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The perceived effectiveness of the school based support program

A national capacity building initiative by the national center for educational development at Qatar University

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Abstract

Purpose – This study aims to investigate the effectiveness of the school-based support program (SBSP) as perceived by teachers who participated in this program. SBSP was designed to collectively build the capacity and promote the overall quality of teaching and learning in identified independent schools in the State of Qatar.

Design/methodology/approach – This study is quantitative in nature and was conducted using a survey methodology as its research design. A variety of statistical techniques were utilized in this research. Means, standard deviations, *t*-test, and one-way analysis of variance (ANOVA) were utilized to analyze gained data.

Findings – The findings indicated that teachers perceived the effectiveness of SBSP to be moderate-to-high. Further, there was a significant difference between male and female teachers in their perceptions of the effectiveness of SBSP overall. Male participant teachers perceived SBSP overall to be more effective than female participant teachers did. However, there were no significant differences among participant teachers in perceiving the effectiveness of SBSP that is attributed to their teaching experience or academic qualifications.

Originality/value – This study suggests a common level of satisfaction of the SBSP program that was launched just two years ago. At the same time, however, many recommendations and implications were discussed and suggested to enhance the effectiveness of the program.

Keywords Effectiveness, Capacity building, Independent schools,
National center for educational development (NCED), School based support program (SBSP)

Paper type Research paper

Introduction

In recent years, significant and rapid changes in many aspects of global society have led countries such as Qatar and others in the Gulf Region to reform their national education systems, focusing on the integration of standards, assessment and accountability. One of the key elements in most of these reforms is professional development, which acts as a central feature of such educational improvement initiatives for the many contributions it can make. It is reasonably assumed that improving teachers' knowledge, skills and practice is one of the most critical steps in improving students' achievements (King and Newman, 2001). Professional development can be an opportunity for collegial networking and a way for professionals to stay up to date with current research,

practices and trends. Professional development can also provide time for the enhancement of teacher leadership in the school and classroom when teachers have ownership of their growth. Further, professional development can play a key role in addressing the gap between educators' preparation and standards-based reform (Crowther *et al.*, 2002).

School teachers may understand the necessity for professional development but will want it to be relevant, timely and effective. Teachers want to get the most out of their professional development but ways of improving professional development are often unclear (Miller, 2009). Proposals from many quarters argue that professional development itself needs to be reformed (King and Newman, 2001). Much of the professional development that is offered for teachers simply does not meet the challenges of the reform movement (Birman *et al.*, 2000).

Professional development in the State of Qatar is no exception. Such development has always taken place in Qatar's independent schools, although "teachers and principals noted a downside to the steep quantity of professional development opportunities: Teachers reported feeling overwhelmed and burned out" (Zellman *et al.*, 2009, p. 50). The quality and effectiveness of professional development has varied greatly.

Professional development in Qatar

In 2001, the RAND Corporation examined Qatar's K-12 education system to recommend options for building a world-class system that would meet the country's changing needs. At that time, Qatar's education system was widely seen as rigid, outdated and resistant to reform (Romanowski *et al.*, 2013; Zellman *et al.*, 2009). RAND's analysis revealed a number of substantial weaknesses, one of the major ones being the lack of training and professional development. As described in RAND's report (Brewer *et al.*, 2007):

> [t]eachers did not appear to receive the training they needed [...] Once the teachers were assigned to schools, they had few options for professional development and any training provided was often disconnected from reality (p. 42).

In 2002, Qatar began implementing the new educational reform and proposed several ways to help schools and teachers implement the reform. The Qatari leadership selected a system-wide structural reform plan that encouraged qualified persons with innovative ideas to apply to run new government-funded schools, called independent schools. The institution driving this structural reform and supervising the independent schools is called the Supreme Education Council (SEC). It consists of three institutions: the Education Institute, the Evaluation Institute and the Higher Education Institute. The Education Institute is responsible for selecting independent school principals, negotiating and monitoring their contracts and supporting independent schools. The Evaluation Institute is responsible for overseeing the design and development of the assessment system and reporting data from the system, including issuing school report cards. Finally, the Higher Education Institute is responsible for providing scholarship support for Qataris pursuing higher education (Zellman *et al.*, 2009).

Teachers were more likely than they were before the reform to report having participated in professional development activities consistent with the reform's expectations in instructional methods, approaches to assessment, use of technology, strategies for teaching students with different abilities, curriculum planning and the new Qatar curriculum standards (Zellman *et al.*, 2009). These professional development

activities included teacher preparation and certification programs for new teachers; daily in-school training provided by School Support Organizations for schools in their first year of operation, to help teachers identify curricula and devise materials and lessons that align with the curriculum standards; and a variety of professional development workshops, some provided by international contractors (Brewer *et al.*, 2007).

However, despite substantial national investment in professional development initiatives, concerns remain about the quality of educational staff and the subsequent impact on instruction (Zellman *et al.*, 2009). Teachers have attended many professional development programs, yet significant professional development needs remain (Palmer *et al.*, 2011).

Another major concern is the difficulty for teachers and principals of finding time during the working day to participate in professional development programs because of the increased workload reported by many teachers in Qatar's independent schools. "Most of them have to stay after regular working hours and into the evening to attend workshops, so many of their days became quite long" (Zellman *et al.*, 2009, p. 50).

An attempt to make the link between teachers' participation in effective professional development programs at independent schools in Qatar and allocating time during the school day to attend such programs was recently studied by Palmer *et al.* (in press). Using multiple methods and various sources, data were collected from over 900 individuals affiliated with independent schools in Qatar. Across data sources, administrators and teachers clearly defined how they wanted future professional development training to be delivered. Specifically, education professionals in Qatari independent schools said that to be effective, professional development should:

• be practical, not theoretical;
• take place during the normal school day at their own school; and
• include ongoing follow-up (Palmer *et al.*, in press).

Such results could point to a substantial gap between the current design of professional development programs for independent schools in Qatar and the most effective design, as identified by independent school teachers. This gap is especially critical for those educators who believe in the necessity of professional development and, at the same time, want it to be practical, school based, timely and effective. Therefore, developing a strong capacity among all of a school's stakeholders to be at the forefront of knowledge and skill in learning and teaching requires more than occasional in-service professional development. It requires a systematic, continuous and purposeful professional development approach that ensures that all aspects of the workplace are conducive to efficient, effective and satisfying work for all stakeholders concerned (Johnston and Caldwell, 2001). To this end, the school-based support program (SBSP) was designed by the National Center for Educational Development (NCED) at Qatar University in the fall of 2011, for implementation in selected independent schools in Qatar to collectively build capacity and promote the overall quality of teaching and learning in participating schools.

The school-based support program
In-service professional development for teachers is often strongly recommended as a key strategy for school improvement to support the professional development of

teachers who are already employed and working in classrooms. The goal of in-service professional development is to improve the knowledge, skills, behaviors and attitudes of teachers so they can more effectively plan, teach, assess student learning and undertake other responsibilities in the school community (Leu and Ginsburg, 2011). However, professional development activities cannot be expected to substantially achieve the desired gains in the student body as a whole if the focus is exclusively on teachers' individual learning:

> Individual teacher learning is, of course, the foundation for improved classroom practice, but teachers must learn to exercise their individual knowledge, skills and dispositions to advance the collective work of the school under a set of unique conditions (King and Newman, 2001, p. 87).

The SBSP was designed to collectively build the capacity and promote the overall quality of teaching and learning in the participating schools.

The SBSP was established to provide in-school professional support to low-achieving schools identified by the SEC based on their overall evaluation for the past three years. A team of five professional development specialists (PDSs) was assigned to each school to address the areas of school leadership and the teaching of Arabic, English, Mathematics and Science. The PDSs were charged with the development of a positive and successful learning environment.

Because they are present in schools on a continuous basis, the PDSs are able to conduct regular walk-throughs, interviews and classroom visits and make ongoing observations of school administrators, teachers and students. This qualifies them to accurately identify and address the needs of each individual teacher and each department within each school and then develop strategies to support improvement. Support provided by the PDSs includes the areas of curriculum standards, lesson preparation, direction related to a wide range of instructional strategies, classroom management, assessment strategies, the use of ICT in teaching and learning and conducting action research. The delivery of the support comes in various forms, including workshops, study groups, coaching and mentoring, team teaching, lesson modeling and various forms of instruction and collaboration. This allows for practical and effective support for school improvement efforts with continuous modeling of appropriate behaviors and strategies, while providing encouragement and support to those trying to make changes.

Based on the ongoing assessment of student progress and the regular observation of teachers and school leaders, the PDSs are able to redesign and deliver high-quality professional development to support improvement rather than just being there to evaluate professional behaviors and activities. All support and follow-up is provided in each educator's own school and during the regular school day. The regular involvement of the PDSs in the schools allows performance and achievement data to be gathered on a frequent and ongoing basis. This allows for regular adjustment of the support for teaching and learning activities.

At the end of the implementation of the program, the effectiveness of SBSP was measured using evidence of achievement in eight dimensions. The first is the impact of SBSP. In this dimension, the PDSs were asked to collect evidence clarifying the extent to which school teachers who participated in SBSP improved their teaching in their specific content areas (Arabic, English, Mathematics and Science). Examples of such

evidence include improvements in students' achievement in the specific content areas, using new methods of teaching (student-centered teaching methods as opposed to traditional teacher-centered teaching methods) and an increase in parental and community involvement (Burruss, 2011; Casale, 2011; Garet *et al.*, 2001; Miller, 2009; National Center for Education Statistics, 2001).

The second dimension is the content of SBSP. This measures the degree to which teachers, at the end of their participation in SBSP, are immersed in the subject they teach and have the ability to communicate basic knowledge and to develop advanced thinking skills among their students. Data were collected by PDSs about the degree to which teachers aligned the content they teach with Qatar's curriculum standards, how they regularly reviewed student work and the degree to which they were competent in their specific content areas.

For the third dimension, teacher collaboration through SBSP, PDSs were asked to collect evidence to measure the degree to which participating teachers worked in a cooperative way and shared experiences with their colleagues. This dimension measures the frequency and quality of teachers' participation in regularly scheduled collaboration with other teachers, networking with teachers outside the school, common planning period for team teachers, individual or collaborative research on a topic of professional interest and other similar collaborative activities (Burruss, 2011; Casale, 2011; Garet *et al.*, 2001; Miller, 2009; National Center for Education Statistics, 2001).

The fourth dimension is teachers' feelings of preparedness as a result of the SBSP. The degree to which participating teachers felt prepared for the overall demands of their teaching assignment was measured in this dimension. Specifically, teachers were asked how prepared they felt in implementing state curriculum standards, using student performance assessment, maintaining order and discipline in the classroom, integrating educational technology into the grade or subject taught and other similar activities.

The fifth dimension is continuity and the relevance of SBSP to other professional development activities. Evidence was collected to measure the degree to which SBSP was linked to other program activities at the school, school administration support in applying what the teacher had learned, follow-up sessions or additional training required and school activities in which the teacher helped other teachers apply the new ideas (Burruss, 2011; Casale, 2011; Garet *et al.*, 2001; Miller, 2009; National Center for Education Statistics, 2001).

In the sixth dimension, evaluation of the SBSP, PDSs were asked to collect evidence to determine the success of the SBSP in improving the overall performance of participating schools. Specifically, PDSs collected evidence on student achievement, student discipline, teacher performance, parental involvement and other aspects of school. The seventh dimension, which concerns types of professional development activities presented through the SBSP, measures the degree to which PDSs have provided new as opposed to traditional types of professional development.

The eighth dimension is the competency of the SBSP facilitators (PDSs). Here, participating teachers were asked to determine the degree to which PDSs are competent in implementing the SBSP. Teachers were asked whether PDSs spent sufficient time with them to improve their teaching practices, met expectations for providing support and learning, were able to provide practical examples of how to improve teaching practices, displayed the knowledge and skills needed, encouraged teachers to try new

things and maintained open communication with them (Burruss, 2011; Casale, 2011; Garet *et al.*, 2001; Miller, 2009; National Center for Education Statistics, 2001).

To summarize, the SBSP uses a variety of professional development procedures to encourage and support the high-quality implementation of effective teaching and learning, including holding one-to-one or small-group meetings during which teachers can identify their most pressing professional needs; guiding teachers through instructional manuals and checklists and collaboratively planning with teachers to identify when and how to implement effective instructional practices; preparing materials for educators prior to instruction; modeling instructional practices in teachers' classrooms; observing teachers when they use interventions; and providing feedback to educators. The SBSP is the process of developing teachers' values and perceptions into a more positive approach that brings about improvements in students' levels of success (Knight, 2011).

Change in schools, however, seems to be a slow and difficult process. Change initiatives usually encounter great resistance (Calabrese and Shoho, 2000). Regardless of the logic used to promote the SBSP as a comprehensive in-school professional development reform model, some educators might still oppose such efforts. On the basis of real or imagined threats to their beliefs systems, teachers might assume that the problems or challenges that the SBSP is intended to address will only worsen if such a model is implemented. If this is the case, adopting the SBSP as a professional development reform model in Qatar's independent schools must be based on valid, reliable and respected data. Hence, this study was conducted to provide relevant data on teachers' perceptions of the quality and effectiveness of the SBSP. For a more specific focus, the following research questions guided this investigation:

RQ1. How effective did participating teachers perceive the SBSP to be?

RQ2. Did teachers' perceptions of the effectiveness of the SBSP differ based on their gender, teaching experience and academic qualifications?

Methodology
Research design
This study is quantitative in nature and was conducted using a survey design. The survey was crosssectional because the data were collected at one point in time. A variety of statistical techniques were utilized: means, standard deviations, *t*-test and one-way analysis of variance (ANOVA).

Schools participating in the SBSP
Six schools have participated in the SBSP:

(1) *Secondary Independent School for Boys*: The school houses 750 students from the 10th, 11th and 12th grades who are culturally diverse and include both Qatari and non-Qatari students. The students are divided among 65 teachers of all subject areas. The school is managed by a principal and two vice-principals. The school's administrative team consists of 20 staff members.

(2) *Secondary Independent School for Girls*: The school principal has an administrative team of 24 members to manage the school's daily operations. The school has 59 subject area teachers working directly with 206 students in the

10th grade, 233 students in the 11th grade and 298 students in the 12th grade; a total of 737 students.

(3) *Preparatory Independent School for Boys*: The school houses 672 students in the 7th, 8th and 9th grades, with ages ranging from 13 to 15 years. The school is managed by the school principal, 2 assistants, 67 teaching staff and 13 administrative staff members.

(4) *Preparatory Independent School for Girls*: The school serves 640 students from the immediate community. A total of 69 academic teachers and 14 administrators work in the school. There are 207 students in the 7th grade, 235 in the 8th grade and 198 in the 9th grade.

(5) *Primary Independent School for Boys*: The school houses 506 students from kindergarten to 6th grade. The students are served by 70 female teachers and 20 administrative female staff members.

(6) *Primary Independent School for Girls*: The school has a total of 749 students who are taught by 77 teachers. The school principal receives support from 17 administrative staff members.

Sample and data collection

Participants in this study were independent school teachers who had participated in the SBSP. Of 258 participants in the SBSP, 156 independent school teachers completed and returned usable surveys, making the response rate 60 per cent. The data collection method was a self-administered paper-based questionnaire. Questionnaires were distributed to participants at the workplace for completion at their own convenience to ensure anonymity.

Data from the returned questionnaires indicated that the majority of teachers who responded were females (69 per cent), middle-career teachers (43 per cent) and holders of bachelor degrees (69 per cent). The remaining demographic data for the teachers who participated in this study are shown in Table I.

Variable	No.	Percentage of total (156)
Gender		
Female	108	69
Male	48	31
Teaching experience		
Less than 5 years	41	26
5-15 years	68	44
More than 15 years	47	30
Academic qualifications		
Bachelor's degree	107	69
Bachelor's degree and higher diploma	35	22
Master's degree	13	8
Doctorate	1	1

Table I.
Demographics of the
sample

Instrumentation
Two questionnaires were used in this study:

(1) demographic information; and

(2) teachers' perceptions of the SBSP.

Demographic information questionnaire. This was developed by the researcher to yield descriptive information concerning each participant and included questions regarding gender, teaching experience and academic qualifications.

Teachers' perceptions of the SBSP questionnaire. This was developed by the researcher based on the related literature (Burruss, 2011; Casale, 2011; Garet *et al.*, 2001; Miller, 2009; National Center for Education Statistics, 2001). The questionnaire was reviewed by 18 professors and PDSs in the educational field and 5 of them asked for modifications. The final version took these modifications into account. The questionnaire comprised 62 items, each with a four-point Likert rating scale ranging from "not at all" (1) to "to a great extent" (4). The questionnaire described the effectiveness of the SBSP in terms of eight dimensions:

(1) impact of SBSP;

(2) content of SBSP;

(3) teacher collaboration through SBSP;

(4) teachers' feelings of preparedness through SBSP;

(5) continuity and relevance of SBSP to other professional development activities;

(6) evaluation of SBSP;

(7) types of professional development activities presented through SBSP; and

(8) competency of SBSP facilitators (PDSs).

To ensure the psychometric properties of the questionnaire, internal consistency measures of reliability were computed for the instrument by calculating the Cronbach's alpha coefficients of each subscale. The internal consistency ratings for each subscale were: impact of SBSP (0.93), content of SBSP (0.84), teacher collaboration through SBSP (0.83), teachers' feelings of preparedness through SBSP (0.91), continuity and relevance of SBSP to other professional development activities (0.87), evaluation of SBSP (0.92), types of professional development activities presented through SBSP (0.89) and competency of SBSP facilitators (0.96). With its high internal consistency rating, the teachers' perceptions questionnaire was assumed to be an appropriate instrument for the present research.

Results
All responses from the teachers' perceptions and demographic information questionnaires were coded, entered into a computer and analyzed using the software package SPSS (Version 21). An examination of out-of-range values and missing data clarified that no out-of-range values were entered and that for each variable, the number of missing data was small. Specifically, none of the variables had missing data that exceeded 2 per cent of the total sample size. Further, examination of these cases showed that the missing values were distributed in a random pattern throughout the sample. It was concluded that the limited number of missing data did not represent a problem in

terms of interpreting the results of this study. Therefore, it was decided to replace variables with missing data with mean values of that variable for the entire sample; "the obvious strength of this strategy is that there is no loss of sample size and statistical power" (Tate, 1998, p. 47).

RQ1. *How effective did participating teachers perceive the SBSP to be?*
This question addresses the effectiveness of the SBSP through its eight dimensions: impact of SBSP, content of SBSP, teachers' collaboration through SBSP, teachers' feelings of preparedness through SBSP, continuity and relevance of SBSP to other professional development activities, evaluation of SBSP, types of professional development activities presented through SBSP and competency of SBSP facilitators (PDSs). To answer this question, means and standard deviations were calculated for the items of each dimension and for the dimensions overall.

Participating teachers perceived the effectiveness of the SBSP, in general, to be moderately high (M = 3.02). The competency of the NCED's PDSs was the dimension with the highest mean in the program (M = 3.31). Evaluation of the SBSP was the dimension with the lowest mean in the program (M = 2.85).

In detail, starting with the first dimension, the overall perception of the impact of SBSP in improving the teachers' classroom teaching was M = 3.03. This result indicated that teachers who participated in SBSP perceived the impact of the program, on average, to be moderately high. To further elaborate on the result of the question, the mean for the item "addressing the needs of students with disabilities" was the lowest (M = 2.28) and the mean for the item "new methods of teaching" was the highest (M = 3.33).

In the second dimension, teachers believed that the effectiveness of the content of the SBSP was moderately high (M = 3.03). In detail, the "instructional methods" item was perceived to be covered to a moderately high level (M = 3.11), while "reviewing students' work or assessment results" was perceived by participating teachers to be the topic covered least by the SBSP (M = 2.77).

In the third dimension, teacher collaboration through the SBSP, the item with the highest mean (M = 3.19) was "regularly scheduled collaboration with other teachers"; and the item with the lowest mean (M = 2.33) was "networking with teachers outside your school". The overall mean for collaboration was M = 2.90.

For the dimensions on teachers' feelings of preparedness through the SBSP and the continuity and relevance of SBSP, the items "implementing new methods of teaching" and "been followed by school administration support in applying what I have learned" had the highest means (M = 3.38 and M = 3.10, respectively). The items with the lowest means were "addressing the needs of students with disabilities" (M = 2.76) in the teachers' feelings of preparedness dimension and "been followed by needed follow-up sessions or additional training" (M = 2.90) in the continuity and relevance dimension. The overall means for the overall preparedness and relevance dimensions were 3.21 and 3.00, respectively.

In the sixth dimension, with regard to "types of evidence collected to evaluate the effectiveness of SBSP during the past two years", teachers perceived "teacher performance assessment" to be the type of evidence collected most (M = 3.12). However, they perceived "parental involvement" to be the type of evidence collected least by PDSs (*M* = 2.35). The overall mean for the dimension was 2.85.

Similarly, "attendance at workshop/in service in your content area" was the professional development activity to be practiced most during the implementation of the SBSP (M = 3.26), while "workshops, conferences or training as a presenter" was identified to be the professional development activity that was practiced least (M = 2.51). The overall mean of the types of professional development activities dimension was 2.87.

Finally, with regard to the eighth dimension, which concerns the competency of the PDSs in implementing the SBSP, participating teachers perceived that PDSs had performed highly in fulfilling their job tasks during the past two years (M = 3.31). At the same time, teachers perceived that PDSs had performed least well on the item "the NCED specialist meets my expectations for providing support and learning" (M = 3.19). The item on which teachers rated PDSs highest was "the NCED specialist encourage me to try new things even in challenging situations" (M = 3.42).

RQ2. Did teachers' perceptions of the effectiveness of the SBSP differ based on their gender, teaching experience and academic qualifications?

This question concerned the significant differences between the effectiveness of the SBSP overall and the demographics of participating teachers, namely, their gender, teaching experience and academic qualifications. The *t*-test for independent samples was used to examine the difference in means between male and female teachers in perceiving the effectiveness of the SBSP.

The results of this test suggest that there is a significant difference at the 0.05 level between male and female teachers in their overall perceptions of the effectiveness of the SBSP ($p = 0.007$). Male teachers perceived the SBSP overall to be more effective than female participating teachers did.

ANOVA was utilized to examine the differences in the perceptions of participating teachers of the overall effectiveness of the SBSP overall, depending on their teaching experience and academic qualifications. It was found that there were no significant differences between the three levels of teaching experience (less than 5 years, 5-15 years and more than 15 years) in the perceived effectiveness of the SBSP ($F = 0.71, p = 0.49$). Similarly, there were no significant differences between the four levels of academic qualification (bachelor, bachelor and diploma, master and doctorate) in the perceived effectiveness of the SBSP ($F = 1.18, p = 0.32$).

Discussion

The purpose of this study was to investigate the effectiveness of the SBSP as perceived by participating teachers. The SBSP is the first such program in Qatar, and possibly in the region, to provide school teachers with high-quality school-based professional development activities and research-based best practices during the regular school day. The SBSP provides the opportunity for PDSs to differentiate and adjust professional learning methods to create a professional development plan that meets the diverse and specific needs of each individual teacher within each department and within each participating school. At the same time, the SBSP could not be expected to substantially achieve the desired gains if the professional learning focused only on teachers' individual learning. Therefore, the SBSP was designed to support individual teachers and to collectively build capacity and promote the overall quality of teaching and learning in the schools concerned.

Competency of PDSs

PDSs come to their role with high levels of professional knowledge and skills. However, the nature of their role, as well as the roles of the educators with whom they work, demands ongoing learning. It is important that the PDSs continue to receive training and are supported in their professional learning. As mentioned by Sarri (2011), the quality of the mentor is an issue of major importance, and careful selection and training are among the key features affecting the success of mentoring programs. Therefore, the NCED should establish and promote a coaching and mentoring program for PDSs as a key practice related to their delivery of professional development and educational support through the SBSP:

> Mentoring has been recognized increasingly as a powerful HRD intervention that assists employees in career advancement, serves as a form of on-the-job training, and helps create learning organizations (Hamlin and Sage, 2011, p. 754).

Coaching and mentoring are two personal development methods that will nurture the PDSs' own abilities to improve behavior and performance in and out of the classroom. A coaching and mentoring program consists of goal description forms, a professional growth plan timeline, personal record-keeping forms, a rubric for evaluating the professional growth plan, a professional growth plan review and a framework for professional practice. Each PDS will be assigned an experienced coach/mentor who guides, models and directs them systematically through a process that equips them with the "where" and "how" of research-based educational pedagogy.

Evaluation of the SBSP

Teachers perceived the evaluation of the SBSP to be the least effective dimension. Many teachers believe that their main duty is to enhance students' learning and improve their levels of achievement. Other duties, such as parental involvement, preparation of portfolios, conducting action research and similar tasks, are not seen to be connected directly to students' learning. In the educational literature, teachers' responsibilities have been categorized as professional and administrative. Teachers' professional roles include teaching students, conducting action research, stimulating the professional growth of colleagues, being an advocate for teachers' work, improving the school's decision-making process and inducting new teachers. In their administrative roles, teachers are expected to participate in the parent–teacher association, lead a department, work as a member of the school governing council and/or as a union representative (Darling-Hammond *et al.*, 2009; Leithwood *et al.*, 2000). However, other research studies found that teachers participate more actively in instructional and student issues than in other issues, such as teachers' issues or managerial issues (Cheng, 2008; Sarafidou and Chatziioannidis, 2013). Therefore, awareness sessions should be held at the beginning of the program for newly participating schools to clarify the components of the program, the expected duties of each participating teacher, the importance of each duty and the types of evidence to be collected at the end of the program. Further, PDSs themselves should give more attention and time to supporting teachers in performing different types of duties. Follow-up sessions on how to collect and document evidence of implementation should be conducted monthly by PDSs with all participating teachers.

Impact of the SBSP
In the perceived impact of the SBSP, "addressing the needs of students with disabilities" has the lowest mean. No PDSs have been hired at NCED to supervise teachers of students with special needs. It seems that the introductory training conducted with the PDSs on dealing with students with special needs was not sufficient to qualify PDSs to perform this task at a high enough level. Therefore, new PDSs who are specialists in this area should be hired to support teachers in the participating schools and to provide teachers of students with special needs with suitable professional development and support. Further, partnership programs should be encouraged with professional development centers that have well-designed programs in special education to help NCED design similar programs in participating schools, based on the needs of these schools.

On the other hand, the mean of the item "new methods of teaching" was the highest. Most professional development activities focus on providing teachers with the newest methods of teaching, and the SBSP is no exception. The focus of teachers' training in participating schools is the use of new teaching strategies to update and improve their teaching performance.

Content of the SBSP
The "instructional methods" topic was perceived by participating teachers to be the topic that was most covered in the content dimension of the SBSP, while "reviewing students' work or assessment results" was the topic covered least. In response to the participating teachers' perceptions of this item, PDSs need to understand that feedback is an integral part of the instructional process. As described by Chan *et al.* (2014), feedback is the keystone to formative instructional practices, as it is one of the most powerful instructional practices. "Feedback provides a vehicle for integrating all components of formative instructional practices, clear learning targets, evidence of student learning, and student ownership in the process" (p. 96). Therefore, reviewing the formal and informal assessment of student work is an essential component of the SBSP. The use of data supplied throughout the year will generate a more accurate representation of students' needs in terms of improving their learning and achievement. Thus, evidence of the impact of teachers' and PDSs' work will be linked with the results of student assessments.

Collaboration through the SBSP
In this dimension, "networking with teachers outside their school" pointed to an area of weakness in the SBSP. According to Duncan-Howell (2010), networking exposes teachers to new ideas and promotes a community of learners. Therefore, an action plan should be design to encourage teachers in participating schools to share the skills and knowledge they have gained with colleagues in other independent schools. Further, the process of launching a new Web site for the SBSP should be accelerated to facilitate networking among teachers in participating schools and other independent school teachers.

Feelings of preparedness and type of professional development through the SBSP
It was surprising that the "been followed by needed follow-up sessions or additional training" item in this dimension had the lowest mean. Follow-up sessions and additional training if required are the most important practices in the SBSP. Hence, a review of the

process of providing follow-up sessions and additional training needs to be implemented and tracked in a rigorous way. However, PDSs must take in consideration the time needed for data collection and the lag time for the application of learned skills to produce a performance change before conducting follow-up sessions (Phillips, 2011).

In the dimension relating to types of professional development, participating in workshops, conferences or training as a presenter had the lowest mean. This result needs to be given more attention. An action plan should be designed and implemented by PDSs to increase capacity-building activities within the SBSP to support participating teachers' contributions as presenters and trainers. Further, the plan needs to be reviewed to allow further improvement in its design and implementation.

Effectiveness of the SBSP and demographic data

Male participating teachers perceived SBSP overall to be more effective than did female teachers. Male teachers in Qatari independent schools usually attend traditional training programs less frequently than female teachers (National Center for Educational Development, 2013). This result, therefore, might be seen as an indicator of the effectiveness of the SBSP.

However, there were no significant differences in teachers' perceptions of the effectiveness of the SBSP in relation to their teaching experience or academic qualifications. These results might simply reflect the similarity of participating teachers' perceptions of the effectiveness of the SBSP, regardless of their teaching experience and academic qualifications. However, these results may suggest that other demographic variables should be sought which might have a different effect on the variables under discussion.

Practice implications

The SBSP was designed to collectively build the capacity and promote the overall quality of teaching and learning in the schools identified. It was established to provide in-school professional support to low-achieving schools identified by the SEC based on their overall evaluation for the past three years.

The SBSP is not like other traditional forms of professional development, which are criticized for being ineffective in providing teachers with content, activities and sufficient time for increasing their knowledge and enhancing positive changes in their classroom practice (Loucks-Horsley et al., 1998). The SBSP adopts a new approach to professional development activities. It encourages collective participation in which activities are designed for groups of teachers from the same school, department or grade level. It also focuses on subject content and how children learn, takes place during the regular school day and is sustained over time (Garet et al., 2001; Palmer et al., in press). In fact, SBSP activities take place during the process of classroom instruction and during regularly scheduled teacher planning time. Therefore, the SBSP is more likely than traditional forms of professional development to make connections with classroom teaching and may be easier to sustain over time. According to Garet et al. (2001), activities that extend over time are more likely to allow teachers to try out new practices in the classroom and obtain feedback on their teaching. Further, the SBSP fosters coherence and promotes active learning in which professional development activities are perceived by teachers to be a part of a coherent program of teacher learning and in

which teachers actively engage in meaningful discussion, planning and practice (Loucks-Horsley *et al.*, 1998).

In practice, teachers who participated in the SBSP perceived the program's effectiveness to be moderately high. This level of perceived satisfaction could be increased by various actions based on the opinions of participating teachers. There is certainly a need for an appropriate coaching and mentoring program for PDSs who implement the SBSP, and this should be designed to further enhance their performance and to sharpen their knowledge and skills. Further, collaboration should be encouraged between the NCED and one of the national centers that provide high-quality services to students with special needs and their teachers to close achievement gaps among students by developing a shared program that is designed and implemented by NCED's PDSs and professionals from that center.

Reviewing students' work and assessment need to be addressed in a sound manner as an integral part of the instructional process. Therefore, evidence of the impact of teachers' and PDSs' work will be linked to the results of student assessments. However, although much work appears to be taking place to provide teachers with new instructional strategies through the SBSP, substantially less work is evident in involving parents in their children's learning, enabling networking between teachers in different schools and providing teachers with follow-up training sessions. Therefore, PDSs should develop an action plan to enhance parents' involvement in their children's learning, and a second action plan and new Web site for the SBSP should be designed to encourage teachers in participating schools to share the skills and knowledge gained with colleagues in other independent schools. In addition, a review of the process of providing follow-up sessions and additional training needs to be implemented and tracked in rigorous way. Even more important than the improvements to the components of SBSP that have been mentioned is holding awareness sessions at the beginning of the program for teachers from newly participating schools to clarify the components of the program, the expected duties of each participating teacher, the importance of each duty and the types of evidence to be collected at the end of the program. Without fundamental shifts in the way people think and interact and in how new ideas are explored, any new projects will be of limited value (Senge *et al.*, 2000).

Concluding remarks
As any successful program is built on evidence, it is important to collect and review the key data to design a program that will effect positive changes. Following implementation, it is then essential to collect the same forms of data to determine the effectiveness of the program. Therefore, this study is of great importance for not only assessing the SBSP but for its continuation. Teachers who participated in the SBSP perceived its effectiveness to be moderately high. The mean of the effectiveness of SBSP overall was greater than the midpoint on a four-point scale. This result suggests a general level of satisfaction with the program. However, the SBSP must be reviewed regularly to determine its relevance and currency, as teachers, like students, learn and make changes at different rates. At the end of each academic year, the SBSP team should gather data to identify the level of development that has occurred. This data analysis should then be used to celebrate successes and to review, and revise if necessary, the goals set for the following academic years. The SBSP team can then develop more detailed plans for what should be done in the following years. Learning in these schools

should not be seen as an occasional exercise or something that is achieved through dramatic change or sudden conversion, but, in contrast, as a continuous necessity for all and through a gradual process of development (Johnston and Caldwell, 2001).

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