Full Length Research Paper

Site-based management: Impact of leader’s roles on institutional improvement

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This study attempts to determine some of the most influential factors within the roles of principals as being site-based manager. This will also help in understanding the impacts that are experiencing within site-based management (SBM) with an intention of providing better guideline for institutional improvement. Data gained through questionnaires from 127 principals and 694 teachers using representative sampling technique from urban secondary provision are used. This study reports that some of the items that are considered as the roles of site-based management have impact on organizational improvement. A remarkable school improvement may be achieved if the principals provide special emphasis on strategic planning, supportive and comprehensive roles reducing emphasis on shared decision making. The findings of this study provide important information for policy makers, education managers, and especially for the principals and teachers concerned with the improvement and well-being of secondary schools under the school-based management system.

Key words: School-based management, roles of principals under SBM, school improvement.

INTRODUCTION

In Bangladesh, Site-based management (SBM) is the management model for non-government secondary and higher secondary institutions since two decades, considering that more than 90% of the secondary and higher secondary institutions comprise under the non-government sector (Hoque et al., 2010). Principals are the key leaders to oversee matters regarding institutional improvement (Delaney, 1997), as they are authorized key figures (Amundson, 1988) at site level under the SBM system. Although SBM is viewed as a positive and successful vehicle of school improvement (SI), there are uncertainties pertaining to the exact roles of principals. As considerable research continues to demonstrate the pivotal position of principalship in school management (Hallinger, 2003; Leithwood and Jantzi, 2005), there should also be similar research on what principals can do to achieve their schooling objectives. Unfortunately due to vague guidelines, the principals only perform their parts when the demands of a situation arise. This varies from school to school, state to state, and country to country. In Bangladesh, site-based management has been practiced for two decades. As all non-government secondary and higher secondary schools are following the same management system, there are a lot of differences in terms of the quality of education, teaching staffs, system of evaluation, as well as input and output. These differences occur because of the principals themselves; as they have the opportunity to exercise their authorities. From different studies (Cotton, 1992; Malen, Ogawa and Kranz 1990; Murphy, 1997), it is found that principals of successful schools share some common roles such as strategic planning, supportive, comprehensive planning, shared decision making and facilitation under SBM, which are the keys to their success. If the principals really know the variation of influence of these roles on school improvement, they can act more efficiently than usual. Therefore, the following...
aim and objectives had been targeted to achieve the study goal.

**Research aim and objectives**

Ergo, the primary aim of this study is to find the variable impacts of the principals’ roles on school improvement. With views to achieve the aim, these following objectives are formulated to foresee whether the roles of principals under the school-based management have any impacts on the school improvement. These objectives are:

1. To investigate the impact of principal's strategic planning on school improvement.
2. To investigate the impact of principal's supportive roles on school improvement.
3. To investigate the impact of principal's comprehensive planning roles on school improvement.
4. To investigate the impact of principal's shared decision making roles on school improvement.
5. To investigate the impact of principal's facilitator roles on school improvement.

**Research questions**

1. What is the impact of principal's strategic planning on school improvement?
2. What is the impact of principal’s supportive roles on school improvement?
3. What is the impact of principal’s comprehensive planning roles on school improvement?
4. What is the impact of principal’s shared decision making roles on school improvement?
5. What is the impact of principal’s facilitator roles on school improvement?

**Literature review**

**Site-based management**

According to Murphy (1997), SBM is a strategy to decentralize decision-making from an individual school that facilitates the empowerment of parents and the professionalism of the teacher, whilst divides shared decision-making among key stakeholders at a local level. Although Lindquist (1989) argues that the variation of the SBM concept is confusing and conflicting, White (1989) contradicts by explaining that these variations are processed according to levels of authority of the actors involved and the areas of control. In his model, Cotton (1992) admits that there are other variations as well. According to Cotton (1992), SBM is a form of district organization that alters the governance of education as it represents a shift in authority towards decentralization.

When a school is identified as the primary unit of education, there is a marked shift in decision-making power to the local school site. Conceptual ideas of SBM conclude that the school is the primary unit of change:

1. Those whom work directly with the students have the most informed and credible opinions.
2. The school principal is the key figure in school improvement.
3. SBM supports the professionalism of teaching and vice versa, which can lead to more desirable schooling outcomes.

**The role of the principal roles under SBM**

Cotton (1992) has delineated the four roles that principals practice under SBM. The first role, which is the ‘chief executive officer’, holds the power of decision-making. As an executive officer, the principal’s chief role is to discover the problem and subsequently solve it, with the application of creative approaches combined with his own wisdom. Consequently, the research of Malen, Ogawa and Kranz (1990) also supports Cotton’s stand (1992) with regard to the notion of principals being the chief executive officer under SBM. The second role is the collegiate and sharing of authority which allows the teachers to feel comfortable in exchanging opinions and sharing decisions. Thus, principals are responsible to create a positive climate and encourage teachers to participate in decision-making. In conjunction to this, Rosenholtz (1985) states that the most effective schools do not isolate their teachers but to encourage a close collaboration instead. This is done by establishing and maintaining a collaborative relationship with the school staff as well as valuing the ideas of teachers by seeking their input. Hargreaves (1994) supports the idea that teachers are able to implement new ideas within the context of supportive relationship or partnership. The third role of the principal is to carry out the task as an “instructional manager”. Generally, effective principals have high expectations for school improvement, and will support others toward achieving common goals. The Maryland Instructional Leadership Framework (2005) focuses on bearing this knowledge for school principals to be the manager of teaching-learning in the school. According to Cotton (1992), principals of SBM must be held accountable for their actions and act as guardian to teachers and students. If not, barriers on open communication, debate and critique (Havnes and Stensaker, 2006) may develop.

Wohlstetter (1994) and Mohrman (1993) see the evidence in emergence of new roles for the principals in restructured SBM schools. They argue that the principals of SBM schools need to juggle a variety of roles. The roles of principals evolve from direct instructional leadership to a broader one of orchestrating decision-making;
School improvement (SI) is a journey towards excellence through a changing process. These changing areas may be identified from the work of distinguished scholars whom specialize in different phases of school improvement since a decade ago. Most of the areas are similar but explained in different ways. Some of the researchers have emphasized on the changing school cultures; such as learning condition and related internal conditions, teacher and leadership development, and classroom improvement (Fullan, 1991; Scheerens, 1992) whilst others have termed SI as a multilevel intervention and mobilizing change at a school, department and classroom level (Fullan, 1993: Hopkins, Ainscow and West, 1994; Hopkins and Harris, 1997). Creemers (1994) highlights the teaching and learning process as the main determinants of SI. Hopkins (2001) suggests adapting the management arrangements within the school itself to support teaching and learning as a strategy for educational change for real improvement, whereas Harris (2002) has highlighted a number of important findings about the successful process of school change. As examples, the teacher development, leadership development, improvement of the learning condition and the school culture.

In addition, Hopkins (2001) draws a framework of SI and school excellence, in which leadership and management, professional pathways, teaching, environment, evaluation, students’ learning process, collaborative planning, curriculum assessment of learning are crucial elements. For example, the Australian Capital Territory (2004) uses some of the relevant elements for its SI framework, primarily the teaching practice, learning and assessment, curriculum, student focus, and leadership behavior. In spite of the obvious contextual differences and definitional and measurement issues, there is a consensus that the leadership roles of the principals has had a tremendous impact on the SI. It is, therefore, important to understand and determine the influential factors of their leadership roles that affect the SI.

As school principals are key figure in SI under the SBM, the roles and responsibilities of theirs greatly influence the SI process. Albeit the basic responsibilities of principals are the same in different models, there are still some variations. The principal needs to operate differently compared to previous times (Sullivan, 1988). For these reasons, the managerial roles of principals under the school-based management have been the subject of much research in an educational setting for SI.

**METHODOLOGY**

This main objectives of this study entitled “Impact of leaders’ roles on institutional improvement,” foresee the correlation of sorts of exploration in regards with the variance of impact of the principals’ roles under the SBM on school improvement. Thus, it is not considered as a causal study; because it aims to establish the relationship between the independent predictable variables (the principals’ roles under SBM) and the dependent variable (school improvement). Gay (1996) argues that correlative research involves collecting data to determine the extent of a degree in relationship exists between two or more quantifiable variables. The result either predicts or establishes a relationship between variables.

**Population and sampling**

The population of the study consists of the principals and teachers of the secondary schools of a city in Bangladesh, called Dhaka. There are four main cities in Bangladesh namely Dhaka, Chittagong, Rajshahi and Khulna. The city of Dhaka is chosen via random sampling. Dhaka is the capital city of Bangladesh and it possesses the most schools compared to all other cities. The total number of secondary schools in this city is 338 including a number of 10,634 teachers (Banbeis, 2006). Secondary schools are chosen because the deterioration of quality in the Bangladesh’s secondary education is now a burning question.

A set of questionnaires for 1,050 teachers and 200 principals are sent to 200 secondary schools for data collection in Dhaka. Returned responses from a total of 715 teachers and 127 principals are obtained from 132 schools. Altogether, the responses of 18 teachers and 5 principals from 5 schools are excluded from subsequent analysis due to their failure in the completion of questionnaires’. The response rate was 68.09% for teachers and 66% for principals. Five schools are dropped out from the returned responses as the 5 of the principals sent incomplete replies. Overall, the responses of 697 teachers and 127 principals from 127 schools (63.5%) are used for the purpose of this study with the aggregated mean of teachers’ responses at school level.
causal-comparative, and experimental research, some experts consider the magic 'general guideline' to be 30. Thus, for correlational studies, at least 30 subjects are needed to establish the existence or non-existence of a relationship. With this in mind, justifiably sufficient to represent the population being studied.

In regards with sampling, Gay (2000) says, for correlational, causal-comparative, and experimental research, some experts consider the magic 'general guideline' to be 30. Thus, for correlational studies, at least 30 subjects are needed to establish the existence or non-existence of a relationship. With this in mind, the responses (132 for principals and 715 for teachers) are justifiably sufficient to represent the population being studied.

Instruments: Their validity and reliability

Questionnaires on the roles of principals under SBM and school improvement are used to collect the quantitative data for this study. The sources of these questionnaires are respectively adapted from the questionnaires of Tanner and Stone (1998) for the roles principals under SBM and Ubben and Hughes (1992) for school improvement. The validity of the content has been determined through experts’ opinions on who were the specialists in the content area selected for this study. The preliminary versions of both questionnaires are tested in a pilot study based on a random sample of 30 secondary schools. The results from this pilot study have proven that the items in both questionnaires are relevant, although some minor alternations are required. To verify the convergent validity of the instrument used for this study, multi item scales are analyzed based on factor analysis. The scales include 5-principals’ roles variables (Strategic planning, supportive, comprehensive planning, shared decision making and facilitator) with one criterion variable 'school improvement'. At the beginning, the underlying assumptions are observed before proceeding on the subsequent phases of factor analysis. Confirmatory factors and reliability analysis are also performed to determine the dimensionality for the roles of principals under SBM and school improvement content. The results of factor analysis for the roles of principals is determined to be 5 with the factor loading ranging from .615 to .917; by using principal component analysis and Varimax rotation procedures amounting for 65.72 and 64% of total variance.

In the case of school improvement measurement, the direct Oblimin rotation method is used. This is because the Varimax rotation method fails to get a clean factor. Factor analysis on 26 items on the school improvement produced a one-dimensional factor with the factor loading ranging from 0.59 to 0.76. This factor cumulatively obtained 76.70% of the variance in the data, with explanatory power as expressed by the eigenvalue 11.29. The factor loadings are acceptable. In other words, these 26 items are internally consistent, with the measurement of the same basic construct. A reliability test of these measures are performed, in which the Chronbach alphas are all above the lower limit of acceptability (Chronbach alpha >0.60) (Nunnally, 1978). Hence, all the measurements are highly reliable.

Data analysis

All the data gathered for this study is processed and analyzed by using the software developed for Statistical Package for the Social Sciences (SPSS). Hierarchical multiple regression analysis is used for taking the variables of principals’ roles as independent variables and school improvement as dependent variable. The researchers have employed hierarchical multiple regression analysis deliberately as this analysis is used to examine the relationships between a set of independent variables and a dependent variable, after controlling for the effects of some other independent variables on the dependent variable. In this study, the researchers have controlled the effects of other two variables such as teachers’ age and gender.

RESULTS

Variance of impact of principals’ roles on school improvement

Table 1 indicates that the whole model is significant ($F=15.671, p<0.05$). The adjusted $R^2$ value of 0.368 supports that 36.8% of the variation in SI can be explained by independent variables. The results suggest the presence of a significant impact of principals’ strategic planning on SI ($\beta = 0.333, p< 0.05$). The supportive attitude of principals ($\beta =0.368, p<0.05$) is also found to be more significantly related to SI. The positive value standardized beta for comprehensive planning ($\beta = 0.184, p< 0.05$) also supported its impact on SI. The condition indexes, VIF, and tolerance are found to be within acceptable range that ruled out the potential problem for multicollinearity.

DISCUSSION

The principals’ roles under SBM and school improvement

Strategic planning and school improvement

The impact of the principals’ strategic planning under the school-based management is found to have significant
and positive effect on school improvement. This result indicates that the principals of Bangladesh’s urban secondary schools, in their role as school leaders, have recently recognized the need for strategic planning to achieve the desired improvement in the schooling system. The result underpins the necessity for strategic planning; suggesting that principals need to lead the school at an incremental pace of improvement by streamlining the extraneous functions. The result also shows that the principals of Bangladesh urban secondary schools develop school improvement plans, stay abreast at work, promote vision and mission, organize meetings and recognize all success under their strategic planning roles. This way, the principals formulate their holistic school design as a set under the SBM and exercise strategic planning around a coherent set of values.

As expected, the principals’ strategic planning under the site-based management has a greater impact on school improvement. This result is in line with other developed and developing countries which are endorsing the school-based management such as the Hong Kong (Evia, 2003), Australia (Gurr, Drysdale and Mulford, 2005) and Sweden (Hoog, Johasson and Olofsson, 2005), whereby it is reported that their school improvement can be observed by the proper implementation of strategic planning. Without proper strategic planning, the principals’ role is found to be in a poor, inadequate preparation (Hall et al., 1997).

**The influence of the principals’ supportive ability on school improvement**

Under school-based management, the influence of principals’ supportive role in school improvement is found to be both positive and significant. These results indicate that the principals must exert their utmost support for the teachers in improving their basic commitment for the development of the school. By cultivating proper time management and a conducive teaching-learning environment, the principal may inspire teachers to engage in a self-development program to contribute to the school improvement. In order to achieve organizational goals, principals of urban secondary schools from Bangladesh are found to have created some specific structures under school-based management to help different team members to build coalitions for the betterment of students and school improvement.

Yariv and Coleman (2005), Dinham (2007) have reported similar findings whereby principals prefer supporting measures or making changes to the school for successful school development, rather than confronting the teachers. In conjunction with these findings, Liethwood and Jantzi (1997) notes that teachers are more likely to be genuinely involved in the implementation of the school’s mission and vision, alongside with the principal in support to help unite teachers and establish a visionary group of ownership. These factors are essential for a school’s effectiveness and improvement.

**The principals’ comprehensive planning under SBM and school improvement**

This study looks at the presence of a positive and significant relationship, in regards with the relationship between principal’s comprehensive planning and school improvement. These findings imply that the comprehensive managerial style for principals can contribute to the school improvement. Comprehensive planning functions as a necessary management tool for principals under the school-based management in order to delegate tasks to various managing groups. These tasks are to be performed at a site level. A thorough improvement of schools can be attained via a comprehensive managerial style of principals. Thus, the proper implementation and utilization of comprehensive planning leads the school to a path of quality improvement. It increases flexibility in relationship improvement between students and teachers and also increases acceptance and understanding of social needs by raising their quality. The comprehensiveness of principals alerts the working groups (teachers and staffs) of their responsibilities whilst encourages them to be at their optimum level in order to fulfill the common goals. Under the comprehensive plan, the principal works as manager at site level; ensuring that both of the working group and team leader feel flexible and relaxed in their decision making. Here, the principal remains at the centre of every team’s work. To include, Tam (2007) reveals his findings in support with the fact that the comprehensive role of the principal is the central factor of a school’s quality.

**Shared decision making and school improvement**

Although shared decision making is considered as an essential managerial role for school–based management (Bouer and Bogotch, 2006; Cranstan, 2001), the researcher of this study could not discern any noticeable impact of shared decision making in school improvement. As unexpected as it may seem, the result is not surprising because of the recent study by Tsai and Beverton (2007), which also failed to prove any relationships between shared decision making and school improvement which is explained by the saying, “Where there are many men, there are many minds”. More often than not, it is difficult and time consuming to come up with decisions to satisfy all the parties involved. On the other hand, teachers spend a lot of time outside the classroom to build consensus and some other activities that do not bring any positive impact on classroom practices. Sometimes, teachers are so busy they do not have time to prepare their lesson plans. But the teachers must also
have some backup plan or preparation to ensure classroom teaching is successful. When teachers are isolated from the classroom, schools will obviously be deprived from their main objectives. As a result, shared decision making does not seem to bring significant results, but more often a futile outcome.

**The facilitating capacity of principals and school improvement**

No significant effects are found on the school improvement with regard to the impact of the principals’ role as a facilitator. This is due to the fact that it is not directly related to school improvement; rather it is directly related to the improvement of the teachers themselves. As a facilitator, the principal facilitates different programs, conducts research and data collection, changes the process and coordinates the social service. These research findings indicate that the services done by the principal in this role have no direct impact on the school’s improvement in the urban secondary schools of Bangladesh. These findings are in line with Catano and Stronge (2006) whom revealed that some management responsibilities are found within Virginia. Some of these responsibilities are congruent whereas the others are less congruent; including the role of a facilitator.

**Implications**

Bangladesh lacks in empirical research in educational areas, especially in the secondary educational management (Alam et al., 2010). Although the SBM exists in non-government secondary schools for two decades in Bangladesh, there is no research conducted in this area or related areas by local research bodies, such as the Institute of Educational Research (IER), the National Institute of Educational Management and Administration (NIEAM) and the Bangladesh Institute of Development Studies (BIDS). Hopefully, this study is able to contribute to the development of SBM. This work constitutes a precise description on the extent of SMB practices in the urban secondary schools of Bangladesh. The researchers believe that the insights of this study are further stressed with the realistic depictions of principals’ managerial roles to fully understand the complexity of their work (Noddings and Witherell, 1991).

For secondary schools in Bangladesh to achieve their desired improvement, it is a must to emphasize on the quality of managerial system. Without this emphasis, it would be like “building castles in the air”. In Bangladesh, the site level management is mostly principal-centered, especially in terms of academic decision. Hence, this is a good initiative and positive opportunity for the SI process. However, it is not so simple for principals to carry out the tasks. Developing and monitoring principals’ capabilities require a conscious effort from both principals and teachers. The principals must know the variables that strengthen their capacities to make informed decisions.

Apart from that, this study reveals that some of the principals’ managerial roles are highly influenced by the SI indices. Consequently, the principals of secondary schools in Bangladesh may consider adopting these managerial roles more often and in a consistent manner, as opposed to what is currently being practiced; either partially or at a low level. Many principals in Bangladesh urban secondary schools have misconceptions about shared decision making under the SBM. They believe that shared decision making enforces the participation of the teachers in all decisions. The idea is good and is welcomed by the teachers, yet the results of this study indicate otherwise. Shared decision making is almost zilch to some negative impacts on the SI. In reality, evidence indicates that effective principals involved teachers in decision making; taking into account the teachers’ expertise areas, professional capacities, and strategies (Dinham, 2007).

**REFERENCES**


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