

A Model of Digital Leadership Development for Principals of Small Size Schools under the Office of the Basic Education Commission

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Abstract

The twelfth national economic and social development plan focuses on developing the efficacy of the administrator in digital literacy. Educational excellence should be promoted at all levels by improving the management of primary education quality in small schools, reforming teaching and learning methods, and developing the quality of teachers within the whole system and National Education Plan, strategy 4: creating opportunities and equality in education. The research objectives were 1) to study digital leadership for principals of small size schools under the office of the basic education commission, and 2) to propose a model of digital leadership development for principals of the small-size schools. A sample of 385 was randomly drawn from principals in small schools. The instrument was a questionnaire, constructed by a researcher with an overall reliability of 0.98. The data analyzed using percentage, mean, standard deviation and Priority Needs Index Modified (PNI_{Modified}). The results were as the followings. 1) The digital leadership factors were fit in the Thai context and the ranking from the top were professional growth and development and opportunity (PNI_{Modified}=0.13), followed by that of learning space and environment. Lastly, factor was communication (PNI_{Modified} =0.03). 2) The proposed model of digital leadership development consisted of three parts: preface, seven components of digital leadership, and three success factors. A model of digital leadership development for principals of small size schools under the office of the basic education commission is appropriate and feasible.

Keywords: Model, Digital Leadership, Principal of Small Size School, Transformative Learning

Introduction

Recently, Thai education in the context of the digital era emphasizes on how to develop a learning platform through the digital system. Various self-learning is provided online for each age group, to support life-long learning (secretariat of the cabinet, 2019). To enhance students' efficiency, education must be delivered by adjusting learning methods to be more digitalized (TDRI, 2014.) It is, then, necessary for all education administrators to understand and comprehend digital literacy so that they can lead and manage the education institutes effectively under the circumstances of rapid changes in the digital era. The digital education leaders should be keen on using digital technology and be able to apply it for education development. It is known that digital leadership is one of the important characteristics of school principals. The school principals can apply digital technology daily while performing educational management such as communication, public relations, branding participatory learning (Sheninger, 2014).

To change the behavior of the school principals, they should start with the beliefs that digital technologies can solve all traditional education problems. The school principals themselves need some new alternative methods such as using social media to create participatory learning and life-long learning (Kind and Evans, 2015 cited in Phothong, 2017). The principals can adjust their mindset through transformative learning (Panit, 2015; Alsammarray, Sirisuthi, and Duangcharthom, 2016; Zhong, 2016; Domeny, 2017). This is an adult education which emphasized learning system by looking through individual own self. This then stimulates a self-learning environment based on social and cultural contexts. Later, the old paradigm of an individual will be adjusted to the right principles. As a result, it is necessary to build the desired digital leadership model that could support successful school management. This type of leadership will include knowledge and ability to use digital technology in all aspects of school management especially those small size school. The digital technology can be used to solve management problems in the small size school namely insufficient budget and teachers, and a small number of students. The important thing that communities need to conserve small size schools in their village so that the government cannot repealing unoccupied small size school's registration and the small size schools are the fundamental knowledge for children that strong relationship in the community. (OBEC, 2018) For this reason, the principals of small size schools should be so selected as a leading group that develops their management potentials on digital leaderships so that they can solve traditional problems. Also, they can adjust the small size school in all geographical areas to be qualified with capability for human resource development. This then focuses on student qualities on dynamic changes that match to be a citizen of the next century.

The research questions focus on what level of digital leadership do principals of small size schools under the office of the basic education commission have and how it should be? And What is the suitable Model of Digital Leadership Development for Principals of Small Size Schools and how it should be? The Objective to study digital leadership for principals of small size schools under the office of the basic education commission, and then set a model of digital leadership development for principals of these small size schools.

Model and Model Development

A model is an important logical element in form of an ideal picture which helps explain specific characteristics of an envisaged phenomenon to make such ideal thought easily understandable (Sotarat, 2017: 96; Kammanee et al., 2006; Wichitputchraporn, 2005).

However, the model needs to be tested for its validity and reliability so that it can be used for effective prediction. There are many types of models, to build or develop them appropriately needs analysis of conformity between the model's philosophy or concepts and desired condition (Charuangdet, 2012.). As a result, the model is developed in two steps which are 1) model building, 2) model testing by considering its validity and validity.

Leader and Leaderships

"Leader" signifies a person whose characteristics influences the followers, or he/she is obeyed and trusted by the others and focus on his/her command to perform things successfully together. "Leaderships" signifies capabilities of an individual which comprise of initiation, intention, endurance, humility, confidence, focus, ethics and being able to communicate to convince others to do thing willingly and being ready to perform their full potentials to develop an organization. Hence, leader and leadership play an important role in organizational development, successfully management, and organizational surviving (Mahapoonyanont, 2018: 359; Thanomton, 2018: 73; Sheninger, 2014).

Digital Leaderships

Digital Leaderships means actions or behavior that reflects digital learning for potentials building within a team, namely 1) Communication, 2) public relations, 3) Branding, 4) Student engagement and learning, 5) Professional growth and development, 6) Re-envisioning learning spaces and environment, and 7) Opportunity (Sheninger, 2014).

Leadership Development

Leadership Development is a systematic process that substantially strengthens leadership characteristics. The researcher had studied about principles of leadership development by using the learning process for changes based on Mezirow's concepts (2000). There are 10 steps of changes as follow: 1) disorienting dilemma, 2) self-examination, 3) critical assessment of assumptions, 4) recognition that one's discontent and the process of transformation is shared, 5) exploration of options, 6) planning a course of action, 7) acquiring knowledge and skill necessary for acting on new meaning, 8) trying on new roles provisionally, 9) building competence and self-confidence, and 10) reintegrating the new perspective into one's life.

The concepts of small size school management (The Office of the Basic Education Commission, 2018).

The small size of school management is normally based on 4 important strategies. First is to develop the effectiveness of management. Second is to develop the learning process and education assurance. The third is to promote schools' strengths. And lastly is to promote the participation of all sectors in education management. In summary, the small size school management focuses on how to manage limited resource to produce the utmost benefits according to strategic management measure provided by the government goal setting and human resource policy committee

Related Researches

Alsammarray, Sirisuthi, Duangcharthom (2016: 244) studied "Development of Educational Management System in Small Primary School" the purposes of the research were: (1) to study the factors of Educational Management System in Small Primary School; (2) to investigate current situations problems and guidelines of developing educational management in small primary school; (3) to develop Educational Management System in Small Primary School; and (4) to examine the results of usage Educational Management System in Small Primary School. The results of the research found that the problems revealed that administrators lacked supervision and did not follow up the development of student's quality, teachers did not clear about student-centered learning, parents and community lacked cooperation in the development of student's quality and students' quality were lower than the benchmark. The guidelines to develop found that both administrators and teachers needed to

develop teachers in student-centered learning, the curriculum in learning of teachers, media and technology, learning sources for learner's learning and to ask for parents' cooperation in the development of student's quality.

Zhong (2016) conducted a study on "The effectiveness of digital leadership at K-12 schools in Mississippi regarding communication and collaboration during CCRS implementation". The results showed that principals who applied hybrid would support instructors on communication and collaboration. For this case, online or website group learning emphasized learning on social media or online learning, Personal learning network (PLN) for career development, digital management, data interpretation and promoting digital citizens based on the CCRS framework.

Domeny (2017) studied "The relationship between digital leadership and digital implementation in elementary schools" with objectives to test the roles on digital leaderships among school directors under the digital culture. The conceptual framework based on ISTE Standards for Administrators and Teachers (2009) and NETS-A National Education Technology Standard for Administrator (2009), was applied to indicate abilities to initiate technology culture. The result revealed that digital leadership was significantly associated with digital working and digital literacy of the teachers.

Sunkpho, Juntiwarakij, and Udeerum. (2017) studied "Leadership under Organizational Management in the digital era, A case study: IT and IT-related Organization in Bangkok and surrounding areas. It was found that factors affecting digital leadership were (1) Vision, (2) Inspirational communication, (3) Intellectual stimulation, (4) Supportive leadership, and (5) Personal recognition.

Polney (2018) conducted a study on "Digital leadership: An examination between leadership styles and technology skills and practices of central office administrators". It was found a strong and significant correlation between leadership and on-site training at a coefficient level of 0.86. It was also suggested that the study of among a high level of digital advancement group in a similar study area should be conducted to indicate factors of achieving.

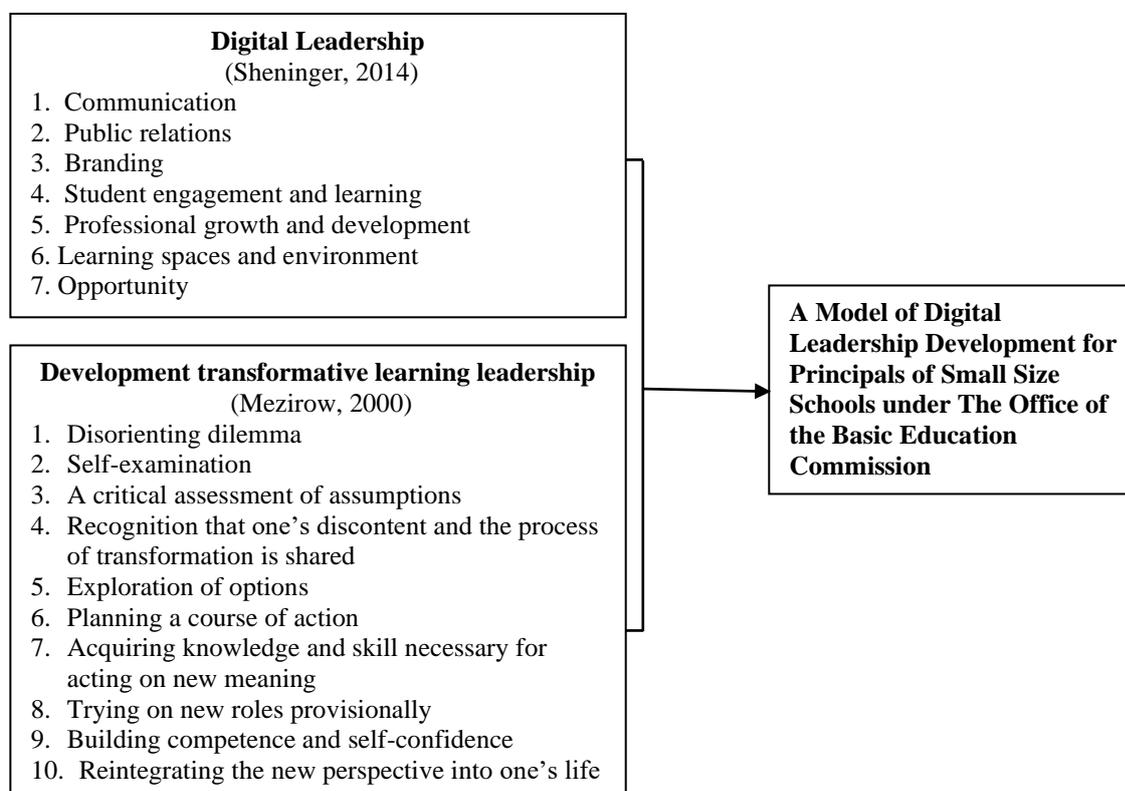


Figure 1. Conceptual framework

Research Methodology

The study on "A Model of Digital Leadership Development for Principals of Small Size Schools under the Office of the Basic Education Commission" applied mixed-method research by using both qualitative data and quantitative data.

This study presented 4 working process.

Step 1 was to study digital leadership: analyzing documents and create a semi-structural question for an interview. Then, these questionnaires were used to interview 12 experts holding one of these qualified characteristics such as 1) being or used to be in an executive position in the Ministry of Education and hold academic standing as an expert or higher, or 2) hold a principal position in a small size school; or 3) being academics with experiences and expertise in information technology or human resource management. After that research instrument was **tested for content validity**. The content analysis was performed by 5 experts to consider conformity and appropriateness of each question as well as item objective congruence: IOC. There were three choices— appropriate (1) inappropriate (0) uncertain (-1). The criteria were based on the value of IOC with its value equal to or more than 0.80. The questionnaires were also corrected according to those experts' advice. After that, the questionnaires were tested among 60 principals of the small size school. Finally, the reliability of the questionnaire was test and Cronbach's alpha coefficient at level 0.98.

Step 2 was to develop a leadership model for principals of small size schools under the Office of the Basic Education Commission by testing a questionnaire for its validity. Then, the need was surveyed. The total population was 14,858 principals of small size schools while samples were indicted by using the table of Yamane (1973) using the 95% confidential level. A total of 385 samples were used. The Multi-stage Random Sampling was applied to indicate these samples starting from the level of regional education office to provincial education office and small size school. Questionnaires were sent via the post office and electronic mail. Data were analyzed by using mean (c), standard deviation (S.D.), and Priority Needs Index Modified (PNI_{Modified}).

The results from Step 1 and 2 were analyzed and shaped to be a draft of a digital leadership model. The researcher then presented this model to the thesis advisor for some suggestions.

Step 3 was to evaluate the model by conducting a focus group consisted of 9 experts; 3 school administrators, 3 academics in the field of education management/human resource management and 3 policy administrators.

Step 4 was to conclude a model of digital leadership for principals under the Office of the Basic Education Commission.

Research Results

The results of the study on "A Model of Digital Leadership Development for Principals of Small Size Schools under the Office of the Basic Education Commission" can be concluded as follows; **The digital leadership development for principals of small size schools: It was found that the needs for the digital leaderships development show from among 7 elements were Professional Growth and Development, and Opportunity (PNI_{Modified} = 0.13), followed by Learning space and Environment (PNI_{Modified} = 0.10) and the lowest level was Communications (PNI_{Modified} = 0.03) and The model of digital leadership development for principals of small size schools comprises of the following details.**

Part 1: Leading part---> To present the need assessment of principle in small size schools.

1) Principles of the Model: Responsive development for principals of small size schools, Digital awareness, Transformative Learning, and Practicing under the context of digital education management.

2) Objectives of the Model: To develop a model of leadership development for principals of small size schools under OBCE.

3) Goals of the Model: Encourage digital leadership development for principals in small size schools.

Part 2: Elements of digital leadership development (3 steps for success)

The researcher selected the first three levels from the evaluation of need which were Professional Growth and Development, and Opportunity (PNI_{Modified} = 0.13), and Learning space and Environment (PNI_{Modified} = 0.10). It was presented the model together with the learning process through 3 steps of success which comprise of critical analyzing (attitude), opening the mind to accept (knowledge) and merging (skill).

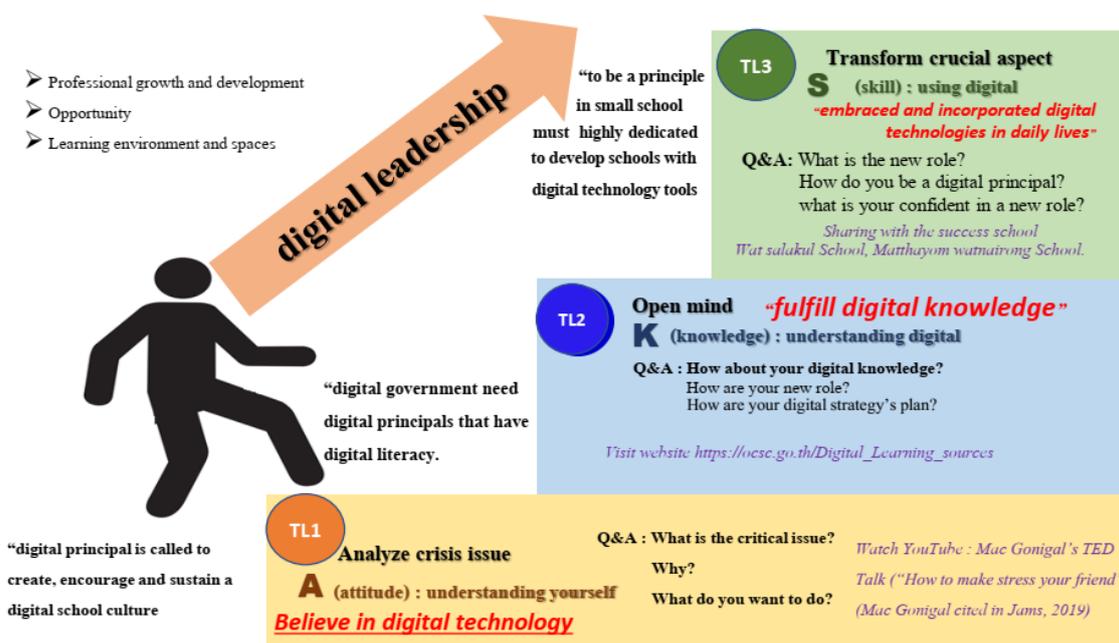


Figure 2. A model of digital leadership development (3 steps for success)

Part 3: Factors affecting the success

The school principals needed to change the traditional paradigm to the new one and then put it into real practice. However, some significant factors for success include 1) building a model for individual development by evaluating the need for the development of principals of small size schools, 2) allocating sufficient budget for such development and 3) building a concrete network and put forward the activities on social media or internet continuously.

Discussion and Conclusion

1) The study on "A Model of Digital Leadership Development for Principals of Small Size Schools under the Office of the Basic Education Commission" revealed that digital leaderships that was the most in need were Professional Growth and Development, and Opportunity (PNI_{Modified} = 0.13). The principals can carry out their duties as professional leaders, provide good examples of teachers because the leadership of the principal is implemented well it will affect the performance of the teachers, working in a conducive school environment and will increase the motivation to affiliate and grow and develop in the direction of achieving common goals. (Hartinah, 2019: 235; Lixia, 2017: 78). This may be because the principals would like to step over significant problems of the small size school

which presented in every insufficient resource (Jermsittiparsert, 2016: 5104), yet such schools need to function and provide education services for all learners in the community area. This is conformable to the government policy on creating an opportunity for human resource development by life-long learning. The school principals needed to develop education professionally and be ready for dynamic change in the modern and future era (Aoradeedolachet, 2017). Therefore, educational services need to be adjusted from the traditional style of learning in class to be Digital services via e-Learning system or Massive Open Online Courses (MOOC).

2) A Model of Digital Leadership Development for Principals of Small Size Schools under the Office of the Basic Education Commission was a semantic model focusing on synthesizing principal's behavior in three parts; 1. Introduction part, 2. The element for digital leaderships and 3 factors for success. The concept indicated that the model depicted structure relating to a set of factors or variables which carried significant relations or logic. The model needed to be tested systematically so that it can be reliable and valid. The model can be built by constructing it and testing for its validity. The results from interviewing indicated that the model could be put into practice by using factors of success. Therefore, the principals should believe that digital technology can be solved traditional education problem (Kammanee et al., 2006; Wichitputchraporn, 2005). This belief will lead principals' motivation and willingness to get digital literacy based on human resource development of The Office of the Civil Service Commission (2017) which provides self-directed learning online.

This study shows significant results for human resource development both in government and private sectors. To develop digital leaderships needs is a self-motivated because self-directed learning is used together with 3 steps of success for learning through changes. This can help trigger inner motivation to transform self-understanding sustainably. Eventually, all limitations can be transcended all limitations of digital technology. The school principals presented the new ideas to boundless develop education quality and standard related to the complicated of multicultural and the SDGs.

Recommendations

Research recommendations

1) The Ministry of Education should have policies that support digital leadership of the officials and affiliated personnel by promoting self-development based on the 'Model of Digital Leadership Development'—consisting of 3 steps of successes. To catch up with the dynamic world situation every part needs to understand digital technology and used their potential for education development.

2) The Office of the Basic Education Commission should apply the “Model of Digital Leadership Development” to all school principals and provide a regular evaluation of success to encourage their understanding of digital awareness. This finally becomes an organizational behavior as a digital school. Then every person in each school will have knowledge and understanding of digital technologies. Later, he/she will be able to apply digital leadership with their daily lives harmoniously. Finally, he/she could develop education innovation on digital technologies to elevate the standard of all learners and the efficacy of the Thai education system.

Recommendations for future studies

1) The research on strategic guidelines for developing the Model of Digital Leadership Development among principles of small size schools under the Office of the Basic Education Commission. This can provide the results on best practices and synthesized them to be a strategy for human development according to national education policy.

2) The study on guidelines for digital leadership development should be conducted in all schools and institutes under the Ministry of Education based on the enneagram and seven

habits, construct, together with transformative learning to strengthen leaderships of our human resources so that they can hold high potentials sustainably.

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