

School Principals as Instructional Leaders: An Investigation of School  
Leadership Capacity in the Philippines

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## ABSTRACT

Decentralization and school-based management are redefining the role of the school principal from school building manager to instructional leader. The principal's core responsibility is to ensure quality teaching and learning in the classroom. However, in Asia many principals are not prepared for this new role and new focus.

This study identified factors related to the extent Filipino school principals thought they were capable of supporting teachers' classroom instruction through instructional supervision, professional development, and classroom resources; and the extent they thought these instructional supports were effective. It also measured principals' confidence in supporting teachers' classroom instruction after participation in the instructional leadership training program, *Instructional and Curricular Excellence in School Principalship for Southeast Asia (ICExCELS)*, offered by the Southeast Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology (SEAMEO INNOTECH). This study was conceptually grounded in the principal-agent relationship as described by Galal (2002) and Chapman (2008), as well as a model for teacher incentives by Kemmerer (1990). Bandura's (1977) concept of self-efficacy served as a framework for investigating school principalship.

Analyses were conducted on data from 364 principals. Linear regression analysis showed that Filipino principals thought their capacity to support teachers through instructional supervision and professional development was dependent on their beliefs as to whether these instructional supports could make a difference in classroom instruction, their level of control, time they spent on instructional leadership and their degree of job satisfaction. Principals' thought their capacity to support teachers through classroom

resources was only dependent on their level of control over them and their beliefs as to whether they could make a difference in classroom instruction. Principals' beliefs as to whether instructional supports could make a difference in classroom instruction was the most significant factor related to principals' sense of capacity for providing instructional supervision and professional development, while their level of control was the more significant factor related to principals' sense of capacity for providing classroom resources.

Results also showed that principals' beliefs as to whether instructional supports were effective in supporting teachers' classroom instruction were dependent upon how effective they think they are as school principals and how capable they think their teachers are in guiding student achievement. MANOVA results indicated no differences related to demographic and contextual factors among principals' beliefs about their capacity to support teachers and their beliefs about the effectiveness of instructional supervision, professional development, and classroom resources. Seventy-five percent of principals attributed their capacity to the hands-on training they received.

The findings are important for formulation and implementation of school-based management policies, and for the design of education reform initiatives and training programs supporting school principals to be instructional leaders.

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## LIST OF ABBREVIATIONS

ADB - Asian Development Bank  
ARMM - Autonomous Region in Muslim Mindanao  
CALABARZON - Cavite, Laguna, Batangas, Rizal, Quezon  
CAR - Cordillera Administrative Region  
CARAGA – Agusan del Norte, Agusan del Sur, Dinagat Islands, Surigao del Norte,  
Surigao del Sur  
CTI - Control over Teacher Incentives  
DepED - Department of Education  
ETI - Effectiveness of Teacher Incentives  
HSRT - High School Readiness Test  
ICExCELS - Instructional and Curricular Excellence in School Principalship for  
Southeast Asia  
IE - Score Incentives Effectiveness Score  
iFLEX - Innotech Flexible Learning Management System  
INSET - Inservice Training  
LEARNTECH – eXCELS - Learning Technology for Excellence in School Principalship  
for Southeast Asia  
LTC - Level of Teacher Capacity  
MANOVA - multivariate analysis of variance  
MIMAROPA - Mindoro, Marinduque, Romblon, and Palawan  
MT - Master Teacher  
NCES - National Center for Education Statistics  
NCR - National Capital Region  
NEAT - National Elementary Achievement Test  
NSAT - National Secondary Achievement Test  
NSCB - National Statistical Coordination Board  
PEPSA - Philippine Elementary School Principals' Association  
PTA - Parent-Teacher Association  
RA - Republic Act  
SAC - School Advisory Committee  
SBM - School Based Management  
SEAMEO INNOTECH - Southeast Asian Ministers of Education Organization Regional  
Center for Educational Innovation and Technology  
SIP - School Improvement Plan  
SMC - School Management Committee  
TIL - Time on Instructional Leadership  
UNESCO - United Nations Education, Science, and Culture Organization



(Philippines, 2009)

## CHAPTER 1: INTRODUCTION

Education systems in many developing countries are being decentralized. Authority for making decisions for school improvement is devolving to the school-level which puts unprecedented pressure on school principals to be accountable for the quality of education provided by their school. This chapter discusses a problem related to school principalship in a decentralized education system. The problem is grounded in the principal-agent paradigm as described by Galal (2002) and Chapman (2008), as well as a model for teacher incentives by Kemmerer (1990). A discussion explaining how the construct of self-efficacy by Bandura (1977) serves as a framework for investigating school principalship for this study is included. The chapter concludes with the research questions that guided this study.

The educational value of decentralization lies in the devolution of authority and responsibility for schools from the central-level administration to the schools themselves. Shifting decision making to those closer to the school and community leads to decisions that are more responsive to local conditions and needs. If principals are not prepared for this new level of authority and increased responsibility, then any educational value decentralization may hold is lost.

The level of responsibility principals must assume is further compounded by the pressures for improved education quality that already exist in most developing countries. A number of developing countries report near universal access and the leveling of enrollment growth at the primary school level. This increases attention to improving quality of education.

A consequence of this increased attention to quality is that administrators at all levels of the education sector, particularly school principals, need a better understanding of the teaching and learning processes and the actions that are likely to improve the quality of education. Even when resources are available, the problem principals face in improving school quality is knowing which inputs and actions will lead to improved teaching and learning.

There is a great need to improve education management at the school level. This need is widely advocated, although least examined as education systems become decentralized. Original research investigating the factors that contribute to principals' sense of capacity for improving school quality under a decentralized system would provide important insights for strengthening education management at the school level. The current study examines the extent to which organizational structures of the decentralized education system contribute to principal's sense of capacity for providing teacher incentives to motivate improved teaching practice in the Philippines.

### Problem Statement

In many developing countries, decentralization of education and school-based management (SBM) are creating new challenges for the school principal that few are able to meet (Chapman, 2000). The principal is increasingly expected to create a climate that is conducive to teaching and learning; work towards improving student performance and be accountable for results; support and supervise teachers' work in instruction and classroom management; supervise the use of the curriculum and its localization to ensure its relevance to the school; and ensure effective staff development programs are

operational in the school and that teachers improve their professional competence (Atkinson, 2001). These functions define the principal's new role as instructional leader.

The challenges of instructional leadership are rooted in the principal-agent problem. Galal (2002) defines the principal-agent problem as being at the core of any education reform. The principal (e.g., a ministry official, school principal) is interested in particular outcomes (such as good quality education), but has to rely on an agent (e.g., teachers) to obtain these outcomes. Chapman (2008) states that the focus on the principal-agent problem places more concern with influencing the educational process in classrooms, where the real activities of learning occur.

Lockheed and Verspoor (1991) observe that many of the teaching practices in developing countries are not conducive to student learning. Teaching practices often involve instruction for the whole class that emphasizes lectures by the teacher who then has students copy from the blackboard while offering them few opportunities to ask questions or participate in learning (Fuller and Heyneman, 1989). Classroom teaching in developing countries is also characterized by student memorization of texts with few opportunities to work actively with the material, and little ongoing monitoring and assessment of student learning through homework, classroom quizzes, or tests. The principal as instructional leader is charged to implement innovative teaching methods that engage students in more active rather than passive learning.

However, teachers are likely to resist the principal's efforts toward implementing innovative teaching methods. One reason for teacher resistance to innovation is captured in the "*worklife complexity hypothesis*" (Snyder, 1990; Chapman and Mählck, 1997). When principals introduce policies and instructional activities that alter the activities of



the classroom, those instructional interventions may seriously impinge on the work lives of teachers. Virtually all innovations increase the complexity of teachers' work lives by expecting them to learn new content, teach in new ways, or use different instructional materials (Chapman, 2008). Increased complexity often leads to people to resist innovation (Spillane, Reiser and Reimer, 2002). Principals can respond to this resistance by either lowering the complexity of the intervention or by increasing incentives so that teachers believe their extra effort is being rewarded (Chapman, 1997).

Kemmerer (1990) discusses *instructional support*, which includes training, instructional materials, and supervision, as an incentive for teachers. Instructional support may contribute to teacher's sense of personal efficacy, or teacher's belief that they can help students learn. A teacher who does not know what to do in the classroom and has little opportunity to learn will eventually attend less, or if he or she attends, they will use instructional time for other activities (Ashton and Webb, 1986).

Kemmerer argues that instructional materials play a crucial role in teachers' assessments of their own instructional competence. Teachers are more likely to acquire a sense of competence when they are provided with a blueprint for organizing students, presenting the lesson, and providing feedback and practice. In this regard, textbooks, particularly in developing countries where other reading materials are scarce, have been shown not only to affect teacher performance but to have a separate and independent effect on student learning (Heyneman, Farrell, and Sepulveda-Stuardo, 1981; Verspoor, 1986; Sepulveda-Stuardo and Farrell, 1983).

Kemmerer also argues that teachers, particularly new ones, require supportive supervision. The principal is in the best position to observe and influence teachers

(Lockheed and Verspoor, 1991). The support, recognition, and approval of principals are key factors in changing teaching practices (Chapman 1983; Fullan and Pomfret 1977; Waugh and Punch 1987). A study of primary school effectiveness in Burundi documents a strong and significant relationship between the frequency of teacher supervision by the school principal and student achievement: student test scores rose as the number of times the school principal visited the classroom increased. Frequent teacher supervision improved the punctuality of teachers and their adherence to the curriculum, which in turn produced higher scores (Eisemon, Schwille, and Prouty 1989).

Traditionally, principals have worked under highly centralized education systems that limit their power and autonomy in making decisions related to the core business of school – teaching and learning. The Ministry of Education in many countries (e.g. China, Thailand, Singapore, Malta, Nigeria, Pakistan) solely designs a unified national curriculum, syllabus, materials and exams and guides funding and staffing schools including teacher selection, recruitment and staff development (Oplatka, 2004). The only decision that principals have authority to make is the allocation of teachers to the various classes in the school (Fenech, 1994). Principals have mainly been engaged as school managers maintaining discipline, ordering equipment, determining staffing needs, scheduling activities, managing school finances and resources, allocating staff, and ensuring that teachers keep accurate records (Chapman and Burchfield, 1994; Chi-Kin Lee and Dimmock, 1999). As a result, principals are more inclined to perform an administrative function than an instruction-oriented function.

Principals in developing countries function as the lower link in an organization chain that extends from the school through district supervisors to the central ministerial

staff (Lockheed and Verspoor, 1991). They are usually former teachers selected to be principals mainly for their seniority rather than for their personal traits or performance. Principals often operate under significant constraints, such as chronic shortage of materials, operating funds, and staff development resources, which make instructional improvement extremely difficult to achieve. Also, principals are overburdened with administrative tasks and find it difficult to make time for instructional improvement. The extent to which principals regard supervision as part of their responsibility varies across countries since it is often performed by district inspectors or teacher supervisors that are usually far removed from the schools and their teachers. However, as a by-product of decentralization, principals are expected to take responsibility for supervision. This last point is crucial in terms of expecting principals to spearhead any school improvement efforts towards student achievement (Chapman, 2000).

School principal training before the appointment is virtually nonexistent among developing countries, except for on-the-job training for a teacher who has served as a deputy or assistant principal. Studies in Egypt, Indonesia, and Paraguay have found that a principal's teaching experience and instructional leadership training (number of courses taken) are related to higher student achievement (Fuller 1987; Heyneman and Loxley 1983; Sembiring and Livingstone 1981). However, only a handful of countries, such as China, Ethiopia, Kenya, Malaysia, Papua New Guinea, the Philippines, and Thailand, have addressed the need to improve school management, primarily by establishing institutions to train school principals (Lockheed and Verspoor, 1991). Such institutes face three problems. First, they cannot accommodate the number of new principals needed to run the burgeoning number of schools. Second, no consensus has been reached about

what the curriculum should reflect and who should provide the training. Institute staff often transplant curricula and methodologies derived from their overseas training without adapting them to the sociocultural context and needs of their country and community. Third, the national policies for training administrators are not coherent, which hinders the effectiveness of these institutes (Lockheed and Verspoor, 1991; Chapman, 2002; Hallinger and Leithwood, 1996).

The aim of the current study is to address the need for improving principal's capacity to assume new roles and responsibilities in a decentralized system. The study focuses on principals in the Philippines and their capacity for providing instructional support to teachers. Principalship in the Philippines is an ideal case for examination. Principals are facing the challenges of working within a recently decentralized education system while learning to become instructional leaders through formal training. The following section discusses how principal's capacity to meet instructional leadership challenges are conceptualized and contextualized to the current research.

### Conceptual Framework

In order to study Filipino principals' perceived capacity for providing instructional support to teachers, the construct of self efficacy as discussed by Bandura (1977) is employed. The construct of self-efficacy is grounded in social cognitive theory and consists of two dimensions: personal self-efficacy and outcome expectancy. Personal self-efficacy is defined as "a judgment of how well one can execute courses of action required to deal with prospective situations" (Bandura 1982, p. 122). Outcome expectancy on the other hand, is defined by Bandura (1977) as "a person's estimate that a given behavior will lead to certain outcomes" (p. 193). Bandura (1982) asserts that

behavior is best predicted through examination of both self-efficacy and outcome expectancy beliefs. Self-efficacy is a cognitive construct that is task and context specific (Bandura, 1977).

The use of self efficacy in this study follows the investigation of supports cultivating principals' sense of efficacy by Tschannen-Moran and Gareis (2004). The authors define principal's sense of efficacy as a judgment of his or her capabilities to structure a particular course of action in order to produce desired outcomes in the school he or she leads. McCormick (2001) further specifies it is as the principal's self-perceived capacity to perform the cognitive and behavioral functions necessary to regulate group processes in relation to goal achievement. Together, the authors explain *principals' perceived capacity*, as applied to this study.

Tschannen-Moran and Gareis (2004) explain that the role of self-efficacy beliefs in effective leadership is multifaceted. Perceived self efficacy has been found to influence analytic strategies, direction-setting, and subsequent organizational performance of managers (Paglis and Green, 2002; Wood and Bandura, 1989). A robust sense of efficacy is necessary to sustain the productive attentional focus and persistent effort needed to succeed at organizational goals (Wood and Bandura, 1989).

Tschannen-Moran and Gareis (2004) also explain that, as school leaders, principals must facilitate group goal attainment by establishing and maintaining an environment favorable to group performance. Drawing the connection between social cognitive theory and leadership, McCormick (2001) notes that,

“Successful leadership involves using social influence processes to organize,

direct, and motivate the actions of others. It requires persistent task-directed effort, effective task strategies, and the artful application of various conceptual, technical, and interpersonal skills” (p. 28).

Leadership self-efficacy has been related to performance evaluations by observers in both leadership simulations and in ratings by peers and superiors in actual work settings (Chemers, Watson, and May, 2000; Paglis and Green, 2002). In these studies, the self-efficacy beliefs of leaders were also shown to impact the attitude and performance of followers. Leaders’ perceived self-efficacy beliefs were related to subordinates’ performance abilities, as well as to success at gaining followers’ commitment to the task. The self-efficacy of organizational leaders has also been shown to mediate employee’s engagement with their work and to overcoming obstacles to change (Luthans and Peterson, 2002).

In this study, self efficacy has the potential to reveal insights into school principal’s judgment of their capacity in providing instructional supports for improved teacher performance and their judgment on whether the instructional supports will lead to improved teacher performance. It is hypothesized that the findings from this study will enable insights into how principals’ perceived capacity has the potential to gain teachers’ commitment for improved instruction and to affect their teaching abilities. Research questions guiding this study follow.

### Research Questions

The study investigates the following research questions:

1. To what extent do principals believe that they have the capacity to provide instructional supports? (*principals' perceived capacity*)
2. To what extent do principals believe that instructional supports lead to improved teacher performance? (*principals' perceived effectiveness of instructional supports*)
3. To what extent do *principals' perceived capacity* and *principals' perceived effectiveness of instructional supports* differ among principals who differ with respect to gender, school level, highest level of education attained, region, and percentage of student body living at poverty level?
4. To what extent do principals perceive Instructional Leadership training provided by SEAMEO INNOTECH to be related to their level of confidence in providing instructional supports?

### Limitations

Limitations of this study center on the use of self reported perceptions of principals, sample characteristics of respondents, and social desirability bias. Responses did not represent the general population of school principals in the Philippines since the sample was not randomly selected. The survey represents only one point in time. The time and place of survey dissemination, and the existence of others during survey completion were likely to contribute to the tendency of respondents to reply in a manner

that may be viewed favorably by others. Principals may have over estimated their sense of efficacy leading to social desirability bias. The external validity of the results of this study was limited by the lack of information regarding the selection criteria for school principals to participate in the Instructional Leadership training provided by SEAMEO INNOTECH. This was also a factor limiting internal validity.



## CHAPTER 2: LITERATURE REVIEW

This chapter provides a review of the literature organized into five major components. First, the discussion focuses on issues related to the role of the school principal in a decentralized education system, and the significance of school-based management and instructional leadership in re-formulating the role of the school principal. Second, the discussion turns to understanding principals' self-efficacy and how it is measured. Third, instructional leadership is linked to teacher incentives influencing teacher self-efficacy. Fourth, school leadership training is discussed and the potential for shaping principals' self-efficacy. And, finally, school-based management, school leadership, and training are discussed in the context of decentralization in the Philippines. The chapter ends with the research questions central to this study and hypotheses.

### Role of the School Principal in an Era of Decentralization

Policies toward decentralization of the education sector exist in almost every country in Asia. However, there is considerable difference in the form it takes within each country context. Decentralization is generally defined as the devolution of authority and responsibility for schools from the central-level administration to intermediate-level organization and ultimately to schools (Chapman, 2002; Zajda, 2004). Much of the literature explaining decentralization of education discusses the challenges specific to central-level administration (i.e. Ministries of Education) and intermediate-level organizations (i.e. district authorities) in decision-making processes and the changes necessary to the functions within those levels of management (ADB, 2001b, 2002). A segment of the literature discusses the challenges school-level management (i.e. school principals) must face in taking on new responsibilities inherited by central-level

administration and the changes demanded to operate effectively in their new roles towards school improvement (King and Ozler, 1998; Leithwood and Menzies, 1998; Chapman, 2000; Gamage and Sooksomchitra, 2004; Grauwe, 2005).

Within this segment, Chapman (2000) acknowledges the fact that decentralization is placing new pressures on the school principal that few are prepared to meet while emphasizing the urgency of strengthening and then supporting school-level management across Asia. Chapman (2000) also provides insight into how the increasing significance of improving education quality and the increasing competition for resources affect the revised role of school principals, which are crucial factors others miss when considering the future of school leadership in Asia.

Chapman (2000) explains that, in theory, school principals have responsibility in four areas. First, school management, which includes ordering supplies, ensuring teachers are hired and assigned, information gathering, and basic record keeping, is viewed in many countries as the school principal's chief set of responsibilities. Second, school-ministry communications, which consists largely of completing reports required by the central ministry, is a major task for school principals in some countries. Third, school-community relations involve working with community councils, community development associations, parent-teacher associations (PTAs), parent groups, and other local organizations that have interest in the schools. The goal is often to encourage community support of the school such as by gaining donations for facilities construction and maintenance or teacher subsidies. Finally, instructional supervision is the responsibility most directly linked to the quality of teaching. However, the extent to which school principals regard instructional supervision as part of their responsibility varies across

countries, as instructional supervision often falls on the shoulders of district inspectors or teacher supervisors that are usually far removed from the schools and their teachers. As a by-product of decentralization, school principals are expected to take full responsibility for instructional supervision, despite the fact that this function is the least engaged by school principals to begin with. This last point is crucial to understand in terms of expecting school principals to spearhead any school improvement efforts towards student achievement (Chapman, 2000).

The level of responsibility of the school principal is further compounded by the pressures for improved education quality and greater efficiency within education systems that exist in most Asian countries. The urgency for strengthening and supporting school-level management is not only due to the new wave of decentralization, but also as a result of demographic and economic trends seen in many Asian countries. Chapman (2000) argues that many countries are experiencing near universal access and leveling of enrollment growth at the primary school level which increases attention to improving the quality of education. One consequence of this shift to quality is that administrators at all levels of the education sector, particularly school principals, will need a better understanding of the teaching and learning processes and which actions are likely to improve the quality of education. Even when resources are available, the problem school principals face in improving school quality is knowing which inputs and actions will lead to positive outcomes in student learning. The competition for scarce resources is huge in many Asian countries due to issues of poverty, epidemic, and pollution that continuously lead governments to allocate resources to causes of catastrophe. Spending on education is often dismissed and the long-term gains offered by education are minimized (Chapman,

2000; Chapman and Adams, 1998). For that matter, administrators at all levels need to become increasingly articulate about the pay-off of continued investment in education, knowledgeable about strategies that are effective in producing those outcomes, and skilled at moving the system toward those ends with even fewer resources. School principals not only need to know a great deal about the teaching and learning processes, but about management as well (Fuller, 1987; Chapman 2000).

### School-Based Management

Within the literature of decentralization is discourse on school-based management (SBM), or the form of decentralization that identifies the individual school as the primary unit of improvement and relies on the redistribution of decision-making authority as the primary means through which improvement might be stimulated and sustained (Malen, Ogawa, and Kranz, 1990). The most common arguments supporting SBM are as follows (Grauwe, 2005): 1.) School-based management is more democratic since it allows for teachers and parents to make decisions about education rather than leaving those decisions up to a select group of central-level officials; 2.) School-based management is more relevant as the decision-making power is closest to where problems are being experienced – in the school; 3.) School-based management is less bureaucratic because decision making process is limited to the management level close to the school; 4.) School-based management allows for greater accountability. The implication of giving school leaders and teachers greater authority is that they can be held directly accountable to parents and the community; and 5.) School-based management allows for greater mobilization of resources since parents and the community at large can have a voice in the organization and management of the school.

Empirical studies by Leithwood and Menzies (1998), Fullan (1993), and Whitty and Power (1997) conclude that there is no firm, research-based knowledge about the direct or indirect effects of SBM on student achievement and suggest that all claims that there is likely to be some sort of pay-off for students must be reconsidered given the lack of research-based support. However, studies point to certain interventions promoted by SBM such as planning, monitoring, and communication having the potential to yield necessary conditions for school improvement. Gaziel (1998) concludes from a study of Israeli schools that greater SBM has a positive impact on teacher motivation and commitment and on the school's achievement orientation. Studies from the United Kingdom and New Zealand report that the increased decision-making power of school principals allows them to introduce innovative programs and practices (Williams, et.al., 1997). Leithwood and Menzies (1998) and Malen and Ogawa (1988) emphasize the crucial role of the school leader in determining what the consequences of school-based management will be. This is especially the case in terms of guiding teachers and engaging the community in supporting school improvement and student achievement.

#### Instructional Leadership

Instructional leadership refers to a series of behaviors designed to affect classroom instruction. Such behaviors include principals informing teachers about new educational strategies and tools for effective instruction, and assisting them in critiquing them to determine their applicability in the classroom (Leithwood, 1994; Whitaker, 1998). Jantzi and Leithwood (1996) define six dimensions of instructional leadership: 1.) identifying and articulating a vision; 2.) fostering the acceptance of group goals; 3.) providing individualized support; 4.) providing intellectual stimulation; 5.) providing

appropriate modeling / mentoring; and 6.) holding high performance expectations. Andrews and Soder (1987) describe the effective instructional leader as a resource provider, instructional resource, communicator, and visibly present in the school.

A number of research studies from developed countries have examined the importance of the principal's role as an instructional leader, as well as the relationship between their efforts in changing instructional practice to improve student achievement. Heck et al (1990) acknowledge that principal behaviors aimed at improving student achievement do not have the same direct impact on learners as does instruction by the classroom teacher. Siens and Ebmeier (1996) concur and found that while principals have strong, direct effects on intermediate school variables, such as teacher attitudes, they have little direct effect on student outcomes. Quinn (2002) concludes that since principals are removed from the classroom, they can only influence student achievement indirectly by working through teachers.

Hallinger and Heck (1996) state that the most theoretically and empirically robust models used to study school leadership effects show that principals can influence student achievement when efforts are aimed toward influencing internal school processes. These internal processes range from school policies and norms (e.g. academic expectations, school mission, student opportunity to learn, instructional organization, academic learning time) to the practices of teachers. A number of studies reveal school goals (or sustaining a schoolwide purpose focusing on student learning) as a significant factor of school principalship (Brewer, 1993; Bamberg and Andrews, 1990; Glasman and Fuller, 1992; Goldring and Pasternak, 1994; Hallinger and Murphy, 1987; Heck et al., 1990; Leithwood, 1994; Silins, 1994).

Leithwood, Louis, Anderson, and Wahlstrom (2004) state that principals' structuring of teachers' working conditions have both direct and indirect effects on teaching and student achievement. The literature suggests that principals of effective schools are those who devote more time to the coordination and control of instruction, perform more observations of teachers' work; discuss work problems with teachers; are more supportive of teachers' efforts to improve (especially by distributing instructional materials or promoting in-service training activities); and are more active in setting up teacher evaluation procedures. The literature also suggests that principals of effective schools show a higher quality of human relations. They recognize the needs of teachers and help them achieve their own performance goals. They also encourage and acknowledge teachers' good work. Gross and Herriott (1965) report that highly effective principals have a positive impact on teacher morale, leading to increased teacher effort, which has a positive impact on student performance.

The literature on effective schools also shows that effective principals are more powerful over making decisions regarding curriculum and instruction than those in ineffective schools. Studies conducted in the United States show that strong district involvement in curriculum and instruction that supports principals' instructional goals is yet another aspect of an effective school (Leithwood, Strauss, and Anderson, 2007). However, district involvement is dependent upon principal's power within the district. In addition, principals of effective schools are effective within the community. They understand community power structures and maintain appropriate relations with parents.

Workplace factors such as teachers' job satisfaction, sense of professionalism and influence, collegial trust, and opportunities to collaborate influence how leadership is

exercised in school, but less is known about how principals contribute to them (Wahlstrom and Louis, 2008).

### Principal's Self Efficacy for Instructional Leadership

A segment of the literature on school leadership focuses on principal's sense of efficacy. The construct of self-efficacy is grounded in social cognitive theory (Bandura, 1977, 1986, 1997). It consists of two dimensions: personal self-efficacy and outcome expectancy. A principal's sense of self-efficacy is a judgment of his/her capacity to structure a particular course of action in order to produce desired outcomes in the school he/she leads (Bandura, 1997). Outcome expectancy is a principal's estimate that certain actions they perform will lead to desired outcomes in the school (Bandura, 1982). Efficacy and outcome expectations are differentiated because individuals can believe that a particular course of action will produce certain outcomes, but if they have doubts about whether they can perform the necessary activities then such information does not influence their behavior (Bandura, 1977).

Self-efficacy and outcome expectancy affect the development and skillful execution of functional leadership strategies (McCormick, 2001). Bandura's (1997) theory of triadic reciprocal causation is the theoretical rationale explaining the relationship between principals' sense of efficacy and their performance, use of power, and coping strategies. Triadic reciprocal causation focuses attention on the interaction between internal and external factors at work in a leadership context. Principals' behavior is influenced by their internal thoughts and beliefs, but these beliefs are shaped by elements – including other individuals – in the environment.



Bandura (1997) explained four main sources of efficacy information: 1.) Mastery experiences or learning that results from performing the behavior; 2.) Exposing individuals to others of similar capabilities who have successfully performed the behaviors (vicarious learning); 3.) Verbal persuasion used to convince people through discussion that they can perform a particular behavior; and 4.) Emotional states experienced by the individual when performing actions. Self-efficacy expectations are acquired through an individual's processing of the four main sources of efficacy information in the environment. The most reliable source is mastery experiences or learning that results from performing the behavior. Other sources that impact self-efficacy are vicarious experiences. Exposing individuals to others of similar capacity who have successfully performed the behavior fosters vicarious learning. The third source of information, verbal persuasion, is used to convince people through discussion that they can perform a particular behavior. Verbal persuasion is readily provided through praise and encouragement. Emotional states are the fourth source of information that can influence self-efficacy. Individuals rely on physiological feedback to judge their capabilities. Individuals are more likely to expect success when they do not experience anxiety, fatigue, and other symptoms of physical inefficacy (Berarducci and Lengacher, 1998).

Bandura (1997) states that the construct of self-efficacy differs from the colloquial term "confidence." Confidence is a nondescript term that refers to strength of belief but does not necessarily specify what the certainty is about. Principals can feel very confident about an endeavor, but may not succeed in it. Confidence is a catchword rather than a construct embedded in a theoretical system.

The literature on principals' sense of efficacy is small. Most of the research studies are mainly conducted in the United States with very few conducted in developing countries (DeJaeghere et al, 2008; Chapman and Burchfield, 1994). Also, most of the studies are limited to only one dimension of the construct: personal self-efficacy. However, findings have been intriguing. Empirical studies conducted in developed countries show that principals with a strong sense of self-efficacy are persistent in pursuing their goals and more flexible and willing to adapt strategies that meet contextual conditions. They view change as a slow process. They are steadfast in their efforts to achieve their goals, but they do not persist in unsuccessful strategies (Osterman and Sullivan, 1996). When confronted with problems, high efficacy principals do not interpret their inability to solve the problems immediately as failure. They regulate their personal expectations to correspond to conditions, typically remaining confident and calm and keeping their sense of humor, even in difficult situations. Principals with higher self-efficacy are more likely to use internally-based personal power, such as expert, informational, and referent power, when carrying out their roles (Lyon and Murphy, 1994).

In contrast, low efficacy principals have been found to perceive an inability to control the environment and tend to be less likely to identify appropriate strategies or modify unsuccessful ones. When confronted with failure, they rigidly persist in their original course of action. When challenged, they are more likely to blame others. Low-efficacy principals are unable to see opportunities, to develop support, or to adapt (Osterman and Sullivan, 1996). They are more likely to see themselves as failures and exhibit anxiety, stress, and frustration. Those with lower self-efficacy are more likely to

rely on external and institutional bases of power, such as coercive, positional, and reward power (Lyons and Murphy, 1994). The perception of the environment as uncontrollable has a debilitating effect on individual goal setting and problem solving. These findings are consistent with findings by Janis and Mann (1977):

“...those who perceive themselves to be inefficacious adopt faulty decision strategies characterized by inadequate identification and assessment of alternatives and incomplete evaluation of feedback,” (Osterman and Sullivan, 1996, p. 681).

#### Cultivating Principals' Sense of Efficacy

The organizational context in which a leader works is an important influence on what he or she can do (Bolman and Deal, 2003). A contextual characteristic that is expected to influence leaders' sense of efficacy is the degree to which the work environment is open to change (Kanter, 1983, 1999; Scott and Bruce, 1994; Tichy and Ulrich, 1984). An atmosphere that is supportive of change is one that encourages creative thinking, encourages risk taking over maintaining the status quo, tolerates diversity of opinions, and promotes trying different approaches for solving problems (Howell and Higgins, 1990; Kanter, 1983, 1999; Scott and Bruce, 1994; Siegel and Kemmerer, 1978).

In addition to a conducive atmosphere, introducing changes to work processes often requires resources in the form of personnel, equipment, funding, or, most simply, time. Lack of resources can be a serious roadblock in a leader's path to accomplishing improvements (Scott and Bruce, 1994; Stewart, 1982). A leader's self-efficacy for successfully leading change may be diminished if resources are viewed as inadequate for supporting change efforts.

Because leaders rely on subordinates to help accomplish goals, their skills, abilities, and other performance characteristics are significant factors in whether or not problems standing in the way of successful change can be overcome (Chemers, Watson, and May, 2000; Paglis and Green, 2002; Hackman and Morris, 1975). Whereas routine managerial tasks can sometimes be accomplished via autocratic methods, leading change requires persuasion and collaboration (Kanter, 1983). A study by Tschannen-Moran and Gareis (2005) found that interpersonal support principals received from school personnel, students, and parents played a large role in shaping principals' sense of efficacy. Teacher support was most strongly correlated with principals' sense of self-efficacy.

Another organizational factor expected to influence leaders' self-efficacy is job autonomy. In order for leaders to feel confident in their ability to lead change efforts, their jobs need to provide them the opportunity to set new directions, build relationships and gain followers' commitment, and take the actions necessary to overcome obstacles. The leader must have some choice about what to do and how to do it (Stewart, 1982; Yukl, 1994). Job autonomy is linked to principal job satisfaction. Studies examining the difference between urban and suburban principal satisfaction in the United States reveal that suburban principal satisfaction is more affected by favorable impressions of the work environment more influenced by issues pertaining to student achievement, recognition, involvement, and support. Urban principal satisfaction is more affected by salary considerations, security, and advancement (Derlin and Schneider, 1994).

The literature also includes studies examining the link between principal self-efficacy beliefs for instructional leadership and demographic and contextual factors; although Tschannen-Moran and Gareis (2005) found that demographic and contextual

variables were not strong predictors of principals' self-efficacy beliefs. Research by Smith et al. (2003) found that principals in the United States working with higher proportions of the student body receiving free/reduced lunch, and those working in large schools reported higher self-efficacy beliefs for instructional leadership. The authors also report that female principals had higher self-efficacy beliefs for instructional leadership than males. Female principals also reported spending more time on instructional leadership than males. In the same vein, DeJaeghere et al (2008) found that female principals in Uganda placed a higher importance on creating workplace relationships, motivating students, and assessing overall teacher performance than their male counterparts. Research by Oplatka (2004) found middle and late career principals to have a higher sense of self-efficacy for instructional leadership. A study by DeMoulin (1992) found that level of education was related to high self efficacy of middle and high school principals, but not for elementary school principals.

Factors associated with how principals' approach their jobs relate to some demographic factors linked to principal self-efficacy. School characteristics, such as community type and homogeneity, school size, student socioeconomic status, and school level, have been found to influence how principals approach their jobs (DeJaeghere et al, 2008; Goldring, 1990; Hallinger and Murphy, 1987; Leithwood et al., 1990). Research suggests that personal characteristics such as gender and prior teaching experience also influence how principals enact their role (DeJaeghere et al, 2008; Boyan, 1988; Hallinger and Murphy, 1986; Leithwood et al., 1990; Bossert et al., 1982; Dwyer, 1985; Glasman, 1984).

Hallinger (1993) asserts that context, particularly facets of the school's socioeconomic environment, appears to influence the type of leadership that principals exercise. A study by Hallinger and Murphy (1986) demonstrates how community socioeconomic status influences the type of leadership the principal exercises. The results from this study indicates that the school's socioeconomic status moderates in-school processes such as patterns of organization and emphasis on basic skills, as well as principal's exercise of instructional leadership (i.e. teachers were given greater flexibility and autonomy in higher SES schools).

#### Constructing Principal Self Efficacy Scales

Self-efficacy beliefs are context-specific (Bandura, 1997). People do not feel equally efficacious for all situations. Principals may feel efficacious for leading in certain contexts, but this sense of efficacy may or may not transfer to other contexts. Therefore, it is necessary to consider the elements of a task when making an efficacy judgment. Also, it is necessary to assess one's strengths and weaknesses in terms of task requirements (Tschannen-Morean, et al, 1998). In analyzing the task, the relative importance of factors that make leading difficult or act as constraints in a particular context are weighed against an assessment of the resources available that facilitate leadership. In assessing self-perceptions of competence, the principal assesses personal capabilities (skills, knowledge, strategies, or personality traits) against personal weaknesses or liabilities in their particular school setting (Tschannen-Moran and Gareis, 2004). It is the interaction of these two components that leads principals to judge their sense of leadership capacity.

Bandura (2001) recommended that self-efficacy measures should assess the range of behaviors necessary to succeed at a given task in context. Self-efficacy measures should examine both level and strength of efficacy beliefs. Level refers to task difficulty. A range of tasks at varying degrees of difficulty should be used to tap efficacy beliefs. The strength of efficacy beliefs should be assessed by asking respondents to identify a point along a continuum of beliefs rather than an “all or none” or “yes-no” format.

Tschannen-Moran and Gareis (2004) argue that principal’s sense of efficacy has been difficult to capture given its context-specific nature. The authors conducted three studies in search for a valid and reliable measure to capture principals’ sense of self-efficacy. In the first study, an adaptation of an existing measure by Dimmock and Hattie (1996) was tested. This measure employed vignettes asking principals to make judgments about their effectiveness in handling various situations they might encounter in their schools. Originally developed to measure self-efficacy among principals in Australia, the items were adapted to better suit situations that principals face in the American context. The authors found this strategy to be problematic because the measure did not stand up to statistical testing.

In the second study, a measure based on the model by Goddard et al. (2000) was tested. This measure was devised to capture both principals’ assessment of the capabilities they brought to the task, as well as their assessment of the difficulty of the task. A problem emerged with this measure because when the difficulty of the task was measured as a separate dimension in an index, it was found that the index of task difficulty artificially drove down the efficacy score for anyone who acknowledged

working in a more difficult environment, whether or not that person felt he or she had the skills and motivation to meet the challenges for the task or not.

In the third study, a measure adapted from Tschannen-Moran and Hoy (2001) was employed. The measure captured the context-specific nature of self-efficacy beliefs by embedding the context of each of the questions through the directions (Example: “Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position.”) and the sentence stem for each of the items (“In your current role as principal, to what extent can you. . .”). Tschannen-Moran and Gareis (2004) found that this strategy proved to be reasonably successful in making the instrument context specific without sacrificing the ability to make comparisons across contexts. The authors consider this as the most promising of the three approaches tested.

#### Instructional Leadership Practices as Teacher Incentives

Many countries – developed and developing – are interested in devising teacher incentive systems that will shape teacher behavior to improve quality of classroom instruction, and in turn student achievement. Chapman, Snyder, and Burchfield (1993) state that a major constraint in formulating an effective teacher incentive system is that there has been little empirical investigation of the extent that incentives shape teacher behavior in the desired ways or the types of incentives that have the greatest impact on teacher practices.

Chapman, Snyder, and Burchfield (1993) explain how the linkage of incentives to performance operates in two ways:



“Direct linkage is most consistent with behavioral theory, as rewards and reinforcement are connected to specific patterns of classroom performance. An example of direct linkage is illustrated by supervision, in which school principals observe teaching, give immediate feedback, and offer positive reinforcement (praise, recommendations for promotion, etc.) to teachers who are implementing the desired behaviors and negative reinforcement to teachers who are not. Indirect linkage assumes that teachers know what pedagogical practices are expected of them and that failure to comply is due to situational constraints. When teachers perform more effectively, they receive reinforcement from extrinsic (praise from instructional supervisors and community leaders) or intrinsic (personal sense of accomplishment) sources. Examples of indirect incentives include the provision of instructional materials and training,” (p. 303).

Literature on teacher efficacy provides insights into how direct and indirect incentives should support and motivate teachers toward improved instruction and student achievement. Research links actions related to instructional supervision such as classroom observations and detailed feedback to improved instruction, teacher self-efficacy, and teacher attitudes toward professional development (Freedman, 2003; Fullan, 1995; Glickman, 2002; Ebmeier, 2003). Research also links professional development, or teacher training, to producing changes in teacher efficacy beliefs, but not in changes in teachers’ sense of outcome expectancy (Riggs, 1995; Ramsey-Gassrt, et al. (1996); Posnanski, 2002; Zambo and Zambo, 2008; O’Sullivan, 2002). Studies suggest that influence on teacher efficacy is directly associated with the level of experiential or constructivist learning opportunities provided through the training program. Labone

(2004) suggests that teacher efficacy is also influenced by teacher training programs that provide opportunity for teachers to reflect upon their practices.

The literature also suggests that teachers' outcome expectancy may be affected by their perceptions of resources available to them to accomplish the task of teaching. A study by Lumpe, Haney, and Czerniak (2000) determined that a positive correlation existed between environmental factors and outcome expectancy. Environmental factors included support from administrators, availability of common planning time, reduced class size, and resources such as instructional materials. Kemmerer (1990) states that instructional materials are a very important resource for teachers in developing countries. Chapman et al (1993) posit that the provision of instructional materials is one of the most important ways of supporting the teacher and enhancing student achievement. The availability of instructional materials is posited to operate as an incentive in both direct and indirect ways. As a direct incentive, good instructional materials serve to select, organize, sequence, and pace the presentation of content, thereby reducing the complexity of the teachers' preparation and presentation. Good materials can help compensate for weak or uneven teacher preparation, providing students with an effective presentation of content even when the teacher is unable to do so. Instructional materials operate as an indirect incentive to the extent that systematic and well targeted presentation of the content results in increased student achievement which, in turn, reflects positively on the teacher, enhancing their sense of professional efficacy and job satisfaction.

### School Leadership Training

As shown in various sections of this literature review, there is a dire need for training school leaders in the Asia Pacific region. Chapman (2000) points out that the major reason for the deficiencies among school leaders is that training (whether preservice or inservice) is often unavailable, inadequate, or inappropriate. Additionally, opportunities and incentives for advancement, clearly defined career paths, and systems for assessing performance are absent. The lack of such inputs not only hinders the professional development of school leaders but also dampens their motivation to perform well (Lockheed and Verspoor, 1991).

The literature on school improvement includes some mention about training of education managers. Some researchers have observed that most training for education managers has been skill focused (e.g. how to budget, analyze data, and design an evaluation) while much of the need is for strategic thinking, analysis of cross-impacts, and ability to work with constituent groups (Adams, 2002; ADB, 2001, Chapman, 2000). Chapman (2000) observes:

“...even if education managers have strategic planning skills, they often lack a firm understanding of the educational process. They do not know what inputs and processes can reasonably be expected to contribute to increased student learning. Lacking this, managers are left to retract to daily events and political pressures. One implication is that managerial training needs to provide education managers with some framework for understanding the educational process and information

on which interventions have the best chance of yielding promising outputs,” (p. 304).

Chapman (2002) states that the delivery of administrator training in the Asia-Pacific region has been organized in three ways: 1.) training of entry-level supervisors and managers; 2.) extended training in fundamental skills for existing managers and technicians; and 3.) professional development and skill upgrading of existing managers. Such training has been conducted through four primary mechanisms: in-house training capacity, centralized government training facilities, non-government training facilities (such as local universities), and on-the-job training. These differ in both cost and the type of training they are best able to deliver. Skill-based training is delivered faster and is less expensive; whereas more conceptually based training takes longer and is more expensive. One seemingly unanticipated outcome of the move toward decentralization is the cost of preparing lower-level managers to make choices that were once reserved for top-level management.

Short-term training (skills-based) is widely used because it is easy to design and deliver, reasonably inexpensive, and does not pull managers away from their ongoing responsibilities for long periods of time. However, there is growing doubt that short-term training makes much difference in improving the overall management of the education sector. Chapman (2002) provides two reasons for this. First, the integration of formal training with practice has been weak; the training tends to be too short, and lacks adequate supervised practice and follow-through. Second, trainees find few incentives and little support for implementing their new skills in their work setting.

One reason for the limited impact of training is the way it has been delivered. A common means of short-term, inservice training has been the cascade model, which assumes that by training trainers, new supervisory and management skills can be effectively disseminated to successively lower levels of the system. Chapman (2002) states that there is ample evidence that shows that comprehensive dissemination rarely takes place without consistent follow-up and support.

Chapman (2002) also highlights the mistake that many governments make in believing that because short-term inservice training has a lower cost, it is more efficient. The assumption has been to believe that if individuals have defined positions within their hierarchies, the most important training is that which provides them with skills to do their jobs.

A number of researchers provide recommendations for school leader training in light of decentralization. Chapman (2002) and ADB (2001) state that training needs to concentrate on three dimensions: 1.) technical skills associated with managing a district or school, 2.) knowledge about the pedagogical process, and 3.) community relations. Lockheed and Verspoor (1991) recommend that both preservice and inservice training programs should concentrate specifically on developing instructional leadership skills. This recommendation perhaps stems from the fact that with few exceptions, instructional supervision is the function least well served by the school leader, as discussed earlier in this paper.

Some researchers also provide insight into the components of a well-designed training program. Wortley (1997) states that a well-designed training program that has the potential for effective transfer should satisfy the following conditions: 1.) training

context should approximate the workplace; 2.) the more emphasis on rules and general principles, the greater the chances of training being effective because trainees may be confronted with conditions that are slightly different from the training context; 3.) training should include a variety of training techniques such as use of video, simulation, role modeling, and lectures; 4.) training should be extended over a period of time.

### Shaping Principal Self-Efficacy through Training

Earlier in this literature review, the construct of self-efficacy was discussed as an important element in understanding the underlying dynamics influencing school leadership. Chapman and Burchfield (1994) posit that understanding how principals assess their capacity to perform activities for improving educational quality is not only a prerequisite to effectively introduce education reform initiatives that require headmaster support, but it is also an essential input in the design of pre- and in-service training programs intended to strengthen management capacity at the school level.

Chapman and Burchfield (1994) state that efficacy can be learned. Efficacy is strongly shaped by experience. Efficacy beliefs shape how leaders evaluate new events and opportunities and influence the extent to which they are willing to implement new programs, procedures, and practices in their school. School leaders' experience with school dynamics shapes their efficacy beliefs which, in turn, shape the way they subsequently view the flow of events around them. The relationship is non-recursive, each influences the other. This cycle can be broken by targeted interventions that offer "new learning" (Chapman and Burchfield, 1994).

Training that aims to shape self-efficacy must ensure that leaders have both the skills necessary to act in the desired ways and an understanding of the links between the behaviors and the desired achievement outcome. Either factor alone is incomplete. However, while skill acquisition involves only new learning, efforts to increase leaders' understanding of the efficacy of various practices often involves undoing prior learning, which is based on accumulated experience and interpretation of the operating dynamics of the school (Chapman and Burchfield, 1994).

As discussed earlier, Bandura's model specifies four sources of efficacy expectations, or sources of influence, on self-efficacy beliefs: are mastery experiences, physiological and emotional states, vicarious experiences, and social persuasion. The sources can be utilized in the design of professional development programs to specifically address change in both self-efficacy and outcome expectancy (Khourey-Bowers and Simonis, 2004). Bandura (2000) proposes three specific approaches for developing self-efficacy in managers. First is *guided mastery*, which includes instructive modeling to acquire a skill or competency, guided skill perfection, and then transfer of the training back to the job context to ensure self-directed leadership success. Second is *cognitive mastery modeling* in order for the novice leaders to learn thinking skills and how to apply them by observing the decision rules and reasoning strategies used by successful models as they arrive at solution to problems and make effective decisions. The third strategy is *self-regulatory competencies* using self-monitoring, self-efficacy appraisal, personal goal setting and the use of self-motivation incentives.

The literature on training approaches focuses mainly on pre-service and in-service teacher training based on constructivist learning theory and their impact on teacher's sense of self-efficacy. Constructivist learning is an active process in which learners construct new ideas or concepts based upon their current/past knowledge (Bruner, 1986, 1990, 1996). Bandura's model describes the constructivist learning procedures.

In a constructivist based training program teachers develop the knowledge base to effectively analyze their teaching situation and choose from a variety of strategies to enhance teaching behaviors and student learning. This may be done through *guided mastery* and *cognitive mastery modeling*. Teachers are viewed as reflective practitioners who have the implicit knowledge base and who construct and re-construct knowledge to strengthen that base. Through on-going inquiry and analysis, teachers continually re-think and re-evaluate their instructional practices and the outcome of those practices on student learning (Clift, Houston, and Pugach, 1990; Cruickshank, 1990; Lieberman and Miller, 1992; Fenstermacher, 1994; Richardson and Hamilton, 1994). This last aspect refers to *self regulatory competencies*.

Studies investigating the impact of training programs based on constructivist learning have found positive influence in teachers' sense of efficacy, yet no influence in outcome expectancy (Gist and Mitchell, 1992; Hoy and Woolfolk, 1993; Ramey-Gassert, Shroyer, and Staver, 1996; Roberts, et. al, 2001; Posnanski, 2002; Zambo and Zambo, 2008). Initial levels of self-efficacy and outcome expectancy seem to have some bearing on whether gains will be made within a professional development program (Khourey-Bowers and Simonis, 2004). Riggs (1995) reported that teachers who began



training with low scores on both self-efficacy and outcome expectancy made gains in self-efficacy scores while outcome expectancy scores remained constant. Teachers with high self efficacy and low outcome expectancy increased in both as a result of training. Teachers with low efficacy and high outcome expectancy increased in self efficacy, but remained stable in outcome expectancy.

Posnanski (2002) found that teachers' sense of self-efficacy tends to get stronger as teachers gain experience and learn more about a domain. This supports Bandura's theory that the most influential source of efficacy information is derived from mastery experiences and performance attainments because they are based on authentic experiences.

### Country Context

The Philippines is a good case in point for this study as it is a developing country facing the complexities of improving the quality of basic education while reforming the education management system in light of decentralization and school-based management.

#### *Issues in Education Quality in the Philippines*

For decades, enrollment rates at all levels of education in the Philippines were higher than those of other countries with comparable, or even higher, income levels. But, this is no longer the case. Any edge that the Philippines might have had has eroded as more developing countries such as Indonesia, Malaysia, Thailand, and Vietnam achieve higher net enrollment rates particularly at the secondary level (UNESCO, 2008). In addition, a large number of children who enter school do not complete the basic education cycle, which is comprised of both elementary (6 years) and secondary (4 years) school. About 30% of those who enter grade 1 and about 25% of those who enter first

year high school do not complete the full basic education cycle. And since transition rates from elementary to secondary school are low, the rate of secondary school completion for children who enter grade 1 is less than 50 percent (World Bank, 2003).

But much more troubling than lagging enrollment rates and completion levels is that students do not learn what they are supposed to in schools. Filipino fourth and eighth-graders performed dismally on international tests given in 1999 and 2003, ranking 36th out of 38 countries in math and science tests (NCES, 2005). In addition, Filipino students have performed poorly on several national tests. On average, students are able to answer only about one-half of the test material given in National Elementary Achievement Test (NEAT) and National Secondary Achievement Test (NSAT). Diagnostic tests given by the Department of Education in 2002 showed that only 40% of Grade 3 students had mastered the expected learning competencies in English, Math, and Science, and only 30 percent of Grade 6 students had mastered their expected competencies in these same subjects. The dismal results of the High School Readiness Test (HSRT) given in 2004 to first-year students further support the conclusion that the elementary education system fails to produce graduates who have mastered the school curricula.

Nowhere is this low achievement and low education quality more visible than in poor areas outside large cities and provincial capitals. About 33% of the population in the Philippines is living below the poverty line (NSCB, 2006). Ten out of seventeen regions of the Philippines are below the national poverty incidence. Regions 4-B, CARAGA, and ARMM are the poorest regions in the country with over 50% of the population below the poverty line. Among the country's provinces and districts of Metro Manila, Sulu had the

highest poverty incidence in 1997 and 2000 with 67.1 and 63.2 percent, respectively.

Also included among the county's poorest provinces are Masbate (Region 5), Tawi-Tawi (ARMM), Ifugao (CAR) and Romblon (Region 4-B). Two districts of metro Manila, 2nd District (Mandaluyong, Marikina, Pasig, Quezon City and San Juan) and 4th District (Las Piñas, Makati, Muntinlupa, Parañaque, Pasay City, Pateros, and Taguig), report the lowest poverty incidence with 4.1 and 4.9 percent, respectively (NSCB, 2006).

*Traditional Bureaucratic Model of Education Sector in the Philippines*

The Department of Education (DepED) is the largest department in the Philippine government, accounting for 45% of the civil service. Traditionally, the authority structure is hierarchical and highly centralized. The line of authority extends from the DepED central office through the 16 regional offices, to 134 division offices, 2,150 district offices, some 36,000 public primary schools, and almost 4,000 public secondary schools. Most of the functions are delegated to the regional offices and, more recently, to division offices. The regional offices, under the Regional Directors, supervise both division and district offices. Decisions on matters related to learning/teaching standards emanate from the DepED central office while the choice of textbooks is largely a decision of the regional offices. The regional offices are also responsible for preparing the budget. The division office, which is headed by a Division Superintendent, prepares and recommends the budget of the division office and of the individual schools in his or her division, and exercises general supervision over the schools within the jurisdiction. The Division Superintendent also has the authority to hire, promote, discipline, and redeploy public school teachers. The District Supervisor formulates plans and programs for the improvement of learning, supervises public and private primary schools and evaluates the

education achievement in the district. Decision making within the DepED emanates from the center and the top, resulting in a system that is traditionally oriented toward control rather than support and toward activities rather than results (ADB, 2002).

### *Traditional Role of the School Principal in the Philippines*

Traditionally, principals in the Philippines have been limited to school building management and maintenance responsible for repairs and placing orders for school supplies and learning resources with the appropriate authorities. The role of the school principal in the Philippines has traditionally been constrained by directives from the Central office leaving little authority over school improvement initiatives. Principals have been obliged to follow orders and mandates passed down from the Central and Regional offices that define and determine the quality of education. Principals have also been obliged to implement the national curriculum passed down from the Central office without revision or modification. Principals have had little or no authority over the management of school funds or procurement of school supplies and learning materials. Funds disbursed to the school have been managed by the Regional office. Similarly, the procurement of school supplies and learning materials has been the responsibility of supply officers at the Regional office. Also, principals have had very little influence over hiring new teachers. Teachers have traditionally applied for jobs directly to the Central office.

### *Decentralization of Education Sector Reforming Filipino School Principalship*

In 2001, the Government of the Philippines passed the Governance of Basic Education Act (Republic Act (RA) 9155) which redefined the role of field offices (i.e.

regional, division, and district) and schools in an effort to dismantle a centralized system and promote shared decision making. It also provided a framework for school principal empowerment aiming to strengthen leadership roles and school-based management within the context of transparency and local accountability. Technical assistance from the World Bank together with the Overseas Economic Cooperation Fund of Japan, and the Asian Development Bank (ADB) supported the development and implementation of RA 9155.

The model of decentralization and school-based management applied in this program is based on the assumption that school principals will be empowered through training and a network of support developed from the divisional office to assist them in providing the leadership needed to work with the School Advisory Committee (SAC/SMC) / School Management Committee (SMC), the Parent-Teacher Association (PTA), local government and other concerned parties to develop the school. The network of support will be developed through lateral coordination between and among the principal, SAC/SMC, PTA, and others. Bolman and Deal (2003) define lateral coordination as being less formalized and more flexible than authority-bound systems and rules. Lateral techniques such as formal and informal meetings, task forces, coordinating roles, matrix structures, and network organizations are meant to open communication channels between principal and stakeholders and facilitate partnership towards school improvement efforts.

Table 1 outlines the principal's duties and responsibilities defined under this model. The role of the principal in the Philippines undergoes a huge transformation after the passing of RA 9155. Through the development of the SIP, principals are given

authority to implement their own school improvement initiatives on a monthly and annual basis. Principals can guide teachers to modify the national curriculum to meet students' needs. Additionally, principals are given authority to provide teachers with enrichment opportunities through training and workshops.

School principals directly receive funding for school maintenance and other operating expenses from the Central and Regional offices. These funds are to be allocated by the principal's discretion. Also, new teachers can apply for jobs at the specific school.

Principals have the authority to recommend the hiring of a teacher which the Divisional office must approve.

Table 1

*RA 9511 Refining School Principalship in the Philippines*

1. Develop a school mission statement and set a clear perspective on school outcomes in conjunction with the SAC/SMC and PTA.
2. Develop the School Improvement Plan (SIP) in conjunction with the SAC/SMC, PTA, and divisional office.
3. Manage and allocate all personnel and physical and fiscal resources of the school as advised by the SAC/SMC.
4. Create a climate that is conducive to teaching and learning so that students may achieve high performance standards.
5. Improve student performance and be accountable for results.
6. Support and supervise teachers' classroom instruction and management with the assistance of the Master Teacher (MT).
7. Supervise curriculum implementation and its localization to ensure its relevance to students.
8. Ensure effective staff development programs are operational and that teachers' professional competence improves.
9. Evaluate and report performance of school staff based on staff evaluation criteria to district and divisional authorities.
10. Participate on a panel of key stakeholders to recommend and appoint teachers and support staff.
11. Establish school-community partnerships through SAC/SMC and other networks to gain support and resources for school improvements.
12. Ensure that school statistics are accurate and complete, and submitted to division and SAC/SMC.

(ADB, 2001a)

The principals' new roles and responsibilities defined through RA 9511 provide principals with a level of control over school improvement that did not exist earlier. Table outlines principals' areas of control upon the passing of RA 9511. First, principals are given the control to determine the overall goals and objectives for their school. Second, they are in control of devising and implementing monthly and annual school improvement plans. Third, principals are given authority to manage school funds and resources which was previously held solely by the Division office. And fourth, principals have the authority to recommend new teachers and support and supervise teachers, which was previously done by the Division Superintendent. Despite these new areas of control for the school principal, control over curriculum and standards and textbooks remains solely with the Central and Regional offices, respectively. The next section elaborates the principals' new level of control in terms of new organizational reforms and new partnerships with key stakeholders.

#### *Organizational Reform of Education Sector*

A major aspect of the decentralization model is to enable division administrators to work closely with schools in order to be better aware of school needs and have the opportunity to support school principals in improving their school. In the traditional system, this was not possible due to many administrative levels acting as filters or blocks preventing the transparent flow of information and funds. In order to correct this, the District Supervisor, as a separate management level between the school and divisional office, has been removed. As the name suggests, the role of the District Supervisor is "supervisory" in terms of inspecting schools on behalf of the division office and reporting on school misdeeds, which differs from instructional supervision as described earlier in



this paper. Under the decentralization model, this layer of management is now part of the divisional office and renamed “School Support Officer” and the function is to support and work with school management to improve school performance. The person in this role would be trained to work with the school principal in areas leading to improved school performance.

Another important aspect of the decentralization model is the school principal’s partnership with the SAC/SMC. The role of the SAC/SMC is to advise and guide the principal in the running of the school. The SAC/SMC does not have legal responsibility for its performance. The model assumes that it will provide a vital interface to link the school to the community and promote collaborative efforts toward school improvement. As the SAC becomes responsive to local needs, it is assumed that it will develop into SMC. The SMC would have a legal responsibility to ensure the school functions effectively and the quality of education continues to improve. The members of the SMC are: school principal; representative teacher selected by teachers in the school; PTA representative; Barangay Council representative; youth sector representative; and preschool teacher or early childhood or youth development worker.

As indicated earlier, the school principal is charged to work with the SAC/SMC, as well as divisional office, to develop the SIP. This plan identifies how the school will develop over a period of five years, and outlines an immediate annual plan for development. The role of the SAC/SMC is important as it helps in identifying possible inputs from the community necessary to ensure outputs and outcomes. Inputs from the community include cash or in-kind donations and time and labor from LGU (local

government unit) that the SAC/SMC may help to obtain. Inputs also include resources such as classroom furniture and learning materials such as books, posters, etc.

The DepEd has implemented the Adopt-A-School Project (RA 8525) which supports the principals' efforts in reaching out to the community for support in school improvement initiatives. This program taps the local business sector and external funding bodies for assistance with improvements such as building and facilities construction. The project is designed to foster a partnership between the central and/or local government and corporations, business establishments, nongovernment organizations and private individuals to address perennial problems of the educational system such as lack of classroom resources (desks, textbooks, etc) and learning materials (science lab equipment, maps, etc).

The principal's collaboration with the master teacher (MT) in instructional supervision is yet another significant aspect of the decentralization model. Master teachers are highly experienced classroom teachers leading school efforts to improve teacher performance. They mentor new teachers and assist with teachers' performance appraisals. By working with master teachers, principals are likely to receive the necessary support in taking on their new role as instructional supervisors. Also, collaboration with Master Teachers allows principals to accurately identify teacher training areas. Master Teachers have traditionally been involved in running inservice training (INSET) activities. The larger the school, the more Master Teacher posts. In high schools, the Master Teachers work closely with Subject Head Teachers. The Master Teacher receives a salary comparable to that of the principal, however, they do not have leadership

responsibilities as the principal does and are not held accountable for school performance.

The design of INSET supports the Division to work in collaboration with school principals or school-based INSET coordinators (i.e. master teacher) appointed by the school principal to identify teacher training needs, design and propose workshops and sessions, manage training events, and monitor and evaluate training. Funding for implementation of proposed training is subject to a process of review and approval by the Division.

*Instructional Leadership Training by SEAMEO INNOTECH*

As a response to the passing of the Governance of Basic Education Act and parallel to assistance from international agencies in decentralizing the education sector, the Southeast Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology (SEAMEO INNOTECH) designed and implemented an innovative school principalship training program, *Instructional and Curricular Excellence in School Principalship for Southeast Asia (ICExCELS)*, for public school principals throughout the Philippines and subsequently for public school principals in Vietnam, Cambodia, and Indonesia.

ICExCELS is a project under *Learning Technology for Excellence in School Principalship for Southeast Asia (LEARNTECH – eXCELS)* that aims to develop a constructivist learning system by providing learners with hands-on leadership learning opportunities in their school settings, exposure to experienced school leaders and other management professionals, and opportunities for collaborative learning and reflection. Through LEARNTECH – eXCELS, SEAMEO INNOTECH has developed a number of

multi-modal training modules whose main beneficiaries are Southeast Asian school principals. These modules include instructional leadership; leading curriculum implementation and enrichment; promoting the use of technology for instructional purposes; and introducing innovation in instruction. Each module is based on the *Competency Framework for Southeast Asian School Heads* which SEAMEO INNOTECH developed and validated with the Ministries of Education from the ten SEAMEO member states. The *Competency Framework for Southeast Asian School Heads* consists of general competency areas and enabling sub-competencies that describe what school principals are expected to do and improve on to make them more successful in performing their work. LEARNTECH – eXCELS is supported by the Department of Education – National Capital Region (DepED-NCR) and the Philippine Elementary School Principals’ Association (PEPSA). DepED-NCR nominates school principals from various school divisions to receive a scholarship to participate in the training modules.

ICExCELS is an integration of two modules: 1.) “Affirm the Instructional Leadership Roles and Functions of a School Head” and 2.) “Lead Curriculum Implementation and Enrichment”. The first module provides a clear outline of the roles and functions of the school principal in improving the teaching and learning process at the classroom level. It provides a challenge for continuous improvement and for building the school as a learning community. In this vein, the second module focuses on the basics of curriculum development and implementation and curriculum leadership. It prescribes guidelines for making the curriculum effectively respond to the school’s changing realities. Assignments for both modules require learners to apply concepts and skills

learned to their school setting. Learners must work with their teachers to complete the assigned tasks. Assigned tasks are included in Appendix A. Each task is meant to engage learners in understanding their new roles as principal and the significance of collaborating with teachers in their school to reach school improvement and student achievement goals. The tasks are also meant to be a starting point for continued collaboration with teachers and self-reflection on one's leadership actions.

The course is primarily delivered through self-study instructional modules as booklets that each learner receives upon enrolling which is then augmented by the use of an online learning platform called iFLEX, which stands for Innotech Flexible Learning Management System. iFLEX consists of interactive tools such as a synchronous chat forum, asynchronous discussion forum, and email among other learner support systems. Learners in the course automatically have access to this platform with a login and password issued to them upon enrollment. Online tutors guide the learners to think critically about what they study in the modules by having them engage in online chats and discussions on a regular basis during the four weeks. It is through this type of online communication that learners learn from each other and make sense of the concepts learned in the modules in order to be able to apply them in their own school setting. Learners are required to submit a Learning Portfolio, which consists of a reflection paper on the course, an action plan, and a self-rating checklist. The tutors evaluate the Learning Portfolio, provide feedback and rate the learner based on their participation and progress in the course. Following completion of the course, the module participants receive their rating card based on their output for each of the module components and of their performance in the course as a whole.

The experiences principals participate in during the ICExCELS training involve their own school setting and require them to work collaboratively with their teachers. For example, principals were required to meet with their teachers to identify current school problems in the areas of school management, school communications, and school community relations, and then to produce an action plan addressing the problems. Such experiences were followed up with opportunities for reflection, which served as a physiological experience since it enabled principals to explore how they felt about their role. Verbal persuasion was offered to principals during feedback on the assignments by the trainer. The trainer also served as a mentor guiding principals in understanding concepts and making connections back to their own workplace while sharing their own experiences in instructional leadership. Most trainers were educators or education managers close to the SBM efforts of the DepEd. Table 2 connects ICExCELS training components to Bandura's source of efficacy information.

Table 2

*Sources of Efficacy Information Linked to ICExCELS Training*

Training Component	Sources of Efficacy Information			
	Mastery Experiences	Vicarious Learning	Verbal Persuasion	Emotional States
Module 1	X			
Module 2	X			
Action Plan	X			
Online Discussions		X	X	X
Feedback on Assignments			X	X
Feedback during Revalidation		X	X	X

School principals in the Philippines rise through the ranks and are often promoted by recommendation from District Superintendents. Some acquire university-level course work before assuming principalship, but most take on the responsibilities of school principal without formal training. It is assumed that the average Filipino school principal would benefit from training that guided them through instructional leadership experiences directly in their own school setting. However, how and to whom such training is offered remains an issue since the DepEd has yet to mandate school principal training. To date, school principals who have participated in the ICExCELS training have been those recommended by the Division to receive a scholarship from the central DepEd for the training. Selection criteria for choosing school principals are unknown.

### Summary of Literature Review

As noted in Chapter 1, the challenges of instructional leadership are rooted in the principal-agent relationship. This literature review suggests that principals can directly impact teaching through supervision, professional development, and classroom resources. Supervision and professional development have been linked to influencing teacher efficacy beliefs, while instructional materials have been linked to influencing teacher outcome expectancy beliefs.

The literature review also suggests that principals' successful delivery of teacher incentives that influence teachers' efficacy beliefs to improve their classroom instruction is strongly dependent on how they assess their own capacity to perform activities related to the delivery of teacher incentives. Insights into how principals assess their own capacity are significant to the introduction of education reform initiatives, and in the design of in-service training programs for strengthening school leadership. Studies suggest that principal self-efficacy is cultivated through organizational context; availability of resources; interpersonal support received from subordinates; and job autonomy. Studies also suggest that demographic and contextual factors such as gender, initial preparation, point in career, school size, school level, and student SES determine principal self-efficacy. The literature does not provide insight into how principals' sense of outcome expectancy. However, it does suggest that teachers' outcome expectancy may be affected by their perceptions of resources available to them to accomplish the task of teaching.

Bandura's theory of self-efficacy suggests that principals' self-efficacy can be shaped through leadership training that enables authentic learning experiences. Studies



examining the influence of teacher training programs show a link between constructivist learning procedures and a positive influence in self-efficacy, but no influence in outcome expectancy.

The review of the literature guides the examination of Filipino principals' self-efficacy and outcome expectancy related to providing teacher incentives in a decentralized system. Based on the issues identified in the literature and country context, this study addressed the following research questions:

1. To what extent do principals believe that they have the capacity to provide instructional supports? (*principals' perceived capacity*)
2. To what extent do principals believe that instructional supports lead to improved teacher performance? (*principals' perceived effectiveness of instructional supports*)
3. To what extent do *principals' perceived capacity* and *principals' perceived effectiveness of instructional supports* differ among principals who differ with respect to gender, school level, highest level of education attained, region, and percentage of student body living at poverty level?
4. To what extent do principals perceive Instructional Leadership training provided by SEAMEO INNOTECH to be related to their level of confidence in providing instructional supports?

It is expected that the extent of *principals' perceived capacity* (self-efficacy) to provide instructional supports will be dependent on *principals' perceived effectiveness of instructional supports* (outcome expectancy). Other factors expected to determine the extent of *principals' perceived capacity* are those defined by the organizational structures within which the principal operates: 1.) level of control in providing instructional supports; 2.) time spent on instructional leadership tasks; 3.) perception of teacher capacity; 4.) perceived level of effectiveness (Principal Effectiveness), and degree of job satisfaction (Principal Job Satisfaction). It is also expected that that *principals' perceived capacity* will also be dependent on the number of years worked as educator and the number of years worked as school principal.

The extent of *principals' perceived effectiveness of instructional supports* is expected to be determined mainly by the principals' level of control in providing instructional supports.

*Principals' perceived capacity* and *principals' perceived effectiveness of instructional supports* is expected to differ among principals who differ in gender, school level, highest level of education attained, region, and percentage of student body living at poverty level.

The hands-on activities experienced through the ICExCELS program is expected to be positively related to principals' level of confidence in providing instructional supports.

### CHAPTER 3: METHODOLOGY

This study investigated four research questions. The first question assessed *principals' perceived capacity* for providing instructional supports. The second question gauged *principals' perceived effectiveness of instructional supports*. The third question tested the extent that principals' perceived capacity for providing instructional supports and their perceived effectiveness of them differed among principals who differ in selected demographic factors. The fourth question assessed how the ICExCELS training program influenced principals' perceived capacity for providing instructional supports. Survey research was conducted to answer each of the research questions.

#### Sample

Participants for this study were school principals who completed instructional leadership training through the SEAMEO INNOTECH ICExCELS program. The school principals were identified by their school superintendents to receive a scholarship from the Department of Education for participating in the training. Surveys were distributed to 1,110 school principals. Completed surveys were received from 364 school principals for an overall return rate of 33%. Sixty-eight percent of the respondents were female; 32% were male. The highest level of education attained for 71% of the respondents was Masters degree. Mean number of years working as an educator was 19 years, and mean number of years working as school principal was 6.5 years. Sixteen percent of respondents were from Region X (Northern Mindanao), 15% from Region IV-B (MIMAROPA – Mindoro, Marinduque, Romblon, and Palawan), and 14% from Region VIII (Eastern Visayas). Together, these regions account for a majority of the respondents. Seventy percent of respondents were elementary school principals, and only

30% were secondary school principals. Sixty-three percent of the respondents reported their schools having more than 50% of the student body living at poverty level. (Table 3).

Table 3

*Characteristics of Respondent Sample*

Characteristic	Frequency	Percent
<b>School Level</b>		
elementary	253	69.7
secondary	110	30.3
no response	1	.3
<b>Gender</b>		
male	115	31.6
female	248	68.1
no response	1	.3
<b>Highest Level of Education</b>		
high school degree	2	.5
college degree	65	17.9
masters degree	258	70.9
doctoral degree	28	7.7
no response	11	3.0
<b>Region</b>		
NCR (National Capital Region)	27	7.4
3 (Central Luzon)	30	8.2
4A (CALABARZON*)	48	13.2
4B (MIMAROPA*)	56	15.4
6 (Western Visayas)	51	14.0
7 (Central Visayas)	39	10.7
8 (Eastern Visayas)	54	14.8
10 (Northern Mindanao)	59	16.2
<b>Students at Poverty Level</b>		
less than 50%	90	24.7
50%	45	12.4
more than 50%	228	62.8
no response	1	.3

N = 364

\*CALABARZON: Cavite, Laguna, Batangas, Rizal, Quezon

\* MIMAROPA: Mindoro, Marinduque, Romblon, Palawan

### Instrumentation

The survey used in this study was constructed to collect data relevant to each of the four research questions. The survey was designed to capture the context-specific nature of self-efficacy beliefs by embedding the context of each of the questions through the sentence stem for each of the items. (For example: “In your current role as principal, to what extent can you...”) This was based on the strategy employed by Tschannen-Moran and Hoy (2001) (as discussed in Chapter 2).

The survey consisted of a 19 item scale to measure *principals’ perceived capacity* (capacity scale), as well as five variable sets constructed to measure *principals’ perceived effectiveness of instructional supports* (“effectiveness of teacher incentives”), “control over teacher incentives,” “time spent on instructional leadership tasks weekly,” “level of teacher capacity,” and “level of confidence after ICExCELS training.” The capacity scale and four variable sets required respondents to rate themselves on a 6-point scale. One variable set measuring “level of confidence after ICExCELS training” required respondents to rate themselves on a 5-point scale.

The survey also included Likert-scale items measuring school principal effectiveness and job satisfaction; as well as questions collecting demographic information. Information about all scales included on the survey is reported in Table 4. The high alpha reliability of each scale leads to the conclusion that the survey designed for this study was a very reliable measure in capturing principals’ self efficacy.

Survey items for capacity scale are reported in Table 5. Survey items measuring *principals’ perceived effectiveness of instructional supports* (“effectiveness of teacher incentives”) is reported in Table 6. The survey is included as Appendix B.

Table 4

*Survey Scales*

Item	Scale of measurement		
<b>DEMOGRAPHIC FACTORS</b>			
Gender	(male/female)		
Highest level of education	(4 levels)		
Number of years working as educator	(actual number of years entered)		
Number of years working as school leader	(actual number of years entered)		
School level	(elementary/high school)		
Region	(actual region entered)		
Percent of students at poverty level	(less than 50%/50%/more than 50%)		
<b>SELF RATING</b>			
Effectiveness as school principal	(5 levels)		
Satisfaction with job as school principal	(5 levels)		
		Number of items	Alpha reliability
Capacity as School Principal		19	.942
Effectiveness of Teacher Incentives		8	.916
Level of Control over Teacher Incentives		11	.897
Time on Instructional Leadership Tasks Weekly		9	.962
Level of Teacher Capacity		6	.893
Level of Confidence after ICExCELS Training		6	.858

Table 5

*Capacity Scale Items*

In your current role as principal, to what extent can you...
1. Make textbooks available in time for start of school year
2. Provide teacher guides to teachers
3. Make classroom resources available. (chalkboard, pencils, notebooks, etc.)
4. Make learning aids available. (globes, maps, posters, science lab equipment, etc)
5. Use research to understand teaching methods to improve classroom instruction
6. Mentor teachers in making decisions about the best teaching method
7. Mentor teachers to make decisions about strategies for assessing student learning
8. Analyze classroom practices
9. Conduct teacher performance assessment
10. Provide teachers constructive feedback on teaching performance
11. Mentor teachers to use learning aids to enhance student learning
12. Mentor teachers to make effective use of instructional time
13. Mentor teachers to address their professional development needs
14. Engage teachers in curriculum development
15. Provide teachers opportunity to learn about teaching strategies for active learning
16. Provide teachers opportunity to understand student-centered learning
17. Provide teachers opportunity to develop skills and knowledge to teach different subjects
18. Provide teachers opportunity to learn classroom management strategies
19. Foster professional learning community among teachers
Scale: 1 = A Great Deal; 2 = Quite a Bit; 3 = Some Influence; 4 = Little; 5 = Very Little; 6 = None

Table 6

*Items Measuring Perceived Effectiveness of Instructional Supports*

To what extent does the following motivate teachers to improve teaching?

1. Classroom Resources (textbooks, notebooks, chalkboard, etc)
2. Learning Aids (Globes, maps, posters, science lab equipment, etc)
3. New Teaching Methods
4. Your Feedback from Classroom Observations
5. Mentoring Teachers
6. Training / Professional Development
7. Giving Teachers Role in Curriculum Development
8. Professional Learning Community for Teachers

Scale: 1 = A Great Deal; 2 = Quite a Bit; 3 = Some Influence; 4 = Little; 5 = Very Little; 6 = None

Scales measuring *principals' perceived capacity* and *principals' perceived effectiveness* operationalized the constructs of personal self efficacy and outcome expectancy, respectively. Both scales were constructed according to the framework for teacher incentives by Kremmerer (1990). Kremmerer posits that incentives for improved teacher performance include quantity and quality of 1.) remuneration; 2.) instructional materials available in the classroom; 3.) instructional supervision at the classroom level; 4.) training provided to the teacher; and 5.) career opportunities available to the teacher.

In the Filipino context, remuneration and career advancement for teachers is not in the control of school principals, but rather regional DepEd officials. Consequently, those teacher incentives were not included in either of the two scales. In an effort to



contextualize the survey to Filipino school principals, three teacher incentives from Kemmerer's framework served as a basis for designing survey items for both scales:

1.) instructional materials available in the classroom; 2.) instructional supervision at the classroom level; and 3.) training provided to the teacher.

The design of survey items for both scales was also based on a set of teacher incentives provided by the school principal that the literature on school principalship and school improvement link to increasing teacher motivation and performance (Heck et al, 1990; Siens and Ebmeier, 1996; Leithwood, Louis, Anderson, and Wahlstrom, 2004). Those teacher incentives were: 1.) establishment of a professional learning community among teachers; 2.) focusing teacher performance on assessment of student work; 3.) providing teacher opportunity to reflect upon classroom teaching and student learning; 4.) engaging teachers in school development, planning, and setting priorities for the school; and 5.) providing constructive feedback.

Survey items measuring *principals' perceived capacity* asked respondents to rate the extent to which they believed they were capable in performing certain actions that motivate teachers to improve teaching practice. Survey items measuring *principals' perceived effectiveness of instructional supports* asked respondents to rate the extent they believed certain actions led to increased teacher motivation to improve instruction. Bandura postulates that principals who have a high sense of perceived capacity coupled with a high sense of effectiveness for instructional supports are likely to exhibit productive leadership. High sense of perceived capacity coupled with low sense of perceived effectiveness for instructional supports would be likely to facilitate protest or grievance. Low sense of perceived capacity for a task that is perceived to be important

creates stress while low sense of perceived effectiveness for an instructional support that is not valued is likely to facilitate apathy.

Survey items measuring *level of confidence after ICExCELS training* reflect the four main sources of efficacy information per Bandura (as discussed in Chapter 2). ICExCELS training experiences included modular activities and assignments, online chat sessions with class members and class instructor, final course assignment, and Revalidation session. Opportunities for mastery experiences and vicarious learning took place in different forms through the various ICExCELS training experiences (also as discussed in Chapter 2). Moments of verbal persuasion and actions inciting emotions that may influence self-efficacy also marked ICExCELS training experiences (also discussed in Chapter 2). Respondents were asked to rate their level of confidence in providing instructional supports after each training experience. Overall Confidence Score was calculated by taking average rating for each respondent.

Overall scores for the following subscales were also calculated by taking the average rating for each respondent: *Control over Teacher Incentives*, *Time on Instructional Leadership Tasks Weekly*, and *Level of Teacher Capacity*. Principals rated their level of control in providing eleven different teacher incentives based on a 6-point Likert scale (A Great Deal to None). Principals also provided information regarding the amount of time they spend on nine instructional leadership tasks on a 6-point Likert scale (Between 50-100% of time to Less than 10% of time). And, principals rated level of teacher capacity based on a 6-point Likert scale (Extremely Capable to Extremely Incapable) on the following tasks related to student achievement: 1.) Preparing students to take National Achievement Test, 2.) Preparing students for next grade level or

graduation, 3.) Using learning aids, 4.) Promoting learning through experience and discovery, 5.) Managing learning differences, and 6.) Assessing student learning.

### Survey Dissemination

The survey was distributed by INNOTECH staff to school principals during the Revalidation sessions scheduled at the end of the each 4-week long training session. The Revalidation session provided school principals a chance to discuss their learning progress in the ICExCELS training program and how they plan to lead their schools upon gaining the knowledge and skills learned through the program with other school principals within their region, as well as with the superintendent of their school district, local DepEd officials, and iFLEX training staff and its director.

Given that ICExCELS is mainly a self-directed training program with most of the communication taking place online over the iFLEX online learning platform, the Revalidation session is among the very few instances where the school principals meet face to face during the course of the training program. The event provided the opportunity to distribute and collect the survey for this study in person by INNOTECH staff. The survey was given to school principals at the beginning of the Revalidation session. They were instructed to fill out the survey at any point in time during the session and deposit it in a box designated for survey collection before leaving the session. About one hour before the end of the Revalidation session, school principals were reminded to complete the survey.

### Analysis

Returned surveys were coded and the data was entered into SPSS 16.0 statistical analysis software. A factor analysis was conducted to categorize the variables measuring

*principals' perceived capacity*. Nineteen items measuring *principals' perceived capacity* were submitted to a principal component analysis with varimax rotation. Items with loadings above .50 were retained for use in construction of subscales. Respondents received capacity scores for each of the subscales by taking the average rating.

Linear regressions were conducted to estimate the extent of principals' perceived capacity for providing instructional supports represented by the subscales. Linear regressions were also conducted to understand the extent to which principals' perceive such instructional supports as being effective in improving teaching practice. MANOVA was conducted to examine the extent to which principals who differed in their perceived capacity and perceived effectiveness of instructional supports differed across demographic and contextual factors (i.e. gender, highest level of education attained, number of years as educator, number of years as school principal, and percentage of students living at poverty level). Descriptive statistical analysis was conducted to understand how the ICExCELS training program influenced principals' level of confidence in providing instructional supports.

## CHAPTER 4: RESULTS AND ANALYSIS

This chapter presents the data collected in the study and reports the findings from the statistical analysis for each of the research questions.

### **Research Question 1. To what extent do principals believe that they have the capacity to provide instructional supports?**

First, factor analysis conducted for this study revealed three dimensions of principals' capacity to support teachers' classroom instruction. The three dimensions included providing teachers with professional development, instructional supervision, and classroom resources. Secondly, results from linear regression analyses revealed a difference between the set of variables predicting principals' perceived capacity in providing professional development and instructional supervision and those related to providing classroom resources. Findings suggest that principals' beliefs about their capacity to provide professional development and instructional supervision was dependent upon their belief about the effectiveness of those instructional supports, their level of control over providing them, the time spent on instructional leadership tasks, and their level of job satisfaction; whereas principals' perceived capacity for providing classroom resources was dependent only on how effective they believe those resources are and the amount of control they have in providing them.

#### Results

Factor analysis of the 19 items composing the capacity scale yielded three factors with eigenvalues above .1 (Table 7). The three factors were categorized as 1.) *professional development*, 2.) *instructional supervision*, and 3.) *classroom resources*. Each factor reflects a set of leadership practices that have incentive value for improving

classroom instruction. *Professional development* is composed of items that measure the extent of principals' perceived capacity to perform tasks related to providing teachers with professional development opportunities, expanding teachers' role to include curriculum development, and fostering a professional learning community among teachers. *Instructional supervision* is composed of items that measure the extent of principals' perceived capacity to perform tasks related to mentoring teachers on classroom instruction and supervising teachers. *Classroom resources* is composed of items that measure the extent of principals' perceived capacity to perform tasks related to making classroom resources available. Table 8 reports factor loadings for each Capacity Scale item as per the three factors. Table 9 reports the Capacity Scale items with factor loadings above .5 composing each of the three factors.

Table 7

*Eigenvalues for Capacity Scale Items*

Capacity Scale Items	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1. Make textbooks available in time for start of school year	9.6	50.6	50.6
2. Provide teacher guides to teachers	2.1	10.8	61.5
3. Make classroom resources available	1.1	5.7	67.2
4. Make learning aids available	.81	4.1	71.3
5. Use research to understand teaching methods to improve classroom instruction	.71	3.8	75.1
6. Mentor teachers in making decisions about the best teaching method	.62	3.3	78.4
7. Mentor teachers to make decisions about strategies for assessing student learning	.52	2.7	81.1
8. Analyze classroom practices	.50	2.6	83.7
9. Conduct teacher performance assessment	.44	2.3	86.0
10. Provide teachers constructive feedback on teaching performance	.37	1.9	88.0
11. Mentor teachers to use learning aids to enhance student learning	.35	1.8	90.0
12. Mentor teachers to make effective use of instructional time	.32	1.7	91.5
13. Mentor teachers to address their professional development needs	.30	1.6	93.0
14. Engage teachers in curriculum development	.28	1.5	94.5
15. Provide teachers opportunity to learn about teaching strategies for active learning	.25	1.3	95.9
16. Provide teachers opportunity to understand student-centered learning	.23	1.2	97.0
17. Provide teachers opportunity to develop skills and knowledge to teach different subjects	.21	1.1	98.2
18. Provide teachers opportunity to learn classroom management strategies	.20	1.0	99.2
19. Foster professional learning community among teachers	.15	.78	100.0

Table 8

*Factor Loadings*

Capacity Scale Items	Factors		
	1	2	3
1. Make textbooks available in time for start of school year	.15	.06	<b>.81</b>
2. Provide teacher guides to teachers	.08	.19	<b>.83</b>
3. Make classroom resources available	.14	.20	<b>.75</b>
4. Make learning aids available	.17	.22	<b>.78</b>
5. Use research to understand teaching methods to improve classroom instruction	.40	.36	.46
6. Mentor teachers in making decisions about the best teaching method	.21	<b>.76</b>	.29
7. Mentor teachers to make decisions about strategies for assessing student learning	.30	<b>.77</b>	.28
8. Analyze classroom practices	.50	<b>.65</b>	.21
9. Conduct teacher performance assessment	.43	<b>.65</b>	.18
10. Provide teachers constructive feedback on teaching performance	.34	<b>.74</b>	.15
11. Mentor teachers to use learning aids to enhance student learning	.43	<b>.73</b>	.13
12. Mentor teachers to make effective use of instructional time	.30	<b>.64</b>	.14
13. Mentor teachers to address their professional development needs	<b>.60</b>	.48	.14
14. Engage teachers in curriculum development	<b>.67</b>	.24	.15
15. Provide teachers opportunity to learn about teaching strategies for active learning	<b>.76</b>	.39	.19
16. Provide teachers opportunity to understand student-centered learning	<b>.78</b>	.32	.13
17. Provide teachers opportunity to develop skills and knowledge to teach different subjects	<b>.82</b>	.26	.13
18. Provide teachers opportunity to learn classroom management strategies	<b>.79</b>	.33	.19
19. Foster professional learning community among teachers	<b>.74</b>	.31	.16

NOTE: All items began with the sentence stem “In your current role as principal, to what extent can you...”

NOTE: Factor 1 = Professional Development; Factor 2 = Supervision;  
Factor 3 = Classroom Resources



Table 9

*Items Composing Each of Three Factors*

Factor 1 = Professional Development	Factor 2 = Instructional Supervision	Factor 3 = Classroom Resources
13. Mentor teachers to address their professional development needs	6. Mentor teachers about teaching methods	1. Make textbooks available in time for start of school year
14. Engage teachers in curriculum development	7. Mentor teachers on assessing student learning	2. Provide teacher guides to teachers
15. Provide teachers opportunity to learn about teaching strategies for active learning	8. Analyze classroom practices	3. Make classroom resources available
16. Provide teachers opportunity to understand student-centered learning	9. Conduct teacher performance assessment	4. Make learning aids available
17. Provide teachers opportunity to develop skills and knowledge to teach different subjects	10. Provide teachers constructive feedback on teaching performance	
18. Provide teachers opportunity to learn classroom management strategies	11. Mentor teachers to use learning aids	
19. Foster professional learning community among teachers	12. Mentor teachers to make effective use of instructional time	

NOTE: Factor Loadings above .5

Respondents received a Capacity Score for each factor by taking an average of the rating. Each respondent was given three Capacity Scores. The three Capacity Scores reflected principals' perceived capacity in providing professional development, instructional supervision, and classroom resources, respectively. These scores were entered as the dependent variable in regressions conducted to predict *principals' perceived capacity* in providing professional development, instructional supervision, and classroom resources. Independent variables used in the regressions were: *Effectiveness of Teacher Incentives* (ETI), *Control over Teacher Incentives* (CTI), *Time on Instructional Leadership* (TIL), *Level of Teacher Capacity* (LTC); *Number of Years Working as Educator* (# years Educator), *Number of Years Working as School Principal* (# years Principal), *Level of School Principal Effectiveness* (Principal Effectiveness), and *Degree of School Principal Job Satisfaction* (Principal Satisfaction).

Table 10 provides the means, standard deviations, and coefficients of variation for each dependent and independent variable. Means and standard deviations show that survey responses were positively skewed. As discussed in Chapter 1, a major limitation to this study is respondents' social desirability bias. It is likely that responses were positively skewed because principals answered the survey items in a manner that they thought was more acceptable. For that matter, the validity of the study is unknown.

The coefficients of variation for the dependent variables reveal that principals' beliefs vary the most in their capacity for providing classroom resources; while their beliefs in their capacity for providing professional development and instructional supervision are relatively the same. The coefficients of variation for the independent variables show that principals vary the most in terms of the number of years spent as

school principal, their level of effectiveness, and the amount of time they spent on instructional leadership. The coefficients of variation for the independent variables also show that principals vary the least in terms of how they rate teacher capacity in their schools.

Table 10

*Means, Standard Deviations, and Coefficients of Variation for Dependent and Independent Variables*

Scale	Mean	Standard Deviation	Coefficient of Variation
<b>Dependent Variables</b>			
Capacity Score 1 - Professional Development	1.74	.671	38.56
Capacity Score 2 - Instructional Supervision	1.61	.633	39.32
Capacity Score 3 - Classroom Resources	2.13	.998	46.85
<b>Independent Variables</b>			
Effectiveness of Teacher Incentives (ETI)	1.64	.665	40.55
Control over Teacher Incentives (CTI)	2.38	.946	39.75
Time on Instructional Leadership (TIL)	2.77	1.30	46.93
Level of Teacher Capacity (LTC)	2.19	.537	24.52
Number of Years Working as Educator	19.13	7.78	40.67
Number of Years Working as School Principal	6.57	5.09	77.47
Principal Effectiveness	2.59	1.76	67.95
Principal Job Satisfaction	1.67	.623	37.31

Rating Scale: 1=A Great Deal; 2=Quite a Bit; 3=Some Influence; 4=Little; 5=Very Little; 6=None

Three regression analyses were conducted. Each of the three regression analyses yielded statistically significant results (Table 11).

Table 11

*Summary of Linear Regression Results Predicting Principal's Sense of Capacity*

Dependent Variable	R	R <sup>2</sup>	Df	F*
Capacity Score 1 (Professional Development) (N = 266)	.666	.444	265	25.67
Capacity Score 2 (Instructional Supervision) (N = 271)	.638	.407	270	22.45
Capacity Score 3 (Classroom Resources) (N = 268)	.583	.340	267	16.70

\*p < .0001

Capacity Score 1 was used as the dependent variable to predict principals' perceived capacity for providing professional development. Results of the regression analysis predicting principals' perceived capacity for providing professional development yielded an F of 25.67 ( $p < .0001$ ) and an R of .666. The analysis explained 44% of the variation in principals' perceived capacity for providing professional development.

Capacity Score 2 was used as the dependent variable to predict principals' perceived capacity for providing instructional supervision. Results of the regression analysis predicting principals' perceived capacity for providing instructional supervision yielded an F of 22.45 ( $p < .0001$ ) and an R of .638. The analysis explained 41% of the variation in principal's perceived capacity for providing instructional supervision.

Capacity Score 3 was used as the dependent variable to predict principals' perceived capacity for providing classroom resources. Results of the regression analysis

predicting principals' perceived capacity for providing classroom resources yielded an F of 16.70 ( $p < .0001$ ) and an R of .583. The analysis explained 34% of the variation in principals' perceived capacity for providing classroom resources.

The high  $R^2$  reported for each of the three regression analyses is subject to the positively skewed responses received from principals participating in this study. Reasons for the positively skewed responses are discussed in the Limitations section of Chapter 1. The validity of principals' responses is unknown.

Table 12 indicates that the extent to which principals think instructional supports are effective, their control over them, time they spend on instructional leadership tasks, and job satisfaction were statistically significant ( $p < .05$ ) predictors of the capacity to provide professional development and instructional supervision. Among these factors, principals' perceived effectiveness of instructional supports made the most significant contribution in predicting principals' sense of capacity in providing professional development and instructional supervision.

Table 12 also shows that the extent to which principals think instructional supports are effective and their control over them were statistically significant ( $p < .05$ ) predictors of the capacity to provide classroom resources. Between these two factors, principals' control over instructional supports made a more significant contribution in predicting principals' sense of capacity in providing classroom resources.

Table 12

*Summary of Linear Regression Analyses*

Predictor Variable	Capacity Score 1 (Professional Development)			Capacity Score 2 (Instructional Supervision)			Capacity Score 3 (Classroom Resources)		
	Stand. beta	t	P	Stand. beta	t	P	Stand. beta	t	P
ETI	.317	5.94	.000	.320	6.33	.000	.232	2.82	.005
CTI	.233	5.42	.000	.176	4.34	.000	.534	8.08	.000
TIL	.089	3.29	.001	.090	3.50	.001	.006	0.14	.889
LTC	.064	1.01	.313	.037	0.61	.541	.074	0.76	.450
# years Educator	-.004	-0.93	.352	-.002	-0.53	.599	-.010	-1.36	.174
# years Principal	.009	1.26	.207	.005	0.68	.496	.002	0.15	.878
Principal Effectiveness	.006	.037	.709	-.026	-1.60	.110	-.032	-1.17	.242
Principal Satisfaction	.115	2.04	.042	.142	2.69	.008	-.114	-1.32	.189

p < .05

NOTE: ETI = *Effectiveness of Teacher Incentives*; CTI = *Control over Teacher Incentives*; TIL = *Time on Instructional Leadership*, LTC = *Level of Teacher Capacity*; # years Educator = *Number of Years Working as Educator*; # years Principal = *Number of Years Working as School Principal*; Principal Effectiveness = *Level of School Principal Effectiveness*, and Principal Satisfaction = *Degree of School Principal Job Satisfaction*

**Research Question 2. To what extent do principals believe that instructional supports lead to improved teacher performance?**

Results from linear regression analysis reveal that *principals' perceived effectiveness of instructional supports* is dependent upon how effective they think they are as school principals and how capable they think their teachers are in guiding student achievement. Principals are likely to perceive professional development, instructional supervision, and classroom resources as effective interventions for improving teacher performance if they feel they can successfully provide them, and if they feel teachers are already somewhat competent in their efforts towards student achievement.

Results

Incentives Effectiveness Score (IE Score) was calculated for each respondent by taking the average rating for *perceived effectiveness of instructional supports*. This score was entered as the dependent variable in the regression conducted to predict *perceived effectiveness of instructional supports*. Independent variables used in the regressions were: *Time on Instructional Leadership (TIL)*, *Highest Level of Education Attained (Education)*, *Number of Years Working as Educator (# years Educator)*, *Number of Years Working as School Principal (# years Principal)*, *Level of School Principal Effectiveness (Principal Effectiveness)*, and *Degree of School Principal Job Satisfaction (Principal Satisfaction)*.

The linear regression predicting *principals' perceived effectiveness of instructional supports* showed that self-rating of school principal effectiveness and how principals' rate the level of teacher capacity are statistically significant ( $p < .05$ ) predictor variables. It is noted that only 9.7% of the variation in *principals' perceived effectiveness*

of instructional supports can be accounted for by the independent variables included in the regression (Table 13). *Principals' perceived effectiveness of instructional supports* is largely dependent upon other factors that this study did not include.

Table 13

*Summary of Predictor Variables and Linear Regression Predicting Perceived Effectiveness of Instructional Supports*

Effectiveness of Instructional Supports				
Independent Variable	Stand. beta	t	P	
# years Educator	-.002	-0.30	.761	
# years Principal	.007	0.88	.382	
Highest level of Education	-.015	-0.20	.841	
Time on Instructional Leadership Tasks	.030	0.96	.338	
Principal Effectiveness	.053	2.52	.012	
Principal Satisfaction	.129	1.98	.049	
Level of Teacher Capacity	.188	2.54	.012	
Dependent Variable	R	R <sup>2</sup>	df	F*
IE Score (N = 291)	.311	.097	290	4.442

\*p < .05



Though findings from this study reveal relationships that are rather small in predicting *principals' perceived effectiveness of instructional supports*, they are nevertheless important in understanding the dynamics underlying *principals' perceived capacity*. As revealed under Research Question #1, principals' beliefs about their capacity to provide professional development and instructional supervision was most associated with their belief about the effectiveness of those instructional supports. Principals regard instructional supports to be effective in improving teacher performance when they are able to provide them and believe their teachers are capable in guiding student achievement to begin with.

The findings also suggest that principals who believe instructional supports are less effective are those who feel less capable in providing them and/or regard their teachers as less capable. Findings suggest that principals' sense of effectiveness and their perception of teacher capacity deserve attention in understanding principals' capacity as instructional leader.

**Research Question 3. To what extent do principals' perceived capacity and principals' perceived effectiveness of instructional supports differ among principals who differ with respect to gender, school level, highest level of education attained, region, and percentage of student body living at poverty level?**

Findings from the study suggest that there are no differences related to demographic and contextual factors among principals' perceived capacity and perceived effectiveness of instructional supports.

Results

A multivariate analysis of variance (MANOVA) was conducted to determine if there were statistically significant differences in the levels of *principals' perceived capacity* and *principals' perceived effectiveness of instructional supports* among school principals who differ in gender, school level, highest level of education attained, region, and percentage of student body at poverty level.

A 5-way [2(gender) x 2(school) x 4(education) x 8(region) x 3(poverty level)] MANOVA examined main effects and interaction effects of the demographic factors on the four dependent variables (3 variables measuring *principals' perceived capacity* and 1 variable measuring *principals' perceived effectiveness of instructional supports*).

As detailed in Table 14, the MANOVA model revealed no significant multivariate main effect for gender [ $F = 1.1, p = .375$ ], school level [ $F = .640, p = .64$ ], highest level of education attained [ $F = .649, p = .80$ ], region [ $F = .756, p = .81$ ], and percentage of students at poverty level [ $F = .792, p = .61$ ]. The MANOVA results indicated there were no significant differences in the levels of self efficacy and outcome expectancy in terms of selected demographic factors.

Table 14

*Results of 5-way MANOVA*

Effect	Wilks' Lambda	F	Hypothesis df	Error df	p	Eta Squared
Intercept	.295	1.074E2	4	180	<.001	.705
Gender	.977	1.066	1	180	.375	.023
School Level	.986	.640	4	180	.635	.014
Highest Level of Education	.958	.649	12	477	.800	.014
Region	.891	.759	28	650	.811	.029
% of students at poverty level	.966	.792	8	360	.610	.017
Interaction Effect	Roy's largest Root	F	Hypothesis df	Error df	p	Eta Squared
Region * Poverty	.147	1.917	14	183	.027	.128
Gender*School*Region	.086	3.145	5	183	.010	.079

p < .05

Carey (1998) states that since Roy's largest root is an upper bound on F, it gives a lower bound estimate of the probability of F. Thus, Roy's largest root is generally disregarded when it is significant but the other F statistics are not significant. For this reason, the reported interaction effect among gender, school, and region was not explored further. However, it merits future study.

**Research Question 4. To what extent do principals perceive Instructional Leadership training provided by SEAMEO INNOTECH to be related to their level of confidence in providing instructional supports?**

Results from the study suggest that ICeXCELS training activities in the form of Module 1, Module 2, and the Action Plan provide principals with the opportunity for mastery experiences that were related to principals' level of confidence in providing instructional supports. Results also suggest that Feedback during Revalidation did not relate to principals' confidence level. And, the results do not point to Online Discussions as an important mode for efficacy information.

**Results**

Over 50% of respondents rated themselves as "very confident" in providing instructional supports after each training component except after receiving Feedback during the Revalidation. About 25-30% of respondents rated themselves as "moderately confident" in providing instructional supports after every training component. Table 15 reports principals' confidence rating associated with each training component.

Table 15

*Principals' Confidence Rating in Providing Instructional Supports after ICExCELS*

*Training Components (Percent)*

	Extremely Confident	Very Confident	Moderately Confident	Somewhat Confident	Not at all Confident
Module 1	9.6	56.9	25.0	3.3	.3
Module 2	10.2	54.7	25.8	3.8	.5
Action Plan	15.9	53.3	22.3	3.5	3.5
Online					
Discussions	12.6	49.7	29.1	2.7	.8
Feedback on					
Assignments	14.5	52.6	27.9	4.4	.6
Feedback					
during	8.5	37.6	24.5	6.0	1.1
Revalidation					

The findings suggest that the training activities of the ICExCELS program that enabled learning through experience (i.e. Module 1, Module 2, and Action Plan) were consistent with Bandura's claim that the most effective way of creating a strong sense of efficacy is through experiences. The findings also suggest that sources of efficacy information linked to Feedback during Revalidation need to be reconsidered since it did not influence principals' level of confidence as much as the other training components.

Online Discussions were considered an innovative aspect of the ICExCELS program. However, findings suggest that its potential as a mode for verbal persuasion and for evoking emotional states was the same as Feedback on Assignments. But, its potential as a mode for vicarious learning was more than that offered through Feedback during Revalidation.

## CHAPTER 5: DISCUSSION

Findings from this study are discussed in this chapter. Implications of the findings on policy formulation and implementation are discussed. Theoretical implications are also explored. The chapter ends with a discussion of how the findings from this study contribute to the literature, and directions for future research.

### **Research Question 1. To what extent do school principals believe that they have the capacity to provide instructional supports?**

Factor analysis of survey items assessing principal's level of capacity revealed that Filipino principals' perceived capacity varies in providing three different types of instructional supports: 1.) professional development, 2.) instructional supervision, and 3.) classroom resources. Findings from this study indicated that Filipino school principals' perceived capacity to provide professional development and instructional supervision is related to 1.) their level of control over such supports (*control*), 2.) how effective they think the supports are for improving teacher performance (*principals' perceived effectiveness of instructional supports*), 3.) how much time they spend on instructional leadership tasks (*time*), and 4.) their degree of job satisfaction (*job satisfaction*). Among these four factors, *principals' perceived effectiveness of instructional supports* was the most significant factor related to principals' level of capacity in providing professional development and instructional supervision. Findings also indicated that Filipino school principals' perceived capacity to provide classroom resources depends on 1.) their level of control over those resources (*control*), and 2.) how effective they think classroom resources are in improving teacher performance (*perceived*

*effectiveness*). Between these factors, level of control is a more significant factor related to principals' level of capacity in providing classroom resources.

### *Time for Instructional Leadership*

It seems reasonable to expect *time* to be a variable related to principal's sense of their own capacity to provide professional development and instructional supervision, but not in providing classroom resources. Providing professional development and instructional supervision are new responsibilities associated with instructional leadership that demand principal's already limited time. Traditionally, principals spend most of their time on management tasks. Providing classroom resources is a management task that principals perform regularly; and therefore, does not impose any new demands on principal's time.

The amount of time principals spend on instructional leadership tasks has a direct impact on their opportunity for gaining mastery experiences that impact sense of *perceived capacity*. Mastery experiences refer to practicing a task regularly and directly. Bandura identifies mastery experiences as a primary means of developing a sense of *perceived capacity*. If principals spend a limited amount of time on instructional leadership tasks, then the opportunity for regular and direct practice is limited. The more principals practice tasks related to professional development and supervision, the more likely they have the chance to develop their sense of *perceived capacity*.

Filipino principals in this study report spending more time on instructional leadership tasks than management tasks. Appendix C, Table D shows that over 25% of the principals spent over 50% of their time on class observations, follow-up to those observations, and mentoring teachers. And, over 25% of the principals spent between 40-

50% of their time on tasks related to providing classroom resources. More time spent on instructional leadership tasks is attributed to the current model of school-based management that mandates the development of the SIP. As discussed in Chapter 2 under Country Context, Filipino principals are required to work with SAC/SMC, PTA and Divisional office in developing school mission and goals and the SIP, which set the principal for collaboration with the Master Teacher in working towards school improvement initiatives such as professional development and supervision.

*Principal-Master Teacher Relationship Impacts Principal's Sense of Job Satisfaction*

*Job satisfaction* is another variable differentiating principal's *perceived capacity* in providing professional development and instructional supervision from that in providing classroom resources. The largest source of principal job satisfaction is rapport with key stakeholders (DiPaola and Tschannen-Moran, 2003). Filipino school principals have the opportunity to build rapport with teachers, students, parents, and local community stakeholders by working through collaborative processes for providing instructional supports (as discussed in Chapter 2). The finding suggests that principal's rapport with the Master Teacher built during collaboration for providing professional development and instructional supervision impacts principal's job satisfaction. The Principal-Master Teacher relationship, in turn, impacts principal's *perceived capacity* in providing professional development and supervision.

Principals are likely to build rapport with local community stakeholders through SAC/SMC during the process for providing classroom resources. The finding suggests that rapport with local community stakeholders does not impact principal's *job satisfaction*. Therefore, the principal-community member relationship does not impact



principal's *perceived capacity* in providing classroom resources. This is surprising because school-community relations are a major area of responsibility for the principal under school-based management. And, it is expected that rapport with local community stakeholders would be impactful given the principal's new political role in bridging school and community.

Rapport with local community stakeholders does not influence principal's job satisfaction because providing classroom resources does not directly address the principal-agent problem central to the principal's job as discussed in Chapter 1. Classroom resources such as textbooks and teacher guides are essential to the learning environment, but may not have much value if teachers do not use them strategically in facilitating the learning process. Professional development and instructional supervision directly address the principal-agent relationship by developing the teacher's capacity to facilitate the learning process.

As discussed earlier, Filipino school principals report spending more time on instructional leadership tasks than on management tasks. More time on instructional leadership leads to more opportunity for building rapport with Master Teachers, which has potential for increased sense of job satisfaction among principals. Lesser time on management tasks suggests that principals in this study do not have as much opportunity to build rapport with community stakeholders during the process for acquiring classroom resources through them. Principals' allocation of more time on instructional leadership and less time on management tasks suggests that teacher development and instructional improvement are of greater priority to the principal within the current model of school-based management. Spending more time on higher priority school improvement areas

such as professional development and instructional supervision allows the principal to collaborate with Master Teachers who provide key insights in addressing the principal-agent issue more directly.

The current model of school-based management suggests *time* and *job satisfaction* as predictors of *principal's perceived capacity* in providing professional development and instructional supervision. As discussed in Chapter 2, the current model of school-based management prioritizes instructional leadership over school management. The principal is held responsible for formulating the school mission and goals and developing the SIP in lateral coordination with the SAC/SMC, PTA, and Divisional office. Stemming from these key leadership responsibilities, principals work in lateral coordination with the Master Teacher to provide teachers with professional development and instructional supervision. Through the current model of school-based management, principal's time is dictated by instructional leadership responsibilities and important relationships are built through lateral coordination. As a result, *principal's perceived capacity* is affected by their work environment.

Lateral coordination between the principal and Master Teacher may take place through formal and informal meetings and coordinating roles. Opportunities for developing rapport with the Master Teacher exist through this type of lateral coordination. However, whether the relationship with the Master Teacher is strong enough to affect the principal's sense of job satisfaction is dependent upon the strength or weakness of the lateral coordination. Bolman and Deal (2003) state that a formal or informal meeting is an opportunity for open dialogue and discussion, but it risks squandering an excessive amount of time and energy if the meeting is not conducted

efficiently. Likewise, the effectiveness of coordinators is heavily dependent on their skills and credibility. If the principal is unable to gain the expertise and insight necessary in planning and implementing professional development and instructional supervision, he/she is likely to feel frustrated with the Master Teacher, as well as in fulfilling their own job responsibilities which may negatively affect sense of job satisfaction.

*Political Implications of (Shared) Control*

It is interesting that *control* is related to *principal's perceived capacity* in providing each of the three instructional supports, though most significantly related to providing classroom resources. Under the current model of school-based management, control over professional development and instructional supervision is shared between the principal and Master Teacher. And, control over providing classroom resources is shared with the SAC/SMC, PTA, and Divisional office. This shared control points to the significance of distributed leadership on *principals' perceived capacity*.

Under this model of school-based management, the principal is highly dependent upon other sources of authority in providing instructional supports. In the process for providing professional development and instructional supervision, the principal is dependent upon the Master Teacher for his/her expertise in classroom instruction, insights into the needs of teachers and students, and influence over teachers. In the process for providing classroom resources, the principal is dependent upon the resources and influence over community and other key sources of support that the SAC/SMC, PTA, and Divisional office hold. Efforts for providing instructional supports are inadequate if sources of control other than the principal are absent or somehow

compromised. As a consequence, principals are likely to exhibit a lower sense of perceived capacity in providing instructional supports.

Lateral coordination between and among the principal, Master Teacher, SAC/SMC, PTA, and Divisional office is further signified when considering the influence of shared control on *principal's perceived capacity*. As discussed earlier in this section, lateral coordination enables rapport building. Rapport building may also extend to maintenance of political relationships. By maintaining political relationships with key sources of control, principals can ensure their support for providing instructional supports. Principals' efforts in building key political relationships affects their sense of control over providing instructional supports, which in turn, affects their sense of perceived capacity.

Principals' control is a more significant factor in determining principals' sense of capacity in providing classroom resources than other instructional supports because it is more likely to be variable. Support from the SAC/SMC, PTA, and Divisional office in obtaining one type of classroom resource may be stronger or weaker compared to their support for another because their resources and level of influence may differ. In addition, the principal may have a very limited role in the process for acquiring some classroom resources. This is particularly the case in providing textbooks which have remained under the decision of the Regional office even after the passing of RA 9155.

*Perceived Effectiveness Determining Perceived Capacity*

It seems reasonable to expect *perceived effectiveness* to be related to *principal's perceived capacity* in providing each of the three instructional supports, though more so in providing professional development and instructional supervision. Principals are likely to judge the effectiveness of an instructional support based on their prior experiences in working with them. Among the three types of instructional supports, principals are likely to have most experience in providing classroom resources. Traditionally, principals' management duties have included regular and direct involvement in working to determine and obtain classroom resources. In this study, principals rated their perceived capacity for providing classroom resources as high, and rated the provision of learning aids in the classroom as effective in promoting improved classroom teaching.

Principals also rated their capacity for providing professional development and instructional supervision as high. Principals rated mentoring teachers and providing feedback from class observations as effective incentives. This is quite surprising since instructional supervision is a new role for principals, and prior research has shown that principals often believe supervision to be a problem (DiPaola and Tschannen-Moran, 2003). Findings suggest that prior experiences in working toward professional development and instructional supervision significantly determine principals' sense of capacity in doing so. It is unlikely that Filipino principals gained substantial experience in providing professional development and instructional supervision before the passing of RA 9115. However, it is likely that the partnership with the Master Teacher, which is supported by the SBM model, enabled Filipino principals to gain vicarious experiences

that contributed to their sense of capacity. Findings from the second research question provided further insights into how Filipino principals may feel a high sense of capacity in providing professional development and instructional supervision.

*Organizational Structures Shaping Principal's Perceived Capacity in Providing Professional Development and Instructional Supervision*

The findings suggest that organizational structures developed through the current model of school-based management influence *principal's perceived capacity* in providing professional development and instructional supervision, but not in providing classroom resources. The current model of school-based management prioritizes instructional leadership over school management through its emphasis on the development of school goals, mission, and SIP. This justifies principals spending time on providing professional development and instructional supervision. The more time principals spend on such tasks, the more likely they gain experiences that increase their sense of capacity in these areas. The model does not directly support time on school management tasks such as providing classroom resources. Since principals have traditionally been school managers regularly and directly involved in providing classroom resources, the model assumes that they have already gained experiences that contribute to a high sense of perceived capacity in providing classroom resources.

The model offers lateral coordination between and among key stakeholders enabling shared authority over instructional supports. Lateral coordination provides the principal opportunity for developing relationships with key stakeholders that play a large role in enabling instructional supports. By working through others, in particular the Master Teacher in providing professional development and instructional supervision, the

principal's perceived capacity is likely to be shaped through vicarious learning, verbal persuasion, and emotional states when performing tasks related to providing that instructional support.

This supports the correlation found by Tschannen-Moran and Gareis (2005) between principals' sense of self-efficacy and interpersonal support received from colleagues with whom the principal works to serve the school mission. The authors argue that principals who are supported by their superintendent, central office personnel, teachers and support staff are more likely to have a robust sense of efficacy, and conversely, principals with strong self-efficacy beliefs seem to be more successful at winning the support of their colleagues. This illustrates Bandura's theory of reciprocal causation. This study pointed to the organizational structures that operationalize reciprocal causation. Lateral coordination provides the principal and his/her colleagues with the avenue through which they may continuously build supportive relationships.

Tschannen-Moran and Gareis (2005) show that teacher support, in particular, is most strongly correlated with principals' sense of self-efficacy. This study showed that the principal's relationship with the Master Teacher was related to their own sense of capacity in providing professional development and instructional supervision. The Master Teacher is representative of the school's teaching staff. The principals' dependence on the Master Teacher in providing professional development and instructional supervision is created by the current model of school-based management.

**Research Question 2. To what extent do principals believe that instructional supports lead to improved teacher performance?**

Principals' perception of professional development, instructional supervision, and classroom resources as effective incentives for improving teacher performance was partly influenced by their own sense of effectiveness as a principal and how they perceive their teachers' capacity in guiding student achievement. The latter finding is rather interesting since teachers' capacity was not expected to be related to *perceived effectiveness of instructional supports*.

Principals' own sense of effectiveness is closely associated with shared control over providing instructional supports. As discussed in the previous section, principals share control over providing each of the instructional supports with key stakeholders. Lateral coordination encourages the principal to build relationships and collaborate with those stakeholders to ensure instructional supports. The stronger the relationship with stakeholders, the more efficient the principal may be in ensuring instructional supports. This leads to a greater sense of one's own effectiveness as a principal.

Principals' perception of their teachers' capacity in guiding student achievement has direct ramifications for the way principals perceive instructional supports as effective incentives. Appendix C, Table D shows that over 50% of the principals in this study rated teachers as being very capable in guiding student achievement. About half of the principals thought their teachers have a strong existing knowledge base and skill set that will enable them to acquire and process new information from professional development opportunities, comprehend suggested methods and techniques offered through supervision, and use classroom resources. An instructional support would be considered



as highly effective in improving teacher performance if the principal feels successful in providing it and if he/she feels that their teachers have the initial capacity level to successfully gain the intended input leading to improved teaching.

The link between principals' perception of teacher capacity and the extent to which they believe instructional supports are effective is consistent with previous research showing that leaders' perceived self-efficacy beliefs are related to subordinates' performance abilities (Chemers, Watson, and May, 2000; Paglis and Green, 2002).

As discussed earlier, how principals perceive the effectiveness of instructional supports significantly determines principals' sense of capacity in providing professional development and instructional supervision. Therefore, principals' sense of capacity in providing professional development and instructional supervision is more influenced by principals' own sense of effectiveness and how they perceive the capacity of their teachers than that in providing classroom resources. The principal's relationship with the Master Teacher is a key aspect in understanding principals' sense of capacity in providing professional development and instructional supervision. Principals' own sense of effectiveness is closely associated with the quality of their relationship with the Master Teacher. The principals' perception of the capacity of their teachers is dependent upon the feedback received from the Master Teacher since he/she is the primary person mentoring teachers and assisting with teachers' performance appraisals as discussed in Chapter 2. The insights and expertise of the Master Teacher serve as vicarious learning experiences for the principal which influence their sense of capacity in providing professional development and instructional supervision.

Findings from this study revealed that school principals thought they were most capable in areas that they perceived as effective in improving teacher performance (Appendix C, Table A). Most respondents rated their capacity level highest in the following supervisory tasks: 1.) mentoring teachers to use learning aids, 2.) mentoring teachers to make effective use of instructional time, and 3.) providing constructive feedback on teaching performance. Respondents rated learning aids as having a great deal of effectiveness in improving classroom teaching, followed by mentoring teachers and providing teachers feedback from class observations. Principals are most likely to provide classroom resources in the form of learning aids, and their instructional supervision is most likely to be focused on mentoring teachers to use the learning aids in supporting the teaching-learning process.

Most respondents (61%) rated their capacity level highest in mentoring teachers to make effective use of instructional time, followed by highest level of capacity in providing constructive feedback on teaching performance (58.8%) and mentoring teachers to use learning aids to enhance student learning (57.4%). Each of these tasks fall under the category for managing teachers (instructional supervision). In rating the level of effectiveness of teacher incentives, most respondents (61.8%) rated learning aids as having a great deal of effectiveness as a teacher incentive to improve teaching practices in the classroom, followed by mentoring teachers (61.3%) and feedback from class observations (61.0%) (Appendix C, Table A).

**Research Question 3. To what extent do principals' perceived capacity and principals' perceived effectiveness of instructional supports differ among principals who differ with respect to gender, school level, highest level of education attained, region, and percentage of student body living at poverty level?**

There were no differences related to demographic and contextual factors among principals' perceived capacity and perceived effectiveness of instructional supports.

This finding concurs with previous research that has shown that demographic variables typically are not strong predictors of school principal efficacy beliefs (Tschannen-Moran and Gareis, 2005).

It was expected that principals' perceived capacity and perceived effectiveness of instructional supports would differ in terms of gender and school level since some studies have found higher self-efficacy beliefs among women at the elementary level and higher self-efficacy beliefs among men at the secondary level (Smith et al., 2003; Boyan, 1988; Hallinger and Murphy, 1986; Leithwood et al., 1990; Bossert et al., 1982; Dwyer, 1985; Glasman, 1984). Such findings suggest that principals who have positive role models similar to themselves would gain vicarious experiences that promote their sense of capacity. It is assumed that the nascent efforts toward school-based management in the Philippines puts all education managers on the same point of the learning curve, which dissolves hierarchical and contextual differences that may determine one as a role model.

It was also expected that principals' highest level of education attained would be a predictor of principals' perceived capacity and their perceived effectiveness of instructional supports. Tschannen-Moran and Gareis (2005) found that initial preparation of principals proved to be an important factor related to principals' self-efficacy in their

study. This does not seem to apply to principals in this study. It is not likely that principals would have gained exposure in thinking about professional development, instructional supervision, and classroom resources as inputs that may serve as teacher incentives for improving instructional practice. And therefore, principals are unlikely to be motivated by people giving lectures.

It is surprising that principals' sense of capacity and effectiveness of instructional supports did not differ in terms of contextual variables such as region where school is located and percentage of student body living at poverty level. This corresponds to findings by Tschannen-Moran and Gareis (2005) where school level, school context, and socio-economic status of the student population were not related to principals' efficacy beliefs. Conventional wisdom posits that low-income environments are more challenging than those with a higher proportion of middle- and upper-income families. Student socioeconomic status has been found to influence how principals approach their jobs; and higher portions of student body receiving free/reduced lunch has been found to be linked to higher principal self-efficacy beliefs for instructional leadership (Goldring, 1990; Hallinger and Murphy, 1986; Leithwood et al., 1990; Smith et al., 2006).

That demographic and contextual factors are not significantly related implies that principals' sense of capacity and effectiveness of instructional supports may be cultivated among principals regardless of who they are, who their students are, and where their school is located. No one group of school principals is likely to have an advantage over another.

**Research Question 4. To what extent do principals perceive Instructional Leadership training provided by SEAMEO INNOTECH to be related to their level of confidence in providing instructional supports?**

Principals felt confident in providing instructional supports upon engaging in training activities that involved hands-on experience in their own school setting. As described in Chapter 2, Module 1 and Module 2 required the principal to perform specific instructional leadership tasks with the teachers in their school and to reflect upon the process they went through. The Action Plan activity required the principal to use the SIP they developed to create steps towards implementing it with their teachers and other stakeholders. Each of these training activities was a mastery experience as defined by Bandura. This finding is important to the design of school leadership training. It implies that training activities should guide instructional leadership tasks situated in the actual work environment.

It is no surprise that principals' level of confidence was not influenced as much by Feedback during Revalidation. As described in Chapter 2, the Revalidation was an event marking the completion of the training program. Principals met with their trainer one-on-one, but for a short while only. Discussions during the meeting with the trainer focused on how the principal would implement their Action Plan, their reflections on his/her learning process, and their overall impressions of the training program. Instances of vicarious learning and verbal persuasion and the evocation of emotional states during the discussion between principal and trainer were dependent upon the trainer's facilitation. Efforts should be made to design a format for facilitating the one-on-one discussions between the trainer and principal that enables an instance of vicarious

learning and verbal persuasion that encourages and motivates the principal towards continuing efforts toward instructional leadership.

It is also not surprising that principals' level of confidence was not influenced by Online Discussions. The online element of the ICExCELS program was originally included as a way to give principals regular access to their trainer and to engage in group discussions without leaving their locations. Facilitation of Online Discussions was dependent upon the trainer. Findings from this study suggest that Online Discussion should be structured to include vicarious learning and verbal persuasion that encourages and motivates principals towards instructional leadership.

#### Implications for Policy and Practice

The focus of this study is based on the industrial organization approach which is part of Galal's model for adopting education reform measures. Education is seen as a principal-agent problem in the industrial organization approach. The principal (e.g. central and division official, school principal) is interested in particular outcomes (such as good quality education), but has to rely on agents (e.g. teachers) to obtain these outcomes (Chapman, 2008). The findings from this study have implications for policy and practice that build Filipino school principals' capacity in solving the principal-agent problem within a newly decentralized education sector.

#### *Mandating Development of School Mission, Goals, and School Improvement Plan*

#### *Channels Principals' Time on Instructional Leadership*

In order for principals to feel capable in providing professional development and instructional supervision, they need to be able to allocate an adequate amount of time to instructional leadership tasks. Since principals have traditionally been school managers

focused on providing classroom resources, allocating time toward instructional leadership tasks such as providing teachers with professional development and supervision is likely to be difficult. The current model for school-based management applied in the Philippines requires principals to work with key stakeholders in developing the school mission and goals, and holds them accountable for producing the School Improvement Plan. These required tasks force the principal to prioritize instructional leadership and channel their time to work towards school improvement issues identified in the SIP such as classroom instruction. School-based management policies aimed to support the principals' role as instructional leadership must be designed to guide principals to prioritize instructional leadership and channel their time towards it.

*Distributed Leadership Reflective in SIP*

Principals' perceived capacity in providing instructional supports is dependent upon the capacity and resources associated with stakeholders who hold a vested interest in school improvement. Without stakeholder support, principals' perceived capacity is likely to be low. The political relationship between the principal and these stakeholders is developed through the lateral coordination enabled by the current model of school-based management for accomplishing key instructional leadership tasks such as the development of the SIP. Implementation of the SIP is then dependent upon the principals' influence over the stakeholders in supporting school improvement initiatives. School-based management policies mandating the development of the SIP must also mandate distributed leadership in its implementation in order to ensure all vested stakeholders provide necessary support. Such a mandate would strengthen principals' perceived capacity in providing instructional supports.

*Building Capacity of Master Teacher Strengthens Teacher Incentives for Improving  
Classroom Instruction*

Principals' perceived capacity in providing professional development and instructional supervision is most dependent upon the capacity level and influence of the Master Teacher. If the Master Teacher is weak in planning, developing, and implementing professional development and instructional supervision and lacks influence over teaching staff, then the principal is likely to feel less capable in providing these instructional supports. School management training provided by the Philippine DepEd must include capacity building for the Master Teacher since this role is key to principals' perceived capacity in performing key instructional leadership tasks.

Findings from this study reveal that principals are mostly likely to provide instructional supervision focused on mentoring teachers to use the learning aids in supporting the teaching-learning process. This indicates that the Master Teacher, as a resource in providing instructional supervision, is limited to improving teaching through classroom resources. Capacity building for the Master Teacher should focus on strategies for improving teaching other than the use of classroom resources. Master Teachers who are more knowledgeable about strategies leading to improved teaching-learning processes are likely to provide principals with instances of vicarious learning that will impact their perceived capacity.



*Leadership Training to be Designed Uniformly to Provide Mastery Experiences in  
Providing Professional Development and Supervision*

Just as the Master Teacher's knowledge base for strategies aiding the teaching-learning process must be improved, so must the principals' knowledge base. Principals are most likely to provide classroom resources in the form of learning aids, and their instructional supervision is most likely to be focused on mentoring teachers to use the learning aids in supporting the teaching-learning process. Instructional leadership training must include opportunity for mastery experiences in implementing strategies aside from classroom resources that support the teaching-learning process.

Principals' perceived capacity and perceived effectiveness of instructional supports is not shaped by demographic and contextual factors. Therefore, instructional leadership training may be designed uniformly to meet principals' learning needs regardless of differences in principals' background and school context within which they work.

*Principals' Perception of Teacher Capacity is Key to Introduction of Education Reforms*

Principals' perception of their teachers' capacity in guiding student achievement has direct ramifications for the way principals perceive the incentive value of instructional supports. Formulation of policies and development of education reform initiatives meant to improve classroom instruction should take into consideration how principals perceive their teachers' capacity. Principals' perception of their teachers' capacity is likely to impact whether they will accept the policy or education reform as a strategy that will improve instruction within their school. Taking this key aspect of

principals' perception into consider is likely to aid the development of policies and education reform that have a greater chance for successful implementation.

### Implications for Theory

#### *Organizational Aspects and Kemmerer's Framework of Teacher Incentives*

Understanding principals' perceived capacity and perceived effectiveness of instructional supports helps to explain organizational aspects underlying the teacher incentives central to Kemmerer's framework. Principals are most likely to provide classroom resources in the form of learning aids such as textbooks and other materials presented in the classroom. Also, principals' supervision is most likely to be focused on mentoring teachers to use learning aids in the classroom. These insights explain organizational aspects that support Kemmerer's claim that classroom resources are a major teacher incentive in the developing country context. Teachers are more likely to acquire a sense of competence when they are provided with classroom resources such as a textbook and teacher guide that serves as a blueprint for organizing students, presenting lessons, and providing feedback and practice. Principals are likely to be experienced in providing classroom resources given their traditional roles as school managers, and they are likely to be supported by Master Teachers who are experienced in supporting the teaching-learning process through the use of classroom resources.

### Contributions to Literature

Most of the research studies examining principals' sense of efficacy have been limited to only one dimension of the construct - personal self-efficacy; and generally only among principals in the United States. This study went well beyond previous research by examining both dimensions of the construct – personal self-efficacy and outcome

expectancy – in the Philippines. This study also differs from most research studies because it focuses on principals' sense of efficacy in providing teacher incentives that have potential for improving classroom instruction rather than on the link between principals' sense of efficacy and student achievement. Another aspect differentiating this study is that demographic and contextual factors were not related to principals' self efficacy and outcome expectancy.

This study contributes to the literature on decentralization and school-based management, as well as school leadership. The findings from this study provide insight into principals' beliefs about their capacity to fulfill responsibilities central to their new role as instructional leader. The findings from this study suggest how the elements of school-based management are related to principals' perceived capacity. Part and parcel of this is the political nature of the principal's new role in terms of the underlying dynamics affecting principals' perceived capacity.

This study also contributes to the literature on school improvement as it highlights the principal-agent relationship central to improving teacher performance. The findings from this study point to the strong effect the Master Teacher has on principals' perceived capacity and the strong effect teachers have on principals' perceived effectiveness of instructional supports. The teacher incentives central to this study are interventions the literature identifies as being supportive in improving teacher performance. Insight into the cognitive and conditional factors that effect the implementation of such interventions adds to the discourse on school improvement.

### Directions for Future Research

This study was limited to principals' self-efficacy and outcome expectancy. Since principals share control with Division officials, SAC/SMC, PTA, and Master Teacher in providing instructional supports, a more comprehensive understanding of capacity would emerge if their sense of self-efficacy was included. Such information is likely to shed light on the dynamics of shared control and how it affects the principal's role in providing instructional supports.

Also missing from this study is the input from the teaching staff. A study of how teachers value professional development, supervision, and classroom resources would provide important understandings about the instructional supports as teacher incentives. Part and parcel of such a study would include a survey to measure how teachers perceive their principals as instructional leaders. Teachers may also be asked to tell what type of incentives their principal is most likely to provide.

### Conclusion

Decentralization and school-based management present many challenges for school managers, especially school principals. Understanding the factors that promote principals' sense of self-efficacy and outcome expectancy for providing teacher incentives that motivate improved classroom instruction is key to the formulation of school-based management policies and development of interventions supporting the school principal in this new role and organizational environment. This study is only the beginning in exploring school principalship capacity under school-based management in Asia. Further research is necessary to better understand the relationships between principal and key stakeholders that play a large role in instructional improvement.

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## **APPENDIX A. ICExCELS Module Assignments**

From Module 1: Affirm the Instructional Leadership Roles and Functions of a School Head, pg. 94

*Conduct a meeting with some teachers in your school. Present to them some of the concepts you learned from this module. A good activity would be to identify the current problems you experienced in the four main domains of a principal's functions. These are in terms of school management, school communications, school community relations and instructional supervision. After identifying the problems under each domain, together come up with a list of ways to address them. Post your output on a bulletin board for everyone to see and learn from.*

*Submit a report about this activity to your Flexible Learning Tutor for review and evaluation. In your report, be sure to include a short reflection on this activity, focusing on how it could improve your work as a school principal.*

From Module 2: Lead Curriculum Implementation and Enrichment, pg. 79

*Conduct an assessment of your school's enrichment curriculum based on what you learned from the module. If your school does not have a written enrichment curriculum yet, maybe it is about time to start one. Call a meeting to form enrichment units. Collect the proposed enrichment curricula prepared by your teams and give some constructive comments for improvement. Do not forget to guide your teachers in repairing an enrichment curriculum based on what you have learned from this module. Exercise your new role as a curriculum leader and see your school reach greater heights!*

*Write a reflection paper on your curriculum assessment experience and submit it to your Flexible Learning Tutor for feedback.*

## Appendix B: Filipino School Principal Capability Survey

Dear School Principal:

I am a PhD candidate at the University of Minnesota, USA conducting research for my dissertation on school leadership capability in public schools in the Philippines. As part of my study, I invite you to complete this survey. This survey aims to gather information about how you see yourself as a school principal. By completing this survey, you will help in identifying the strengths of school principalship in the Philippines and how it may be better supported.

Your participation in this study is voluntary and will not affect your participation in the ICExCELS training. You will remain anonymous and your answers will be kept strictly confidential. It should take you about 15 minutes to complete the survey. Once you have completed the survey, please deposit it in the designated place.

I thank you in advance for your time and willingness to share your perspective in this study.

Sincerely,  
Swetal Sindhvad

**Part 1: Demographics** Place an X on the line or write in your answer.

1. Are you currently employed as a School Principal, Head Master / Head Mistress, or Head Teacher?  
 If YES, then please continue to complete this survey.  If NO, then please DO NOT continue to complete this survey.
2. Gender:  Male  Female
3. Highest level of education attained:  High School Diploma  College Degree  Masters Degree
4. Total number of years working as an educator (including this year): \_\_\_\_\_
5. Total number of years working as a school leader (including this year): \_\_\_\_\_
6. The school you work in is:  an elementary school  a high school
7. If you serve at a high school, please indicate whether or not it is specialized:  science  technical  no specialization
8. What region are you in: \_\_\_\_\_
9. Percentage of students in your school in school feeding program:  less than 50%  50%  more than 50%
10. Percentage of students in your school at poverty level:  less than 50%  50%  more than 50%

**Part 2: Rate Your Capability as School Principal** Place an X in the box.

In your current role as principal, to what extent can you...	None	Very Little	Little	Some Influence	Quite a Bit	A Great Deal
1. Make textbooks available in time for start of school year						
2. Provide teacher guides to teachers						
3. Make classroom resources available. (chalkboard, pencils, notebooks, etc.)						
4. Make learning aids available. (globes, maps, posters, science lab equipment, etc)						
5. Use research to understand teaching methods to improve classroom instruction						
6. Mentor teachers in making decisions about the best teaching method						
7. Mentor teachers to make decisions about strategies for assessing student learning						
8. Analyze classroom practices						
9. Conduct teacher performance assessment						
10. Provide teachers constructive feedback on teaching performance						
11. Mentor teachers to use learning aids to enhance student learning						
12. Mentor teachers to make effective use of instructional time						
13. Mentor teachers to address their professional development needs						
14. Engage teachers in curriculum development						
15. Provide teachers opportunity to learn about teaching strategies for active learning						
16. Provide teachers opportunity to understand student-centered learning						
17. Provide teachers opportunity to develop skills and knowledge to teach different subjects						
18. Provide teachers opportunity to learn classroom management strategies						
19. Foster professional learning community among teachers						

**Part 3: Rate Effectiveness of Teacher Incentives** Place an X in the box.

To what extent does the following motivate teachers to improve teaching?	None	Very Little	Little	Some Influence	Quite a Bit	A Great Deal
1. Classroom Resources (textbooks, notebooks, chalkboard, etc)						
2. Learning Aids (Globes, maps, posters, science lab equipment, etc)						
3. New Teaching Methods						
4. Your Feedback from Classroom Observations						
5. Mentoring Teachers						
6. Training / Professional Development						
7. Giving Teachers Role in Curriculum Development						
8. Professional Learning Community for Teachers						

**Part 4: Rate Your Level of Control in Providing Teacher Incentives** Place an X in the box.

To what extent do you have control in providing...	None	Very Little	Little	Some	Quite a Bit	A Great Deal
1. Classroom Resources						
2. Learning Aids						
3. Teacher Salaries						
4. Teacher Benefits						
5. Teacher Promotion						
6. Teacher Rewards						
7. Teacher Training / Professional Development						
8. Professional Learning Community for Teachers						
9. Teacher Mentoring						
10. New Teaching Methods						
11. Feedback from Classroom Observations						



**Part 5: How much time do you spend on Instructional Leadership tasks WEEKLY? Place an X in the box.**

<b>Instructional Leadership Tasks</b>	<b>Less than 10%</b>	<b>Between 10 – 20%</b>	<b>Between 20 – 30%</b>	<b>Between 30 – 40%</b>	<b>Between 40 – 50%</b>	<b>Between 50 - 100%</b>
1. Classroom Observations						
2. Follow-up to Classroom Observations						
3. Obtaining Classroom Resources						
4. Obtaining Learning Aids						
5. Researching Teaching Methods						
6. Mentoring Teachers						
7. Planning Teacher Training / Professional Development						
8. Planning Activities for Professional Learning Community						
9. Curriculum Development						

**Part 6: Rate Your Level of Confidence After ICExCELS Training** Place an X in the box.

<b>How confident are you in your abilities to provide teachers in your school incentives that would motivate them to improve classroom instruction AFTER...</b>	<b>Not at all Confident</b>	<b>Somewhat Confident</b>	<b>Moderately Confident</b>	<b>Very Confident</b>	<b>Extremely Confident</b>
1. Completing Module 1 Assignment					
2. Completing Module 2 Assignment					
3. Creating an Action Plan					
4. Online discussions with fellow school principals and tutor					
5. Feedback from the tutor on assignments					
6. Feedback during the Revalidation					

**Part 7. How effective are you as a School Principal?** Place an X on the line.

\_\_\_ Extremely Effective    \_\_\_ Very Effective    \_\_\_ Somewhat Effective    \_\_\_ Somewhat Ineffective    \_\_\_ Very Ineffective    \_\_\_ Extremely Ineffective

**Part 8. How satisfied do you feel about your job as School Principal?** Place an X on the line.

\_\_\_ Very Satisfied    \_\_\_ Satisfied    \_\_\_ Neither Satisfied or Dissatisfied    \_\_\_ Dissatisfied    \_\_\_ Very Dissatisfied

**Part 9: Rate Level of Teacher Capacity in Guiding Student Achievement at Your School** Place an X in the box.

<b>How capable are teachers in your school in...</b>	<b>Extremely Capable</b>	<b>Very Capable</b>	<b>Somewhat Capable</b>	<b>Somewhat Incapable</b>	<b>Very Incapable</b>	<b>Extremely Incapable</b>
1. Preparing students to take National Achievement Test						
2. Preparing students for next grade level or graduation						
3. Using learning aids						
4. Promoting learning through experience and discovery						
5. Managing learning differences						
6. Assessing student learning						

**Part 10. Teacher Absenteeism** Place an X on the line.

What percentage of teachers in your school was absent more than 1 day during the last month?

\_\_\_ **Less than 10%**    \_\_\_ **Between 10 – 20%**    \_\_\_ **Between 20 – 30%**    \_\_\_ **Between 30 – 40%**    \_\_\_ **Between 40 – 50%**    \_\_\_ **More than 50%**

**Part 11. Student Time on Task** Please write your answer on the line.

1. How long is a typical class period in your school? \_\_\_\_\_

2. How many class periods are scheduled during the school day? \_\_\_\_\_

**THANK YOU FOR COMPLETING THIS SURVEY!**

**Appendix C. Descriptive Statistics**

**Table A. Principals' Perceived Capacity**

<b>Instructional Leadership Tasks</b>	<b>A Great Deal</b>	<b>Quite a Bit</b>	<b>Some Influence</b>	<b>Little</b>	<b>Very Little</b>	<b>None</b>
1. Make textbooks available in time for start of school year	29.4%	28.8%	15.7%	8.2%	8.0%	4.1%
2. Provide teacher guides to teachers	42.0%	32.1%	11.0%	3.8%	4.1%	1.1
3. Make classroom resources available. (chalkboard, pencils, notebooks, etc.)	43.1%	29.1%	14.0%	4.7%	3.3%	.8%
4. Make learning aids available. (globes, maps, posters, science lab equipment, etc)	28.0%	36.0%	16.0%	9.3%	5.5%	0%
5. Use research to understand teaching methods to improve classroom instruction	15.0%	33.0%	22.3%	15.7%	7.7%	1.6%
6. Mentor teachers in making decisions about the best teaching method	44.8%	33.8%	14.6%	2%	.5%	0%
7. Mentor teachers to make decisions about strategies for assessing student learning	45.6%	34.3%	12.6%	2%	.3%	0%
8. Analyze classroom practices	44.2%	35%	15.1%	1.1%	.5%	0%
9. Conduct teacher performance assessment	55.8%	28.8%	10.2%	1.1%	0%	0%
10. Provide teachers constructive feedback on teaching performance	58.8%	27.2%	8.2%	1.1%	.3%	0%
11. Mentor teachers to use learning aids to enhance student learning	57.4%	27.7%	9.3%	1.4%	0%	0%
12. Mentor teachers to make effective use of instructional time	61%	25%	8.8%	.3%	.3%	.3%
13. Mentor teachers to address their professional development needs	41.5%	37.1%	14.6%	2.5%	0%	0%
14. Engage teachers in curriculum development	32.4%	38%	16.8%	5.8%	1.4%	.8%
15. Provide teachers opportunity to learn about teaching strategies for active learning	45.3%	35.7%	12.4%	1.6%	0%	0%
16. Provide teachers opportunity to understand student-centered learning	46.2%	34.6%	13%	1.6%	.3%	0%
17. Provide teachers opportunity to develop skills and knowledge to teach different subjects	43.1%	37.1%	12.4%	3%	0%	0%
18. Provide teachers opportunity to learn classroom management strategies	53%	31%	10.2%	1.4%	0%	0%
19. Foster professional learning community among teachers	49%	32.1%	12.6%	2.2%	0%	0%

**Table B. Principals' Rating for Effectiveness of Teacher Incentives**

<b>To what extent does the following motivate teachers to improve teaching?</b>	<b>A Great Deal</b>	<b>Quite a Bit</b>	<b>Some Influence</b>	<b>Little</b>	<b>Very Little</b>	<b>None</b>
1. Classroom Resources (textbooks, notebooks, chalkboard, etc)	57.4%	23.4%	10.4%	6.0%	1.4%	.3%
2. Learning Aids (Globes, maps, posters, science lab equipment, etc)	61.8%	20.6%	8.5%	6.3%	1.9%	.3%
3. New Teaching Methods	49.2%	33.8%	13.2%	2.7%	.3%	0%
4. Your Feedback from Classroom Observations	61.0%	29.4%	7.4%	1.1%	0%	0%
5. Mentoring Teachers	61.3%	27.5%	9.1%	.8%	0%	0%
6. Training / Professional Development	53.6%	36.5%	7.1%	1.4%	.3%	.3%
7. Giving Teachers Role in Curriculum Development	44.5%	35.7%	13.5%	3.8%	.5%	.8%
8. Professional Learning Community for Teachers	47.3%	36%	11.8%	3%	.3%	.3%

**Table C. Principals' Level of Control in Providing Teacher Incentives**

<b>To what extent do you have control in providing...</b>	<b>A Great Deal</b>	<b>Quite a Bit</b>	<b>Some Influence</b>	<b>Little</b>	<b>Very Little</b>	<b>None</b>
1. Classroom Resources	25.3%	36.5%	18.7%	9.9%	7.1%	1.1%
2. Learning Aids	22.5%	41.2%	20.6%	8.8%	4.4%	.8%
3. Teacher Salaries	16.2%	19.5%	7.1%	8.2%	10.7%	34.3%
4. Teacher Benefits	18.4%	19.8%	10.2%	10.2%	11.0%	27.7%
5. Teacher Promotion	28%	30%	16.8%	11.5%	7%	5.2%
6. Teacher Rewards	35.7%	30.8%	18.4%	7%	4.1%	2%
7. Teacher Training / Professional Development	35.2%	39.3%	15.1%	5.5%	3.3%	.5%
8. Professional Learning Community for Teachers	31%	38%	15.4%	7.7%	4.7%	.5%
9. Teacher Mentoring	47.5%	36%	11%	3.8%	.3%	.3%
10. New Teaching Methods	37.1%	43%	14%	4.4%	.3%	.3%
11. Feedback from Classroom Observations	61%	30%	5.8%	2.2%	0%	0%

**Table D. Principals' Time on Instructional Leadership (Weekly)**

<b>Instructional Leadership Tasks</b>	<b>Between 50-100%</b>	<b>Between 40-50%</b>	<b>Between 30-40%</b>	<b>Between 20-30%</b>	<b>Between 10-20%</b>	<b>Less than 10%</b>
1. Classroom Observations	30.8%	27.7%	14.6%	12.1%	8.2%	2.7%
2. Follow-up to Classroom Observations	26.4%	26.4%	14.8%	14.0%	10%	4.4%
3. Obtaining Classroom Resources	18.1%	27.2%	20.6%	12.1%	8.5%	7.7%
4. Obtaining Learning Aids	16.5%	27.2%	20.3%	15.4%	7.7%	7.4%
5. Researching Teaching Methods	12.4%	24.2%	20.1%	14.8%	12.6%	10.4%
6. Mentoring Teachers	33%	27.7%	13.55	11.3%	8.5%	1.6%
7. Planning Teacher Training / Professional Development	23.1%	25.5%	17.3%	12.1%	10.2%	7%
8. Planning Activities for Professional Learning Community	21%	26.6%	16.8%	12.1%	11%	7%
9. Curriculum Development	21%	26.1%	17.3%	13.7%	8%	8.2%

**Table E. Reported School Principal Effectiveness**

<b>Extremely Effective</b>	<b>Very Effective</b>	<b>Somewhat Effective</b>	<b>Somewhat Ineffective</b>	<b>Very Ineffective</b>	<b>Extremely Ineffective</b>
2.5%	44.5%	45.3%	1.1%	.5%	0%

**Table F. Reported School Principal Job Satisfaction**

<b>Very Satisfied</b>	<b>Satisfied</b>	<b>Neither Satisfied or Dissatisfied</b>	<b>Dissatisfied</b>	<b>Very Dissatisfied</b>
37.6%	51.4%	4.4%	.5%	3.3%

**Table G. Principals' Rating for Teacher Capacity**

<b>How capable are teachers in your school in...</b>	<b>Extremely Capable</b>	<b>Very Capable</b>	<b>Somewhat Capable</b>	<b>Somewhat Incapable</b>	<b>Very Incapable</b>	<b>Extremely Incapable</b>
1. Preparing students to take National Achievement Test	10.4%	66.2%	18.7%	.5%	.8%	.5%
2. Preparing students for next grade level or graduation	11.5%	70.6%	13.7%	.5%	.5%	.3%
3. Using learning aids	8.8%	66.2%	21.2%	.5%	.3%	.3%
4. Promoting learning through experience and discovery	5.5%	60%	30%	1.6%	.3%	.3%
5. Managing learning differences	6%	53%	36%	1.6%	.3%	.3%
6. Assessing student learning	9.6%	67%	19%	1.1%	.3%	.3%