THE IMPACT OF A PILOT PROGRAM AIMED AT DEVELOPING EFFECTIVE SCHOOL LEADERSHIP IN KUWAIT

A Dissertation in
Educational Leadership
by
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ABSTRACT

The purpose of this study is to evaluate the impact of the pilot program aimed at developing effective school leadership on Kuwaiti principals’ effectiveness as perceived by teachers in three main domains: organizational development, organizational environment, and instructional leadership.

Schools were chosen to participate in the pilot program by the Ministry of Education in Kuwait based on recommendations from the six Kuwaiti school districts during the 2012/2013 school year and each school’s interest in joining the pilot program. For this study, I selected 10 schools that had implemented the pilot program (the experimental group), and 10 demographically similar schools that had not implemented the pilot program (the control group). All 725 teachers (experimental = 374; control = 351) who worked in the selected schools completed surveys before and after program implementation.

The survey, which was a modified version of the Audit of Principal Effectiveness (APE), included 43 items, with 10 items measuring organizational development, 27 items measuring organizational environment, and 6 measuring instructional leadership. Participants responded to items using a scale ranging from 1 (not effective) to 9 (very effective).

The findings reveal that there is a statistically significant difference between the experimental and control groups’ mean scores for items related to the organizational development domain and organizational environment domain. Higher gain scores are associated with teachers in schools that implemented the pilot program aimed at increasing school principal effectiveness. The findings also reveal that there is no statistically significant difference between the experimental and control groups’ mean scores for items related to the instructional leadership domain, indicating that the pilot program did not significantly affect instructional leadership.
Furthermore, demographic characteristics (gender, years of experience, educational qualifications, teaching level) had no significant effect on the dependent variable.

Several implications emerged from findings. Policymakers in the Ministry of Education should focus on” enhancing the capacity of parents, the public, community organizations and businesses to understand and participate in the reform efforts” (Goertz, Floden, & O’Day, 1996, p152). School principals should be equipped with the knowledge and skills necessary to help teachers with professional development and instructional improvement. Indirect instructional leadership strategies should be acknowledged and valued in Kuwaiti schools. District administrators and policymakers should work together to implement strategies that will enhance the role of school districts as active agents in the change process. Traditional leadership preparation programs should be modified by placing greater emphasis on the knowledge and skills needed to improve curriculum and instruction and addressing the diverse needs of school leaders from different professional backgrounds.
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DEDICATION

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CHAPTER 1

Introduction

In this chapter, I provide a brief introduction and background of the study, including a statement of the problem, significance of the research, purpose of the research, research questions, and limitations. I conclude the chapter by defining key terms.

Overview

During the past decade, the role of the school principal has become increasingly viewed as vital to the effectiveness of schools, especially those engaged in school reform efforts. School effectiveness researchers have identified that principals play the most important role in implementing change and providing a positive environment for student learning. As effective instructional leaders, they must lead with the goal of improving the quality of teaching and student learning. Research has indicated that when school principals work as instructional leaders, they ensure that every student receives the highest quality instruction each day (Lezotte & Snyder, 2011, Fink&Rimer, 2012). A requirement for successful school improvement is, therefore, the preparation of highly effective leaders to guide schools through the challenging modern educational landscape (Braun, Gable, & Kite, 2011).

As the primary drivers of change, school principals thus experience great pressure to meet public demands for more effective schools (Terry, Orr, & Orphanos, 2011). These demands are even more challenging in the Middle East, where governments are facing huge pressure to compete globally. As the trend toward globalization accelerates, countries must create ecosystems of innovation and entrepreneurship to stimulate their economies for sustainable growth (World Bank Institute, 2007; Winokur, 2014). Creating such ecosystems requires a strong education system.
In 2009, the World Bank raised serious concerns about the Kuwaiti education system and warned that perpetuation of the status quo may render the country’s high school certificates unrecognizable by major academic institutions in the future (Gangal, 2009). This was not the first time such concerns had been raised. Kuwait has a long and troubled history of school reform. Since the 1970s, various interest groups have demanded reform of the entire educational structure (Al Musailim, 1987). However, over the past 40 years, Kuwait’s leadership has failed to implement successful and sustained educational reforms.

Educational reforms have failed for many different reasons. The broader cause of failure is that the reforms in Kuwait have been largely based on policies and programs from Western countries such as the United States and the United Kingdom (AlKandari, 2013). Although many practices have been proven to be effective, little is known about the contextual factors underlying their effectiveness. Reformers have not considered what adaptations are necessary to be able to achieve similar results given differences in context and culture (Reimers, Cooc, & Hashmi, 2011). For example, Al-Safran, Brown, and Wiseman (2009) asserted that there is no universal leadership style that is effective in all cultures. They added that despite a growing trend in the Kuwaiti education system of adopting American educational models, the ideal model of principal leadership in the United States is inapplicable in a culture like Kuwait’s.

Second, a failure to properly evaluate all past efforts has made it difficult to follow up and improve implementation and design. Implementing school reforms requires taking an experimental approach, in which new programs designed to solve specific problems in the system continue to be evaluated in order to learn whether these programs make a difference or not. Evaluations would help save time and inform the decision-making process.
Third, most previous reforms were implemented in a highly centralized system characterized by a controlling, top-down leadership style. Higher authorities in the Ministry of Education would create mandatory standards and communicate their preferred changes down through the school system hierarchy (Provenzo Jr., 2008). However, highly bureaucratic and centralized government systems thwart reform efforts (Winokur, 2014). “Top-down, politically driven education reform movements are addressed primarily to restructuring. They have little to say about educating” (Goodlad, 1992, p. 238). Most successful reforms have involved a shift from a system of highly centralized control of school activities to a decentralized and open system (Astiz, Wiseman, & Baker, 2002; Blossing & Ekholm, 2008).

These past failures have motivated the Kuwaiti government to move forward with new plans for school reform. As Winokur (2014) observed, “repeated efforts at policy borrowing that resulted in failure to internalize reforms can be used as the impetus for real and sustainable change” (p. 103). A new initiative that focuses on establishing Kuwait as a financial and trade hub in the region has further increased pressure for reform (Wiseman, Alromi, & Alshumrani, 2014). As part of the information gathering process, the government commissioned a consulting firm, Tony Blair Associates, to research major issues facing the nation and recommend changes (Blair, 2009, as cited in Winokur, 2014). The result was a document entitled “Kuwait Vision 2035.” The Blair report focused on the future of Kuwait as a financial hub and stated that although the Kuwaiti government has poured a great deal of money into the public education system, there has been almost no return on its investment because students are not receiving an education that prepares them for jobs in the Kuwait of the future (Wiseman, Alromi, & Alshumrani, 2014). In short, the report revealed that Kuwait is facing imminent danger, and
serious steps must be taken to save the public education system. The report shocked both
Kuwaiti citizens and the government.

Although Kuwait is still among the top countries in terms of educational expenditure, it
scores among the lowest worldwide when it comes to student results. The Kuwaiti government
has admitted that the education system in Kuwait is failing (AlKandari, 2013). In one report, the
Supreme Council for Planning and Development (2009) highlighted serious issues, including the
poor performance of Kuwaiti students in math and English, a failure to meet the demands of the
labor market, a high drop-out rate and low quality schools.

School leaders in Kuwait are partially to blame for the failing educational system. In one
study, Al-Saleh (2009) emphasized that school leaders in Kuwait do not play an active role in
improving student achievement. Despite the fact that” instructional leaders shape the
environment in which teachers and students succeed or fail” (National Staff Development
Council, 2008, p4), research shows that school leaders in Kuwait are immersed in so much
“clerical work” that it prevents them from focusing on instructional facilitation (Al Musailim,
1987). Al-Duaij and AlArian (1995) noted that the centralized educational system had limited the
ability of school principals to become effective instructional leaders in their schools. Researchers
have pointed out that principals believe they should be involved in instruction and curriculum
and that a greater portion of their time should be spent in the classroom (Boocock, 1972 , as cited
in Johnson, 2011).

Building on the reports from Blair Associates, the World Bank, the Belfer Center, the
Work Foundation/LSE, and data from TIMSS, PIRLS, and MESA, Kuwait created a
comprehensive educational reform plan in 2013 with six strategic objectives to be achieved by
2018: (a) build national standards for education, (b) develop effective school leadership, (c)
develop curricula, (d) use assessment and evaluation tools to improve student achievement (TIMSS, PIRLS, MESA), (e) improve teacher quality, and (f) promote positive school environments. As evidenced by the second objective, the Ministry of Education recognized that strengthening school leadership can help create a positive environment for reform. Therefore, the Ministry created a pilot project aimed at: (a) developing effective school leadership, (b) preparing school principals to lead instructional improvement and school change efforts, and (c) preparing school principals to use data to improve student learning. The Ministry of Education also plans to implement new leadership roles and change both the structure and culture of school leadership (Ministry of Education, 2013)

The pilot project was implemented in 48 “experimental schools” that were chosen based on recommendations from the six school districts in Kuwait. In these experimental schools, the school principals were seen as instructional leaders rather than as building managers. In addition, a new structure was implemented in order to help school principals fulfill their new roles: the number of assistant principals at each school was increased from two to three.

In light of these changes, school leaders needed support and customized coaching to increase their skills and become more reflective in order to turn their schools into high-performing learning communities (Higgins, 2015; Harwell, 2003). A group of trainers from the Massachusetts Elementary School Principals Association (MESPA) visited Kuwait in the summer and fall of 2013 to provide the necessary training. In the United States, MESPA trains educators to become principals and provides professional development. The training course for the program was designed by MESPA and was comprised of 10 sessions. The main objective of the training program was to prepare school principals for their new roles as instructional leaders (Karlen, 2013).
All past efforts to develop school leadership were unsustainable due to a failure to internalize policies borrowed from other countries. According to Phillips (2004a), there are four stages to policy borrowing: cross-national attraction, decision, implementation, and internalization. (as cited in Winokur, 2014). Each stage is important; however, without proper implementation and internalization, a policy will fail. The reason why policy borrowing has failed repeatedly in Kuwait is because the final stage rarely occurs.

Given a history of too much reform and too little change, what makes this reform effort different? Unlike old reforms that focused on restructuring only, this initiative is focused on implementing fundamental changes to both the structure and the culture of school leadership in Kuwait. Fullan (2000) notes that restructuring involves changing the structure, roles, and related formal elements of the organization. Although structural reforms are easier to implement than cultural reforms, restructuring alone makes no difference in the quality of teaching and learning. (Fullan, 2000).

Despite these significant differences from previous reforms, one crucial aspect remains the same. Policy makers still have not prioritized evaluation, despite its great importance. Aside from discussing intentions to evaluate this pilot project before expanding it to all schools in Kuwait, no real efforts have been made to accomplish it. Historically, the Ministry of Education has not engaged in evaluation because it is a costly, time-consuming process that diverts attention from activities that are seemingly more important, such as planning and implementation. However, successful implementation depends on evaluation. Evaluating the effectiveness of professional development will help inform decisions about the program and identify whether intended outcomes have been achieved.

To address this important gap in the educational reform process, in this dissertation I
evaluate the impact of the pilot program on school principals’ effectiveness as perceived by teachers in three main domains: organizational development, organizational environment, and instructional leadership. Teachers are a potential source of feedback for principals. In addition, teachers’ perceptions of the school principal are important, as how teachers perceive the principal may influence their own effectiveness.

**Problem Statement**

During the 2013/2014 school year, the Ministry of Education implemented a pilot program aimed at developing effective leadership in the schools of Kuwait. School leadership practices in 48 pilot schools were transformed, re-conceptualized and reorganized by creating new and improved leadership roles. New job descriptions were created to clearly define roles and responsibilities for principals and assistant principals. Effective school leadership begins with effective school principals, since they play an essential role in fulfilling the government’s goal to provide high-quality education for all learners. However, there is a lack of quantitative empirical evidence to determine whether the pilot program has had any effect on school principal effectiveness. Therefore, in this quantitative study, I evaluate the impact of the pilot program on school principals’ effectiveness by comparing teachers’ perceptions in experimental schools with teachers’ perceptions in other schools that are demographically similar. This evaluation of principals’ effectiveness is based on teachers’ perceptions as measured by the Audit of Principal Effectiveness (APE) in three main domains: organizational development, organizational environment, and instructional leadership.

**Research Questions**

The research questions and hypotheses formulated for this study are:
R1: For the domain of organizational development, is there a significant difference in teachers’ perceptions of principal effectiveness between schools that implemented the pilot program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)?

H1: For the domain of organizational development, teachers' perceptions of principal effectiveness are significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H1: μ1-μ2 > 0, p ≤ .05).

H1₀: For the domain of organizational development, teachers' perceptions of principal effectiveness are not significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H1₀: μ1-μ2 > 0, p > .05).

R2: For the domain of organizational environment, is there a significant difference in teachers’ perceptions of principal effectiveness between schools that implemented the pilot program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)?

H2: For the domain of organizational environment, teachers' perceptions of principal effectiveness are significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H2: μ1-μ2 > 0, p ≤ .05).

H2₀: For the domain of organizational environment, teachers' perceptions of principal effectiveness are not significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H2₀: μ1-μ2 > 0, p > .05).

R3: For the domain of instructional leadership, is there a significant difference in teachers’ perceptions of principal effectiveness between schools that implemented the pilot
program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)?

H3: For the domain of instructional leadership, teachers' perceptions of principal effectiveness are significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H3: μ1-μ2 > 0, p ≤ .05).

H3: For the domain of instructional leadership, teachers' perceptions of principal effectiveness are not significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H3: μ1-μ2 > 0, p > .05).

Significance of the Study

This study contributes to research, practice, and policy. School effectiveness researchers have identified principals as instrumental in leading effective schools and facilitating change and improvement (Fullan, 2001). The main goal for the Ministry of Education’s pilot program was to build the capacity of school leaders so that they are better able to guide and direct large scale, sustained improvement (Karlen, 2013). Evaluation is valuable tool for investigating program effectiveness (Fink, 2015). Using a pretest-posttest control group design, I assess teachers’ perceptions of school principals who have been trained in the pilot program. The results enable a richer understanding of the strengths and weaknesses of the program and provide valuable information to policy makers, school principals and training institutions.

Over the past decade, important contributions have been made to the educational field through program evaluation, which is used to measure how efficiently and effectively a program achieves important individual, community, and societal outcomes. Both the Ministry of Education and MESPA will use this study to examine the effectiveness of the pilot program and verify its success or failure. Trainers will have the opportunity to use the findings to alter or
enhance the content and structure of the training program in order to improve the knowledge and skills acquired by school principals. Policymakers and members of the Ministry of Education will be able to use the findings to: (a) evaluate the program and its impact on school principal effectiveness; (b) modify and improve the pilot program; (c) justify the need to fund or reinstate the training program; and (d) identify obstacles in implementing the program across Kuwait. The results of this study will also provide school principals with information on how teachers perceive their principals’ effectiveness in the domains of organizational development, organizational environment and instructional leadership. Results will also shed light on the effectiveness of time management training as it applies to school principals.

Understanding the strengths and weaknesses of the program will help the ministry avoid repeating mistakes during the full implementation across Kuwait over the next few years. Overall, the results of this study will provide more knowledge about school principal effectiveness and help policymakers determine the impact of the training program. This study fills a significant gap identified in existing literature related to the lack of program evaluation. More broadly, I contribute to the literature by identifying the effects of professional development on school principals.

Limitations and Delimitations

This study has several limitations and delimitations. First, the findings of this study are limited to the validity and reliability of the instruments used and to teachers’ perceptions. Furthermore, school principal effectiveness is evaluated in three separate domains (organizational development, organizational environment, and instructional leadership) and the results may not be solely related to the pilot program. School principals engage in many professional learning experiences throughout their careers that may affect their effectiveness. Moreover, this study is
restricted to the population of public school principals in Kuwait. Principals of private schools are excluded. Only principals of public schools that participated in the program (i.e., the experimental group) and those of public schools with similar characteristics (i.e., the control group) are included. Finally, the Ministry of Education assigned schools to the experimental group and I selected schools for the control group based on similar demographic characteristics. Therefore, the design of the study limits the potential for generalizing the results to a larger population.

**Definitions of Terms**

*Effective school leadership:* ”school leaders need to set the direction for the learning and development of both staff and pupils, to redesign the organization’s systems and structures in ways which suit the vision and tasks, to manage the learning program , and to do all those things in a motivational, optimistic and enabling manner.” (Lewis & Murphy, 2008, P.17).

*Principal effectiveness:* A building administrator’s ability to: provide organizational direction, be a change agent, foster and promote relationships, facilitate instructional improvement and leadership, and guide the interactive/affective processes of the school through clear communication and shared decision making (Valentine & Bowman, 1987).

*Organizational environment:* The dynamics of personal relationships within the organization, including interpersonal relationships with members of the organization and related affective issues (Valentine & Bowman, 1989).

*Organizational development:* A principal’s ability to create a vision, build positive relationships, and utilize effective practices to bring about successful change (Valentine & Bowman, 1989).
Instructional leadership: “Those actions that a principal takes, or delegates to others, to promote growth in student learning” (Debevoise, 1984, p. 15)

Program evaluation: “Unbiased investigation of a program’s merits, including its effectiveness quality and value” (Fink, 2015, p. 4)

Pretest: The test given to participants prior to implementing the pilot program. The pretest used for this study was the survey instrument of the Audit of Principal Effectiveness (APE).

Posttest: The test administered to participants following the implementation of the pilot program. The posttest used for this study was the survey instrument of the Audit of Principal Effectiveness (APE).

Organization of the Study

The organization of the remainder of this dissertation is as follows. In Chapter 2, I review of literature on school effectiveness and the principal’s role in its facilitation in three domains: organizational development, organizational environment, and instructional leadership. In Chapter 3, I provide background information about the Kuwaiti educational system and detailed information about the pilot program as a part of the school reform movement in Kuwait. In Chapter 4, I present my research methods, including the research design, population and sample, instrument, and techniques used for data collection and analysis. In Chapter 5, I present the quantitative results of the survey of Audit of Principal Effectiveness (APE) and research findings. In Chapter 6, I discuss major findings and implications for the Kuwaiti educational system and provide recommendations before concluding with some final thoughts.
CHAPTER 2

Literature Review

If you can't measure it, you can't improve it. - Peter Drucker

Principal effectiveness is defined in many ways, which presents several difficulties when conducting research on the evaluation of school principals’ effectiveness. If it cannot be defined, then it cannot be measured, and therefore cannot be improved. Thus, it is essential to define specifically how effectiveness is viewed and interpreted with regard to a particular research study, as it may be scrutinized in light of previous research. In this chapter, I review literature on school effectiveness and the specific role of principals before presenting findings related to the three main dimensions of principal effectiveness explored in this study: organizational development, organizational environment, and instructional leadership. In the final section of this chapter, I review other studies in which teachers’ perceptions have been used to measure school principal effectiveness.

School Effectiveness

Researchers have found that effective (i.e., successful) schools share fundamental characteristics. While researchers in the 1960s investigated the effects of input variables such as resource quantities and student characteristics in large studies, research in the latter decades of the 20th century focused more on school processes (Sweeney, 1982). In the early 1980s, the idea that school principals could serve as instructional leaders emerged after effective school research demonstrated that principals could serve successfully in this role. Similarly, the role of school principal as instructional leader is considered to be a relatively new concept; it, too, emerged in the early 1980s, having been influenced largely by research which revealed that effective schools are run by school principals who are interested in instructional leadership (Brookover & Lezotte,
In the first half of the 1990s, attention to instructional leadership seemed to fade, displaced as it was by many discussions about school-based management and facilitative leadership (Lashway, 2002; Jenkins, 2009; Nyaaba-Ayamdor, 2014; Philips, 2004b). Recently, however, instructional leadership has made a strong comeback in terms of research focus, with an increasing amount of importance placed on accountability and core standards (Phillips, 2004b; Jenkins, 2009; Nyaaba-Ayamdor, 2014).

Key characteristics of effective schools include: professional leadership; a clear, shared mission, vision and goals; an orderly, safe environment conducive to learning; a focus on instructional leadership; high expectations for success; positive reinforcement; constant monitoring of progress; defined pupil rights and responsibilities; adequate time to attend to tasks; and positive home-school relationships (Lezotte & Snyder, 2011; Sammons et al; 1995; Poirier, 2009). All schools that have been identified as “effective” facilitate student learning at the highest levels.

An extensive body of research on school effectiveness supports the notion that school principals make a real difference in schools. Schools are complex institutions with many students and staff members. “A principal can impact the lives of anywhere from a few hundred to a few thousand students during a year” (Schmidt-Davis & Bottoms, 2011, p.4). According to Kouzes and Posner (2002, p. 13), “leadership is not all about personality; it’s about practice.” Leithwood, Louis, Anderson, and Wahlstrom (2004) confirmed that “Leadership not only matters: it is second only to teaching among school-related factors in its impact on student learning” (p. 3).

According to the Institute for Educational Leadership (IEL) (2000), for most of the last century, principals worked primarily as building managers since they spent most of their time dealing with personnel issues, ordering supplies, balancing program budgets, keeping hallways and
playgrounds safe, addressing crises that threatened tranquil public relations, and ensuring that busing and meal services were operating smoothly (Lashway, 2002). However, schools in the 21st century are based on complex systems that require school principals to wear many different hats during the work day (Vasquez, 2014). The most effective school principals, therefore, are more than just managers and disciplinarians (National Education Association, 2008). In his book *Managerial Imperative and the Practice of Leadership in Schools*, Larry Cuban (1998) identified three primary roles that comprise the jobs of educational leaders in the modern era: the administrative role, as the manager of a building; the political role, as the primary negotiator and facilitator with parents, administrators, and other constituents; and the instructional role, as a teacher of teachers. (as cited in Supovitz and Poglinco, 2001)

Expectations for school leaders to fulfill these additional duties have increased with the increasing sense of urgency around making measurable educational progress. Today, school principals are required to lead with the goal of improving the quality of teaching and student learning (Louis, Leithwood, Wahlstrom, & Anderson, 2010). “Expectations for the principalship have steadily expanded…always adding to, and never subtracting from, the job description” (Copland, 2001, p. 4). Today, most school principals seek to balance their roles as manager-administrators and instructional leaders (Phillips, 2004b). These new responsibilities have complicated principals’ jobs in the sense that”leadership is not just about mobilizing others to solve problems they already know how to solve, but helping them confront problems that have not yet been successfully addressed” (Fullan, 2001, p.3).

School principals have a duty to empower and support their teachers and promote a school-wide emphasis on positive student academic growth to improve the quality of achievement for students, teachers, schools, and their communities (Bogler & Somech, 2004).
According to Supovitz and Poglinco (2001, p. 3), “The life of a school principal thus can be seen largely as a tug of war among managerial, political, and instructional responsibilities.” Although the managerial and political roles still dominate the jobs of most school principals (Cuban, 1998), those who are able to balance the three types of responsibilities are able to increase school effectiveness in three domains: organizational development, organizational environment, and instructional leadership.

**Organizational development.** The role of school principals in fostering organizational effectiveness in schools has received considerable attention in research. As leaders, school principals are responsible for ensuring that all students have access to high-quality education (NASSP, 2013). According to Louis, Leithwood, Wahlstrom, & Anderson (2010): Leadership is all about organizational improvement; more specifically, it is about establishing agreed-upon and worthwhile directions for the organization in question, and doing whatever it takes to prod and support people to move in those directions” (pp. 9–10). Effective school principals organize their schools so as to improve instructional quality (Supovitz & Poglinc, 2001). In support of the claim that principals’ professional investment affects schools’ success, Horng, Klasik, and Loeb (2010) concluded in a study that student achievement as reflected by test scores increases with the amount of time that principals spend on duties related to organizational management

Leithwood and Riehl (2003) noted that “effective educational leaders help their schools to develop visions that embody the best thinking about teaching and learning” (p. 5). Schools with shared visions, norms, and values about instruction create incentives and opportunities for teachers to improve their classroom practices (Bryk & Driscoll, 1985; Newman & Wehlage, 1995). It is a concrete vision of instructional quality in school that helps provide” a tangible representation of what effective instructional planning looks like and provides teachers with an
“instructional.” that they can work toward as a team” (Supovitz & Poglinco, 2001,p4). Viewing schools as learning communities helps school principals to promote a unified vision and goals and ensure that all resources and processes are in place to support that vision (Leithwood & Riehl, 2003). Clear goals are essential (Moos & Day, 2011); a lack of clarity around goals can negatively impact the organizational environment and hinder school performance. In essence, the goals for any school must be strongly connected to its vision and mission. A failure to create relevant standards to align the goals, vision, and mission can hamper school performance. The distinctive goals set by the principal must also be realistic and attainable.

In the context of school reform, organizational change and strategic planning should be a priority for school principals:

As schools focus on student outcomes, they must attend to these organizational change and strategic planning processes to build the “infrastructures”—at the staff, school, system, and community levels—that coordinate resources, build capacity, support school-wide programs, and maximize success. (Knoff, 2008, p. 8)

Valentine and Bowman (1989) described how school principals can encourage appropriate change, develop change strategies, and implement and evaluate change in an organized and systematic manner. First and foremost, principals must be effective communicators. Specifically, principals must articulate clear directions for instructional programs and emphasize areas that require extra attention. Second, principals must effectively perform managerial tasks, such as organizing activities, tasks and people, and developing appropriate rules and procedures. Third, principals must use systematic appraisal procedures for staff and offer constructive criticism when necessary. Finally, principals must understand how to handle the stress of the job.
Principals also promote school effectiveness by developing systems that facilitate teamwork. For example, many principals create teaching teams in their schools. This approach ensures that teachers have a support system so they may help each other handle problems related to instructional design or classroom instruction. Teaching teams also help develop teachers’ skills by fostering interactions with colleagues. Moreover, teamwork serves as a platform for enhancing overall motivation, which is an essential element of teacher performance.

**Organizational environment.** Principals have a role to play in the promotion of an effective school environment. School principals have a duty to empower and support their teachers and promote a school-wide emphasis on academic growth to improve the quality of achievement for students, teachers, schools, and their communities (Bogler & Somech, 2004; Fenton, et al. 2010). Research indicates that principals can promote an effective school environment in several different ways.

First, it is essential for principals to develop a framework that ensures the involvement of all stakeholders (Weismann, 2001). Taking an autocratic approach and omitting some stakeholders (especially in decision making) is one common way in which principals create ineffective school environments. Adopting such an approach can hinder the implementation of any plan in an educational institution. In essence, stakeholder involvement ensures that the efforts of all people who affect or are affected by the operational system of a school are aligned toward achieving the same targets or goals (AlKandari, 2013). The most effective learning environments are not characterized by conflicts or squabbles among principals, teachers, students and community members. In other words, school principals must lead their schools within a framework of collaboration and shared decision making with teachers and other staff members (Moos & Day, 2011; NASSP, 2013). To create this framework, specific actions must be taken to
ensure that all stakeholders are incorporated into the various processes at the school. For instance, many principals organize regular meetings between parents and teachers. This provides an excellent platform for these groups to provide feedback about student performance and identify potential areas for improvement. Additionally, such meetings ensure that parents and teachers are working towards a common goal.

The second factor that can shape a positive environment is the ability of school principal to lead school-based learning communities. Connelly (2008) noted that learning community members share transparent values and goals for what students must know and be able to do. This leads to the establishment of environments in which new relationships are forged between administrators and teachers that lead to collaborative leadership in the school, where all members of the learning community grow professionally and learn to view themselves as leaders and learners (Connelly, 2008). When schools are viewed as learning communities, students become the main focus of all stakeholders, which creates an environment that facilitates teaching and learning.

Research has indicated that a positive school climate improves student achievement (Hughes & Pickeral, 2013). Specifically, “school leaders can promote equity and justice for all students by establishing school climates in which patterns of discrimination are challenged and negated “(Leithwood & Riehl, 2003, p. 8). As Harris (2002) pointed out, when working in open systems, school principals seem to influence teachers and teaching practices through the organizational climates they create, not through specific interactions or interventions. Watson (2001) warned that if the school culture is not conducive to teaching and learning, then teacher motivation and student achievement can suffer greatly. Fink and Resnick (2001) also asserted that school principals are responsible for establishing a culture of learning in schools.
There is substantial evidence in the literature to suggest that a school principal must first understand the school’s culture before implementing change (Leithwood, Louis, Anderson, & Wahlstrom, 2004). “Re-culturing” and “re-structuring” are key words for change. Transforming the culture and structure of the school and changing what teachers in the schools value and how they work together to accomplish it leads to deep, lasting change (Fullan, 2002; Klein, Corley, Maxwell, & Tibbetts, 2007). Kytle and Bogotch (2000) examined school reform efforts through a re-culturing rather than a restructuring model. They revealed that real and sustained change in a school climate is more readily achieved by first changing the culture of the school rather than by simply changing operational and functional structures.

In order for safe, equitable, engaging, and high quality school climates to become the norm in schools, school environments must encourage, support, and reward shared leadership (Hughes & Pickeral, 2013). A distributed model of leadership focuses on the interactions (rather than the actions) of those in formal and informal leadership roles (Harris & Spillane, 2008). There is growing recognition in the field that prior organizational structures of education simply do not fit the requirements of learning in the 21st century (Harris & Spillane, 2008; Abbate, 2010). Only through a distributed view of leadership can school staff members face these new challenges, because such a perspective incorporates the activities of multiple groups of individuals in a school who work to guide and mobilize staff members in the instructional change process (Hulpia, Devos, & Van Keer, 2009). In these schools, leadership functions are distributed, and leadership tasks are accomplished through the interaction of multiple leaders (Spillane, Halverson, & Diamond, 2001).
**Instructional leadership.** Instructional leadership has become a critical aspect of school effectiveness. In order to improve overall student achievement, school leaders must influence their teachers first. It has been shown that instructional leadership impacts the quality of teaching in schools (Abdullah & Kassim, 2011). Yet, “despite the existing and emerging research evidence for educational effectiveness in terms of instructional leadership and its impact on teaching and learning, there is a disturbing level of ignorance among school leaders and teachers at all levels of educational provision related to what works and why” (Rowe, 2007 p. 4). The National Association of Elementary School Principals (NAESP) (2001) defines instructional leadership as the act of leading learning communities in which staff members meet on a regular basis to discuss their work, collaborate to solve problems, reflect on their jobs, and take responsibility for what students learn (Phillips, 2004b; Jenkins, 2009). Similarly, Fullan (2001) defined instructional leadership as a principal’s ability to work with staff and focus on curriculum, instruction and student gains in learning.

When school principals work as instructional leaders, they ensure that every student receives the highest quality instruction each day. Principals who engage in instructional leadership focus on strengthening teaching and learning, student achievement, teachers’ professional development, decision making, and accountability (Institute for Educational Leadership, 2000; Klein, Corley, Maxwell, & Tibbetts, 2007; King, 2002). Ginsberg and Murphy (2002) found that school principals who engage in instructional leadership become more familiar with the school’s curriculum and teachers’ instructional practices. They begin to establish themselves as school leaders and instructional mentors, influencing teaching and learning processes. The main underlying assumption is that instruction will improve if school principals provide detailed feedback to teachers, including suggestions for change and improvement. It
follows that school principals must have the time, knowledge, and consultative skills to provide teachers—in all relevant grade levels and subject areas—with valid, useful, and significant feedback about their instructional practices (Louis et al., 2010). Resnick and Glennan (2002) noted that most principals spend relatively little time in classrooms and even less time analyzing instruction with teachers. They may arrange time for teachers’ meetings and professional development, but they rarely provide intellectual leadership about teaching skills (Mestry, 2013).

In order to improve school effectiveness through instructional leadership, principals must therefore employ effective strategies for monitoring and evaluating the effectiveness of instruction. Relevant mechanisms must be in place for addressing different weaknesses that might arise. Additionally, monitoring helps principals identify the distinctive ways in which change can be integrated into the learning environment (Matthews, 2003). Student assessment is another effective instructional leadership practice. Principals must ensure that all students are evaluated effectively. Regular assessments are essential in that they help determine the progress attained by students. In the absence of such assessments, overall student performance might be compromised. To provide useful feedback for teachers, parents, and students, effective leaders use multiple sources of information to assess performance and eventually improve student achievement. Effective principals know that analyzing student achievement data is critical, as doing so enables them to make good decisions about instruction. The NAESP (2011, p. 11) made five recommendations to help principals put student achievement data to the best possible use:

1. Make data part of the ongoing cycle of instructional improvement inside the school;
2. Teach students to be accountable for their own learning by examining their own data and set learning goals;
3. Establish a clear vision for school-wide data use;
4. Provide support that fosters a data-driven culture within the school; and

5. Develop and maintain a district-wide data system.

In the instructional leadership domain, the effectiveness of school principals’ leadership is ultimately defined and evaluated through the results their teachers deliver (Hardman, 2011).

Teachers’ Perceptions of School Principals’ Effectiveness

Data for this study are comprised primarily of teachers’ perceptions of their school principals’ effectiveness. Structured feedback can help principals assess and evaluate their own performance. “Feedback data provide an avenue to improved perceptions in the educational setting; improved perceptions translate into personal growth and a more positive organizational culture” (Valentine, 1989, p. 1). An analysis of teachers’ perceptions of their school principal’s leadership skills can result in: (a) increased awareness of the principal’s strengths and weaknesses; (b) greater communication in the future between the principal and teachers; and (c) increased instructional productivity among both principals and teachers (Carlton, 1987). Thus, teachers’ perceptions of a principal should be seen as a strong determinant of a school principal’s overall leadership effectiveness (Kursunoglu & Tanrıogen, 2009).

Teachers’ perceptions have been used extensively in the academic literature to measure school principals’ performance. For example, Kursunoglu and Tanrıogen (2009) found a positive relationship between teachers’ perceptions of their principals’ instructional leadership behaviors and the teachers’ attitudes toward organizational change. Principals play an important role in influencing teacher’s attitudes toward change when they share a common vision. Likewise, Blasé & Blasé (1999) found that teachers’ perceptions of their school principals as instructional leaders greatly influence their daily teaching practices. Smith and Andrews (1989) noted that “schools operated by principals who were perceived by their teachers to be strong instructional leaders
exhibited significantly greater gain scores in achievement in reading and mathematics than did
schools operated by average and weak instructional leaders” (p. 9). Further, each teacher’s
perception of how he or she is valued and supported by the school leadership often will influence
the daily decisions he or she makes to motivate students (Bandura, 2003; Demir, 2008).

Teachers’ perceptions also can be revelatory because they may not always be consistent
with the perceptions of principals. For example, Kochamba and Murray (2000) found a
significant difference between principals’ and teachers’ perceptions of the importance of the
principals’ ability to translate vision into action. Principals thought this skill was more important
than teachers did, indicating that principals may have a clearer understanding of the role that
vision plays in instructional leadership than teachers do. This perceived lack of importance may
indicate a lack of teacher participation in overall school planning and instructional restructuring
efforts. Louis et al. (2010) also found that teachers and principals tend to assess instructional
leadership differently. Likewise, Coffin (2008) focused on examining the perceptions of middle
school teachers on the changing role of secondary middle school principals and compared
teachers’ perceptions with those of both assistant principals and principals. Their findings
revealed that correlations between teachers’ and principals’ perceptions of a secondary middle
school principal’s role were significant for only 14 of the 36 role descriptors. Teachers’ mean
score ratings were also lower than those of their principals.

To date, empirical studies have generated only scant descriptions of the behaviors of
effective principals, and their impact on teachers and classroom instruction. It is vital for both
school principals and teachers to understand and recognize how leadership practices are being
perceived so that efforts can be realigned to achieve greater learning success in schools.
Summary

A review of the literature revealed a longstanding debate on what factors create effective schools. Lezotte and Snyder (2011) explained:

The original research provided little guidance as to how the effective schools become effective; that is, how the processes evolved or how correlates came into place. Discovering the outlier as it existed in schools identified as effective is one thing; it is quite another to tell someone how to create an effective school. The researchers were confident in their descriptions, but those descriptions didn’t define the steps they should prescribe to interested school leaders. (p. 16)

Moreover, training school leaders to develop school effectiveness remains one of the most difficult challenges facing designers of professional development programs. There is substantial evidence in the literature that effective principals lead effective schools. School principal effectiveness has been defined from different perspectives, but there is no one single definition accepted in the research on effective schools. This is because a principal’s effectiveness is influenced by the goals and culture of his or her school. As the conceptualization of schools as organizations changes, so does the definition of effectiveness, the criteria used to measure effectiveness, and the frameworks and theories used to explain and predict it. This study is based on Valentine and Bowman’s (1989, p. 11) definition:

Principal effectiveness is the building administrator’s abilities to provide organizational direction, to be a leader of change, to foster and promote relationships, to facilitate instructional improvement and leadership, and to guide the interactive/affective processes of the school, including clear communication and shared decision making.
This definition aligns well with the Kuwaiti context and the focus of current reform efforts. In Chapter 3, I provide background information on the Kuwaiti education system and describe previous reform efforts before explaining current reform initiatives in detail.
CHAPTER 3
The Kuwaiti Education System and School Reform Efforts

In this chapter, I provide general background information about Kuwait to contextualize my research setting. Then, I describe the evolution of the Kuwaiti education system as well as historical and current public school reform efforts, including the pilot program aimed at developing effective school leadership.

Background

Kuwait is a small, predominantly Arab country located in the Middle East at the northwestern corner of the Arabian Gulf. The country’s main neighbors are Saudi Arabia and Iraq. Kuwait is a constitutional, hereditary emirate ruled by the Al Sabah family. It is divided into six governorates that are subdivided into districts. Although Kuwait’s population is largely comprised of Arabs, Africans and other Asians also live there. Kuwait’s current population is approximately 4.2 million people (Nehme, 2014); however, more than 2 million are foreign workers.

The standard of living across the entire country has been continuously improving, especially in recent years. According to the United Nations, Kuwait has a high human development index (HDI) because income levels are generally high among members of the population. Life expectancy rates in Kuwait are also relatively high compared to neighboring countries.

The defining event of Kuwait’s history was the discovery of oil in 1938. The nation has expansive reserves of crude oil, and the economy relies heavily on producing petroleum-based products. When oil production began in 1946, Kuwait stepped into the modern era and implemented sweeping plans for urban redevelopment, including a new social system in which education, healthcare, and employment would be provided and guaranteed by the government.
With the exception of U.S.-led invasion of Iraq (Casey, 2007), which caused the entire region to be categorized as a risky destination thereby curtailing foreign direct investment, Kuwait has experienced continuously high economic growth. Relative peace and stability in the government compared to other nations in the region have contributed immensely to Kuwait’s strong economic growth and development. It is also important to emphasize that Kuwait has cultivated robust partnerships with international development agencies, such as the World Bank, which have been instrumental in boosting the rate of economic growth (Bechir, 2010) and attracting international investors.

**Kuwait’s Education System**

In the early 20th century, formal education was more or less nonexistent in Kuwait (Adel, 2005). The government had not placed any kind of emphasis on education, which undermined economic and social progress. At that time, Kuwaitis were educated either in informal settings where they learned basic arithmetic, or at religious schools (i.e., Katateeb) where children were taught reading, writing and arithmetic, and memorized large parts of the Qur’an (Cottrell, 1980). Records indicate that the first formal school or educational institution in Kuwait was the Al-Mubarakia school, which was established in 1912 and funded by donations from citizens who desired an alternative to the Katateeb.

Following the oil prospecting agreement in December 1934, the government began to focus on building an educational system. By 1936, Kuwait had approximately 36 educational institutions. However, the education system developed slowly throughout the first half of the 20th century; society had not yet recognized the need for formal education since most citizens were employed in industries requiring minimal education.
Things began to change during the second half of the 20th century, however. Thanks to a booming economy driven by the oil sector, the government was able to allocate resources toward developing the country’s education system (Horn, 2002). Education has been a major item in the national budget since oil exports began in the late 1940s. This money was used to build additional schools across different parts of the country. The booming economy also created increasing demand for skilled, educated employees, motivating citizens to enroll in formal education. By 1960, 10,532 out of every 100,000 Kuwaiti children were enrolled in grades 1–6; according to a report prepared by a UNESCO special committee, this ratio was the highest achieved by any Arab state.

In 1962, the Department of Education became the Ministry of Education, and education was directed towards accomplishing the following aims:

1. Conforming to modern educational trends, facilitating scientific and technological development, and reforming the curricula so as to include all that is new in science and art, taking into consideration the basic facts of the local environment, its sources of wealth and the best methods of their investment.

2. Diversifying educational programs and institutions at the secondary and tertiary levels in order to prepare Kuwaiti youths to perform the duties required by society in various spheres of human activity.

3. Orienting students and encouraging them to pursue scientific and technological studies, and providing schools with workshops for this purpose and laboratories with scientific equipment to enable students to take an active part in practice and application.
By 1966, the government had changed laws in order to streamline education standards in Kuwait. For instance, the constitution was changed to state that education was a basic requirement for all citizens. As such, education became compulsory for all children between the ages of 6 and 14 years. Prior to the enactment of this constitutional clause, education was not recognized as a basic and compulsory need for citizens. However, these changes helped address this shortcoming (Oxford Business Group, 2009). Additionally, the government began to establish a framework for incentives aimed at encouraging more people to enroll in schools. These changes were instrumental towards ensuring that the country maintained a formal educational system.

In 1971–72 over half of total government expenditures on public services were for education. In 1973–74, Kuwait's education budget exceeded the defense and health budgets by nearly double. This money was used to build even more schools in Kuwait. At that time, there was also an influx of foreign educational professionals into the country, which played an instrumental role in educational reform (Gaad, 2011).

Today, there are three levels of education in Kuwait: elementary (5 years), intermediate (4 years), and secondary (3 years). Schooling usually begins at age 6 and primary and intermediate education is compulsory for all students between the ages of 6 and 14. Pre-school is available for 4- to 6-year-olds, and students who complete their basic education can continue on to higher education. With the exception of a few private schools which are supervised by the Ministry of Education, most schools in Kuwait are run by the government and education at all levels is provided free of charge to all citizens.

The Ministry of Education remains the highest authority responsible for educational matters in Kuwait. This ministry must ensure that overall standards of education in the country
continuously improve (Russell, 2014). Policies are created by the ministry and instructions for implementation are communicated to schools in a top-down fashion. Teachers must follow a national curriculum (set for all grades by the Ministry of Education) which aims to prepare an educated work force to meet Kuwait’s national economic and social aspirations. There are standardized national tests at the end of each academic year at the intermediate and secondary levels. The ministry is also responsible for monitoring and reforming the Kuwaiti educational system to meet international standards. Although there is room for improvement, the educational system has had a positive societal impact. Literacy rates in Kuwait are among the highest not only in the Middle East, but across Asia. Furthermore, the ministry has ensured that enrollment rates for both male and female students are quite high.

**Private and public schools**

Many Kuwaitis choose not to send their children to government schools but, rather, enroll them in private schools (Embassy of Kuwait, 2015). The Ministry of Education designs the policies and curricula for the public schools and supervises the private schools as well (Al-Husaini, 2004). The private sector in Kuwait is divided into Arabic and ‘foreign’ schools; a foreign school is further divided into foreign and foreign-bilingual schools, which teach Arabic in addition to other languages. Each school system has its own structure, curriculum and policy, depending on the educational system it follows and the originating country. In these schools, the Kuwaiti government’s curriculum does not have to be adopted. Foreign schools are operated in different ways, but the Ministry requires certain obligatory subjects (Al Shatti, Leyland, Pykhtina, Roberts, Yang & Donald, 2011).
Educational Reform in Kuwait

The latter decades of the 20th century were characterized by gradual changes in the country’s education sector, with a strong emphasis on quality outcomes. Many plans to develop and reform education were established. In 1993, the government launched an initiative called “The Enhanced School Administration of Kuwait” aimed at developing school administrators. A pilot program was implemented in 10 schools in 1993–1994, and expanded to an additional 20 public schools in 1994–1995, and another 20 schools in 1995–1996 (Al-Jabr & Al-Mehelby, 1999). The program was initiated after efforts had been made to train existing staff to fill new roles for a new system of administration. However, the results of post hoc evaluations based on qualitative and quantitative research methods suggested that the project should be aborted, at least until major enhancements to the new system could be implemented.

In 2006, Emir Sabah AlSabah ordered the establishment of the National Centre for Education Development (NCED) with the aim of improving the effectiveness of public education in order to successfully achieve the goals set forth in the National Strategic Plan (2005–2025). The NCED had three main objectives: curriculum improvement, teacher development, and evaluation and assessment. Over a 4-year period, the NCED implemented 31 projects with a budget of 500 million dinars.

One of these projects was reforming the science curriculum at all levels. Alshammari (2013) explored the opinions of science teachers about Kuwait’s new sixth and seventh grade science curriculum, which was implemented in 2008. The findings indicated that the curriculum content did not help students work together and was not related to the students’ culture and society. The findings also showed that science teachers faced many challenges in teaching the
new curriculum, such as a lack of teaching tools and training related to the new curriculum. Overall, the study suggested that the new curriculum should be reviewed and modified with the teachers’ involvement.

In cooperation with the World Bank, Kuwait’s Ministry of Education and the NCED have been engaged in a multi-year integrated modernization program that addresses critical issues in Kuwait’s education system: curricular reform, the development of national assessment systems, improvement of school leadership, and the creation of professional standards. These areas were selected based on a conceptual framework that identified key reform pillars. The overall objective of school reform is to improve the quality of schools and education in Kuwait (World Bank,2014). As they engage in reform efforts, policymakers in Kuwait are relying heavily on advice from the World Bank, data from international studies such as TIMSS and PIRLS, a national test (MESA), the Public Education Strategy (2005–2025), recommendations provided by the NCED in February 2008, and research studies by outside consultants.

In a report, the Ministry of Education (2013) described some of the challenges faced by the current educational system in Kuwait that make reform a necessity. First, there are economic challenges associated with achieving the maximum benefit from the financial resources allocated to education. Socially, work values must be modified with an emphasis on productive jobs. From a curriculum perspective, the education system must prepare all young people in a standardized way and improve education outputs to ensure that Kuwait achieves its objectives. Furthermore, the power of technology must be harnessed and implemented into curricula at all educational levels. Basic infrastructures must be built to support organizational efficiency so that pedagogical administrators can concentrate on developing, monitoring, evaluating, motivating and supporting schools. At the societal level, citizens must maintain a sense of economic and
social openness and practical transnationalism in order to prepare students for success in the era of globalization. Moreover, the values of dialogue and human rights must be emphasized and different opinions must be respected, especially those of young people. To meet these challenges, the Ministry of Education has created a series of initiatives aimed at developing the education system and improving outcomes in Kuwait. Some have been successfully implemented, some are in progress, and others are planned for the future (NCED, 2015). Figure 3.1 illustrates the framework for current educational reform in Kuwait.
Figure 3.1. Framework for current educational reform in Kuwait.
Establishing national education standards. Given urgent global demands for high quality outputs, it is necessary to lay the foundation for the future by setting educational standards for all components of the educational process, including students, teachers, management, and curricula, as well as sources of education and learning, methods of evaluation, buildings and equipment. The goals of this initiative are to: (a) improve the quality of education and learning; (b) increase the effectiveness of the education system; (c) improve student achievement; (d) develop scientific knowledge among students; and (e) create potential for educational and career success among Kuwaitis. (NCED, 2015)

Teacher licensing. This initiative requires teachers in public and private schools to obtain professional licenses. The licensing process will ensure that all teachers in public and private schools meet minimum standards, which will hopefully improve overall performance. The licensing evaluation process will be used to assess teachers’ current ability levels and specify compensation and promotion criteria.

Evaluating and assessing performance. This initiative is aimed at determining the current state of education in Kuwait by examining processes and outputs of the education system, and comparing them against those of the most successful education systems worldwide (e.g., Singapore) and best practices recommended by global experts in the education field. The goals of this initiative are:

1. To improve school performance based on scientific, objective and comprehensive evaluation criteria that measure effectiveness and efficiency;

2. To identify student strengths and weaknesses, and gaps in knowledge, skills and abilities required to successfully complete the curriculum;
3. To verify that needs of various education stakeholders such as families, society and its institutions have been met; and

4. To provide decision makers with scientific, objective and comprehensive indicators about the performance of the educational system to ensure appropriate planning and development choices, justify the financial and human resources devoted to education, and help diagnose knowledge gaps and determine underlying causes.

**Improving curricula and instruction.** The Ministry of Education is focused on improving the quality of curricula and instruction to improve students’ learning. The ministry is aligning the curriculum with the most important global standards and creating a mechanism for its ongoing revision and improvement. The initiative is also aimed at providing professional development for teachers to train them on content, pedagogy and technology. Furthermore, the ministry is supporting the procurement of human and material resources that will enable curricular changes to be implemented.

**Creating attractive school environments.** The Ministry of Education is attempting to establish creative, productive and safe environments in Kuwaiti schools. The goal of the initiative is to create a culture in which leaders, students, parents, and teachers work together to develop and live a shared school vision.

**Developing effective school leadership.** This initiative is the focus of the current study. The project vision is for all schools to have leaders with the dispositions, knowledge, skills and commitment required to improve teaching, learning and leading so that all students will learn at high levels. During the pilot project, school leadership practices in 48 schools were transformed. School leadership teams adopted participatory and team-based approaches to planning and
decision making. School leadership roles were re-conceptualized and reorganized with new and improved administrative procedures (WorldBank, 2014).

Moreover, new job descriptions were created to clearly define roles and responsibilities for the principal and assistant principals (WorldBank, 2014). Primary responsibilities include:

- Achieving the general policy objectives of education, and applying rules and regulations, which organize the educational process;
- Collaborating with members of the school community to build a scientific vision for the future that is compatible with the education strategy, and leading the planning and development processes;
- Determining the estimated budgets for financial, physical and human resources based on the number of students;
- Enhancing school values, which helps increase learning and prepares the pedagogical environment to shape students’ personalities, foster growth in all dimensions and impart them with positive traits;
- Planning and organizing meetings with administrative staff and the educational board to discuss pedagogical issues;
- Organizing all the financial, physical and human resources necessary for the school to efficiently achieve objectives;
- Evaluating the assistant principals’ performance accurately and realistically, according to predetermined criteria;
- Forming the committees and boards of the school, and supervising them;
- Supervising the implementation of the general school strategy;
• Leading the school effectively to create a safe and attractive educational environment;
• Determining the practical development needs of the educational staff and administrative board and collaborating with competent authorities to address those needs;
• Supervising the educational and guidance programs of the school;
• Employing educational indicators and reports provided by the school performance improvement department to make the appropriate decisions;
• Supervising teachers, visiting classrooms and reviewing their actions;
• Tracking the effectiveness of the curriculum and providing recommendations for its development and improvement;
• Creating a safe and attractive education environment;
• Supervising teacher development programs with respect to the results of the technical reports provided by the school’s performance improvement department;
• Creating opportunities for collaboration among teachers, parents and community members to achieve the objectives of the school;
• Exhibiting humanity in the school;
• Opening communication channels to enhance collaboration with identical or different educational foundations; and
• Communicating decisions and policies made by the Ministry of Education.

Figure 3.2 depicts the new organizational structure and the responsibilities of the principal and assistant principals.
Figure 3.2. New organizational structure for pilot program schools.
Educational teams also were trained how to use data for decision making, and how to foster community engagement and outreach to enroll stakeholders in the process and ensure the initiative’s success.

This initiative has several guiding principles. First, school improvement is a necessary, possible, continuous, and collaborative process that requires redefining leadership and begins by building trusting relationships. Leadership is building the capacity of others to improve teaching and learning. Leaders are critical to school improvement; they are organization developers, systems thinkers and life-long learners who use a variety of data to determine teaching and learning needs. There are no recipes; there are no quick fixes.

Major goals of the initiative are to help school leaders:

1. Become more effective at leading school improvement efforts;
2. Develop the knowledge, skills and commitment necessary to improve curriculum, assessment and instruction;
3. Learn how to collect, analyze and use school-based data;
4. More effectively plan;
5. Learn an approach to initiate, facilitate, support and sustain department wide, school-wide and/or district-wide efforts to improve teaching, learning and leading; and
6. Communicate more effectively with teachers, parents, students and other community members.
The timeline for reform implementation is presented in Table 3.1. Post-implementation, the goal is for school leaders to be able to:

1. Use leadership and instructional practice standards to inform their leadership practices;
2. Gather, analyze and use a variety of data;
3. Improve curriculum, assessment and instruction;
4. Use a leadership conceptual framework to plan and lead continuous school improvement; and
5. Engage the school community and invite their participation in the school improvement process.

Training for school leaders in pilot program schools was provided by the Massachusetts Elementary School Principals’ Association (MESPA). A group of principals, vice principals, curriculum specialists, and representatives from the Ministry of Education traveled to Massachusetts over a 3-year period to be trained on leadership and curriculum development. MESPA members provided professional development, met with Kuwaiti policymakers and visited elementary, middle and high schools in Kuwait. Many topics were discussed during the MESPA workshops, such as how to: build relational trust and engage community members, collectively determine focus, collaboratively develop an improvement plan, celebrate gains, and gather and analyze contextual data to assess progress.
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Summary

It is noteworthy that the government has continued to invest heavily in reforms in order to enhance educational standards in the country. All of these reforms have been informed by foreign experts and implemented in collaboration with the World Bank. Simply importing Western ideas would not be effective in the Kuwaiti context. Winokur (2014) stated that Kuwait’s policymakers continue to make progress toward developing an education system that prepares youth for future challenges. This commitment to improvement is evident, but the biggest challenge the country faces is whether enough political, professional, and popular determination exists to implement the changes and internalize them for sustainable reform. He added that repeated efforts at policy borrowing that resulted in previous failures to internalize reforms can be used as the impetus for real and sustainable change. This leads to two important questions: Why did past reforms fail? And, how does the current reform differ from past reforms?

Many factors could have caused previous school reforms to fail. First, all previous educational reforms in Kuwait have been based on Western policies. The education system in Kuwait is highly bureaucratic. It can be viewed as a controlled and closed system. In Kuwait, both the “lenders” and “borrowers” of such policies could not overcome the fundamental cultural differences between Western and Kuwaiti perspectives on the nature, values, and goals of education.

Second, most reform projects were aborted in early stages. In each case, the reform did not suit the Kuwaiti environment and/or did not produce noticeable results quickly. Instead of canceling entire projects and beginning new ones (which wasted millions of dinars), efforts
should have been made to refine and define such experiences. One cannot simply wave a magic
wand and fix systemic problems; reform requires time and hard work.

Third, previous reforms did not have support from all stakeholders. School principals and
teachers were fairly isolated. It is hard for them to implement new changes when they are not
enrolled in the planning process. Failing to involve all stakeholders in reform efforts has created
steadfast opposition to change in Kuwaiti schools over time.

Last but not least, past reforms were planned to be comprehensive, yet were implemented
as isolated programs with no connections among different initiatives. Comprehensive school
reforms are aimed at improving student achievement by reorganizing and revitalizing entire
schools (Everhart & Chenoweth, 2013). Such reforms only work if entire systems are changed
simultaneously.

As for the second question, I believe this initiative differs from past reforms in two ways.
This time, policymakers have already learned a precious lesson: imposing Western ideas in a
totally different cultural environment will never work. The ministry contacted experts at MESPA
and asked them to visit Kuwait prior to the implementation of the pilot program so they could
modify the program to fit Kuwaiti culture. The team from MESPA traveled to Kuwait twice;
they visited schools and had discussions with educators, school principals, and teachers before
implementing professional development and training for the pilot program. Likewise, principals,
vice principals, curriculum specialists, and Ministry of Education officials traveled to
Massachusetts over a 3-year period to study leadership and curriculum development. This helped
both sides reach a shared understanding of how change can be implemented.

Another reason why this reform might be different is that all initiatives under this reform
are being implemented under one umbrella program. This is a good example of comprehensive
school reform. All departments in the Ministry of Education are working according to one strategic plan to reform the education system. As shown in this chapter, this reform was planned carefully on paper so no program would be isolated from the others. It is comprised of six reform initiatives aimed at changing the entire school system in Kuwait.

In their study, Tan and Chua (2014) used Chinese school reform as an illustrative example of the trend of borrowing policy from Western countries such as the United States. Educators in China used the proverb “Western wind has overpowered Eastern wind” (“xifeng yadao dongfeng”) to describe the practice of borrowing education policies from the West. This proverb refers to the preferences of policymakers for “Western” rather than indigenous education policies and practices. The same proverb can be used to describe the Kuwaiti reform experience over the years. Culture matters and reforms are destined to fail if cultural contexts are not considered.

In Chapter 4, I describe the methodology I used to evaluate the effectiveness of the pilot program aimed at developing school leadership in this study. I describe my research design, variables and instrument (i.e., the Audit of Principal Effectiveness), as well as its reliability and validity. I then provide details about the pilot study, the population and sample, and my data collection and analysis methods.
CHAPTER 4

Methodology

In order to determine the impact of the pilot program aimed at developing effective school leadership in Kuwaiti schools, I used a quasi-experimental pretest-posttest design with experimental and control groups to compare teachers’ opinions about the effectiveness of their school principals in three main domains: organizational development, organizational environment, and instructional leadership. In this chapter, I describe the methods I used in this study. I introduce the research questions and define relevant terms; describe my research design, including the study population, sampling techniques, measures and their reliability and validity; and explain my data collection and data analysis methods.

Research Questions and Hypotheses

The purpose of this study was to evaluate the impact of the pilot program aimed at developing effective school leadership on Kuwaiti principals’ effectiveness as perceived by teachers in three main domains: organizational development, organizational environment, and instructional leadership. The research questions and hypotheses formulated for this study were as follows:

R1: For the domain of organizational development, is there a significant difference in teachers’ perceptions of principal effectiveness between schools that implemented the pilot program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)?

H1: For the domain of organizational development, teachers' perceptions of principal effectiveness are significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H1: μ1-μ2 > 0, p ≤ .05).
H10: For the domain of organizational development, teachers' perceptions of principal effectiveness are not significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H10: μ1-μ2 > 0, p > .05).

R2: For the domain of organizational environment, is there a significant difference in teachers’ perceptions of principal effectiveness between schools that implemented the pilot program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)?

H2: For the domain of organizational environment, teachers' perceptions of principal effectiveness are significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H2: μ1-μ2 > 0, p ≤ .05).

H20: For the domain of organizational environment, teachers' perceptions of principal effectiveness are not significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H20: μ1-μ2 > 0, p > .05).

R3: For the domain of instructional leadership, is there a significant difference in teachers’ perceptions of principal effectiveness between schools that implemented the pilot program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)?

H3: For the domain of instructional leadership, teachers' perceptions of principal effectiveness are significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H3: μ1-μ2 > 0, p ≤ .05).

H30: For the domain of instructional leadership, teachers' perceptions of principal effectiveness are not significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H30: μ1-μ2 > 0, p > .05).
Definitions of Terms

**Effective school leadership:** “School leaders need to set the direction for the learning and development of both staff and pupils, to redesign the organization’s systems and structures in ways which suit the vision and tasks, to manage the learning program, and to do all those things in a motivational, optimistic and enabling manner.” (Lewis & Murphy, 2008, P.17).

**Principal effectiveness:** A building administrator’s ability to: provide organizational direction, be a change agent, foster and promote relationships, facilitate instructional improvement and leadership, and guide the interactive/affective processes of the school through clear communication and shared decision making (Valentine & Bowman, 1987).

**Organizational environment:** The dynamics of personal relationships within the organization, including interpersonal relationships with members of the organization and related affective issues (Valentine & Bowman, 1989).

**Organizational development:** A principal’s ability to create a vision, build positive relationships, and utilize effective practices to bring about successful change (Valentine & Bowman, 1989).

**Instructional leadership:** “Those actions that a principal takes, or delegates to others, to promote growth in student learning” (Debevoise, 1984, p. 15)

**Study Design**

For this quantitative study, I used a quasi-experimental pretest-posttest design. The aim of quasi-experiments is to demonstrate causality between an intervention and an outcome (Harris et al., 2006). This kind of design is widely used in educational research because it is difficult to apply classical natural science methods to the social sciences. The main difference between
experimental and quasi-experimental designs is that participants are not randomly assigned to
eperimental and control groups (Harmon, Morgan, Gliner, & Harmon, 2000; Price, 2014). This
study is based on a quasi-experimental design since the Ministry of Education in Kuwait had
assigned schools to the treatment (i.e., the pilot program aimed at developing school
effectiveness) according to their own criteria. Schools were chosen based on (a) their willingness
to be part of the program, and (b) district recommendations.

In a pretest-posttest design, baseline data are collected for both groups prior to an
intervention. One group, often called the experimental group, receives a new treatment; the other
group, the control group, does not receive this treatment and members often continue to operate
as they did at baseline. At the end of the intervention period, both groups are measured again to
determine whether there are differences between them (Kaufman & Platt, 2005). This design
controls threats to internal validity related to history, maturation, testing, instrumentation, and
the use of a pretest and posttest design with an experimental and a control group when the
researcher seeks to determine the effect of a treatment on a measured outcome (school
principals’ effectiveness), controlling for all other factors that might influence that outcome.
Studies with group designs remain the primary means for evaluating whether educational
interventions have beneficial effects or not (Gersten, Baker, & Lloyd, 1998). Using a pretest-
posttest design with control and treatment groups is considered to be the most powerful quasi-
experimental design (Harmon et al., 2000) because testing the subjects before and after the
intervention and measuring any improvement in the aggregated data is a way to assess the
effectiveness of an educational intervention for a large group (Mazzolini & Cadusch, 2011).
The design of the study is diagrammed as follows:

Group A O1---------X--------O2

Group B O1---------------O2

In the diagram, Group A represents the experimental group comprised of schools that implemented the pilot program (n = 374), and Group B represents the control group comprised of schools that did not implement the pilot program (n = 351); O1 represents the pretest (a modified version of the Audit of Principal Effectiveness survey), O2 represents posttest (the same modified version of the Audit of Principal Effectiveness survey), and X represents the treatment, which is implementation of the pilot program.

**Research Variables**

The independent variable is the antecedent while the dependent variable is the consequent (Linebach & Kovacsiss2014). The independent variable helps to explain the change in the dependent variable. The independent variable in this study is the implementation of the pilot program aimed at developing effective school leadership in schools in the experimental group during the 2013/2014 school year. The dependent variable is the variable that may change as a result of deliberate change made to the independent variable. In this study, the dependent variable is the effectiveness of school principals as measured by teachers’ responses to the Audit of Principal Effectiveness survey questions. Changes in school principal effectiveness are measured using the difference between scores on the pretest and posttest administered to all participants in the study.
Instrumentation

Valentine and Bowman (1989) designed the Audit of Principal Effectiveness (APE) to provide useful insights to principals about their own leadership skills and to function as a valid, reliable instrument for research on the effectiveness of school principals (Sharp, 2009) (see Appendix A). The authors reviewed numerous studies and reports on principal effectiveness conducted during the 1970s and 1980s (Sharp, 2009) and based their instrument on the following synthesized definition:

Principal effectiveness is the building administrator’s abilities to provide organizational direction, to be a leader of change, to foster and promote relationships, to facilitate instructional improvement and leadership, and to guide the interactive/affective processes of the school, including clear communication and shared decision making. (Valentine & Bowman, 1989, p. 11)

I chose this instrument because it aligned with the goals of the pilot program and fulfilled the purpose of this study, which is to measure its impact on the effectiveness of school principals from the teachers’ perspective. Not only was it designed based on theories of school effectiveness and school principal effectiveness, but it is pragmatic in nature and statistically and conceptually valid (Moehlman, 1989). The APE has a 0.97 reliability rating.

Teachers responded to survey items using a Likert-type scale ranging from 1 (not effective) to 9 (very effective). For each item, teachers were asked to select the response that described how effectively their principal performed each task. Item and factor analysis were used to validate the instrument. Teachers were selected as respondents because they work more closely with principals than any other professional group. The APE includes 80 items grouped into three main domains comprised of several factors (Valentine & Bowman, 1987):
Domain I: Organizational development. This domain provides insight into the ability of the principal to work with personnel inside and outside the school setting to establish processes and relationships that most effectively promote positive growth and change of the organization as a whole. It includes the following factors:

Factor I-A: Organizational direction. The principal provides direction for the school by working with faculty members to develop goals, establish expectations, and promote appropriate change (items 1–7);

Factor I-B: Organizational linkage. The principal promotes positive working relationships among the school, the community the school serves, and other educators and agencies that work with the school (items 8–18); and

Factor I-C: Organizational procedures. The principal utilizes effective procedures to facilitate problem solving, decision-making, and change (items 19–27).

Domain II: Organizational environment. This domain provides insight into the ability of the principal to nurture the ongoing climate of the school by developing positive interpersonal relationships among members of the organization and implementing effective day-to-day operational procedures for the school. It includes the following factors:

Factor II-A: Teacher relations. The principal develops effective working relationships with staff members by using appropriate communication skills, expressing sensitivity to needs, and providing appropriate support and reinforcement (items 28–40);

Factor II-B: Student relations. The principal develops effective working relationships with students by using appropriate communication skills, providing encouragement and support, and maintaining high visibility (items 41–48);
**Factor II-C: Interactive processes.** The principal organizes tasks and personnel for the effective day-to-day management of the school, including providing appropriate information to staff and students, developing appropriate rules and procedures, and setting the overall tone for discipline in the school (items 49–57); and

**Factor II-D: Affective processes.** The principal encourages the expression of feelings, opinions, pride, and loyalty through team management, sensitivity, humor, and personal example (items 58–64).

**Domain III: Instructional leadership.** This domain provides insight into the ability of the principal to be the educational leader of the school through active involvement in instructional leadership and curriculum development. This domain includes the following factors:

**Factor III A: Instructional improvement.** The principal affects instructional skills positively through effective clinical supervision, knowledge of effective schooling, and commitment to quality instruction (items 65–72); and

**Factor III B: Curriculum improvement.** The principal promotes an articulated, outcome-based curriculum by diagnosing student needs and systematically reviewing and changing the program (items 73–80).

Additional survey items were used to collect demographic information about grade level taught (elementary, middle school, high school), gender, years of experience and educational district.

**Instrument Translation**

The unit of analysis is public schools located within Kuwait, and the target population is teachers in public schools. However, the APE instrument is written in English and designed to be
applied in Western settings. Therefore, it was necessary to translate the instrument into Arabic and make necessary changes to ensure its validity for Kuwaiti respondents from a cultural perspective.

Cha, Kim, & Erlen (2007) noted that translating an instrument into another language can create nuance problems, which could affect the reliability and validity of the research. Nuance problems often occur during the translation process due to different vocabularies, expressions, phrases, and cultural differences. They added when a researcher adopts an instrument written in another language, an appropriate translation procedure is required to ensure psychological equivalency between the original language and the other language.

The instrument was translated by a bilingual (in English and Arabic) expert panel of two qualified translators with academic backgrounds in education. The expert panelists questioned some words or expressions and suggested alternatives. Experts were provided with materials that helped them to maintain consistency with previous translations. The translated instrument was then translated back into English by a third bilingual translator to check for ambiguities and discrepancies in words, sentences, and meanings between the translated version and the original version.

**Reliability and Validity**

According to Gall, Gall, and Borg (2005), “A measure is considered reliable for most research and practical purposes if its reliability coefficient is 0.80 or higher, and in a Cronbach’s alpha, a value of 0.70 or higher is usually sufficient” (p. 140). Valentine and Bowman (1989) stated that the APE has a total instrument reliability of 0.9698. I deleted some items from the instrument because they were not applicable to the structure and culture of Kuwaiti schools. School principals in Kuwait have less authority and autonomy than those in American schools.
To check for content validity, I asked a panel consisting of three professors, three school principals and three teachers to evaluate the instrument. They reviewed the instrument to ensure that the questions accurately reflected or assessed the specific concepts that I was attempting to measure and provided feedback. The original questionnaire contained 80 items; after revising the translated version based on suggestions from the panel, the final version of the questionnaire included 43 items (see Appendix B). The following items were removed: items 8–18 (Factor I-B: Organizational Linkage) related to how the principal promotes positive working relationships among members of the community, other educators and outside agencies, because teachers in Kuwaiti schools do not have close enough relationships with school principals in order to be able to evaluate such relationships; and items 73–80 (Factor III B: Curriculum Improvement) related to how the principal promotes an articulated, outcome-based curriculum by diagnosing student needs and systematically reviewing and changing the program, because school principals in Kuwait do not have direct involvement in the process of building and improving the curriculum. Finally, I used factor analysis to examine whether items were grouped together in the manner intended in the original instrument.

Pilot Study

A pilot study can be used as a “small scale version or trial run in preparation for a major study” (Polit, Beck, & Hungler, 2001, p. 467). Moreover, a pilot study can be used to pretest a research instrument (Baker, 1994). According to Simon (2011), a pilot study can be used to: (a) ensure that instructions are comprehensible; (b) ensure that investigators and technicians are sufficiently skilled in the procedures; (c) check the wording of a survey; (d) check the reliability and validity of the results; and (e) check the statistical and analytical processes to determine if they are efficacious.
The instrument was pilot-tested on 117 teachers from the population. Cronbach’s alpha was used to assess whether each item set was a reliable indicator of that construct. Overall, the Cronbach’s alpha coefficient was 0.968 which means that the instrument was reliable. Cronbach’s alphas for the specific domains were: organizational development (10 items) = 0.961; organizational environment (26 items) = 0.999; and instructional leadership (6 items) = 0.949.

Factorial validity is a form of construct validity that is established through factor analysis (Comrey, 1988, Stapleton, 1997). Factor analysis is used to identify dimensions of the instrument after it is translated and administered in a different setting. The instrument maintained the same dimensions of the original instrument except for overlapping in items 38–43, which I assigned to the instructional leadership dimension (see Appendix C) since instructional leadership is considered to be a new dimension for school principals in Kuwait. Principals were not perceived as instructional leaders by teachers. I also performed a factor analysis for the posttest surveys and likewise assigned items 38–43 to the instructional leadership domain.

**Study Population**

The population of the study was approximately 58,184 teachers from the entire State of Kuwait, including approximately 4,900 teachers from 48 experimental schools, and approximately 53,284 teachers from 749 control schools that were not a part of the pilot project. According to the Ministry of Education’s yearly statistical report, schools were chosen to participate in the pilot project by the Ministry of Education based on recommendations from the six school districts in Kuwait during the 2012/2013 school year and schools’ desire to join the pilot program. Fifty schools were selected for the pilot program; after 2 months, two schools withdrew which left 48 schools in the program.
**Sampling Technique**

I used a cluster sampling technique to create the experimental group. Cluster sampling is the random selection of groupings, referred to as clusters, from which all members are chosen for the sample (Henry, 1990). I randomly selected 10 of the 48 schools from the six school districts that were participating in the pilot program. All 404 teachers in all 10 schools were surveyed and comprised the experimental group. In educational research, cluster sampling can be used as an alternative to simple random sampling in order to reduce research costs associated with a large sample size (Ross, 2005).

I selected the control group using demographic criteria that were equivalent to the experimental group. Schools in the control group were matched based on a list of characteristics that might affect the outcome of the research: school level, educational district, and gender (boys’ schools vs. girls’ schools). The control group sample included 390 teachers from 10 schools.

**Data Collection**

A total of 794 questionnaires were distributed in the pretest stage; 764 were returned, representing a 96% response rate. Missing data is a common problem in educational evaluations (Puma, Olsen, Bell, & Price, 2009). Several teachers took the pretest, but did not take the posttest (n = 39). In the experimental group, 389 teachers completed the pretest, but only 374 completed the posttest; in the control group, 375 teachers completed the pretest, but only 351 completed the posttest. After excluding data from teachers who did not complete the posttest, the final sample included 725 teachers.
Table 4.1

*Participants’ Demographic Information (N = 725)*

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<tr>
<td>Mobarak Alkabeer</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>Aljahra</td>
<td>157</td>
<td>132</td>
</tr>
<tr>
<td>Years of experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5 years</td>
<td>89</td>
<td>69</td>
</tr>
<tr>
<td>5–10 years</td>
<td>143</td>
<td>114</td>
</tr>
<tr>
<td>11–15 years</td>
<td>67</td>
<td>80</td>
</tr>
<tr>
<td>&gt; 15 years</td>
<td>74</td>
<td>87</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>351</td>
<td>325</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>23</td>
<td>26</td>
</tr>
</tbody>
</table>

I obtained permission to conduct this study from the Pennsylvania State University’s Institutional Review Board (IRB) (see Appendix D). I also obtained official permission from the curriculum department of the Kuwait Ministry of Education to administer the surveys in Kuwaiti schools (See Appendix E). I administered pilot surveys to a sample of Kuwaiti school teachers (N = 117) to ensure that the survey items would be easily interpretable.

Teachers provided voluntary consent to participate in the study. In a cover letter addressed to all participants, I informed participants that all survey responses would be kept confidential and that completion of the survey was completely voluntary. I included my full contact information on the cover page in case the participants required assistance.
All surveys were coded and provided to the respondents along with confidential envelopes in which to seal their responses. Teachers were asked to generate their own identification codes. Self-generated identification codes are recommended in longitudinal research designs involving data collection at multiple time points (Faden et al., 2004). In order to measure changes over time, identification of respondents is essential so that data from the same respondents can be matched and compared. Subject-generated identification codes enable respondents to be tracked anonymously over multiple data collection points (Yurek, Vasey, & Havens, 2008). I administered pretest surveys in March 2014, the pilot program was implemented in April 2014, and I administered the posttest surveys in December 2014 (see Figure 4.1).

![Figure 4.1. Research timeline.](image)

**Data Analysis**

I analyzed the data using SPSS v.22 and Excel spreadsheets. After analyzing the data for normality, I calculated descriptive statistics (i.e., counts, means, percentages and standard
deviations) to summarize the teachers’ demographic data and answer my research questions related to the impact of the pilot program on principals’ effectiveness as perceived by teachers in three main domains: organizational development, organizational environment, and instructional leadership. I compared the data provided by teachers from experimental vs. control schools about their principals’ effectiveness and computed gain scores. I used paired t-tests to measure the within-group effects of the pilot project on principals’ effectiveness. It is common in the social sciences to collect paired observations in pretests and posttests and perform a statistical test on the average difference to determine an average change in score (Hedberg & Ayers, 2015). Since independent sample t-tests are used to test hypotheses about differences between two means for the same variable but for two different samples, I used them to determine differences between the experimental and control groups.

I analyzed the data using linear mixed models regression. Mixed models are very useful for analyze repeated measures in longitudinal studies since they enable associations to be estimated between a given independent variable and the outcome holding all other variables constant (Verbeke, Molenberghs, & Rizonpoulos, 2010). In Chapter 5, I present the results of my data analysis in tables and figures and describe my findings.
CHAPTER 5

Results

In this chapter, I presented the results of the study, which I use to answer my research questions and confirm or reject related hypotheses. The purpose of this study was to evaluate the impact of a pilot program aimed at increasing principal effectiveness and the population for this study is teachers in Kuwait. I collected survey data from teachers who worked in pilot program (experimental) schools and non-pilot program (control) schools. In the following sections, I present these data and compare teachers’ perceptions of principal effectiveness in three main domains: organizational development, organizational environment, and instructional leadership.

Schools were chosen to participate in the pilot program by the Ministry of Education in Kuwait based on recommendations from the six Kuwaiti school districts during the 2012/2013 school year and each school’s interest in joining the pilot program. For this study, I randomly selected 10 schools that had implemented the pilot program (the experimental group), and 10 demographically similar schools that had not implemented the pilot program (the control group). All 725 teachers (experimental = 374; control = 351) who worked in the selected schools completed surveys before and after program implementation.

The survey, which was a modified version of the Audit of Principal Effectiveness (APE), included 43 items, with 10 items measuring organizational development, 27 items measuring organizational environment, and 6 measuring instructional leadership. Participants responded to items using a scale ranging from 1 (not effective) to 9 (very effective). In the following sections, I compared the average gain scores from pre- to post-implementation for the experimental and control groups for each of the three domains. In addition to group assignment, I considered the effects of teacher demographic characteristics such as gender, years of experience, educational level, and grade level taught on gain scores.
Research Questions and Hypotheses

The purpose of this study was to evaluate the impact of the pilot program aimed at developing effective school leadership on Kuwaiti principals’ effectiveness as perceived by teachers in three main domains: organizational development, organizational environment, and instructional leadership. The research questions and hypotheses formulated for this study were as follows:

R1: For the domain of organizational development, is there a significant difference in teachers’ perceptions of principal effectiveness between schools that implemented the pilot program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)?

H1: For the domain of organizational development, teachers' perceptions of principal effectiveness are significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H1: μ1-μ2 > 0, p ≤ .05).

H10: For the domain of organizational development, teachers' perceptions of principal effectiveness are not significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H10: μ1-μ2 > 0, p > .05).

R2: For the domain of organizational environment, is there a significant difference in teachers’ perceptions of principal effectiveness between schools that implemented the pilot program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)?

H2: For the domain of organizational environment, teachers' perceptions of principal effectiveness are significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H2: μ1-μ2 > 0, p ≤ .05).
H2: For the domain of organizational environment, teachers' perceptions of principal effectiveness are not significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H2: μ1 - μ2 > 0, p > .05).

R3: For the domain of instructional leadership, is there a significant difference in teachers’ perceptions of principal effectiveness between schools that implemented the pilot program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)?

H3: For the domain of instructional leadership, teachers' perceptions of principal effectiveness are significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H3: μ1 - μ2 > 0, p ≤ .05).

H30: For the domain of instructional leadership, teachers' perceptions of principal effectiveness are not significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H30: μ1 - μ2 > 0, p > .05).

**Variables of Interest**

The purpose of this study is to evaluate the impact of the pilot program on principal effectiveness as perceived by teachers. The dependent variables are the gain scores in three domains of principal effectiveness: organizational development (OD), organizational environment (OE), and instructional leadership (IL). Positive gain scores indicate increased principal effectiveness as perceived by teachers. The independent variable is pilot program participation (experimental vs. control). I also collected data for four teacher demographic variables: gender, years of experience (< 5 years, 5–10 years, 10–15 years, > 15 years), education level (Bachelor’s degree, Master’s/Ph.D.), and teaching level (elementary, intermediate, high school).
Data Analysis

I used SPSS v.22 to analyze the data. I calculated means and standard deviations of teachers’ pretest and posttest ratings for items in each of the three domains on the Audit of Principal’s Effectiveness (APE). Although some data were missing, no more than 5% were missing for each variable. Since a missing data rate of 5% or less is inconsequential (Schaffer, 1999), missing values were removed from the subsequent analysis.

I used independent sample t-tests to ascertain whether significant differences in teacher’s perceptions of principal effectiveness exist between experimental and control schools. Knapp and Schafer (2009) recommended using the t-test approach because it is relatively simple, requires fewer assumptions and calculations, and is widely used. They stated that nothing is more straightforward than comparing the mean pretest to posttest change for experimental and control groups in order to ascertain the effect of an experimental treatment. Such analyses have been performed for years.

Because a t-test compares means, the data should meet the assumption of normality and represent a normal distribution (Connelly, 2011). I tested all of the dependent and independent variables for normality by calculating skewness and kurtosis values, all of which fall between –1.0 and 1.0 (see Table 5.1), which is considered an acceptable statistical range (Schumacker & Lomax, 2004, p. 63). Because the data meet normality conditions, I used parametric procedures to analyze the data. Since the assumptions of homogeneity of variance and independence also are met, the use of independent and paired-sample t-tests is justified in the study.
Table 5.1

Test of Normality: Skewness and Kurtosis

<table>
<thead>
<tr>
<th>Dimension</th>
<th>No. of items</th>
<th>M (SD)</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>OD</td>
<td>10</td>
<td>.54 (2.4)</td>
<td>0.482</td>
<td>.985</td>
</tr>
<tr>
<td>OE</td>
<td>37</td>
<td>.20 (2.4)</td>
<td>-0.076</td>
<td>.521</td>
</tr>
<tr>
<td>IL</td>
<td>6</td>
<td>.09 (2.6)</td>
<td>-0.231</td>
<td>.884</td>
</tr>
</tbody>
</table>

In the following sections, I present the demographic data and survey results. I compare the experimental and control groups to test for significant differences in teachers’ perceptions of principal effectiveness for each of the three domains of organizational development, organizational environment and instructional leadership. Using a multilevel regression model, I then discuss potential relationships between the demographic variables (gender, experience, education, and teaching level) and the dependent variables (gain scores for organizational development, organizational environment, and instructional leadership).

Demographic Characteristics

Although some slight demographic differences can be observed between the experimental and control groups, the results of chi-square tests reveal that none of these differences are statistically significant (see Table 5.2).
Table 5.2

Teachers’ Demographic Characteristics by Treatment Condition (N = 725)

<table>
<thead>
<tr>
<th>Demographic characteristic</th>
<th>Experimental (%)</th>
<th>Control (%)</th>
<th>X²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>23.59</td>
<td>19.54</td>
<td>1.744</td>
<td>.187</td>
</tr>
<tr>
<td>Female</td>
<td>76.41</td>
<td>80.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;5 years</td>
<td>23.92</td>
<td>19.71</td>
<td>7.515</td>
<td>.057</td>
</tr>
<tr>
<td>5-10 years</td>
<td>38.44</td>
<td>32.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-15 years</td>
<td>18.01</td>
<td>22.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;15 years</td>
<td>19.62</td>
<td>24.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>93.72</td>
<td>92.42</td>
<td>0.462</td>
<td>.497</td>
</tr>
<tr>
<td>Master/Ph.D.</td>
<td>6.28</td>
<td>7.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>31.64</td>
<td>38.75</td>
<td>4.715</td>
<td>.095</td>
</tr>
<tr>
<td>Intermediate</td>
<td>21.18</td>
<td>16.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>47.18</td>
<td>44.44</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Survey Results

In order to answer the research questions, I calculated mean scores and standard deviations for survey items related to each of the three domains (organizational development, organizational environment and instructional leadership) for the experimental and control groups (see appendix F). I calculated gain scores by averaging each group’s scores for domain-related items (OD, items 1–10; OE, items 11–37; IL, items 38–43) on the pretest and posttest, respectively, and then calculating the difference between each group’s pretest mean and posttest mean for each of the three domains. Figures 5.1–5.3 show that the distributions of the gain scores for all three domains are approximately symmetrical with high peaks.
Figure 5.1. Distribution of organizational development gain scores.

Figure 5.2. Distribution of organizational environment gain scores.
I also compared the distributions of the gain scores for the experimental and control groups within each domain. Figures 5.4–5.6 show that for each domain, the medians and ranges for the experimental and control groups have similar distributions.
Figure 5.4. Distribution of organizational development gain scores by treatment condition.

Figure 5.5. Distribution of organizational environment gain scores by treatment condition.
Figure 5.6. Distribution of instructional leadership gain scores by treatment condition.

As shown in Table 5.3, the experimental group had higher gain scores than the control group in all three domains.

Table 5.3

*Experimental vs. Control Group Scores for Survey Items*

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th></th>
<th></th>
<th>Gain</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>SE</td>
</tr>
<tr>
<td>OD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>374</td>
<td>6.71</td>
<td>2.026</td>
<td>7.53</td>
<td>1.408</td>
<td>0.808</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>351</td>
<td>6.62</td>
<td>2.123</td>
<td>6.80</td>
<td>2.019</td>
<td>0.259</td>
</tr>
<tr>
<td>OE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>374</td>
<td>6.80</td>
<td>2.036</td>
<td>7.22</td>
<td>1.649</td>
<td>0.413</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>351</td>
<td>6.84</td>
<td>1.978</td>
<td>6.83</td>
<td>1.861</td>
<td>-0.170</td>
</tr>
<tr>
<td>IL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>374</td>
<td>7.29</td>
<td>1.952</td>
<td>7.32</td>
<td>1.649</td>
<td>0.039</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>351</td>
<td>7.07</td>
<td>2.224</td>
<td>7.21</td>
<td>1.971</td>
<td>0.153</td>
</tr>
</tbody>
</table>
The treatment and control groups should be similar with regard to all non-treatment variables that could influence outcomes. Failure to achieve this similarity can introduce bias into the study (U.S. Department of Health and Human Services, 2001). According to Cribbie and Jamieson (2004), one of the advantages of a pretest-posttest design is that baseline (pretest) differences between groups can be taken into account. As shown in Table 5.4, I compared the group means on the pretest using independent sample t-tests, which reveal no significant differences between the two groups at baseline.

Table 5.4

*Independent Sample t-Tests Comparing Experimental vs. Control Groups at Baseline*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Experimental (n = 374)</th>
<th>Control (n = 351)</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>OD</td>
<td>M = 6.71, SD = 2.026</td>
<td>M = 6.62, SD = 2.123</td>
<td>0.84</td>
<td>721</td>
<td>.264</td>
</tr>
<tr>
<td>OE</td>
<td>M = 6.80, SD = 2.036</td>
<td>M = 6.84, SD = 1.978</td>
<td>-0.34</td>
<td>721</td>
<td>.736</td>
</tr>
<tr>
<td>IL</td>
<td>M = 7.29, SD = 1.952</td>
<td>M = 7.07, SD = 2.224</td>
<td>1.28</td>
<td>718</td>
<td>.264</td>
</tr>
</tbody>
</table>

I used paired sample t-tests to measure whether within-group means varied from pretest to posttest for each of the three domains. The alpha level was set at 0.05 for the test. As shown in Table 5.5, the paired t-tests reveal significant within-group gains between the pretest and posttest for the experimental group for the OD and OE domains but no significant difference for the IL domain. For the control group, there are no significant differences between the pretest and posttest gain scores for any domain.
Table 5.5

*Paired Sample t-Tests for Within-Group Gains*

<table>
<thead>
<tr>
<th>Domain</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>( t )</th>
<th>df</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>OD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>374</td>
<td>0.808</td>
<td>2.291</td>
<td>-6.795</td>
<td>370</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>351</td>
<td>0.259</td>
<td>2.641</td>
<td>-1.837</td>
<td>350</td>
<td>.067</td>
</tr>
<tr>
<td>OE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>374</td>
<td>0.413</td>
<td>2.407</td>
<td>-3.307</td>
<td>370</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>351</td>
<td>-0.017</td>
<td>2.423</td>
<td>0.131</td>
<td>350</td>
<td>.895</td>
</tr>
<tr>
<td>IL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>374</td>
<td>0.039</td>
<td>2.654</td>
<td>-0.279</td>
<td>355</td>
<td>.781</td>
</tr>
<tr>
<td></td>
<td>351</td>
<td>0.152</td>
<td>2.677</td>
<td>-1.066</td>
<td>349</td>
<td>.287</td>
</tr>
</tbody>
</table>

I used independent sample t-tests to test the null hypotheses and compare the gain scores to determine if the pilot program had an effect on school principal effectiveness in each of the three domains. As shown in Table 5.6, the results of the t-tests indicate that the null hypotheses should be rejected for the OD and OE domains because statistically significant differences exist between the treatment and control groups. The \( p \)-values for OD and OE are .003 and 0.017, respectively, indicating significance at the .05 level. For the OD and OE domains, teachers’ perceptions of principal effectiveness are significantly higher in schools that implemented the pilot program aimed at developing effective school leadership. While the results of the t-test for the IL domain indicate that the null hypothesis should be accepted because the difference between the two groups is not statistically significant (\( p = .572 \)), it should be noted the experimental group actually had lower gain scores than the control group (although this result is not statistically significant).
Descriptive statistics and zero-order correlations of the three outcome variables by group are presented in Table 5.7. The experimental group had higher gain scores for survey items related to the OD and OE domains, while the control group had higher gain scores for survey items related to the IL domain. The gain scores for the three domains are highly correlated.

Table 5.7

Gain Score Correlations by Domain

<table>
<thead>
<tr>
<th>Domain</th>
<th>OD</th>
<th>OE</th>
<th>IL</th>
<th>Experimental (n =374)</th>
<th>Control (n = 351)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OD</td>
<td>1.00</td>
<td></td>
<td></td>
<td>0.81 (2.29)</td>
<td>0.26 (2.64)</td>
</tr>
<tr>
<td>OE</td>
<td>0.85**</td>
<td>1.00</td>
<td></td>
<td>0.41 (2.41)</td>
<td>-0.02 (2.42)</td>
</tr>
<tr>
<td>IL</td>
<td>0.73**</td>
<td>0.84**</td>
<td>1.00</td>
<td>0.04 (2.65)</td>
<td>0.15 (2.68)</td>
</tr>
</tbody>
</table>

Note. *p < .05, **p < .01.

Multilevel Linear Regression Model

I created a multilevel model to consider the effects of teacher demographic characteristics on the survey results and to address the nested data structure (i.e., multiple teachers working at each school). I first used unconditional models to estimate intra-class correlation (ICC) coefficients indicating the degree of dependence on school. Although school ICCs are small due
to large residual variability, all z-tests of school estimates are significant at the .05 level, suggesting that the nested data structure should be taken into account (see Table 5.8 and Figures 5.7–5.9).

Table 5.8

*Covariance Parameter Estimates and Intra-Class Correlations by School*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Intercept</th>
<th>Residual</th>
<th>ICC</th>
</tr>
</thead>
<tbody>
<tr>
<td>OD</td>
<td>0.36*</td>
<td>5.72**</td>
<td>0.06</td>
</tr>
<tr>
<td>OE</td>
<td>0.44*</td>
<td>5.49**</td>
<td>0.07</td>
</tr>
<tr>
<td>IL</td>
<td>0.27*</td>
<td>6.88**</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Note. *p < .05, **p < .01.
Figure 5.7. Diagnostic plots for the organizational development domain.
Figure 5.8. Diagnostic plots for the organizational environment domain.
I created a multilevel linear regression model to calculate standard error estimates for the effects of demographic characteristics (i.e., teacher’s gender, years of experience, educational level, and teaching level) on gain scores. As shown in Table 5.9, male teachers had higher gain scores than female teachers in all three domains; teachers with less than 15 years of experience tended to have higher gain scores than teachers with more experience; teachers with Bachelor's degrees had higher scores in all three domains than teachers with higher educational levels; and compared to teachers at the high school level, teachers who taught at the elementary level had

Figure 5.9. Diagnostic plots for the instructional leadership domain.
higher gain scores, and teachers who taught at the intermediate level had lower gain scores. However, none of these demographic main effects are statistically significant.

In addition, I estimated effect sizes to gauge the effect of group difference on the gain scores. I calculated these effect sizes by dividing the demographically-adjusted group mean difference by the unadjusted pooled within-group standard deviation of the outcome measure (Hill et al., 2008). The magnitude of the effect of the program on the gain scores in each of the three domains ranges from -0.06 (IL) to 0.20 (OD), which is small according to Cohen’s (1988) criterion.

Table 5.9

<table>
<thead>
<tr>
<th>Parameter</th>
<th>OD (SE)</th>
<th>OE (SE)</th>
<th>IL (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.32 (0.47)</td>
<td>-0.47 (0.48)</td>
<td>-0.55 (5.13)</td>
</tr>
<tr>
<td>Gender Male</td>
<td>0.52 (0.44)</td>
<td>0.67 (0.46)</td>
<td>0.45 (0.46)</td>
</tr>
<tr>
<td>Years of experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5 years</td>
<td>0.39 (0.28)</td>
<td>0.33 (0.28)</td>
<td>0.23 (0.31)</td>
</tr>
<tr>
<td>5-10 years</td>
<td>0.19 (0.25)</td>
<td>0.01 (0.25)</td>
<td>0.09 (0.28)</td>
</tr>
<tr>
<td>10-15 years</td>
<td>0.45 (0.28)</td>
<td>0.21 (0.28)</td>
<td>0.31 (0.32)</td>
</tr>
<tr>
<td>Educational level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>0.29 (0.36)</td>
<td>0.08 (0.35)</td>
<td>0.57 (0.40)</td>
</tr>
<tr>
<td>Grade taught</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>0.32 (0.38)</td>
<td>0.59 (0.41)</td>
<td>0.19 (0.39)</td>
</tr>
<tr>
<td>Intermediate</td>
<td>-0.52 (0.44)</td>
<td>-0.45 (0.46)</td>
<td>-0.42 (0.47)</td>
</tr>
<tr>
<td>Effect size</td>
<td>0.20</td>
<td>0.17</td>
<td>-0.06</td>
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</table>

**Summary**

The purpose of this quasi-experimental quantitative study based on a pretest-posttest, control vs. experimental group design was to explore the effect of the pilot program aimed at developing effective school leadership in Kuwait on teachers’ perceptions of principal effectiveness. The dependent variable was gain score, calculated as the difference between the
pretest and posttest score, which serves as a measure of school principal effectiveness in three main domains of organizational development, organizational environment and instructional leadership. The independent variable was the implementation of the pilot program. I used SPSS v. 22 to analyze the gain scores using independent and paired-sample t-tests. My analysis reveals four major findings.

First, there is a statistically significant difference between the experimental and control groups’ mean scores for items related to the organizational development domain. Higher gain scores are associated with schools that implemented the pilot program aimed at increasing school principal effectiveness. Thus, the null hypothesis is rejected for the first research question pertaining to the domain of organizational development.

Second, there is a statistically significant difference between the experimental and control groups’ mean scores for items related to the organizational environment domain. Higher gain scores are associated with schools that implemented the pilot program aimed at increasing school principal effectiveness. Thus, the null hypothesis is rejected for the second research question pertaining to the domain of organizational environment.

Third, there is no statistically significant difference between the experimental and control groups’ mean scores for items related to the instructional leadership domain. Thus, the null hypothesis for the domain of instructional leadership is accepted, indicating that the pilot program did not significantly affect instructional leadership. It should be noted that teachers in control schools actually had higher gain scores in this domain than teachers in experimental schools.

Fourth, the results of a multilevel linear regression model reveal that demographic characteristics (gender, years of experience, educational qualifications, teaching level) had no
significant effect on the dependent variable. Although they are not significant, some differences exist. In all three domains, higher gain scores are associated with responses provided by male (vs. female) teachers; teachers with less than (vs. more than) 15 years of experience; and teachers with Bachelor's (vs. graduate) degrees. The gender difference is particularly interesting since Kuwaiti schools are gender-segregated: male teachers always have male principals and vice versa. Furthermore, compared to teachers at the high school level, responses from teachers at the elementary level are associated with higher gain scores, while responses from teachers teaching at the intermediate level are associated with lower gain scores. I elaborate on these differences in Chapter 6.

Based on the results of this study, I can conclude that the pilot program aimed at developing effective school leadership in Kuwait has had a positive influence in two domains of school principal effectiveness: organizational development and organizational environment. However, results of this study show that the pilot program has not had a significant influence on one of the most important domains in the study, instructional leadership. In Chapter 6, I interpret the results of this study and discuss some implications and limitations before providing recommendations for future research.
CHAPTER 6

Discussion and Implications

In this study, I investigated the impact of the pilot program aimed at developing school leadership in Kuwait on school principals’ effectiveness by comparing teachers’ perceptions in experimental schools with teachers’ perceptions in demographically similar control schools. I used a modified version of the Audit of Principal Effectiveness (APE) to measure teachers’ perceptions in three main domains: organizational development, organizational environment, and instructional leadership. In this chapter, I provide a brief summary of the study before discussing how the findings compare to previous findings in the literature and drawing conclusions, including implications for various stakeholders and recommendations for further research.

Summary

The primary purpose of this study was to determine what effect, if any, a pilot program aimed at developing school leadership in Kuwait had on school principals’ effectiveness. I investigated three areas: organizational development, organizational environment, and instructional leadership. The following research questions and hypotheses were posed:

R1: For the domain of organizational development, is there a significant difference in teachers’ perceptions of principal effectiveness between schools that implemented the pilot program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)?

H1: For the domain of organizational development, teachers' perceptions of principal effectiveness are significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H1: μ1-μ2 > 0, p ≤ .05).
H1₀: For the domain of organizational development, teachers' perceptions of principal effectiveness are not significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H₁₀: μ₁-μ₂ > 0, p > .05).

R2: For the domain of organizational environment, is there a significant difference in teachers’ perceptions of principal effectiveness between schools that implemented the pilot program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)?

H₂: For the domain of organizational environment, teachers' perceptions of principal effectiveness are significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H₂: μ₁-μ₂ > 0, p ≤ .05).

H₂₀: For the domain of organizational environment, teachers' perceptions of principal effectiveness are not significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H₂₀: μ₁-μ₂ > 0, p > .05).

R3: For the domain of instructional leadership, is there a significant difference in teachers’ perceptions of principal effectiveness between schools that implemented the pilot program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)?

H₃: For the domain of instructional leadership, teachers' perceptions of principal effectiveness are significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H₃: μ₁-μ₂ > 0, p ≤ .05).

H₃₀: For the domain of instructional leadership, teachers' perceptions of principal effectiveness are not significantly higher in schools that implemented the pilot program aimed at developing effective school leadership at the .05 level of probability (H₃₀: μ₁-μ₂ > 0, p > .05).
The population of the study consisted of 48 experimental schools and 749 schools considered to be the control group. The experimental school population was selected by the Ministry of Education in Kuwait based on recommendations from the six school districts in the country during the 2012/2013 school year and schools’ interest in joining the pilot program. For this study, 10 schools were randomly selected from the experimental group, and 10 were selected from the control group that had demographic criteria matching the experimental schools. All teachers in the selected schools were surveyed. In total, 725 teachers from 20 schools who were either in the experimental group (n = 374) or control group (n = 351) took the survey before and after program implementation. The survey contained 43 items, with 10 items measuring organizational development, 27 items measuring organizational environment, and 6 measuring instructional leadership. Teachers answered all items using a scale ranging from 1 (not effective) to 9 (very effective).

I analyzed the data using SPSS v.22 and compared the average gain scores from pre- to post-implementation between the condition groups for each of the three domains. In addition to the group condition, teacher demographic information such as gender, years of experience, educational level, and grade level taught were also taken into consideration. Independent sample t-tests were conducted to ascertain whether there was a significant difference between experimental and control schools.

The findings of the study indicate a statistically significant difference between the treatment and control groups for the organizational development domain. There was a significant increase in posttest scores compared with pretest scores for the experimental group and no significant difference between the posttest and pretest scores for the control group. This indicates that the pilot program aimed at developing effective school leadership in Kuwait increased
school principals’ effectiveness in the domain of organizational development. Thus, the null hypothesis for question one is rejected.

Findings also indicate a statistically significant difference between the experimental and control groups for the domain of organizational environment. There was a significant increase in posttest scores compared with pretest scores for the experimental group and no significant difference between the posttest and pretest scores for the control group. This indicates that the pilot program aimed at developing effective school leadership in Kuwait increased school principals’ effectiveness in the domain of organizational environment. Thus, the null hypothesis for question two is rejected.

However, the analysis revealed no significant difference between schools that implemented the pilot program and control schools in the domain of instructional leadership, considered to be the most important domain. The null hypothesis for question 3 is therefore accepted, indicating the pilot program had no effect on school principals’ instructional leadership, since schools that had implemented the pilot program did not experience greater gains in instructional leadership domain than schools that had not implemented the program.

Furthermore, demographics (gender, years of experience, grade taught, educational qualifications) had no significant effect on the dependent variable. Although they were not significant, some differences emerged that should be noted. Male teachers gave scores resulting in higher gains than females in all three domains; teachers with less than 15 years of experience tended to give higher scores than teachers with more experience; teachers with Bachelor’s degrees gave higher scores in all three domains than teachers with higher educational levels; and compared to teachers in high school, responses from teachers who taught elementary grades were
associated with higher gain scores while responses from teachers who taught intermediate grades were associated with lower gain scores.

This study is important because it is the only study to date that has empirically measured the effectiveness of the pilot program aimed at developing school leadership in Kuwait and yielded statistically significant results. Although there are some reports available on the effects of the pilot program, this is the first time a researcher has taken a large-scale quantitative approach to measuring the impact of the program on school principals’ effectiveness in Kuwait. This study is based on an empirical methodology with valid and reliable statistical measures.

In the following sections, I discuss the empirical findings presented in Chapter 5 for each of the three domains and demographic factors assessed in the study in the context of current literature on effective schools, effective school principals, organizational change and instructional leadership. I discuss implications for various stakeholders and avenues for future research before offering some concluding remarks.

**Organizational Development**

One of the goals of the pilot program was to help school leaders catalyze change in schools and learn how to initiate, facilitate, support and sustain education reform. School principals were expected to use a leadership conceptual framework to plan and lead continuous school improvement. The Ministry of Education tried to help school principals become more effective in meeting new organizational development demands of school reform by: (a) providing the appropriate professional development through short workshops designed and presented by the Massachusetts Elementary School Principals’ Association (MESPA), and (b) changing the organizational structure of public schools in Kuwait.
My first research question was: For the domain of organizational development, is there a significant difference in teachers’ perceptions of principal effectiveness between schools that implemented the pilot program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)? Data analysis revealed a statistically significant difference between the perceptions of teachers in schools that had implemented the pilot program and teachers in control schools for items in the organizational development domain, which assessed the effectiveness of organizational direction (i.e., the principal’s ability to provide direction for the school by working with faculty to establish goals and expectations and promoting appropriate change) and organizational procedures (i.e., the school principal’s ability to utilize effective procedures for problem-solving, decision-making and change) (Valentine & Bowman, 1987). After participating in the pilot program, principals were better able to relate to the community, teachers, and other administrators. Principals in experimental schools also involved teachers in the decision-making process more often. According to Valentine and Bowman, principals in experimental schools were therefore more effective at “providing for the identification of, and the reaching of consensus on, the educational goals of the school;” “involving teachers in the decision-making process;” “anticipating the effect of their decisions;” and “utilizing a systemic process for change.”

Shani, Woodman, and Pasmore (2011) asserted that school reforms such as those being implemented in Kuwait would require profound structural changes in the roles of both principals and teachers. Sizer (2004) said that when a school reform fails: “The people are better than the structure. Therefore the structure must be at fault” (p. 209). Indeed, the Ministry of Education made substantial structural changes in Kuwaiti schools by: formally defining roles and responsibilities for principals, assistant principals, and teaching staff in new job descriptions;
adding an assistant principal for student affairs at each experimental school to provide student support services; creating a new school improvement unit responsible for collecting, analyzing, and disseminating students’ achievement data to staff; and implementing a series of regulations and procedures to streamline the governance and functioning of schools (Alkhoja, Halabi, Abdullah, & Al-Shamali, 2014). These structural changes helped principals function as effective change agents (Hall & Hord, 1987).

Based on the findings related to the first research question, we can conclude that the pilot program may have succeeded in addressing some deficient areas of school leadership identified in a report published by the Kuwaiti Centre of Research and Studies (Ministry of Education, 1997). The new infrastructure implemented in experimental schools allowed principals to focus more on organizational development activities that facilitate change. An additional assistant principal and a new department responsible for collecting and analyzing data helped free up principals’ time so they could provide critical professional support to teachers and students in the new era of reform.

Organizational Environment

Schein (1985) claimed that the only really important thing a leader must do is create and maintain an organizational culture. Another goal of the pilot program was to train each school leader to become a “developer and nurturer of the school’s culture” and to share it with teachers in order to foster a sense of membership and participation in the organization. In previous research on educational leadership in Kuwait, scholars identified major problems and challenges preventing school principals from creating environments conducive to teaching and learning. AlKandari (2013) described school environments in Kuwait as unhealthy, attributing it to a gap between the central authority and local schools. The Ministry of Education realized that these
challenges associated with school culture must be addressed if schools are to successfully provide high quality education and implement new reform plans (Ismail, 2012).

Given the importance of school environment and culture to the success of educational reform in Kuwait, my second research question was: For the domain of organizational environment, is there a significant difference in teachers’ perceptions of principal effectiveness between schools that implemented the pilot program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)? The organizational environment domain provides insight about the ability of the principal to nurture the ongoing climate of the school by developing positive interpersonal relationships among members of the organization and effective daily operational procedures for the school; it is comprised of four factors: teacher relations, student relations, interactive processes and affective processes.

The results of data analysis reveal that teachers in experimental schools perceived their principals to be more effective than teachers in control schools in terms of relationships with teachers and students, and the interactive and affective processes of the school. Teachers in pilot program schools indicated that their principals made them feel more comfortable sharing ideas and concerns and better anticipated their needs than teachers in control schools. In addition, both interactive (through the use of effective communication skills) and affective (through the improvement of the overall school climate) processes were perceived to be more effective in experimental schools than in control schools. Principals in experimental schools also were perceived as being better able to use humor and share personal feelings about school issues in order to improve school climates and help teachers develop a sense of pride in and loyalty to the school (Valentine & Bowman, 1987). Moreover, principals in experimental schools were
perceived as more effectively offering sincere compliments of teachers’ work and promoting confidence throughout the school.

These findings confirm previous findings in the literature. In their study, Clark, Lotto, and McCarthy (1980) noted that a principal is more powerful and effective in the organization when he or she frequently articulates the school's vision and goals and shares them with teachers, students and parents. Being able to develop a school change process, share it with staff and teachers, and having the knowledge and skills to put such a vision of change into practice is a crucial role of school principals (Peters and Cornu, 2007). Likewise, Brandt (1982) asserted that “in an effective organization, the leader articulates its major purposes and then undertakes systematic dissemination” (p. 13).

School principals in experimental schools were perceived as being more effective in the domain of organizational environment for two main reasons: (a) principals had more time to focus on developing relationships; and (b) principals began to focus more on leadership than on management activities. The major structural changes that supported organizational development (i.e., adding a third assistant principal, creating a data collection and analysis department, etc.) were also intended to facilitate the emergence of a new culture (Miller, 2006) that would support reform. It has been shown that the use of effective managerial and organizational procedures in day-to-day school operations supports a good working climate (Valentine & Bowman, 1987, p. 6); in the context of this study, the structural changes in experimental schools improved the school climate by freeing up time for principals to build and nurture relationships with students, teachers, and other stakeholders. When excessive workload demands are ameliorated, more time is available for leaders to focus on creating a positive environment (Leithwood & Azah, 2014; Muijs, 2006).
Second, school principals in experimental schools began to function more as leaders than as managers. This role shift was clearly reflected clearly in the new job descriptions and in the training program, which included topics such as: how to build relational trust with the community and invite engagement, how to collectively determine focus, how to collaboratively develop an improvement plan, and how to celebrate gains and gather and analyze contextual data to assess progress.

These findings suggest that the pilot program aimed at developing effective school leadership in Kuwait successfully addressed some previous deficiencies related to principals’ abilities to create supportive and positive environments. As leaders, school principals are expected to simultaneously manage their staff and help them grow professionally, and to use strong communication skills to develop positive relationships, provide support and maintain staff motivation (Freiberg, 1999). School leaders must be empowered to take risks by adopting new techniques that encourage other school staff members to innovate, add value to their schools, and implement constructive changes that will create a positive environment (AlFraih, 2014).

**Instructional Leadership**

The primary objective of the pilot program was to provide school leaders with the necessary skills and knowledge to improve teaching, learning and leading so that all students learn at high levels. Building the capacity of others to improve teaching and learning is how leadership is defined in the program. The current emphasis on educational reform is forcing principals in Kuwait to reprioritize their leadership strategies and methodologies, making instructional leadership skills even more important.

Given this strong desire to improve instructional leadership, my third research question was: For the domain of instructional leadership, is there a significant difference in teachers’
perceptions of principal effectiveness between schools that implemented the pilot program aimed at developing effective school leadership (i.e., experimental group schools) and schools that did not (i.e., control group schools)? The domain of instructional leadership relates to the principal’s commitment to improving instructional programs and extracurricular activities. The principal works with teachers to help them improve the quality of their instruction and systematically reviews and modifies the curriculum to fit the needs of learners in the school. This domain is what sets principals apart from managers in other disciplines (Valentine & Bowman, 1987).

Findings related to the instructional leadership domain reveal no statistically significant difference between perceptions of teachers in experimental and control schools. In fact, teachers in control schools actually perceived their principals as being more effective in the domain of instructional leadership. It was not surprising to me that the pilot program did not have a strong impact on the instructional leadership skills of school principals for several reasons. First, the aim of this study was to demonstrate the impact of the pilot program by measuring short-term outcomes. The pilot program had been implemented for just 6 months when I evaluated its impact on school principals’ effectiveness, so it may have been too early to measure effects in this particular domain.

Second, researchers have identified major issues with school leadership in Kuwait and called for change. The structure of public education in Kuwait has developed over the past 100 years into a highly centralized administration consisting of the Minister of Education and the Undersecretary of Education who work with 10 assistant undersecretaries responsible for various aspects of the educational system, including educational research and curricula, planning and information, and private education. The General Undersecretary oversees six education districts that ensure proper administration of educational plans (Wiseman, Alromi, & Alshumrani, 2014).
The system is cumbersome and results in delays in decision-making and lack of communication between schools, district offices and the minister and his undersecretary. AlMusaileem (1994, p. 94) described:

The Ministry of Education in Kuwait defines and plans all the jobs and work required of school principals from the first day of school until the end of school year by sending many memos. I followed the memos and instructions sent to schools in different districts and found that the Ministry interferes in 95% of the school principals’ activities. Unfortunately, extreme interference has created unhealthy leadership styles in schools. One style is the authoritarian and controlling leader who deals with students and teachers as the Ministry deals with him—by controlling every aspect of the school. In addition, another type has emerged—passive leaders who do nothing and delegate all the work for assistant principals and other staff members. This controlling system has created what we call “schools with no souls,” meaning that schools in one district are the same as schools in other districts in terms of the school buildings, activities, environments, etc.). This centralized image of schooling in Kuwait has killed creativity and hinders schools from playing active and positive roles in serving society. Many school principals are willing to change, but complicated routines and bureaucratic procedures make it an impossible mission for them.

If principals are to become effective instructional leaders, they must spend less time on bureaucratic tasks and focus their efforts on improving teaching and learning processes in their schools. To achieve this goal, it takes more than a strong principal with concrete ideas and technical expertise (Jenkins, 2009). It also requires a redefinition of the role of principals, one
that removes the barriers to leadership by eliminating bureaucratic structures and reinventing relationships (Jenkins, 2009; Phillips, 2004).

Third, the role of instructional leader is relatively new, having emerged in the early 1980s in response to a shift in emphasis from principals being managers or administrators to instructional or academic leaders (Brookover & Lezotte, 1982; Duze, 2012; Phillips, 2004b; Jenkins, 2009). While the principal is typically viewed as both a manager/administrator and instructional leader in many countries, principals in Kuwait traditionally have been more engaged in managerial and administrative tasks (e.g., ensuring that every student has a desk, buses run on time and cafeterias are supervised). The job of instructional leader traditionally has been relegated to others in the administrative hierarchy of the Kuwaiti education system (Marishane, Botha, and Du Plessis, 2011). District- and ministry-level supervisors were responsible for planning and developing curricula, visiting teachers, determining course content and presentation methods, and providing feedback for teachers and students. New changes implemented to develop principals’ instructional leadership skills are now causing conflicts between school principals and supervisors at the district and ministry levels. Supervisors resist the new changes, claiming that the label “instructional leader” cannot be assigned to school principals, since they believe it is their own responsibility.

Change is a process, and it takes time for long-held beliefs about a principal’s role to change (Chell, 1995)—most importantly, among the principals themselves (Fullan, 1991). Generally speaking, school principals in Kuwait do not perceive themselves as instructional leaders, believing that matters related to improving instruction should be assigned to supervisors and teachers (Omar, Khuan, Kamaruzaman, Marinah, & Jamal, 2011; Phillips, 2004a). The role shift from managers to instructional leaders, which involves spending more time on matters of
teaching and learning, may not be natural or easy for school principals (Duze, 2012). Al-Azemi (1995) evaluated the instructional leadership of school principals in Kuwait and found that a considerable percentage of principals do not monitor students’ progress or contribute to academic improvement. The study also revealed many barriers to instructional leadership, particularly myriad administrative responsibilities, surprise visits from parents, and student problems. Convincing principals to relinquish the manager/administrator image and assume the role of instructional leader will be a formidable task.

Finally, it is not easy for school principals to be effective instructional leaders and improve educational environments, especially in situations wrought with many challenges (Ismail, 2012). One of the main challenges the project faced is a lack of resources. Implementing the pilot program was a huge undertaking. School leadership was re-conceptualized and reorganized with new and improved administrative procedures, and new job descriptions were created to clearly define roles and responsibilities for the principal and assistant principals in each school (World Bank, 2014). However, this new organizational structure was not adopted by the Civil Service Commission, which is responsible for appointing employees. Such bureaucratic red tape and dysfunctional politics are enough to cripple any reform initiative.

Another challenge faced by the program relates to turnover in the Ministry of Education; since the program was implemented, three different Ministers of Education have managed it. Abla Al Essa is the manager of training and development at the Ministry of Education and the director of the pilot program. As a participant in the seminar “Education in Kuwait…Future Outlook,” she pointed out how “these ministerial changes hinder the development of the program and send us back to square one.” In addition, a lack of communication between various parts of the educational system created misunderstandings about the project and resistance to change. At
the same seminar, the Assistant Undersecretary for Curriculum and Educational Research noted that “school districts were ill-informed about the goals of the program, causing them to not provide the required support.” She added that what is needed is:

more cooperation between school districts and the team in charge of the pilot program, on the one hand, and direct communication between Abla Al Eissa, the project manager, and directors of the school districts, on the other hand, to achieve the desired outcome of this vital project of the ministry.

In essence, schools principals are being asked by elected officials (i.e., policy leaders) to assume responsibilities without the skills necessary to succeed, and the risks and consequences of failure are high for everyone (Elmore, 2000). Neither school principals nor the organizations they lead were prepared to make the dramatic shift toward viewing principals as instructional leaders. Furthermore, educational leaders were asked to guide their schools through these challenges posed by an increasingly complex environment with programmatic requirements and other policy directives (Leithwood & Riehl, 2003).

**Demographic Factors**

I evaluated the significance of the four critical demographic characteristics supported in the literature as potentially predicting teachers’ perceptions of principal effectiveness. The results of multilevel linear regression analyses reveal that demographics (gender, years of experience, grade level taught, educational qualifications) had no significant effect on the dependent variable. Although they were not significant, some differences are worth noting.

**Gender.** First, male teachers gave scores indicating higher gains than female teachers in all three domains. Since Kuwaiti schools are gender-segregated (i.e., female teachers have female principals, male teachers have male principals) the results indicate that male principals
had higher gain scores than female principals. In previous studies, relationships existed between leader gender and the perceived effectiveness of their leadership (Adams & Hambright, 2004). In this study, male teachers rated principals higher than the female teachers, confirming results found by Al-Belbisi (2007), who noted that female school principals are stricter than males in Arab schools about following rules, which creates a less friendly school atmosphere. Perhaps this is because they are trying to prove themselves; despite political gains, Kuwaiti women still lag behind their male counterparts in leadership positions. On the other hand, this finding contradicts Nakomsri’s (1977) finding that female principals tend to have a more democratic leadership style and include stakeholders in the decision-making process; furthermore, females ranked higher than males in organizational development and overall effectiveness.

**Years of experience.** Participants with less than 15 years of experience tended to give higher scores than teachers with more experience. This confirms previous results from the literature showing a negative relationship between the number of years the teacher had worked for the principal and ratings of principal effectiveness, meaning that less time a teacher had worked for a principal, the higher the ratings they gave of that principal’s performance (Hardman, 2011). This indicates that principals must ensure that more experienced teachers are included in school decision-making processes. When teachers feel they are a part of the decision-making process, they feel they are a valued part of the organization.

**Educational qualifications.** Teachers with Bachelor's degrees gave higher scores in all three domains than teachers with higher education levels. Few studies have investigated how teachers with graduate degrees perceive their school principals. Perhaps teachers with Master’s and Ph.D. degrees feel that they should be included more in decision-making processes.
Grade level taught. Compared to high school teachers, elementary school teachers gave higher scores while intermediate school teachers gave lower scores. A review of the literature suggests that there are distinct differences between the academic environments and leadership requirements in middle schools and high schools. Duke (1987) discussed research indicating that principals at different levels (elementary, middle, and high school) had different perceptions of leadership demands and how they relate to instructional improvement. In his study, Hernandez (2004) found that middle school and high school principals with different leadership styles differentially affect student achievement. Middle school principals using a competitive style had a positive effect on student achievement while high school principals using the same competitive style had a negative effect on student achievement.

Implications

As indicated in the introductory chapter, the aim of this study was to measure the impact of the pilot program aimed at developing effective school leadership in Kuwait on school principals’ effectiveness. Principals’ effectiveness in the study was measured in three main domains: organizational development, organizational environment, and instructional leadership. Results of the study indicate improvement in school principals’ effectiveness in the organizational development and organizational environment domains; however, teachers’ perceptions related to the instructional leadership domain did not change. Since processes in schools, districts and professional development programs shape the quality of teaching and learning, the results of this study have implications for policymakers, school district personnel, school principals, and those who design and facilitate professional development programs.

Implications for policymakers. The results of this research study have several potential implications for educational policymakers in Kuwait. Results show that the pilot program had
not yet achieved one of its main outcomes—helping school leaders develop and implement instructional leadership skills. Policymakers in Kuwait rely heavily on advice from the World Bank, data from international studies such as TIMSS and PIRLS, a national test (MESA), and research studies by outside consultants to inform policy decisions and change implementation processes. As a result, Kuwait’s government established the National Centre for Educational Development (NCED). Together with the World Bank and Kuwait’s Ministry of Education, the NCED has been engaged in a multi-year integrated modernization program that addresses critical issues in Kuwait’s education system: curricular reform, the development of national assessment systems, the improvement of school leadership, and the creation of professional standards. These areas were selected based on a conceptual framework that identified the key reform pillars (World Bank, 2014). The overall objective of school reform is to improve the quality of schools and education in Kuwait. What makes this reform different than previous reforms is it covers all stages and all aspects of education (AlKhoja et al., 2014). Launched in 2013, this is intended to be the most comprehensive and enduring reform in Kuwait’s history.

Implementing such sweeping school reform requires strong support from multiple stakeholders. In this pilot program, policymakers focused only on a small group of school principals; other stakeholders must also learn and change if system-wide reforms are to be successful. Schools are complex institutions and school principals are not isolated. It can undermine efforts to improve the quality, relevance, and cost efficiency of education if principals, teachers, parents and other stakeholders resist change. Therefore, policymakers in the Ministry of Education should focus on “enhancing the capacity of parents, the public, and community organizations and businesses to understand and participate in the reform efforts” (Goertz, Floden, & O’Day, 1996,p152). If the reforms are to be effectively sustained over time,
the public must be involved from the very beginning (Goertz et al., 1996).

The Kuwaiti educational system is a top-down bureaucracy. Closed systems, policies and practices institutionalized over decades in Kuwaiti schools have thwarted previous school reform efforts and prevented school principals from developing instructional leadership skills. According to Sizer (2004) “bureaucratic systemic structures” are the main cause of school reform failures. In Kuwait, the Ministry of Education oversees the whole system of education; all rules and regulations come directly from the ministry and are implemented by schools in a closed and controlled system. Reforms are enacted at the school level, yet school principals are currently powerless to implement instructional changes. Reform will only succeed when policymakers realize that real change does not happen at the top of the education system hierarchy.

Recently, there has been strong support for decentralizing the education system. Decentralization may be defined as “the transfer of decision-making authority, responsibility, and tasks from higher to lower organizational levels or between organizations” (Hanson, 1998, p. 112). An open system strategy based on decentralization offers the best chance of creating effective change, especially when adopting Western-inspired reforms. While there are solid theoretical justifications for decentralizing the Kuwaiti education system, the process requires strong political commitment and leadership in order to succeed. The pilot program can be considered a first step toward decentralization since the Ministry of Education has delegated some authority and responsibility to school leaders, giving them more freedom to make organizational changes.

In this pilot program, policymakers focused more on structural changes than cultural changes in schools, which can lead to a lack of support and promote resistance to change. For
productive change to occur, policymakers should recognize that schools have their own unique cultures, even within a centralized system. Sarason (1996) noted that when change efforts are insensitive to school cultures, they largely result in failure, partly (and sometimes completely) due to ignorance about the distinctive traditions, values and outlooks of school personnel.

One of the most substantial steps that can be taken by the Ministry of Education in Kuwait is to equip principals with the knowledge and skills necessary to help teachers with professional development and instructional improvement. Principals in Kuwait currently do not receive the proper training to prepare them for such a role. Furthermore, the hiring process for school principals should be changed. Generally, principals are former teachers and assistant principals. However, it is possible that professionals from outside the education field with management training and perhaps private sector experience would make good principals. Many scholars have recommended recruiting and retaining “better” people to improve school quality, and many school systems have expanded their recruitment pools to include non-educators (Clark, Martorell, & Rockoff, 2009). These changes are based on the notion that principals need not have served the district for a long period of time in order to be effective leaders, and that talented educators should be promoted only when they are considered ready to lead schools (Clark et al., 2009).

**Implications for school principals.** Improving instructional leadership skills has been a main priority for the Ministry of Education in Kuwait, especially during the recent reform movement. Therefore, principals must work on improving the quality of instruction and related outcomes. The study findings show that the pilot program had not yet helped school principals improve their instructional leadership skills, as was originally hoped. As was found by Marishane et al. (2011), the main issue was that school principals still saw themselves as
managers more than instructional leaders, holding on to traditional beliefs that the instructional leadership role should be filled by ministry and district supervisors. Principals must recognize that they have a crucial instructional role in their schools and monitor classroom activities. Effective principals spend their days with the students, teachers, and parents, visit classrooms regularly, and provide support and feedback to teachers in a professional manner.

Principals also must acquire more content knowledge so they can convince teachers that they are capable of contributing to classroom teaching. Likewise, principals must have a thorough knowledge of changes in the curriculum in order to support their implementation. According to Marishane et al. (2011), principals should understand contemporary theories of learning, have an explicit personal theory of learning, and be able to use this knowledge.

Another goal of the pilot program was to improve school principals’ skills in gathering, analyzing and using a variety of data. In any educational reform, school leaders must pay attention to data to focus and clarify their decisions regarding school change (Earl & Fullan, 2003). The ministry created a new department to collect and analyze data in experimental schools, and principals should use this information to enhance their instructional leadership. An effectively implemented data-driven strategy for determining the needs of both students and teachers can help improve the quality of instruction.

In addition, indirect instructional leadership strategies should be acknowledged and valued. It is important for teachers and principals to know that principals can influence instruction in many ways, not just through direct involvement in classrooms (e.g., classroom observations). For example, holding productive conversations with teachers, assessing the needs of teachers and students and providing the right support can significantly improve instructional quality.
Finally, Brewer (2001, p. 30) provided 10 suggestions for a successful principalship:

1. Focus on instruction;
2. Build a community of learners;
3. Share decision making;
4. Sustain the basics;
5. Leverage time;
6. Support ongoing professional development for all staff;
7. Assess and redirect resources necessary to support a multifaceted school plan;
8. Have integrity;
9. Remain competent; and
10. Develop a climate of inquiry and continuous improvement.

**Implications for districts.** Unfortunately during the current reform and pilot program implementation, the role of school districts was neglected completely, creating communication problems that impeded change. Districts could play a key role in building the capacity of teachers and schools in their areas (Goertz et al., 2006). Yet, reform plans in Kuwait did not clearly define the distinct roles of district offices and schools in building capacity and supporting teacher development and school change. District administrators and policymakers should work together to implement strategies that will enhance the role of school districts as active agents in the change process. Moreover, district leaders must recognize principals as instructional leaders and relinquish responsibilities in that area.

**Implications for professional development.** “Improving professional learning for educators is a crucial step in transforming schools and improving academic achievement” (Darling-Hammond, Wei, Andree, Richardson, & Orhanos, 2009, p. 3). This study reveals the
importance of continuous training for school principals to create change. According to Srivastava and Sarita (2005, p. 249):

- Professional development plays an essential role in successful education reform.
- Professional development serves as the bridge between where prospective and experienced educators are now and where they will need to be to meet the new challenges of guiding all students in achieving to higher standards of learning and development.

Principals must play a crucial leadership role in developing school- and community-level support for educational reforms, and must be provided with professional development and other support required to help them become effective leaders (Gardner, 1983).

In the United States, the Southern Regional Education Board sought to understand the knowledge and skills required of effective school leaders and how to best prepare them (Bottoms & O’Neill, 2001). Their findings have several implications for professional development programs, including those in Kuwait. In order to help principals effectively implement reform, professional development programs should (Bottoms & O’Neill, 2001):

1. Help principals gain a comprehensive understanding of school and classroom practices that contribute to student achievement;

2. Teach principals how to work with faculty and others to facilitate continuous student improvement; and

3. Teach principals how to provide the necessary support for staff to carry out effective school, curriculum and instructional practices.

Furthermore, traditional leadership preparation programs should be modified by placing greater emphasis on the knowledge and skills needed to improve curriculum and instruction and addressing the diverse needs of school leaders from different professional backgrounds.
The results from several other studies have shown that training programs fail to improve school principals’ effectiveness in terms of organizational development and change. In fact, many researchers have critiqued principal training and development programs for their failure to link theory with practice or to prepare school principals to act as change agents (Copland, 1999; Elmore, 2000; Murphy & Vriesenga, 2004). However, the findings of the current study indicate that the pilot program helped school principals more effectively work with staff to set goals, define expectations, and enact change. Perhaps the pilot program in Kuwait was more effective than previous programs (at least in the domains of organizational development and organizational environment) because some school-level organizational structures were realigned to support reform. If reform is going to be effective and enduring, more structural changes will be required at all levels to support professional development.

Moreover, professional development can succeed only when it is aligned with the context (Harwell, 2003). For this reason, the trainers from the Massachusetts Elementary School Principals’ Association (MESPA)\(^1\) should consider the Kuwaiti culture when creating and facilitating professional development programs. The content of the programs should be revised to meet the needs of the Kuwaiti educational system. Specifically, those who are responsible for training Kuwaiti school principals should consider the results of this study when they redefine and redesign the pilot program. In particular, training should focus more on instructional leadership, since principals received the lowest scores in that domain. Professional development activities should focus on instructional and curriculum improvements, incorporate instructional management with leadership, and provide administrators with opportunities to practice the skills

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\(^1\) MESPA is a professional association serving principals in the United States. Members provided training for Kuwaiti school principals who participated in the pilot program.
they will apply as change agents, human resource managers, and instructional leaders.

**Opportunities for Future Research**

This study opens up several avenues for future research. This study could be extended in multiple ways. It could be repeated with additional variables that provide a more in-depth analysis of the three domains of the APE (i.e., organizational development, organizational environment and instructional leadership) (Valentine and Bowman, 1987) or with a survey instrument other than the APE. Likewise, other studies with longer follow-up periods could be performed in order to assess the long term effects of the program. In this study, I evaluated the program just 6 months post implementation. If similar results were found, it would validate the results of the current study. Furthermore, although the APE was designed for teachers, it could be modified for school principals and comparisons could be made between how school principals rate their own effectiveness and how teachers rate them. Researchers also should investigate why teachers’ perceptions of the effectiveness of female (vs. male) principals were lower and why teachers with more experience rated their principals as less effective.

Moreover, the pilot program should be evaluated qualitatively to reveal more information about program processes and outcomes that were not captured in the current quantitative study. In the current research study, I only investigated teachers’ perceptions of school principals’ effectiveness. A more comprehensive evaluation of the pilot program would be based on interviews with school principals, trainers, program staff, teachers and other stakeholders about the program’s effectiveness. Qualitative data also would provide more insight into school principals’ opinions about the training program. More generally, further study is recommended to examine and compare leadership training programs in Kuwait and in other Gulf countries.
Conclusion

The results of this study confirm previous findings from the literature that the principal occupies a strategic position in educational reform. According to Brown and Anfara (2003, p. 16): “The visionary leader establishes goals, objectives, and group action. The visionary leader inspires, challenges, guides, and empowers.” Effective school leadership creates an environment conducive to effective academic performance for both teachers and students (Elmore, 2000). If Kuwait’s educational system is going to meet higher standards, it is crucial to continue to provide high-quality training programs and the necessary structural support to help develop visionary school leaders in the reform era.

Developing school principals’ instructional leadership skills was an important goal for the pilot program. Despite the lack of progress in this domain, the results of this study should not be interpreted as evidence for cancelling or withdrawing support from the pilot program. Rather, some problems facing the pilot program should be addressed in order to ensure effective, sustained reform. More effort is required to implement enduring changes in Kuwait and to avoid the internalization failures associated with previous reforms.

“Achieving school excellence in Kuwait will require a culture that encourages creativity, innovation, and thinking outside the box” (Aldaihani, 2014, p126). For several decades, school leaders in Kuwait have been thinking inside the box, perpetuating a bureaucratic, centralized education system based on closed systems. Change will not happen overnight when challenges are systemic and longstanding, and educational reform can take even longer when a school system serves a large number of students. Quick fixes always fail in education (Rutherford & Ahlgren, 1991); even with great ideas, the best of intentions, investments in appropriate resources, and a tremendous amount of hard work, any sweeping change in a national
educational system is bound to take a decade or longer (Rutherford & Ahlgren, 1991). Although the pilot program constitutes a serious effort in the right direction, the biggest challenge Kuwait’s policymakers face is whether change can be sustained.
REFERENCES


Al-Husaini, M. (2004). An investigation into factors that may contribute to school violence in
male high schools in Kuwait.


Educational Leadership Preparation, 6(1), Retrieved from the Connexions:

http://cnx.org/content/m36634/1.4/


Harwell, S. H. (2003). *Teacher professional development: It’s not an event, it’s a process.* Waco, TX: CORD.


Knoff (2008). Teacher perceptions of the changing role of the secondary middle school principal. *ProQuest*


Rowe, K. (2007). The imperative of evidence-based instructional leadership: Building capacity within professional learning communities via a focus on effective teaching practice.


APPENDIX A

Audit of Principal Effectiveness (Original)

Teacher Form 1-88
Directions: There are 80 statements in this instrument. The statements describe specific principalship skills. Because teachers work more closely with principals than any other professional group, teachers’ perceptions are particularly important. Please take a few minutes to read each statement and select the response that most appropriately describes your assessment of your principal’s ability for each item. DO NOT record your name. All responses will be reported as a group, not individual data. Please be honest and candid with your responses.

For each item, select the response that describes HOW EFFECTIVELY YOUR PRINCIPAL PERFORMS EACH SKILL. Please use the following nine-point scale as the measure of effectiveness.

1------------2---------3---------4---------5---------6---------7---------8---------9
(Not Effective)                                           (Moderately Effective)                                    (Very Effective)

1. The principal assists the faculty in developing an understanding of, and support for, the beliefs and attitudes that form the basis of the educational value system of the school.
2. The principal provides for the identification of, and the reaching of consensus on, the educational goals of the school.
3. The principal has high, professional expectations and standards for self, faculty, and school.
4. The principal helps the faculty develop high, professional expectations and standards for themselves and the school.
5. The principal envisions future goals and directions for the school.
6. The principal encourages changes in school programs that lead to a better school for the students.
7. The principal communicates to teachers the directions the school’s programs need to take for growth.
8. The principal develops plans for the cooperation and involvement of the community, individuals, and agencies of the school.
9. The principal utilizes resources from outside the school to assist in the study, development, implementation, and/or evaluation of the school.
10. The principal provides for the gathering of information and feedback from individuals and agencies in the community.
11. The principal provides for the dissemination of information to individuals and agencies in the community.
12. The principal is supportive of, and operates within, the policies of the district.
13. The principal maintains good rapport and a good working relationship with other administrators of the district.
14. The principal invests time with the district office and other external agencies to obtain support and resources from the agencies.
15. The principal strives to achieve autonomy for the school.
16. The principal develops and implements school practices and policies that synthesize educational mandates, requirements and theories, e.g. legal requirements, social expectations, theoretical premises.
17. The principal understands and analyzes the political aspects of education and effectively interacts with various communities, e.g. local, state, national, and/or various subcultures within the local community.
18. The principal informs the staff of new developments and ideas in education.
19. During the identification of needed change, the principal’s style is more supportive and participative than directive and authoritative.
20. During evaluation of change, the principal’s style is more supportive and participative than directive and authoritative.
21. The principal anticipates the effects of decisions.
22. The principal fairly and effectively evaluates school personnel.
23. The principal employs new staff who enhance the overall effectiveness of the school and complement the existing staff.
24. Through discussion with teachers about concerns and problems that affect the school, the principal involves teachers in the decision-making process.
25. The principal discusses school-related problems with teachers, seeking their opinions and feelings about the problem.
26. The principal utilizes a systematic process for change that is known and understood by the faculty.
27. The principal has the patience to wait to resolve a problem if the best solution to that problem is not yet readily evident.
28. The principal is willing to admit to making an incorrect decision and corrects the decision if feasible.
29. The principal is perceptive of teacher needs.
30. The principal gives teachers the support they need to be effective.
31. The principal diagnoses the causes of conflict and successfully mediates or arbitrates conflict situations.
32. Teachers feel at ease in the presence of the principal.
33. When deserving, teachers are complimented by the principal in a sincere and honest manner.
34. The principal is receptive to suggestions.
35. The principal is accessible when needed.
36. The principal takes time to listen.
37. Teachers feel free to share ideas and concerns about school with the principal.
38. When teachers discuss a problem with the principal, the principal demonstrates an understanding and appreciation of how teachers feel about the problem.
39. When talking to the principal, teachers have the feeling the principal is sincerely interested in what they are saying.
40. Through effective management of the day-by-day operation of the school, the principal promotes among staff, parents, and community a feeling of confidence in the school.
41. The principal finds the time to interact with students.
42. Students feel free to initiate communication with the principal.
43. Students in the school view the principal as a leader of school spirit.
44. The principal encourages student leadership.
45. The principal helps develop student responsibility.
46. The principal is highly visible to the student body.
47. The principal positively reinforces students.
48. The principal enjoys working with students.
49. The principal keeps teachers informed about those aspects of the school program of which they should be aware.
50. When the principal provides teachers with the information about school operations, the information is clear and easily understood.
51. When teachers are informed of administrative decisions, they are aware of what the principal expects of them as it relates to the decision.
52. The principal is able to organize activities, tasks, and people.
53. The principal develops appropriate rules and procedures.
54. The principal uses systematic procedures for staff appraisal, e.g. retention, dismissal, promotion procedures.
55. The principal establishes the overall tone for discipline in the school.
56. The principal establishes a process by which students are made aware of school rules and policies.
57. The principal communicates to teachers the reasons for administrative practices used in the school.
58. The principal works with other leaders of the school in the implementation of a team approach to managing the school.
59. The principal encourages faculty to be sensitive to the needs and values of other faculty in the school.
60. The principal helps teachers clarify or explain their thoughts by discussing those thoughts with them.
61. During meetings, the principal involves persons in the discussion who might otherwise not participate.
62. The principal shares personal feelings and opinions about school issues with teachers.
63. Humor used by the principal helps to improve the school environment by creating a more congenial working climate.
64. Personal thoughts shared by the principal about school help teachers develop a sense of pride and loyalty as members of the school.
65. The principal is knowledgeable of the general goals and objectives of the curricular areas.
66. The principal is knowledgeable of the varied teaching strategies teachers might appropriately utilize during instruction.
67. The principal possesses instructional observation skills that provide the basis for accurate assessment of the teaching process in the classroom.
68. The principal actively and regularly participates in the observations and assessment of classroom instruction, including teaching strategies and student learning.
69. The principal has effective techniques for helping ineffective teachers.
70. The principal maintains an awareness and knowledge of recent research about the learning process.
71. When criticizing poor practices, the principal provides suggestions for improvement.
72. The principal is committed to instructional improvement.
73. The principal promotes the development of educational goals and objectives that reflect societal needs and trends.
74. The principal promotes the diagnosis of individual and group learning needs of students and application of appropriate instruction to meet those needs.
75. The principal administers a school-wide curricular program based upon identification of content goals and objectives and the monitoring of student achievement toward those goals and objectives.
76. The principal participates in instructional improvement activities such as program and curriculum planning and monitoring of student learning outcomes.
77. The principal uses objective data such as test scores to make changes in curriculum and staffing.
78. The principal has a systematic process for program review and change.
79. The principal encourages articulation of the curricular program.
80. Using the nine-point scale, give your rating of your principal’s overall effectiveness.
APPENDIX B

Survey Instrument

Survey Consent Form

My name is Munirah AlAjmi. I am a graduate student in the Educational leadership Program at the Pennsylvania State University. I am conducting a survey as part of requirement to complete my doctorate degree dissertation. This is a part of study titled “A pre-test/post-test control group study of the impact of the developing effective school leadership pilot program on school principals’ effectiveness in the state of Kuwait. The survey involves answering some general demographics questions and some questions about your perceptions about your school principal’s effectiveness. The survey takes about 10-15 minutes to complete. The purpose of the survey is to learn more about your personal perception about the research topic. Your participation is completely voluntary, and your responses will be completely anonymous.

If you have any questions about the survey, you can call me at 965-51117110. If you have any questions, please contact me by email mka154@psu.edu.

Thank you for your participation.

Munirah AlAjmi
Phd candidate
Educational leadership department
Pennsylvania State University
أعزائي المعلمين / المعلمات

لقد تم تصميم هذا الاستبيان للتعرف على أثر البرنامج التدريبي "تطوير القيادات المدرسية" في تطوير فاعلية دور مدير المدرسة. هذه الاستبانه موجهة للمعلمين والمعلمات فقط وليس للمدراء أو المديرين المساعدين أو رؤساء الأقسام.

هذ الاستبانه سوف تكون جزء من رسالة جامعية والتي تهدف إلى جمع بيانات كمية عشوائية لمعرفة آراء المعلمين والمعلمات التحليلية. أرجو الإجابة على جميع الأسئلة وعدها 43 بثقة وموضوعية لنتم الاستفادة من نتائج الدراسة في تطوير المجال التربوي. ونتعهذ بالمحافظة على السرية النامه لإجاباتكم على الاستبانه.

تحقيقا لهذه الغاية، فإننا نرجوكم مشكورين أن تقوموا بتعبئة الاستبان، فإننا نرحب بال التواصل عبر البريد الإلكتروني لنا وهو:

mka154@psu.edu

اشككم على تعاونكم وجزاكم الله خير
Section A: Background Information

In this section of the questionnaire, we ask you to provide background or biographical information. The information will allow us to compare groups of respondents. Once again, we assure you that your responses will remain anonymous. Your cooperation is appreciated.

1. Gender:
   Male    Female

2. Years of Experience:
   < 5   5–10   10–15   > 15

3. School District:
   Al-Ahmadi  Al-Asemah  Al-Farwaniya  Al-Jahra  Hawalli  Moubark AlKabeer

4. Educational Level:
   Elementary  Intermediate  Secondary
قسم أ - خلفية عن بعض المعلومات

هذا القسم من الاستبيان إلى خلفية أو معلومات عن السيرة الذاتية وسوف تسمح لنا المعلومات بمقارنة مجموعات من أفراد العينة مرة أخرى، نحن نؤكد لكم أن ردكم سوف يبقى بشكل سري. ونحن نقدر تعاونكم.

1. الجنس
   ذكر
   أنثى

2. سنوات الخبرة لديك
   أقل من خمس سنوات
   5-10 سنوات
   أكثر من 15 سنة

3. أعلى مؤهل علمي لديك
   درجة البكالوريوس
   دراسات عليا (ماجستير, دكتوراه)

4. المنطقة التعليمية
   الجهراء
   العاصمة
   الفروانية
   حولي
   مبارك
Section B: Audit of Principal Effectiveness

Teacher Form 1-43

Directions: There are 43 statements in this instrument. The statements describe specific principalship skills. Because teachers work more closely with principals than any other professional group, teachers’ perceptions are particularly important. Please take a few minutes to read each statement and select the response that most appropriately describes your assessment of your principal’s ability for each item. DO NOT record your name. All responses will be reported as a group, not individual data. Please be honest and candid with your responses.

For each item, select the response that describes HOW EFFECTIVELY YOUR PRINCIPAL PERFORMS EACH SKILL. Please use the following nine-point scale as the measure of effectiveness.

1----------2----------3----------4----------5----------6----------7----------8----------9
(Not Effective)                                          (Moderately Effective)                      (Very Effective)

1. The principal assists the faculty in developing an understanding of, and support for, the beliefs and attitudes that form the basis of the educational value system of the school.
2. The principal provides for the identification of, and the reaching of consensus on, the educational goals of the school.
3. The principal has high, professional expectations and standards for self, faculty, and school.
4. The principal communicates to teachers the directions the school’s programs need to take for growth.
5. During the identification of needed change, the principal’s style is more supportive and participative than directive and authoritative.
6. The principal anticipates the effects of decisions.
7. The principal fairly and effectively evaluates school personnel.
8. Through discussion with teachers about concerns and problems that affect the school, the principal involves teachers in the decision-making process.
9. The principal utilizes a systematic process for change that is known and understood by the faculty.
10. The principal has the patience to wait to resolve a problem if the best solution to that problem is not yet readily evident.
11. The principal is perceptive of teacher needs.
12. The principal gives teachers the support they need to be effective.
13. The principal diagnoses the causes of conflict and successfully mediates or arbitrates conflict situations.
14. Teachers feel at ease in the presence of the principal.
15. When deserving, teachers are complimented by the principal in a sincere and honest manner.
16. The principal is receptive to suggestions.
17. The principal is accessible when needed.
18. The principal takes time to listen.
19. Teachers feel free to share ideas and concerns about school with the principal.
20. When teachers discuss a problem with the principal, the principal demonstrates an understanding and appreciation of how teachers feel about the problem.
21. The principal finds the time to interact with students.
22. Students feel free to initiate communication with the principal.
23. Students in the school view the principal as a leader of school spirit.
24. The principal encourages student leadership.
25. The principal helps develop student responsibility.
26. The principal positively reinforces students.
27. The principal enjoys working with students.
28. The principal keeps teachers informed about those aspects of the school program of which they should be aware.
29. When the principal provides teachers with the information about school operations, the information is clear and easily understood.

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30. When teachers are informed of administrative decisions, they are aware of what the principal expects of them as it relates to the decision.
31. The principal develops appropriate rules and procedures.
32. The principal uses systematic procedures for staff appraisal, e.g. retention, dismissal, promotion procedures.
33. The principal establishes a process by which students are made aware of school rules and policies.
34. The principal encourages faculty to be sensitive to the needs and values of other faculty in the school.
35. The principal helps teachers clarify or explain their thoughts by discussing those thoughts with them.
36. The principal shares personal feelings and opinions about school issues with teachers.
37. Humor used by the principal helps to improve the school environment by creating a more congenial working climate.
38. The principal is knowledgeable of the general goals and objectives of the curricular areas.
39. The principal is knowledgeable of the varied teaching strategies teachers might appropriately utilize during instruction.
40. The principal possesses instructional observation skills that provide the basis for accurate assessment of the teaching process in the classroom.
41. The principal actively and regularly participates in the observations and assessment of classroom instruction, including teaching strategies and student learning.
42. When criticizing poor practices, the principal provides suggestions for improvement.
43. The principal is committed to instructional improvement.
استبيان عن مدى فاعلية دور مدير المدرسة

التوجهات: هناك أربعة وأربعون جملة في هذه الاستبيان. تصف هذه الجمل مهارات الإدارة بشكل محدد. وحيث أن المعلمين يعملون بالقرب من مدير المدرسة أكثر من أي مجموعة مهنية أخرى, لذلك فإن آراء المعلمين تمتلك أهمية كبيرة. يرجى قراءة كل جملة بسرعة واختيار الإجابة التي يمكنك أن تصف بشكل ملائم مدى تقييمك لقدرتك مدير المدرسة لكل بند. لا تقم بتسجيل اسمك سوف يتم أخذ جميع الإجابات في شكل مجموعة وليس كبيانات فردية يرجو منك أن تكون أمنًا وصريحاً عند الإدلاء بإجاباتك لفائدة البحث العلمي.

فيما يتعلق بكل بند, اختار الإجابة التي تصف كيفية إداء المدير لكل مهارة بشكل فعال يرجى استعمال المقياس التالي المكون من تسعة نقاط لي نسعة لكي تقيس مدى الفاعلية.

1 2 3 4 5 6 7 8 9
(غير مؤثر) (مؤثر بشكل متوسط) (مؤثر جداً)

<table>
<thead>
<tr>
<th>يرجى اختيار المستوى الذي يتناسب مع أداء مدير المدرسة</th>
<th>العبارات</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 8 7 6 5 4 3 2 1</td>
<td>يساعد مدير مدرستي المعلمين على فهم ودعم وتطوير الاتجاهات التي تعز القيمة التعليمية الأساسية للمدرسة.</td>
</tr>
<tr>
<td>9 8 7 6 5 4 3 2 1</td>
<td>يقوم مدير مدرستي بتحديد الأهداف التعليمية للمدرسة والموافقة عليها بالإجماع.</td>
</tr>
<tr>
<td>9 8 7 6 5 4 3 2 1</td>
<td>يحافظ مدير مدرستي بتوقعات مهنية ومعايير عالية عن ذاته, وهيئة التدريس والمدرسة ككل.</td>
</tr>
<tr>
<td>9 8 7 6 5 4 3 2 1</td>
<td>يتواصل مدير مدرستي مع المعلمين وينقل لهم التوجيهات التي تحتاجها برامج المدرسة لتحقيق النمو.</td>
</tr>
</tbody>
</table>
5- من خلال مرحلة التعريف بالتغييرات التي ستتحصل في المدرسة، فإن مدير مدرستي يتبع الأسلوب التشاركى والتعاونى أكثر من الأسلوب الإدارى التسلطى.

6- يعمل مدير مدرستي على تقييم العاملين بشكل واضح وعادل.

7- يشارك مدير مدرستي المعلمين في عملية إتخاذ القرار من خلال فتح النقاش حول الامتيازات والمشاكل التي تؤثر على سير العمل في المدرسة.

8- يعمل مدير مدرستي على تقييم العاملين بشكل واضح.

9- لإحداث التغيير المطلوب، يتبنى مدير مدرستي عملية منهجية يعرفها ويفهمها العاملين معه.

10- يتلقى مدير مدرستي بالصبر الانتظاراً لحل مشكلة لم يتم التوصل إلى حلها في الوقت الراهن.

11- يدرك مدير مدرستي احتياجات المعلمين والمعلمات في المدرسة.

12- يقوم مدير مدرستي بالدعم المتواصل للمعلمين لرفع كفاءتهم.

13- يشعر المعلمون بالراحة أثناء حضور مدير المدرسة.

14- يمدح مدير مدرستي المعلمين الجددين بالمدح بكل شفافية وإخلاص.

15- يحيل مدير مدرستي باقتراحات تطوير العمل في المدرسة.

16- يسهل الوصول إلى مدير المدرسة عند الحاجة إليه.

17- يمنح مدير مدرستي جزءاً من وقته للاساتماع للمعلمين.

18- لا يتتردد مدير مدرستي في إبداء آرائهم.
لا يوجد نص يمكن قراءته بشكل طبيعي من الصورة المقدمة.
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## APPENDIX C

**Component Matrix**

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APPENDIX D

IRB Approval

Date: March 19, 2014

From: The Office for Research Protections

FWA#: FWA00001534

Courtney A. Whetzel, Compliance Coordinator

To: Munirah Alajmi

Re: Determination of Exemption

IRB Protocol ID: 44501

Follow-up Date: March 18, 2019

Title of Protocol: The impact of the Developing School Leadership pilot program on principal effectiveness in the schools of Kuwait

The Office for Research Protections (ORP) has received and reviewed the above referenced eSubmission application. It has been determined that your research is exempt from IRB initial and ongoing review, as currently described in the application. You may begin your research. The category within the federal regulations under which your research is exempt is:

45 CFR 46.101(b)(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects'
responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Given that the IRB is not involved in the initial and ongoing review of this research, it is the investigator’s responsibility to review IRB Policy III “Exempt Review Process and Determination” which outlines:

1. What it means to be exempt and how determinations are made
2. What changes to the research protocol are and are not required to be reported to the ORP
3. Ongoing actions post-exemption determination including addressing problems and complaints, reporting closed research to the ORP and research audits
4. What occurs at the time of follow-up

Please do not hesitate to contact the Office for Research Protections (ORP) if you have any questions or concerns. Thank you for your continued efforts in protecting human participants in research.

This correspondence should be maintained with your research records.
APPENDIX E

Permission from the Kuwait Ministry of Education

الموضوع: تسهيل مهمة

تقدم الطلبة/ مديرة خالد العجمي المسجلة في جامعة宾夕法尼亚大学/ الولايات المتحدة الأمريكية بإجراء بحث ميداني لمتطلبات التخرج لبرنامج الدكتوراه بعنوان "أثر برنامج تطوير القيادة المدرسية على جودة مديري المدارس".

في حق تيسير مهمة المذكورة أعلاه من خلال تطبيق الاستبانة المختومة، صفحاتها من إدارة البحوث والدراية على معلمي جميع المراحل والدراية للمدرسة التابعة لمنطقة التعليمية خلال العام الدراسي الحالي.

مع خالص الشكر والتقدير،

مدير إدارة البحوث
## APPENDIX F

### Means and S.D for responses

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VITA

Munirah Khalid AlAjmi

Educational History

2015    Doctor of Philosophy in Educational Leadership
        Pennsylvania State University.

2007    Master Degree in Education-Educational Administration.
        Kuwait University.

1999    Bachelor in ESL /college of Education. Kuwait University.

Job history

2013- present    Employee with scholarship position in Education college,
                  Kuwait University.

2008-2012        Head of English Department in high school, Ministry of
                  Education, Kuwait.


Research

A research titled “Futuristic Vision for Privatizing Secondary
Education in Kuwait” published in a refereed academic journal “