International Journal of Economics, Commerce and Management

United Kingdom http://ijecm.co.uk/ Vol. VII, Issue 1, January 2019 ISSN 2348 0386

THE EFFECT ANALYSIS OF PRINCIPAL LEADER COMPETENCY STUDY OF QUALITY **EDUCATIONAL MANAGEMENT SERVICES** TOWARDS QUALITY TOMORROW'S SCHOOLS IN THE TWENTY FIRST CENTURY IN INDONESIA

M. Hosnan

Lecturer of Graduate School, State University of Tirtayasa Banten, Indonesia And International Education Counselor AMEC - TOPSI San Diego CA 92121, USA husnan.International@gmail.com

Abstract

This study focuses on how to describe The Effect Analysis Of Principal Leader Competencies study Of Quality Educational Management Services Towards Quality Tomorrow's Schools In The Twenty First Century In Indonesia. The study used qualitative and quantitative methodologies to collect valid and reliable data to meet the objectives of the study. As specified by the ToRs quantitative data was collected through detailed and large-scale surveys of principals Leader Competencies. Qualitative data was collected through one-day field visits to schools and district education offices. During these visits more detailed information was collected to address the study objectives and key issues that emerged from the analysis of the quantitative surveys. Data was collected using Key Informant Interviews (IIK), Focus Group Discussions (FGD), Structured School Observation (SSO) and Document Review and Analysis. Data was checked for validity using Cronbach alpha and analysed using the SAS statistical package. Frequencies, means, standard deviations were calculated for all items. Ratings were disaggregated and analysed against a set of independent profile variables: The study found that there is positive influence of principal leader Competencies towards quality of Tomorrow's Schools. It means that getting better principal leadership competencies will be better for positive effect on quality of Tomorrow's Schools in Indonesia.

Keywords: Principal Leadership, Competencies, Quality Management, Tomorrow's Schools

INTRODUCTION

In an Era marked by Globalization and the Nitizen phenomenon of globalization in the 21st century, namely the occurrence process of changing relationships between Nations and between countries without being bound by the limits of political or ideological geonational geosocial. Whole world tend to become one and form interdependence without recognizing any clear boundary of nature the boundary. Therefore Strategic Plan of The Ministry of National Education, now the *Ministry of Education and Culture* (MoEC), gives priority to the development of the professional competencies of school and madrasah principals to ensure improved quality in the implementation of school education programs. Principal competencies were defined and articulated in the National Education Standards (NES) and Ministerial Decrees No 13/2007 about Standard of school principal

International research findings indicate that the quality of educational leadership has an impact on the quality of educational outcomes. For this reason, during the current Strategic Plan period, the Ministry of Education and Culture and the Ministry of Religious Affairs (MoRA) have placed significant emphasis on building the competency and capacity of principals and supervisors through the development and implementation of new approaches to recruitment, appraisal and Continuing Professional Development (CPD).

These priorities were consistent with Presidential Instruction No. 1 of 2010 (INPRES), which focused on the empowerment of MoEC and MoRA school/madrasah principals, through provision of professional development programs.

In the world of work, the competence needed to know what type of job is right for someone. If competence upon an employee had known then the agency has been able to help the personal development of employees through training or specific training. In addition, the competency of an employee is able to be a guide for organizations to determine the extent to which he is able to present them and provide optimal work for the institution.

Competencies of school leadership is very helpful of institutions to describe how the performance of one's principal. This is of course related to the knowledge, skills, and abilities a person working on a particular field of work. Competence represents an important dimension of the work for oneself principals. Well, of competencies that these institutions seem to be more aware of how a responsible, solve problems, and transfer the information to others / teacher associated with the implementation of the tasks instructed by his superiors.

Professional competence of the principal/Islamic school as listed in Regulation of the Minister of national education Number 13 year 2007 were grouped into five dimensions that two of them have more than one element, namely: Personality Dimensions: behave with integrity and act as a role model of professional leadership. Managerial dimension; program planning,

implementation and evaluation; development and organizational effectiveness, human resource management and management information. Entrepreneurship dimension, Supervision Dimensions and Social Dimensions. In essence, competence are used to plan, assist, and develop a person's behavior and performance. Not only that, through the leadership competencies of an employee work / school principal and subordinate agencies can know the strengths and weaknesses of employees (Anderson, Ones, Sinangil & Viswesvaran, 2005).

In addition, the excellence of a nation is not only measured and relies solely on its natural resources owned by the nation, but also seen on the availability and benefits of human resources (HR) quality, namely educators educated and able to face the challenges in line with changes in the changes that occur in all areas of human life, especially in the development of the life of the era of globalization. In connection with the education in the school has an important role and strategic and has a very decisive factor and prepare qualified human resources.

In order to improve the quality of education in the school Principal as Manager needs Improving competency in order goodness implementation tasks better.

Therefore, in order to create the *Tomorrow's School* required professional competence held by the principal. In connection with the necessary basic studies regarding the level of competence of school / Islamic school principal in this case the study is intended as an information and guidance to prepare Sustainable Professional Development program (SPD) future. This information has been gathered through the implementation of Basic Studies About Competence leadership school / Islamic school Principal to the creation of Quality Tomorrow's School in the 21st century and it is intended to anticipate the pace of growth and development of school and face the challenges of globalization.

LITERATURE REVIEW

When entering the world of work, we as a prospective employees are often expected to have certain competencies over the term of the work which we entered. It is becoming a reference for the company/institution to know the ability of our work as a prospective employee. Not only that, through the competence that we have more companies figure out what position are suitable and appropriate for us. Not into the raw reference that the competence of the most important things to have an employee, but as a potential employee of the institution we need to know approximately what kind of competence is generally desired institution

As per Spencer, McClelland & Spencer, 1994; competence can be interpreted as individual characters that can be measured and determined to demonstrate the behavior and performance of a particular job in a person. Thus, competence is a guide for institutions to demonstrate appropriate work function for an employee. Competence relates to attitudes (what is said and done someone) that shows a person's good or bad performance. A lot of studies and research that discusses the competence in the world of work as a school principal particularly in educational institutions.

Competence: an ability to execute / perform the job / task based on skills and knowledge, supported work attitude demanded by the job. Competence demonstrated the skills / knowledge that are characterized by professionalism in a specific field as something that is important, as the seed of the field.

Competence is the performance of the underlying individual characteristics / behaviors in the workplace. Performance at work is affected by: Knowledge, abilities and attitudes; as well as the working style, personality, interests, fundamentals, values attitudes, beliefs and leadership style of the principal.

As per Spencer and Spencer, 1993: 9; to create tomorrow school / school superiorquality 21st century competencies required of school leadership is a cornerstone of the basic characteristics of a person and indicate how to act / behave / think, equating the situation, and support for a long period of time. Some types of characteristics of school leadership competencies that are expected as follows: (a) Motif: something that is consistently thought / wanted person who caused the action. Motif encourages, directs, and chooses behaviors towards actions / specific purpose. (b) Properties: physical characteristics and consistent responses to situations / information. Reaction speed and sharpness of eye a fighter pilot competency physical characteristics / ready for used (c) The concept of self: attitudes, values / person's self image. Confidence is the belief that they can be effective in almost every situation is part of the self-concept of a school principal. (d) Knowledge: information that belongs to someone in a specific field. Knowledge is a complex competence. Scores on tests of knowledge often fail to predict performance for failing to measure knowledge is and skills in ways that are actually used in the work. (e) Skills: ability to do physical tasks / specific mental. Mental competency/cognitive skills including analytical and conceptual thinking.

In an educational institution organization management of human resources (HR) based competency is needed to support the achievement of the desired objectives. Here are some of the stakeholders interested in the leadership competency-based human resource as follows:

School principals for managers necessary competencies; 1) Flexibility (flexibility): the desire and the ability of managers to change managerial structures and processes where necessary to carry out organizational change strategy. (2) Change implementation (implementation changes): the ability to communicate the need for organizational change leadership will change to subordinates, and change management skills. (3) Entrepreneurial innovation (innovation entrepreneurship): motivation pioneered and surpassed by generating new products ahead of its competitors, and in providing services and production processes more efficient. (4) Interpersonal understanding (to understand the relationship between humans): the ability to understand and value the input of people Another distinct. (5) Empowering (empower): managerial behavior, to share information, in participate to collect ideas subordinates, encourages the development of workers, delegate responsibility importantly, provide feedback, coaching, expressed positive expectations of subordinates, and appreciate.

For the Executive, Competencies Required: 1) Strategic Thinking: an executive's ability to understand the tendency of rapid environmental change, look at the market opportunities, detect threats competitive, strengths, weaknesses of the organization, to identify the optimum strategic response. (2) Change leadership: the ability to communicate executive organizational strategic vision that makes adaptive response develops and accepted stakeholders, to encourage motivation and commitment, act as sponsors of innovation and entrepreneurship, and allocate resources optimally to implement organizational changes. (3) Relationship management: the ability of executives to build good relationships with stakeholders in and outside the organization. (4) The model of competence is distinguished according to their interests, to be a model of competence for: leadership, coordinator, expert, and support. Competency model for leadership and coordinator basically the same and include: a commitment to continuous learning, community service orientation, conceptual thinking, decision making, implementation of tasks, and develop others, high professional standards, the impact and influence, innovation, leadership, organizational awareness, orientation on performance, service-oriented, business strategy, teamwork, and diversity. (5) Competencies model for expert and support are also basically the same, including: commitment to the continuous learning, orientation on community service caring for the accuracy and detail, creative and innovative thinking, flexibility, high professional standards, planning, organization and coordination, problem solving, orientation on performance, service-oriented teamwork and diversity.

Tomorrow, s school is not just a guarantee of quality control because only see the product, the results of a national study or national examination (UN), which examines the cognitive basic skills in mathematics and languages with mangabaikan aspects of the acquisition of learning other. Parameter excellence must also guarantee the quality that is looking at planning, process, until the learning outcomes based on quality standards. Even the future of the superior schools already fused and have a culture of excellence that perform continuous improvement is referred to as Total Quality Management in Education .

Purpose and Scope of the Research

The purpose of the Research/study was to:

- 1. Assess the level of competence of school principals based on the competencies in Ministerial Decrees No. 12/2007 and 13/2007 and the distribution of their competencies against agreed variables
- 2. Develop a profile of the attributes of school principals to inform future Continuing Professional development / CPD programs
- 3. Analyse the future Continuing Professional development/CPD needs of school principals
- 4. Determine the extent to which Ministerial Decrees No. 12/2007 and 13/2007 have been implemented by districts
- 5. Assess the impact of the 2010 Interim Presidential Staff Strengthening Program (INPRES) on participating school principals develop Tomorrow's school in the Future.

RESEARCH METHOD

The method used in this research through quantitative and qualitative data collected from multiple sample, principals, teacher, and head of the Department of Education and / or the Office of the District MORA of 55 districts through a very detailed survey / detail .While the data qualitative collected through a series of field visits that as many as 88 schools and 19 Department of Education / Office of the District MORA entire Indonesia. Data about the competence of the head of school given in a manner similar to that used for reporting on school leadership competencies in several provinces in Indonesia.

Data about the competence of school principals obtained from the superintendent, principals, teachers, and heads of district education offices for each of the six dimensions of competence obtained from the principal: (personality / character, Managerial, Supervisory, Entrepreneurship, and Social,) each competency indicators in each dimension. For each indicator, the principal, supervisors were asked to rate principals competency on a four point scale:

- a. Not yet capable,
- b. basic Level of Competence,
- c. Capable /Proficient
- d. Very capable/very proficient

Quantitative and qualitative data gathered through a number of populations and samples; supervisor, the head of school/madrasa, teachers, parents, and the head of Department of Education/Office of Kemenag district in seven regions/cluster in Indonesia: Sumatra, Java, Kalimantan, Nusa Tenggara, Sulawesi, Maluku, and Papua.

EMPIRICAL RESULTS

Based on the analysis in the evaluation of the principal's competency assessment showed higher yields than their own competence assessment by the headmaster; and this difference was statistically significant for all the indicators of competence for Managerial Dimensions, Entrepreneurship, supervision and teaching and counseling. Competence school / Islamic school principals rated highest for Personality and Social Dimensions and lowest for Supervision dimension both for the principal or headmaster. A general overview about the competency assessment by the head of school/madrasa by region. Unlike the assessment supervisor school/madrasah, in this case there is only a slight difference in the valuations across the region.

Principal Competency

Principal self-ratings of competency were generally slightly lower than the ratings provided by supervisors and teachers for all competency dimensions except for Personality and Social. This pattern was similar to ratings for supervisor competency.

MoEC principal self-ratings of competency were higher than MoRA principal self-ratings and these differences were statistically significant for all competency indicators for Managerial, Entrepreneurship, Supervision and Teaching and Counselling dimensions. Principal competency was rated highest for Personality and Social dimensions and lowest for Supervision for MoRA and MoEC. Figure 31 provides an overview of principal self-ratings by region. There was little difference in ratings across regions.

Principal of school/ Islamic school were asked to identify what they think is the most important competencies for school / Islamic school principal. Despite all the competencies identified by the school / Islamic school principal, but the most frequently identified competences are Managerial and Personality / Character.

Managerial chosen because of the need for school / Islamic school principal to manage school / Islamic school principal effectively, the main functions of a head of school / Islamic school principal as it is considered by most of the school / Islamic school principal who chose this dimension. Those who choose Managerial commented on the impact exerted by the effective management practices towards the improvement of the school and "empowers staff to provide optimal performance."

Performance management process has allowed the school leadership experience and knowledge gained from the work of individuals can be used to modify the purpose of the organization / institution schooling in Indonesia

A number of major issues emerging from the analysis of the principal's leadership competencies of school / Islamic school, each described as follows:

b. Dimensions Managerial Competence

Managerial competence is a major dimension in BSNP Standards for School / Islamic school Principals with sixteen (16) individual competence indicator. For purposes of the survey all the indicators are analyzed and reduced to 13 by combining a number of individual indicators. This method needs to reduce the level of complexity of the survey.

Principal Self-rating for each of the indicator for this dimension slightly lower than teachers and supervisors rating of principal competency for most indicators. Self rating by MoRA Principals were lower than MoEC principals on all competency indicator. While the rating for all but one indicator for MoEC principals fell in the Capable/proficient category. For MoRA Principals, five indicators fell into the basic category.

The Indicators that was rated lowest by both MoRA and MoEC principals was indicator 12 – The Ability to manage ICT for school organization and management. ICT Issues also emerged in other dimensions as an area for improvement for principals.

4.0
3.5
3.0
2.5
2.0
1.5
1.0
1 2 3 4 5 6 7 8 9 10 11 12 13

Competence Dimension

Supervisor Principal Teacher

Figure 1 Ratings of competency-Managerial competency Principas all group

Managerial Competency Principals

The indicators that had the lowest self rating competency and that feel into the basic range Were:

- Indicator 1 The ability to analyze the needs and priorities
- Indicator 2 The ability to develop a plan of school / madrasah school
- Indicators 7 Managing school /madrasah physical resources

- Indicators 12 The Ability to manage ICT for school organization and management
- Indicator 13 The ability to monitor and evaluate school programs and use the information for planning and school improvement

Principals Self-rating of the competency were analyzed by variables of Sex , School type , location of school, school accreditation level, and public or private school were conducted and revealed some important differences.

MoEc and MoRA female principal rated themselves lower on all competency indicators for this dimension. In fact the ratings of MoRA female principals fell into the basic category for all but two indicators. In particular the rating for indicators 7 –The Ability to manage school infrastructure and physical Recourses –was much lower for women than men.

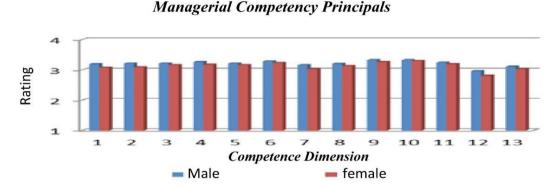


Figure 2 Managerial Self-Ratings by Sex - MORA

This pattern of responses for male and female principals was repeated for Entrepreneurship and Supervision dimensions indicating that female principals need particular assistance in these dimensions.

Analysis by principal's highest educational qualification found that the higher the qualification, the higher the self-rating of competency. For MoRA principals the analysis showed that only principals with S2 degrees had self-ratings in the *Proficient* range for all competency indicators.

These differences in self-ratings were statistically significant and were repeated for Entrepreneurship, Supervision and Teaching and Counselling competency dimensions.

The findings were very similar to those for supervisors and reinforces the need to target future CPD to particular groups of principals and may also have implications for selection and licensing of principals.

School status, public or private, is an important variable that has a significant influence on the self-assessment, in particular for the headmaster. Own assessment of the competence of

the head of the private school/islamic school for Managerial dimension is lower than the assessment given by the head of school/madrasa. For the head of the madrasa assessment given much lower in all indicators of competence and get into the category quite capable for almost all indicators of competence. The pattern of results is repeated for all the indicators of Entrepreneurial dimension of competence, Supervision, and teaching and counseling.

This has special relevance of the results for Religion Ministry due to the large percentage of private islamic school in the sample and in the population. The findings are very important for the selection, performance management and CPD for school / private Islamic school principals. There is a strong correlation between the level of school accreditation and self-assessment of competence by the school / Islamic school principal as follows.

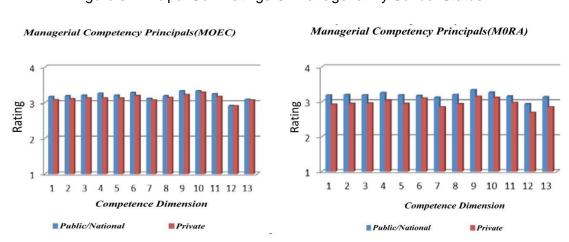


Figure 3 Principal Self-Ratings Of Managerial By School Status

There was a strong correlation between level of school accreditation and principal self-ratings of competency.

Two other factors had an important effect on principal self-ratings of competency for Managerial – school accreditation level and location.

For both MoRA and MoEC there was a positive correlation between school accreditation level – A, B or C – and self-ratings of competency for Managerial. The higher the school accreditation level, the higher the self-ratings.

It is important to note that for MoRA, self-ratings for all Managerial competency indicators fell into the Basic range for principals of schools/madrasah accredited at Level C. For MoEC, all but two indicators fell into the Basic range for principals of Level C schools. This was not unexpected and provides further information to support the validity of the survey and its

findings. This pattern of self-ratings was repeated for Entrepreneurship, Supervision and Teaching and Counselling.

Location of the school – urban, semi-urban, rural and remote – also had an effect on self-ratings of MoEC and MoRA principals for the Managerial dimension.

While the self-ratings for principals of urban and semi-urban schools were similar, selfratings of principals in rural and remote locations were significantly lower on most indicators. In particular, remote area and rural principals were less competent in:

- Managing ICT
- Managing physical resources
- Managing and planning the curriculum and school learning programs
- o Monitoring and evaluating school sperformnce and using the results for improvement.
- The negative impact of location was greater for MoRA principals.

Figure 4 Principal Self-Ratings of Managerial by Location

4 3 2 1 2 3 4 5 6 7 8 9 10 11 12 13 Competence Dimension Urban Semi Urban Rural Remote

Managerial Competency Principals

This pattern of findings was repeated for Entrepreneurship and Supervision. In addition to providing self-ratings of competency principals were asked to indicate whether they had prepared and maintained a number of key documents required by a number of other BSNP Standards. This information provided further evidence of managerial competency.

The findings show that most principals maintained most key documents, except for longer-term school plans. This was a particular issue for MoRA principals where thirty one percent (31%) indicated they did not have longer-term plans. In addition, nine percent (9%) of MoEC principals and fifteen percent (15%) of MoRA principals did not have school financial management guidelines.

It is also of concern that a small percentage of schools/madrasah did not have other key documents, including a School Curriculum document (KTSP) or Annual Work Plan.

These findings, together with self-ratings of competency, indicate that, for particular groups of principals, there is a need for their further development and for improved performance management by supervisors to improve principal competency in the Managerial dimension

Entrepreneurship Dimensions

The Entrepreneurship dimension comprised five competency indicators concerned with innovation, creativity, motivation and problem solving. They are presented below.

Entrepreneurship Indicators

- Ability to create innovations for the development of the school/ Islamic School/madrasah
- o Ability to strive and work hard to create/build a successful school/ Islamic School/madrasah
- Ability to motivate themselves to lead the school/madrasah in accordance with the prescribed duties and functions.
- Ability to find the best solution to school problems
- Ability to motivate students to learn entrepreneurship and apply an entrepreneurial spirit in efforts to support students

For this dimension, principal self-ratings were either equivalent to or lower than competency ratings given by their teachers and supervisors of Their School/Islamic School.

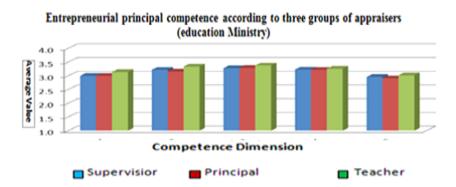


Figure 5 Ratings of Competency for Entrepreneurship – All Groups

As with other dimensions, MoEC ratings of competency were higher than MoRA ratings for most indicators. However, self-ratings for both groups of principals were lower than their self-ratings for the Managerial dimension.

For principals MoEC, self-ratings for indicators 1 and 5 fell into the Basic range. MoRA principals also rated indicators 1 & 5 in the Basic range together with indicators 2 and 4 although the latter two approached the *Proficient* range.

For both groups motivating students to learn entrepreneurial skills and developing innovations to improve the school appeared to cause concern for principals. The findings about self-ratings for these two indicators were reinforced by ratings provided by teachers and supervisors which also fell in the Basic range.

Private school/madrasah principals ratings of competency in this area were much lower than those of public school/madrasah principals. The impact of school status was particularly noticeable for MoRA madrasah principals with ratings falling into the lower part of the Basic range.

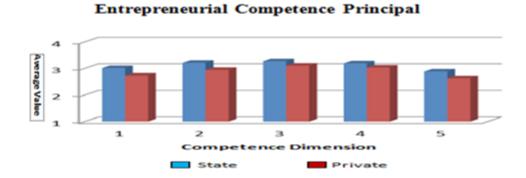


Figure 6 Principal Self-Rating for Entrepreneurship – MoRA

School accreditation status, highest educational qualification and location of the school all had an impact on self-ratings of competency for Entrepreneurship.

The other factor that affected self-ratings of competency for Entrepreneurship was type of school. For both MoEC and MoRA, but particularly for MoRA, vocational high school principal ratings were higher than for other groups. This may reflect the fact that vocational school/madrasah principals are required to build stronger links with the business community and to develop more innovative, employment oriented programs for their students and schools.

This finding was reflected in comments by vocational high school principals in the qualitative field studies. This is discussed in more detail in the next section of the report.

Supervision Dimensions

The Supervision dimension, which comprised three competency indicators, received the lowest levels of competency ratings across all indicators, particularly for MoRA principals.

In addition, for MoEC principals, this was the only dimension on which supervisor ratings of principal competency were lower than principal-self ratings.

Ratings on all indicators for both principals and supervisors fell into the *Basic* range for Ministry of education and culture (MoEC) and Ministry of Religious Affair (MoRA) indicating that this is an area which requires significant improvement.

Supervision Indicators

- Ability to develop programs of academic supervision to improve the capabilities and professionalism of teachers
- Ability to implement academic supervision program using appropriate methods and techniques
- Ability to follow up the results of supervision to improve teacher professionalism

Note. Supervision dimension for principals was rated lowest by principals and their supervisors and fell into the Basic range

Principal supervision of competence according to three groups of appraisers ministry of education

appraisers ministry of education ministry of education ministry of education

Figure 7 Ratings of Principal Competency Supervision Dimension – All Groups

Analysis by sex, principal qualifications, school status, school accreditation level and school type repeated the pattern of findings for Managerial competency. That is:

- Female principals rated themselves as less competent than males
- The higher the qualification level, the higher the principals' self-ratings of competency.
- Private schools/madrasah principals rated themselves significantly less competent than did public school/madrasah principals
- The lower the accreditation status, the lower the rating of competency
- Schools in rural and remote location had lower self-ratings of competency than principals of other schools/madrasah.

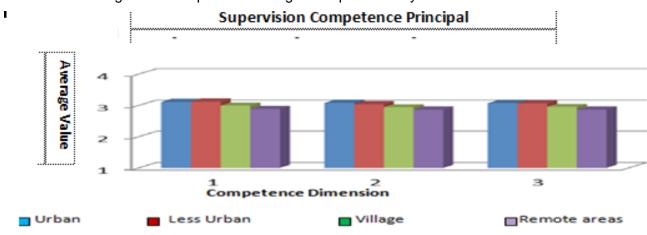


Figure 8 Principal Self-Ratings of Supervision by School Location

To obtain further information about principal competency on the Supervision dimension and to help validate survey self-ratings, principals were asked if they maintained relevant records of staff and academic supervision as required by the National Standards Board for Education (BSNP) Management Standard. The findings indicated that a considerable number of principals, especially MoRA principals, did not maintain appropriate documents further indicating that the Supervision dimension is an area requiring urgent improvement.

Personality And Social Dimensions

- Competency ratings on all competency indicators for both dimensions that were provided by principals, their supervisors and a sample of their teachers fell into the Capable/Proficient category ...
- o For almost all competency indicators on these two dimensions principal self-ratings were higher than teacher and supervisor ratings. The mirrored the pattern for ratings of supervisor competency on the same dimensions. MoRA and MoEC ratings were very similar for all groups of respondents.
- The only competency indicator for which MoEC and MoRA principals gave a lower rating than other groups was Indicator 3 on the Social dimension – Showing concern and empathy to different groups although the ratings remained in the Capable/Proficient range.

Note: Principals rated themselves highest on Social and Personality competency dimensions.

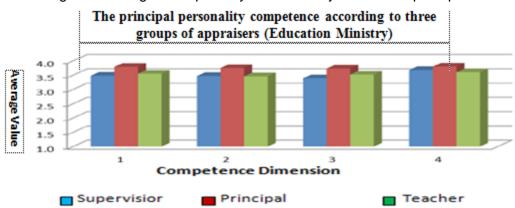
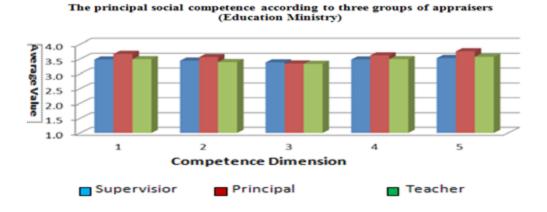


Figure 9 Rating of competency – Personality Dimension principals

Figure 10 Ratings of Competency – Social Dimension Principals



Continuing Professional Development /CPD For School Principal

As with the quantitative findings principals that participated in INPRES commented positively on the program and the impact on their capacity as principals. The following comments reflect their views about the impact of the program.

In terms of Presidential Instruction /INPRES methodology participants stated that the more practical and active methods were more effective. While lectures were important they were often too long and became tedious according to a number of participants. They said that more active learning methods should be used in the face-to-face components of the programs. These comments are in line with the findings from the surveys where principals indicated that they benefited particularly form the mentoring and on the job learning activities such as action research.

Principals identified a number of areas for their future Continuing Professional Development (CPD). Managerial competency was mentioned frequently as principals said this

was essential for their work. For the same reason supervision was also seen as an area for future development. Generally the areas for future Continuing Professional Development/CPD matched the areas principals identified as requiring further development.

Note: Effective for the management of the school, especially for the principal who wants to learn and develop at the school for the benefit of teachers and students (Agama)

- o Very useful, because face-to-face training in LPMP Province, immediately enabled me to guide teachers in creating lesson plans, syllabi, instructional media, and new teaching methods. These activities then add insight and change in schools, and teachers are passionate again when they started a new teaching method.
- This training provides materials for principals for conducting supervision and assessment to assist their quality improvement efforts

DISCUSSION

Discussion of Findings and Implications for policy and practice with regard to each of the five objectives of this study. As a result, additional studies that have provided comments on broader issues relating to National Education Standards, and possible areas for research and studies in the future. Although this chapter is arranged so that any findings with regard to the purpose of the study has been discussed separately, but stressed that all issues raised in the chapters are inter-related and issues emphasized at one field has implications against other fields.

National standards for Education-/BNSP, consists of five competencies for school/Islamic school principal - personality, social, managerial, entrepreneurial and supervision. In response to a request from ministry of education, the sixth competency, namely teaching and counseling, are included in the survey, because the school/Islamic school principal were required to do some teaching, and also he should act as the leader of the process of learning and teaching. One of the weaknesses of the current standard for the principal is relatively small given the focus on instructional leadership role of principal. The inclusion of the sixth dimension of competence is partly reconsideration of the issue. A variety of indicators for the dimension of Teaching and counseling are taken from the standard of teachers.

- The Government of Indonesia is currently facilitating the National 1000 Digital Startup Movement to encourage the development and use of Information technology in providing innovative solutions to 21st century future schools
- Implementation of Digital-Age Literacy in Education towards 21st Century schools in Indonesia formulating the framework according to the 21st Century Skills enGauge it is multidisciplinary, meaning that all material can refer to the framework. By referring to the central theme of 21st century education, it can be understood that the formulation of

- competency development in 21st century education in the domain of Digital-Age Literacy consists of 8 aspects of skills as follows: Basic, Scientific, Economic, Information, Technological, Visual, Multicultural and Global Awareness
- Based on the results of research; in the implementation of education towards the future school of the 21st century must always be adaptive to the changing times. Adaptive education system means the need for synergy between the design of the educational process and the latest development of knowledge that Hawes-Neisbitt (2005) called 'modern education' and by Mark Treadwell (2011) is referred to as 'Nouvelle Comprehension'. Aware of the importance of the demand for "creation" of superior human resources, the education system and model must also undergo transformation.
- Based on the results of the study, BNSP (2010), then formulated a 21st century national education paradigm which included: (1) science-oriented education with a reasonable balance; (2) education must be accompanied by the cultivation of noble attitudes; (3) education at every level must meet the science frontline; (4) the spirit of independence is needed; (5) the need for scientific convergence; (6) need to pay attention to aspects of diversity; (7) education for all; (8) need for education monitoring and evaluation
- Furthermore, the National Education Standards Agency / BNSP (2010) stated that in order to achieve 21st century education, a change in the future education model is needed, namely: the learning process: from teacher-centered towards student-centered, from isolation to networking environment, from passively towards active investigating, from virtual / abstract to real world contexts, from personal to team-based learning, from broad to distinctive behaviors empowering the rules of engagement, from single-sensory stimulation to stimulation in all directions, from a single tool to multimedia tools, from one-way relationships shifting towards cooperatives, from mass production to customer needs, from a single conscious effort to plural, and from one science shifted towards plural disciplinary knowledge.
- According NCREL & Metiri Group, (2003), in enGauge 21st Century Skills, stated that literacy in the digital era includes several components, including: (1). Basic Literacy ability in language (especially English) and mathematical abilities; (2) Science literacy knowledge and understanding of scientific concepts and processes; (3) Technology Literacy - knowledge of what technology is, how it works and how to use it effectively and efficiently; (4) Economic literacy - knowledge of the 2016 National Science Education Seminar (SNPS) 117 economic problems, situations and developments; (5) Visual literacy - knowledge of how to use, interpret and produce images and videos using conventional and modern media; (6) Information literacy - the ability to obtain, use

and evaluate information effectively and efficiently from various sources; (7) Multicultural Literacy - the ability to appreciate the differences in values, beliefs and cultures of others; and (8) Global awareness - the ability to understand and problems at the global level.

Skills aspects in the Digital-Age Literacy domain based on enGauge 21st Century Skill In the 21st century, literacy skills are not only limited to the ability to read, hear, write and speak verbally, but more than that, literacy skills are emphasized in literacy skills connected to one another in the digital era like today.

School Principal Competence

Principal self-ratings of competency were generally slightly lower than the ratings provided by supervisors and teachers for all competency dimensions except for Personality and Social. This pattern was similar to ratings for supervisor competency

MoEC principal self-ratings of competency were higher than MoRA principal self-ratings and these differences were statistically significant for all competency indicators for Managerial Entrepreneurship, Supervision and Teaching and Counselling dimensions. Principal competency was rated highest for Personality and Social dimensions and lowest for Supervision for MoRA and MoEC.

A core function is the supervision of the principal in all countries and the education system. International research indicates that human resources management is also a field in which the principal felt underprivileged most. Findings from this study has implications policy and practice of the Continuing Professional Development (CPD). School/Islamic school principal percentage.

Teaching Learning & Indicators

- o First indicator, the ability to understand learning theories and principles of education in their field of expertise
- Second indicator, the ability to develop creative teaching methods in order to make the pupils can achieve their potential
- o Third indicators, the ability to use information and communication technologies for teaching and learning.

Information and communication technology seems to be a significant issue for school/Islamic school principal because they also have concerns about their capacity to use information and communication technology for the purpose of administrative and school organization.



Analysis based on a variety of factors such as gender, qualifications, school status, level of school accreditation and school locations produce similar findings with findings for the dimensions of managerial, entrepreneurial and supervision. However, the influence of a variety of variable is not as large in dimensions of Teaching and counseling when compared with various other dimensions. A number of key issues emerged from these analyses of principal competence. They were:

- On specific competency indicators rural and remote school principals generally rate their competency lower than urban or semi urban principals.
- Principal competency is rated lowest on Supervision competency dimension and using ICT for management and teaching and learning purposes.
- Level of principal qualification and school status (public or private) were significant variables for Managerial, Entrepreneurship, Supervision and Teaching and Learning for MoEC principals. The higher the qualification the higher the ratings of competency
- o Female principals rated their competency lower than males on Managerial, Entrepreneurship and Supervision.
- The principal of school their competence rate is higher than the principal of Islamic school for dimensions of managerial, entrepreneurial, supervision and teaching and counseling and the difference is statistically significant

c. Principal Continuing Professional Development/CPD Priorities Programs

A quantitative study of the related participation in training is the priority for the CPD principal.

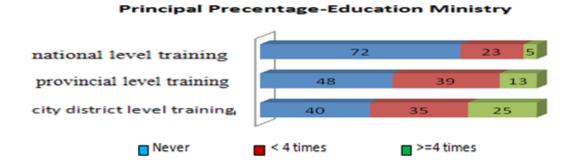
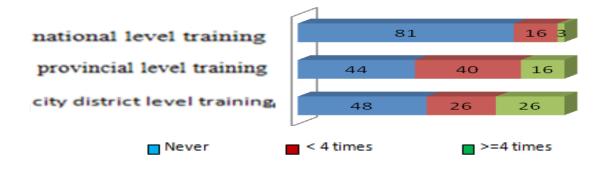


Figure 11 Number of Times Principals Participated In Training

Principal Precentage-Religion Ministry



The future CPD priorities for principals were investigated in two ways. First, the analysis of the ratings of competency gave important information about the areas which should be targeted for future CPD support. Second, a separate section of the survey asked principals to identify their priorities for future CPD. And assessments given by the school/Islamic school principal and the chief Ministry of religious district areas that become top priorities for professional development in the future.

Findings from ratings of competency indicated that high priority CPD areas for MoEC and MoRA principals should be for:

- Supervision
- o ICT for teaching and learning and administration
- Motivate pupils to develop entrepreneurial skills
- Some specific aspects of managerial competencies, including medium-term planning

However, principal and heads of district office ratings of high priority CPD needs revealed additional areas where principals needed further training. They were: Some of the priorities of the CPD for school/madrasah principal based on an assessment of the competence and the assessment of their impact on the priorities of the CPD.

MoEC and MoRA Additional CPD Priority Areas

- Leadership development and cooperation with parents (Personality)
- Transparent governance procedures and systems (Personality)
- Financial and resource management (Personality)
- Curriculum management and development (Managerial)
- Management of teaching and learning (Managerial)
- Innovative leadership (Entrepreneurship)
- Using new and more effective teaching and learning methods (Teaching and Learning)



Provides a summary of CPD Priorities for principals based on the rating of competency and their rating of CPD Priorities.

Table 1 CPD Priorities – for Principal

The Areas Of Focus Of The Target Group

Competence	Focus Area	Target Group
Dimensions		
○ Personality	 Leadership development and cooperation with parents All principal 	All school/Islamic school principals
	 Procedures and transparent management system 	
○ Managerial	 Management and curriculum development. All principal 	All school/Islamic school principals
	 Teaching and learning Management ICT for management and administration Monitor and evaluate school programs 	
	and use the information for planning and repair schools	Islamic school principals
○ Supervision	 Develop academic supervision program to increase the ability and professionalism of teachers Implement the academic supervision of the program by using the right methods and techniques Methods to follow up on the results of supervision to enhance the professionalism of teachers 	All school/Islamic schoo
○ Entrepreneurship	Innovative LeadershipMotivate pupils to develop entrepreneurial skills	All school/Islamic school principals
○ The teaching and Learning	 Use of new teaching and learning methods are more effective and creative Use ICT for teaching and learning Understand the theories of learning and the educational principle in their field of expertise 	All school/Islamic school principals

d. Impact of the Presidential Instruction /INPRES Training for School Principal

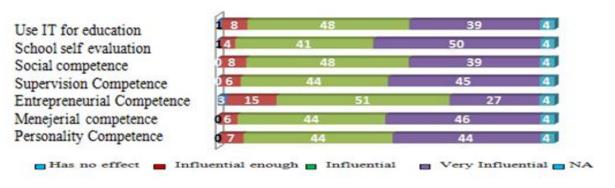
In this sample 1,387 MoEC principals and 172 MoRA principals participated in INPRES staff strengthening training. For MoEC principals, self-ratings of competency for all competency indicators in Managerial, Supervision, Entrepreneurship, and Teaching and Counselling dimensions were higher for principals who had participated in INPRES training. This suggests that INPRES training had a positive impact on the capacity of MoEC principals.

The findings for MoRA were more variable, with the Supervision, Entrepreneurship, Teaching and Counselling and most indictors in Managerial competency dimensions showing higher ratings of competency for INPRES participants. For MoRA INPRES training had no apparent benefits for their capacity to use ICT for administrative purposes.

Principals who participated in INPRES training were also asked to rate the impact of the INPRES training on their effectiveness as principals. The findings are presented in Figure 12

Figure 12 Principal Self-Ratings of Influence of INPRES Training on their Capacity to Implement their Roles as Principals

Percentage 0f The Principal Knows the Influence that Given Topic in PRESIDENTIAL INSTRUCTION



These findings also indicate that principals benefited from participating in INPRES supporting findings from the comparison of self-ratings of competency of principals that did and did not participate in INPRES training. The findings also indicate that the area of least benefit was for Entrepreneurship and, for MoRA, using IT for education.

Teachers were also asked to rate the impact of the INPRES training on the capacity of their principals and their ratings followed a similar pattern to those of principals. However, while teachers felt that the training had had a positive influence on their principals their ratings were less positive about the extent of the influence.

Principals who participated in INPRES training were also asked to rate the effectiveness of the training methodologies used in the training program.



e. The Effectiveness Of Training Methods Of Presidential Instruction - Assessment Of **School Principal**

The results indicate that each of the training methods are considered effective, although the second method i.e. workshops reporting and assessment of the two-day face-to-face get lowest effectiveness assessment compared with other methodologies. As the findings on the Superintendent, it should be noted that is a relatively high percentage of incomplete assessment or N/A for Islamic principal. Review may be required against a complete assessment either for Islamic principal in order to clarify this issue.

f. The challenge in creating Tomorrow's School in Twenty first century

In the Era of the Netizen this education system allows organizing independent education run by school for still being in the corridors of the national curriculum. The school curriculum called the 2006 Curriculum or Curriculum unit level education (KTSP) is now already quite adequate because there is freedom in developing the curriculum in accordance with local needs and based on a school (School building) which at this time perfected/developed be 2013 Curriculum. That development can serve as the idiosyncrasies in each school. Distinctiveness or uniqueness that built independently by the school in the form of a curriculum of local cultural, religious, linguistic, arts, and science and technology (science and technology).

The Education System and Curriculum

In general schools in Indonesia is still oriented emphasize the "output", results of the study with high marks in academics, as a result of the demands of the Government in implementing national examination (UN). Consequently, the process of learning in general emphasis on activities that train students to get high scores with a lot of effort working on problems such as drills and memorization. But learning is a process to acquire knowledge and use it in everyday life. In other words, the end result of education not only on the acquisition of academic learning, but also for the formation of behavior, social sensitivity, and spirituality. Therefore, the learning process must be the establishment refers to the process without forgetting the high learning results. The combination between the process and the results of which should be made one of the hallmarks of the school in the future. Approach to teaching that is centered on the teacher, "teachers center", should be changed to "children center". In accordance with the demands of the curriculum of 2013 at the moment. On "children center" students is the subject is not an object. The teacher acts as a facilitator and motivator in the learning process. Students are given the opportunity to state my opinion, reflect, and reconstruct the thinking individually or through discussions accompanied by courage responsible. This paradigm suggests that teachers no longer be the only learning resource centre or source of knowledge so teachers should utilize the existing environment in order to support the process of learning how to be effective.

The quality of educators and Educational Personnel

Educational personnel of the school are those who are qualified as educators, managers, and support personnel education. Educators in charge of executing, and assessing and developing the learning process. School administrators in charge of managing and leading educators and support personnel in all schools. School support personnel are those who are tasked with supporting the Organization of the learning process in schools.

Produce educators include teachers, counselors, principals and other designations in accordance with his. In General, the educational personnel of the school in charge of carrying out planning, learning, supervision, training, management, assessment, supervision, technical services and librarianship, research and development of practical things that are needed to improve the quality of the learning process. Energy education is the soul of the school and the school is simply a their vessels. Therefore, the educational effort is key for the successful development of the school.

Given the importance of the role of produce educators for the development of the school, then the school must: (1) have sufficient educational personnel sufficient number; (2) have adequate qualifications and capabilities in accordance with the assigned level of education: (3) have a high level of compliance, in the sense of ability that is owned by educational personnel in accordance with the assigned areas of work; and (4) have the ability to work high.

Every educational personnel shall be obliged to: (1) keep the good name of the private institution, profession, and position in accordance with the trust given to him; (2) carry out educational who became her responsibilities; and (3) improve the professional ability of intellectual capabilities which include integrity, personality and social interaction in both the work environment and in the community. With regard to this last grain, the school must provide the conditions and services for the development of produce educators. As a consequence of the obligations to be assumed, then produce educators are entitled to the protection of the law, career coaching, a decent income, appreciation, and the opportunity to use school resources to support the smooth running of its job.

CONCLUSION AND RECOMMENDATIONS

From the explanation above, the research results can be concluded that the effect of principal leadership competencies study of quality educational management services towards quality tomorrow's schools in the Twenty First Century is significantly positive in Indonesia. And, can be realized with regard to democratization, participation/ community participation, with the principle of transparent and accountability in the conduct of the school. In addition the school program development process must involve stake holders/the citizens of the school consisting of school principals, teachers, school staff, students and parents of students, community leaders, religious figures and involves the world of business and industry. Besides the education service agencies and related institutions to support programs for the advancement of quality school of the future in Indonesia.

To see the positive impact of competence principal leadership against the Quality tomorrow's School of the 21st century can be seen through some of the indicators of success of the criteria as follows:

- There is commitment and support from the top management to be easy for doing the performance management principal.
- Conducting performance management process can be adapted to the actual work of the Organization and how the performance is generally manageable.
- Performance management can provide added value in the form of short-term results or longer-term development.
- Performance management process can work flexibly to local environmental needs/special.
- Performance management process is ready to be accepted all interested parties as a natural component of good management and practice work.
- Competencies that must be possessed by the Head of School / Madrasah based on the Minister of National Education Regulation No. 13 of 2007 concerning School / Madrasah Head Standards consist of 5 competencies including: managerial competence, entrepreneurial competence, supervision competence, personality competence, and social competence.
- Competence of the leadership skills of the Principal is intended as a provision for them to be able to carry out the improvement of the quality management of future 21st century school education effectively and efficiently.
- Leadership Competencies democratic principals should be respect humans as beings who have the same dignity and dignity.
- The implementation of democratic values in leadership should be covered activity as follows: 1) Recognizing and respecting humans as individual beings who have different abilities between one another, including members of the organizational environment. 2) Giving equal rights and opportunities to each individual as a social being in expressing and

actualizing themselves through their respective achievements in their organizational environment as a small community. 3) Giving equal rights and opportunities to each individual to develop their abilities that are different from one another, by respecting the values / norms that govern them as normative beings in their respective organizational environments. 4) Grow and develop a shared life in togetherness through cooperation that recognizes, respects, and respects the advantages and disadvantages of each individual as a member of the organization. 5) Give equal treatment to each individual as a member of the organization to advance and develop themselves in fair and healthy competition. 6) To bear the same obligations and responsibilities in using their rights to realize a harmonious common life.

- Principal managerial competence should be improve the ability to control all resources in the education unit to achieve the vision and mission, as well as the goals of the education unit.
- Principal Leadership Competencies as successful Managers must show performance output as follows: (1) Management must be able to criticize themselves, be able to recognize, accept, and learn from past mistakes, (2) Encourage open and constructive confrontation and are seen as methods problem solving (3) making decisions by consensus, joint decisions made must be fully supported by members of the work team. Position in the organization does not guarantee the quality of ideas (4) The implementation of management is open and applies in accordance with ethics by telling the truth and giving equal treatment to every employee (5) believing in the principle of hard work, where high productivity is something to be proud of, commit long term, if there is a problem with career resignation that is better than dismissal.
- Service quality should be focused on meeting the needs and desires of the customer and the accuracy of the delivery to balance customer expectations.
- Quality Educational management is an important force that can produce success both within the organization and the growth of institutions, this can also be applied in the implementation of education quality services. Furthermore, if quality is associated with the implementation of education, it can be guided by Law Number 20 of 2003 concerning the National Education System and Government Regulation Number 19 of 2005 concerning National Education Standards which states that quality assurance is mandatory both internally and externally.
- Stakeholder organisations involved in the design, development and the introduction of performance management. It is composed of top management, line managers, workers, and individual States/representative workers.



- Performance management leadership principal runs good, transparent and honest work and fair.
- Managers and team leaders take action to make sure there is a shared understanding is usually about the vision, strategy, goals and values of the organization.
- Performance management process understand the community interests in the Organization and appreciate the needs of the individual.
- Performance management process used the manager and team leader for helping people feel valued organization.
- Leadership competencies, performance management process the principal objectives of the Organization and help resolve the individual. Individuals and teams are given the opportunity to convey the views about what they can accomplish.
- Performance management focus on the development of people and the consideration about the support that they need. There is a competency framework, especially for organizations with full involvement of all interested parties. Performance management skills training given to team manager, team leader and workers in General.
- The purpose and implementation of the performance management and its benefits for all interested parties, communicated extends and the effectiveness of performance management is monitored and evaluated constantly.
- The opinions of all stakeholders be informed about how well its schema goes on and the action taken as needed to improve processes.
- Performance management process is integrated with strategic and business planning process, so that performance management does not add any new jobs, but are fixing what has been ordinary.
- Islamic principal there are extra issues i.e. provide leadership in religious schools and in the community. This aspect was stressed by a number of the principal. This general comment is given by the principal.
- Principal leadership competencies in the 21st century are required to accelerate the development of information and communication. The progress of communication and information technology has increased flexibility in the acquisition of knowledge for each individual both teacher and student.
- Managerial, social and personality are most often mentioned as areas of strength and this is in accordance with the judgment given by the head of school/madrasah in the quantitative survey. As for the comment about madrasah School Superintendent/field of



- their strength, the dimensions selected by the principal in accordance with the dimension that they think is most important for their roles.
- Principal leadership competencies in the 21st century are required to always monitor their school performance to determine the quality of education services provided and can show the added value achieved by their students in learning.
- Response from the principal, teachers, supervisors, and parents to the field of what is to be reinforced by school/islamic school principal turned out to be more complicated. Whereas the Supervision as predicted and entrepreneurship (to the principal) are identified as areas requiring further development; Principal more often choose the same dimensions for improvement such as the dimensions of their choosing as a factor of strength.
- Facing the challenges of quality management in the 21st century's future schools, each teacher needs guidance and development from the principal effectively.
- Effective guidance in developing teacher professional leadership and a culture of professional learning in schools is very necessary because both of these are important components of school success in the 21st century.
- Some trends in the development of 21st century teachers are by using a 'bottom up' approach, emphasizing collaboration that is oriented to the ability of teachers to overcome each problem faced, is interactive and interrelated programs, which are carried out continuously and planned systematically and comprehensive
- Assessment of teachers, parents and school superintendent against the power of the head of the school of their great fit with an assessment of the principal.
- Findings regarding the competence of the leadership of the principal both qualitative and quantitative surveys, and of all the respondents, consistently that the power of the principal is in the dimension of managerial, social and personality in order to support the creation of Quality management services for tomorrow's School in the 21st century...
- Facing the challenges of the quality management of the 21st century's future schools, Teachers must be professional and must be able to become learners throughout their careers to improve the effectiveness of the learning process along with the development of the environment; able to work with, learn from, and teach colleagues in an effort to deal with the complexity of school and teaching challenges; teaching based on professional teaching standards to ensure the quality of learning; and having direct communication both effectively and effectively using information technology with parents to support the development of the future school of the century



To create a quality management for future schools in the 21st century requires careful and solid preparation of both concepts and applications to form superior and quality human resources for time being and ever for quality tomorrows school in Indonesia. .

LIMITATIONS OF THE CURRENT STUDY

- 1. The survey has several limitations, especially the capacity to collect large amounts of data, from large samples located in various regions in Indonesia in a relatively short time.
- 2. This study was not designed to collect formal performance appraisal data. This will require very different design and implementation of methodologies with special emphasis on collecting and analyzing extensive observation data on the application of competencies in the workplace. Lack of valid and reliable data available from policy makers on issues related to this study.
- 3. The third limitation relates to the collection of impact data on the 2010 and 2011 Presidential Instruction Strengthening Program (INPRES). An impact study usually requires available data about the competency of respondents before they intervene to be investigated. In this way post-intervention competencies can be compared with preintervention competencies.
- 4. Pre-INPRES competency data about school principals were not available to the study team because they were not collected. This places some limitations on the extent to which this research is able to provide findings on the impact of interventions on participant competency.
- 5. Lack of data on the competence of principals, may be available at the provincial or district level, but this is not available for MoEC or national study teams.
- 6. Research on the competency of principals is only carried out at certain times, while the demand for improving the quality of education is continuously needed, therefore further research is needed in the future to obtain valid and reliable data as a forum for better coaching and development.

REFERENCES

Brophy, J.E, Good T.L. (1986), Teacher Behavior and Student Achievement, New York: Me. Millan.

Bradsford, R. (2003). Educational Psychology. New York: Me Millan.

Brubacher, J. (2001). Design and Analysis. A Researcher's Handbook. New York: Prentice Hall.

Blair, Robert W. (ed), (1982) Innovative Approach to Language Teaching, MassachusettsrHeinle & Heinle Publisher.

Doff, Adrian, (1988) Teach English: A Training Course for Teachers, Cambridge: Cambridge University Press,.

Donald L. Mills Vollmer, Howard M. (1966). Professionalization. Englewood Cliffs, N.J.: Prentice-Hall.

Dubin, Fraida and Elite Olshtain, (1991). Course Design. Developing Programs and Materials/or language Learning, Cambridge: Cambridge University Press,.

Duncan, Arrie. (2009). "Teacher preparation: Reforming the uncertain profession." New York: Remarks presented at Teachers College, Columbia University. October 22, 2009. levine, Arthur. Educating School Teachers. Washington, D.C. Education Schools Project.

Ellul Jacques. (1967). The Technology Society, New York; Alfred A. Knopf

Finachiaro, Mary,(1969)Teaching English as a Second Language, New York: Harper & Row Publisher,.

Fullan Michael G. With StiegelbauerSuzanne (1998), The New Meaning of Educational Change second edition, Techers College Press J. Drost, SJ (1999),

Good, T.L, (1981), Teacher Effectiveness in the Elementary Schools: What we know about it now, Journal Teaching Education, 52 - 64.

Gagne, Robert M, Leslie J, Briggs, (1979) Principle of Instructional Design, USA: Holt, Rinehart and Winston, Inc.,

Clark, K (2011), Philosophy of Instructional Use for Teaching and Learning in the 21st Century, The University of Akron.

Cox, M. j (2008), Research IT in Education, dalam buku: Handbooks of 10" in Primary and Secondary Education, 2008, page 965-969

Jason A. Colquitt, Jeffery A. LePine, dan Michael J. Wesson, (2011), Organizational Behavior: Improving Performance and Commitment in the Workplace, Second Edition, New York: McGraw Hill,

Jex, M. Steve, Thomas W. Britt, (2008), Organizational Psychology: A Scientist Practitioner Approach, New York: John Wiley & Sons,

Keputusan Mendiknas Nomor 053/U/2001 ,Pedoman Penyusunan Standar Pelayanan Minimal Penyelenggaraan Persekolahan, Bidang Pendidikan Dasar dan Menengah Ketetapan MPR-RI Nomor IV/MPR/1999 tentang Garis-garis Besar Haluan Negara, Sekretariat Jenderal MPR, Jakarta.

Peraturan Menteri Pendidikan Nasional Republik Indonesia Nomor 13 Tahun 2007 Tentang Standar Kompetensi Kepala Sekolah/Madrasah.

Lavonen, j. and Meisaio, V 2002, Research-Based Design of Learning Materials for Technology-Oriented Science Education. Themes in Education. I; 3): 107-131

Learning and Teaching, (2001) England: Pearson Education Ltd.,

Little John , Stephan W. (1978). Theories of Human Communication, Columbus , OH , Charles E. Merril Publishing Co. p. 23.

Lim, Cher Ping, Ching Sing Chai, and Daniel Churchill. (2010), Leading ICT in Education Practices. Singapore: Microsoft Partners in Learning.

Ontario Ministry of Education. (2010). Growing success: Assessment, evaluation, and reporting in Ontario schools. (1st edition, covering grades 1 to 12). Toronto: Author.

Ontario Ministry of Education. (2011). Learning for all, K-12. Toronto: Author.

Ontario Ministry of Education. (2012) Supporting the Ontario Leadership Strategy. Toronto: Author.

Ontario Ministry of Education. (2013) Creating Pathways to Success, The Education and Career/Life Program Policy for Ontario Schools Kindergarten to Grade 12, Toronto: Author.

Robinson, V., Hohepa, M., & Lloyd, C. (2009). School leadership and student outcomes: Identifying what works and why. Best evidence synthesis iteration (BES). Wellington: New Zealand Ministry of Education.

Toshalis, E., & Nakkula, M. J. (2012) Motivation, Engagement

Program Kemitraan untuk Pengembangan Kapasitas dan Analisis Pendidkian (ACDP) - School and Madrasah Principal and Supervisor Competency Baseline Studi, Overview of the Education Sector in Indonesia 2012, kemdikbud Jakarta.

Russel, J.W., Kozma, R.B., Jones, T., Wykoff, J., Marx, N., & Davis, J. 1997. Use of Simultaneous-Synchronized Macroscopic, Microscopic and Symbolic Representation to Enhance the Teaching and Learning of Chemical Concepts, journal of Chemical Education. 74 (3): 330-334.



Sanger, M.J, and Greenbowe, T.J. (2000). Adressing Student Miscop-ception Concerning Electron Flow in Aqueous Solutiona with Instruction Including Computer Animation and Conceptual Change Strategies. International journal of Science Education. 22(5): 521-537

Schwartzer, N. (2002). Knowledge and Development of Science Teachers in the Context of Teaching Higher Order Thinking. Ph. D, Thesis, Jerusalem: Hebrew University of Jerusalem

Waterhouse, S. (2005). The Power of e-Learning. The Essential Guide for Teaching in the Digital Age. California: Allyn & Bacon.

Williamson, V.M., and Abraham, M.R. (1995). The Effect of Computer Animation on the Particulate mental Models of College Chemistry Students, journal of Research in Science Teaching. 32(5): 521-534.

Zohar, A. (2004). Higher Order Thinking in Science Classroom: Students' Learning and Teachers' Professional Development. Science & Technology Educational Library, volume 22. Dorchrecht: Kluwer.