervention be given to the Special Education Officers and training in consultation and behavior management be given to the Guidance Officers.

In discussing this issue with the supervisors, it became clear that the GSEOs would not be working in teams and each was assigned to a unique set of schools where they would be working independently. The evaluation responses from the preliminary workshops also contributed to this discussion. For example, one Guidance Officer's response to the question, "What did you find most useful in the past 2 days?" was as follows: "Everything. The reading session was new to me, yet interesting and helpful; Behavior modification session—quite refreshing/useful; consultation material well planned, great for future use." Based on the fact that each GSEO would be responsible for a set of schools without assistance and the workshop feedback indicated that both sets of officers had responded favorably to all of the training modules, the MoE supervisors decided to provide all of the training to all of the GSEOs.

#### PLANS FOR TRAINING

In the discussions with the MoE supervisors, both short- and long-term training needs were discussed. The short-term needs focused on supporting the MoE as it moved toward implementing the CAP model. In this model, the GSEOs would be required to prevent problems, or identify problems early

and intervene, requiring training in assessment and diagnosis. Thus, training in psychoeducational assessment, diagnosis, and intervention were seen as important short-term needs. The fourth short-term need was consultation as the GSEOs had to learn how to help teachers and parents work with students who manifested academic or behavioral problems but who did not require intensive individual assistance. Two longer term goals were also discussed. The first goal was to identify and provide doctoral training in the areas of special education, school psychology, and related areas to a small cadre of Trinidad and Tobago nationals who could become leaders in this effort for the MoE. The second long-term goal involved the development of a training program at the University of the West Indies that could support the ongoing development of these professionals.

In spite of the mandate to implement CAP, the MoE had not assigned any additional funds to the Guidance or Special Education Units. To support the project, these units (with sanction from the MoE) obtained a small grant from the United Nations Children's Fund (UNICEF) and the consulting team received a formal contract to provide consultative support to the two supervisors and training of the GSEOs in a series of workshops related to the short-term goals. These workshops took place in the 1999–2000 academic year.

The actual consultation project lasted for several years and can be divided into three phases. In Phase 1, the initial set of training workshops was conducted and pilot data were obtained. In Phase 2, we collected final data and provided T & T with a set of normative manuals for reading and behavior. The third phase involved the expansion of the Guidance and Special Education Units and a change in the conceptualization of the role of these units reflected in a change in the organizational structure.

## Phase 1

In preparing for the first set of major workshops, it became clear to the consulting team that one of the obstacles to progress was the lack of validated psychoeducational instruments available in Trinidad and Tobago for assessment and diagnosis and addressing this problem became another focus of the ongoing collaboration in Phase 1. In consultation with the supervisors, the initial workshops were designed as extensions of the preliminary workshops on reading and behavior. GSEOs were to be taught to use and in some cases develop the measures presented here. Given the limited funding, the consultants decided to combine the training with obtaining normative data. The instruments (see Table 1), training workshops, and sampling plan are described here.

### READING: ELEMENTARY GRADES

Three measures of reading were adapted or developed for elementary schools in Trinidad and Tobago. In working with the ministry supervisors, we de-

**TABLE 1** Measures Normed in Trinidad and Tobago (T & T)

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Elementary reading
Individual phonemic analysis: Years 1 and 2
<i>Mountain Shadows Phonemic Awareness Scale</i> (Watkins & Edwards, 1998): Years 1 to 3
Oral reading fluency (T & T passages): Years 2 to 7
The Cloze procedure (T & T passages): Years 3 and 4
Elementary behavior (Years 1 to 7)
<i>Adjustment Scales for Children and Adolescents</i> (McDermott et al., 1993)
<i>Adjustment Scales for Children and Adolescents-Home</i> (Watkins & McDermott, 2002)
<i>Learning Behaviors Scale</i> (McDermott, Green, Francis, & Stott, 1999)
Secondary (Forms 1 to 5)
<i>Fear Survey Schedule for Children and Adolescents-II</i> (Burnham & Gullone, 1997)
<i>Revised Children's Manifest Anxiety Scale</i> (C. R. Reynolds & Richmond, 1985)
<i>Reynolds Adolescent Depression Scale</i> (W. M Reynolds, 1987)
<i>Self-Description Questionnaire-II</i> (Marsh, 1990): General, Verbal, and Mathematics subscales

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terminated that measures to monitor student performance—that is, formative assessments versus summative assessments—were most appropriate and informative for teachers, administrators and supervisors. Based on decades of research in the United States and other English-speaking countries, and the ability to create curriculum specific measures, curriculum-based measurement (CBM) was selected as the optimal method to measure T & T students' performance in reading over time. Curriculum-based measures were developed to monitor student skills in specific skill areas. The measures are tied to the curriculum of instruction, of short duration, capable of being developed in multiple forms, inexpensive to create and produce, and sensitive to student achievement change over time (Marston, 1989). CBM was also selected because results provide teachers with data that inform instruction in the classroom and are thus useful for intervention. Finally, these measures have high technical adequacy. The three reading measures selected for this project were phonemic awareness, the Cloze procedure, and oral reading fluency.

*Phonemic awareness.* Two assessments were adapted to measure and monitor students' early reading skills: (a) the *Mountain Shadows Phonemic Awareness Scale* (MS-PAS; Watkins & Edwards, 1998) and (b) Individual Phonemic Analysis measure. The MS-PAS (Watkins & Edwards, 1998) is 20-item measure designed to assess students' ability to identify words that begin with the *same sound* or with *different sounds* and can be administered to individuals or groups in about 15 min. The items consist of target pictures that students can see and teachers read the names of each picture aloud. The picture format reduces memory load for the students and allows a purer assessment of phonemic awareness.

Students in 1st and 2nd years were also assessed using *Individual Phonemic Analysis* (IPA), a curriculum-based measure that is administered

individually. This measure with several subtests can be used to help isolate the source of a student's difficulties in early reading skills and is best used to follow up on low scores obtained on group measures like the MS-PAS. The IPA measures included in this implementation included five subtests: (a) knowledge of letter names, (b) knowledge of letter sounds, (c) telescoping (blending), (d) segmenting, and (e) word knowledge. The words that were used were taken from the reading curriculum in T & T for the respective grades. The use of standard directions reduced the possibility of systematic error in administration and the specific responses produced by the child—both correct and error responses—were recorded to provide error analysis information that will be of direct use in developing interventions.

*Decoding and comprehension.* Students in Years 3 and 4 were administered the Cloze, a measure that assesses student comprehension by requiring students to replace words that have been removed from text passages. McKenna and Robinson (1980) defined the Cloze as follows: "A method of systematically deleting words from a prose selection and then evaluating the success a reader has in accurately supplying the words deleted" (p. 5). In Cloze, students read passages *silently* and fill in missing words that have been removed before passage administration. Students respond at the word level and thus provide an estimate of their vocabulary, and their understanding of the passage based on the choice of words that fill in provides an estimate of their comprehension. Cloze measures were developed using actual passages from the curriculum of instruction. In order to minimize systematic error, standard directions were used.

The final reading measure used was oral reading fluency (ORF). This curriculum-based measure uses students' reading fluency to measure reading decoding and comprehension. Students whose reading fluency is low have to devote so much working memory to decoding that there is little cognitive capacity remaining to deal with comprehension. ORF was administered to students from Year 2 through Year 7. As with the IPA and Cloze measures, the oral reading fluency measures were developed from passages that were representative of the students' curriculum of instruction. The focus was on scoring errors obtained from 1-min probes with the errors serving as data for diagnosing and intervening with reading problems.

#### BEHAVIOR: ELEMENTARY GRADES

We were also interested in getting normative data on ratings of student behavior. After some conversations with the lead author and the publisher, we obtained permission to use two rating scales completed by teachers in T & T, the Learning Behaviors Scale (LBS; McDermott, Green, Francis, & Stott, 1999) and the Adjustment Scales for Children and Adolescents (ASCA; McDermott, 1994; McDermott, Stott, & Marston, 1993). In order to obtain behavior ratings in a nonschool environment, we also developed the Adjustment Scales for

Children and Adolescents-Home (ASCA-H; Watkins & McDermott, 2002) to be completed by parents.

*LBS.* The LBS is a nationally standardized rating scale consisting of 29 behaviors that a teacher completes with regard to a target child. The behaviors are rated on a 3-point scale: 2 = *Most often applies*, 1 = *Sometimes applies*, and 0 = *Does not apply*. Items include both positive and negative learning behaviors and negatively worded items are recoded so that higher scores reflect positive learning behaviors. In the United States, the scale yields a total score and four subscale scores: Competence Motivation, Attitude toward Learning, Attention-Persistence, and Strategy-Flexibility. There is substantial construct validity evidence for LBS scores in samples of U.S. students (Canivez & Beran, 2011; McDermott, 1999; Schaefer & McDermott, 1999; Worrell, Vandiver, & Watkins, 2001).

*ASCA.* The ASCA consists of 156 items that assess behaviors across 29 social, recreational, and learning contexts. Both internalizing (diffident, uncommunicative, lethargic) and externalizing (aggressive hyperactive, delinquent) behaviors are included in a variety of school-based contexts, such as greeting the teacher, standing in line, sitting at a desk, and behaving in the classroom. The teacher rates if the behavior has or has not occurred in the previous 2 months. Although the scale is designed to assess problem behaviors, it includes positive behaviors in 25 of the contexts. Factor analyses of ASCA scores in the United States yield both first-order (e.g., diffident, attention-deficit hyperactivity disorder) and higher order factors (Internalizing, Externalizing) and there is substantial validity evidence supporting the use of the scores (Canivez & Sprouls, 2010; McDermott, 1993).

*ASCA-H.* Like the ASCA, the ASCA-H assesses psychopathology from ratings of similar types of problem behaviors across multiple situations in the home observable by a parent or guardian. The ASCA-H consists of 202 behavioral descriptions. Each of these is presented with reference to 34 social, recreational, or daily living situations where a child's adjustment to authority, age-mates, smaller or weaker children, and various tasks can be observed. Some of these situations include talking with parents or other adults, coping with household chores, sleeping patterns, and playing with peers. As with the ASCA, descriptions of positive behavior are included for 29 of the 34 contextual situations to allow parents nonpsychopathological alternatives.

#### SECONDARY SCHOOL MEASURES

Four measures assessing anxiety, depression, fear, and self-concept were normed for use at the secondary school level (see Table 1; also see Worrell & Hall, 2002). However, given the limitations of space and the fact that the work of the consultation team was focused primarily on prevention and early intervention, the work at the secondary level is not discussed in depth in this article.

## TRAINING WORKSHOPS

It is our firm belief that individuals who are going to be making high-stakes decisions in schools—that is, decisions that will have a profound impact on the development of students—need to understand the importance of sound measurement principles. They must understand principles of reliability, validity, standardization, norming, and nomothetic and idiographic assessment for them to be useful to the students and teachers they serve. These principles are also important in understanding the need for data-based approaches to decision making and a data-based, reflective approach to practice. If these fundamental principles are ignored, personnel can easily fall into practices that do not result in improved outcomes for the students whom the system is being created for.

## SAMPLING AND DATA COLLECTION PLAN

Although the process of obtaining the samples was similar for the elementary and secondary schools, we sampled at the individual level in elementary schools and at the classroom level in the secondary schools. The elementary school data was based on performance in reading and behavior and secondary school data were based on psychological functioning (e.g., anxiety, depression) using self-reports.

*Elementary.* A list of all government and assisted elementary schools—but excluding special schools—was compiled by the Educational Planning Division of the Trinidad and Tobago Ministry of Education (1999). From this list, 79 elementary schools were randomly selected stratified by the regional enrollment of the school-age population. To keep the sample relatively gender balanced, if a school serving just one gender was chosen, the next random selection in that region was limited to schools serving the other gender. Thus, St. George West, with the largest school enrollment, was represented in the sample by 19 schools, whereas the Nariva/Mayaro region was represented in the sample by 3 schools. At each school, GSEOs used a table of random numbers to select one classroom to participate. If there was only one classroom at each grade level, the single classroom was used. GSEOs then obtained a list of students enrolled in each classroom selected at each school and used a random numbers table to randomly select 2 students at each grade level from the identified classrooms, resulting in a sample of 14 students from each school. One male and 1 female student were selected from each classroom in mixed-gender schools, whereas 2 males or 2 females were selected from single-gender schools. The same selection process was repeated for all seven elementary school years.

This sampling procedure resulted in a potential sample of 1,106 students. However, this represented an oversampling of approximately 50% to allow for validity studies and to compensate for participant attrition over the multiple data collection periods across the academic year. The final

normative sample consisted of 700 students (100 students per grade level—50 boys and 50 girls—for the seven elementary grades) that matched the population demographics on the indices of gender, ethnicity, and student enrollment in the eight educational regions (see Table 2 for final sample from Phase 2).

*Secondary.* As the majority of students complete only 5 years of secondary school, the secondary school sample consisted of students in Forms 1 through 5; Lower and Upper 6 were excluded. A list of all secondary schools obtained from the Educational Planning Division of the Ministry of Education was used to identify a representative sample. Given that not all secondary schools contain all grade levels and secondary schools were concentrated in the urban and suburban districts, selection of schools occurred by grade level. That is, all schools that served students in Form 1 were identified and six were selected at random for participation. To ensure gender balance, if a single-gender school was selected, then the next random draw at that form was from schools that exclusively served the other gender. The same selection process was repeated for Forms 2–5. Guidance Officers then obtained a classroom list for each form at each school. If there was only one classroom at a chosen form, then that classroom was automatically selected for participation. If there were multiple classrooms at a chosen form, a table of random numbers was used to select one classroom to participate.

Our goal was 30 classrooms. Unfortunately, GSEOs were unable to obtain data from 3 of the 30 classrooms. Thus, only 27 classrooms were actually included in the final sample. Not including these 3 classrooms resulted in no representation from the St. Andrew/St. David and Tobago educational divisions, representing 5.9% of the student population. However, the final sample of 897 students appeared to be distributed across the other six educational divisions in proportions relatively equivalent to the population (largest deviation was 3.9%).

**TABLE 2** Elementary Normative Sample by Educational Region (2001–2002)

Division	School population		Norm sample	
	Number	%	Number	%
St. George West	31,948	24.1	160	22.9
St. George East	14,255	16.5	116	16.6
St. Andrew/St. David	3,859	6.3	44	6.3
Caroni	10,913	15.0	105	15.0
Nariva/Mayaro	2,287	3.7	29	4.1
Victoria	26,197	19.0	133	19.0
St. Patrick	12,711	11.0	80	11.4
Tobago	3,059	4.3	33	4.7
Total	105,229	100.0	700	100.0

## DATA COLLECTION AND PILOT DATA

In conjunction with the Guidance and Special Education supervisors, we developed a detailed timetable beginning with training of the GSEOs and proceeding to collection of the normative data, data analysis, development of norms, and assessment manuals (see Table 3). The Ministry of Education obtained a small grant of \$10,000 from UNICEF to support the training activities. No funding was solicited for data collection, as the Ministry of Education indicated that the GSEOs would be collecting data during their normal working hours and thus should not need extra compensation. We proceeded with the training regimen and normative data collection began in the 1999–2000 academic year under the supervision of the supervisors in T & T.

As the data came in and began to be entered, it became clear that there were gaps in coverage. Some educational regions were oversampled and others were not sampled at all. A conversation between the consulting team and the supervisors clarified what had occurred. GSEOs had been ordered to collect the data while continuing to perform their regular duties. Several GSEOs refused to participate as they felt that they were being asked to do extra work without compensation. For example, GSEOs typically assessed children but typically had little interaction with teachers or parents. Data

**TABLE 3** Preliminary Training and Data Collection Schedule

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May 1999
Review of measurement issues (e.g., reliability, validity, norming)
Learning to administer behavior rating scales
Learning to administer reading assessments
May and June 1999
Systematic practice in the administration and scoring of instruments
July and August 1999
Consultant review of protocols for administration and scoring errors
Preliminary investigation of psychometric properties of scores on the instruments
September 1999
Review of measurement issues, administration, and scoring; Fluency practice
Introduction to sampling plan and use of sampling strategies for norming
October 1999 to June 2000
Collect normative data for reading
Reading: October
Behavior: November and December
January 2000 to April 2001
Data are entered, cleaned, verified, and analyzed
Normative tables are created
Manuals are developed
May 2001 to August 2001
Consultants turn over normative manuals to Ministry of Education
Teams are trained in using normative data for diagnosis and assessment in practice
September 2001
Manuals being used by GSEOs in schools

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collection involved not only assessing children who had not been referred on multiple occasions but also soliciting teachers and parents to complete rating scales. Additionally, several GSEOs left the Ministry and were not replaced in the same year. In cases where replacements were assigned, the new GSEOs had not participated in the training and were not able to collect the data. Thus, the data that were collected in the 1999–2000 academic year were not representative of the T & T student population. These data were treated as pilot data and allowed the consulting team to do psychometric analyses on the data and share the results with the Ministry of Education. These data confirmed that the instruments' scores were working and would be reliable and yield valid inferences in the T & T context, a concern of some T & T personnel.

## Phase 2

The data collection process in Phase 1 alerted the consultants to several issues that needed to be addressed. The first had to do with supervision of the project. It was clear that leading the data collection required a dedicated supervisor who understood the project and would be able to problem solve issues as they arose. Second, it was also clear that funds would need to be allocated to data collection, not only for providing extra compensation for the GSEOs who were collecting the data but also as an incentive for teachers and parents to complete the rating scales. The third area where additional resources were required was in the Guidance Office at the Ministry of Education where data packets were put together for schools and where completed data forms and rating scales were brought for processing and packaging to be sent to the consulting team in the United States.

The consulting team met with the Guidance and Special Education supervisors and developed a set of recommendations for another round of data collection. The Ministry of Education solicited funding (\$105,000) from the Organization of American States. Despite our conversations before this grant was submitted, the grant did not include funding for data collection but did include a substantial amount of funding for two local consultants. The consulting team and the two supervisors invited two active educational researchers from the School of Education at the Trinidad campus of the University of the West Indies to dinner and described the project to them. These two researchers endorsed the project and observed that we would need funds for data collection, given their experience conducting research projects in T & T. They also asked how they could help. When we explained the dilemma posed by the grant, the two T & T researchers agreed to be the two local consultants. The grant paid them and they generously turned over the funds to the project to be used for data collection.

#### SAMPLING AND DATA COLLECTION

Data on the final normative samples were collected in the 2001–2002 academic year. A member of the consulting team took a sabbatical and supervised data collection in T & T. Twenty-one GSEOs (95% female) ages 35 to 55 years ( $M = 45.9$ ,  $SD = 5.8$ ) served as data collectors. They had been working as GSEOs for an average of 8 years ( $SD = 6.9$ ), and 17 of the 21 had taught in schools before being assigned to the Ministry of Education. All of the data collectors had university degrees and were trained by the consulting team. All data collectors were assigned to schools in the educational district in which they worked, although 4 of them were called upon to assist in a few schools outside of their home regions. A member of the consultant team supervised data collection. We paid the GSEOs an honorarium for each school with complete data as well as their traveling costs, and we paid teachers and parents an honorarium for completing rating scales. We also paid an honorarium to Guidance Unit office staff to put together the data packets for the schools and to process, package, and ship the data.

As can be seen in Table 2, the normative data for the elementary schools closely matched the school population for the educational regions, with differences ranging from 0% to 1.2%. The lack of representation from the two small districts in the secondary student sample also resulted in an underrepresentation of males and an overrepresentation of females (by about 6%). Similarly, students of East Indian and Mixed descent were overrepresented in the secondary sample relative to their percentage in the population whereas students of African descent were underrepresented. There were limited funds for data entry, so graduate students in the United States who were interested in using data from the project for theses and dissertations entered the data and in some cases conducted preliminary analyses as part of their thesis projects. The members of the consulting team analyzed all of the data and developed the normative manuals for the Ministry.

#### DISCUSSION

The primary outcomes from this project were 100 copies each of three manuals given to the Ministry of Education in T & T (see Figure 1 and Appendix). One manual included reading assessment norms for students in elementary schools, one included norms for rating scales for students in elementary schools, and the third included the norms on the psychological measures for students in secondary schools. As can be seen in Figure 1, there are two behavioral manuals, one labeled interim. The interim behavioral manual included norms *only* from the teacher rating scales, the LBS and the ASCA. Scores on these instruments had been validated in the United States

**Republic of Trinidad & Tobago**

Ministry of Education  
Central Guidance & Special Education Units

**Reading Assessments  
for Elementary Schools****Republic of Trinidad & Tobago**

Ministry of Education  
Central Guidance & Special Education Units

**Secondary Assessment Tools****Republic of  
Trinidad & Tobago**

Ministry of Education  
Central Guidance & Special Education Units

**Behavioral Rating Scales  
For Elementary Schools:  
Interim Manual****Republic of  
Trinidad & Tobago**

Ministry of Education  
Central Guidance & Special Education Units

**Behavioral Rating Scales  
For Elementary Schools**

**FIGURE 1** Manuals provided to the Ministry of Education in Trinidad and Tobago. The reading manual, secondary assessment manual, and the interim behavioral manual were given in 2002. The final behavioral manual was delivered in 2006.

prior to being used in this project and had been examined in T & T pilot data. Thus, the final analyses were focused on validation analyses and the development of norms. As the parent rating scale (ASCA-H) was developed specifically for this project and was not part of the pilot, more analyses were required in assessing these scores. This condition, coupled with slower progress on the part of the student who was working with these data, resulted in the final behavior manual for elementary students, which included both

teacher and parent ratings, being provided to the Ministry of Education a few years later.

All of the manuals contain (a) information on the sample and data collection, (b) a description of the instruments, (c) a brief description of the data from the United States where applicable, (d) descriptive statistics and reliability and validity coefficients for T & T scores, (e) information on administration with standardized prompts, (f) information on scoring, (g) tables of norms (percentile ranks) for T & T students, and (h) a section on interpreting the obtained scores. In addition, the reading manual has sections on the procedures for *developing* IPA, Cloze, and oral reading fluency prompts in the future when the curriculum changes. Each of the chapters contains the *actual* prompts that were used (e.g., the MS-PAS; the reading passages for Cloze and oral reading fluency; and the letters, words, and sentences used for IPA) so that they can be photocopied and used by the GSEOs. The actual norms are described briefly here.

## Reading Outcomes

### PHONEMIC AWARENESS

The MS-PAS measure was administered to students in the first 3 years of school near the beginning of Term 1 and near the end of Term 3. Chapter 2 of the reading manual contains tables with raw scores and percentile ranks (5th, 10th, 25th, 50th, 75th, 90th, and 95th) for the beginning and end of year for the first three grades of elementary school. The tables for the IPA measures are similar (Chapter 3) but only include the first two grade levels and there are percentile ranks for telescoping, segmenting, word reading, and sentence reading for the beginning of the year, the middle of the year, and the end of the year. There is a brief section at the end of Chapter 3 on using charts and graphs to examine data as well as an error analysis form.

### COMPREHENSION AND DECODING

The fourth chapter of the reading manual is devoted to the Cloze procedure. Raw scores and percentile ranks are available for the beginning, middle, and end of the year for Years 3 and 4 of elementary school. In this chapter and the chapter on oral reading fluency, we also included box and whisker plots for each time period and grade level. Finally, Chapter 5 of the reading manual had percentile ranks and box and whisker plots for the beginning, middle, and end of the year for Years 2 to 7 of elementary school. GSEOs were introduced to box and whisker plots in their training and were familiar with using them for normative interpretations of student functioning.

## Behavioral Outcomes

### LBS

Chapter 2 of the behavior manual contained norms for the LBS. In addition to the tables indicating the factor coefficients and final factor structure, there were tables reporting internal consistency estimates of factors for the total sample as well as by gender, race/ethnicity, and grade level. Although the LBS has been found to have four factors in the United States, only two factors emerged in the T & T sample in both the pilot and final samples. Raw scores and percentile ranks (1st, 5th, 10th, 15th, . . . 90th, 95th, and 99th) are included for the two subscales—Attitude Toward Learning and Strategy Flexibility—and the Total score.

### ASCA AND ASCA-H

Norms for the ASCA and ASCA-H are presented in Chapters 3 and 4 of the behavioral manual. In addition to raw scores, percentiles, and internal consistency estimates for the three factors found in T & T—Attention-Deficit/Hyperactivity, Conduct Problems, and Underactivity—these chapters contain tables of the most and least frequently endorsed items. As with the LBS, there were fewer factors in T & T than in the United States. One reason for this difference may be the inability to distinguish between behaviors as acutely in this cultural context as rating scales are not typically used.

## Psychological Outcomes

The secondary school sample consisted of almost 900 participants from 27 schools. For the Reynolds Adolescent Depression Survey (RADS), we found that the first principal component was very similar to that reported for the American norm sample, with a coefficient of congruence of .99. The RADS was developed as unitary measure of depressive symptomatology (W. M. Reynolds, 1987). In the manual, we reported raw scores and percentile ranks (by gender) for the total score ( $\alpha = .91$ ), as females reported higher levels of depressive symptoms than males. Revised Children Manifest Anxiety Scale scores yielded a factor structure that was consistent with the United States, although reliability estimates were consistently above .80 only for the total score. Females reported more anxiety than males and we reported raw scores and percentile ranks by gender for the total score.

Interpreting the Fear Survey Schedule-II is typically based on the number and types of things that adolescents are fearful of. For this scale, we did report raw scores and percentile ranks but also provided a table with the 10 most frequently endorsed fears in T & T, the United States, and Australia. Fear of AIDS was the greatest fear of adolescents in all three countries, and although the ordering was different, 8 of the 10 most frequently endorsed

fears in T & T were also in the top 10 in the other two countries. Finally, we provided raw scores by gender for mathematics, verbal, and general self-concepts for secondary school students. As in the United States, males had significantly higher mathematics self-concept and females had significantly higher verbal self-concepts, but the effect sizes were quite small.

### System and Research Outcomes

Even though the data collection ended in the spring of 2002, the relationship with the Ministry of Education continued for several more years. The consulting team had to teach the GSEOs how to use the manuals in their practice. One of the outcomes of the process was an expansion of the number of GSEOs by 200% in the next few years and we spent some time training the new officers. The Ministry of Education also decided to merge the Guidance and Special Education Units under the title of the Student Support Services Unit, which had a preventative mission in keeping with the overarching theme of the consultation project. The consulting team also published several studies based on this project, adding information on T & T to the extant literature. The Appendix contains a list of the manuals, master's theses, doctoral dissertations, refereed articles, and book chapters that were produced from the project to date.

### Termination and Lessons Learned

In general, one can say that the consultation project was successful in that it yielded many benefits for the consultees as well as the consultants. When the project was officially terminated in 2006, the Ministry of Education was happy with the manuals and with the training that Ministry of Education personnel had received. Indeed, the Student Support Services Unit indicated that it wanted to maintain a relationship with the consulting team and hoped to identify funding to (a) extend the LBS and ASCA norms to secondary schools, (b) get academic norms for elementary schools in mathematics and writing, and (c) support training of the GSEOs in interventions and consultation.

None of these proposed activities took place. First, in 2007, a new minister was assigned to the Ministry of Education, and the person who was Minister of Education when the normative data were collected was reassigned to another ministry. The new Minister was not interested in supporting the project's expansion. Second, in 2010, the governing political party lost in national elections and the new governing party appointed a new Minister of Education. Much of the work in setting up the Student Services Unit was undone by the new regime, and the majority of GSEOs were reassigned to teaching duties in schools. Third, the Director of the Student Support Services Unit (formerly the Guidance Supervisor) turned 60 in 2012, the age of mandatory retirement in T & T.

Thus, much of the progress that was made in the decade beginning in 1998 has been put aside. The Ministry of Education has expressed interest in using data for decision making and improving the schools, but there has been little tangible action. Senior staff in the Student Support Services Unit have expressed frustration and disappointment with the current state of affairs but also express hope that the lessons that they have learned will be perceived as useful in the not-too-distant future. And, at least, T & T has a place from which to start that puts it far ahead of other developing nations, if it chooses to use the manuals and other lessons from the project.

In closing, the realities of being a consultant—with the concomitant lack of control—is now more evident than it had been during the project. The process of consultation is dependent, in part, on the consultant-consultee relationship. In organizational consultation with governmental entities, maintaining the relationship is dependent on the political exigencies. These projects create a dilemma for consultants in small nation-states where national politics affect most decisions. On the one hand, it is important to be sanctioned by the political appointees in order to consult with the civil servants who do the day-to-day work. On the other hand, sanction by the political appointees is present only as long as those appointees are in place. Thus, successful consultation projects with developing nations may be as or more dependent on the luck of taking place during the time of one political administration as they are on the contribution that the work makes to the country's development.

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