



A Comparative Study of Model to Support Teachers' Capacity in Assessment for Learning in Thailand and New Zealand

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Abstract

According to the assessment of educational reform efforts over the ten-year period from 18 August 1999 when the National Education Act of B.E. 2542 (1999 A.D.) was announced to the present, many issues were found successful while other topics have encountered problems requiring development, modification and continuation, especially in terms of student, teacher, faculty and educational personnel quality, management efficiency, including increases in educational opportunities. The purpose of this research was to comparative study about the developing teachers in terms of assessment for learning by studying Thailand and New Zealand context. The results founded those recommendations to the relevant authorities to create strategic approaches to develop models for promoting teachers in terms of assessment for learning in Thailand including of some issues surrounded by professional learning on assessment for learning in Thailand.

Keywords: assessment for learning; professional development; comparative study.

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1. Introduction

Due to Thailand's educational reform from 1999 to 2009. Professor Srisa-arn has summarized that the past educational reform has fail because of Thailand have been unable to manage Thai schools to have similar quality [1]. Failures at some educational reform issues during the first decade have been an important reason leading to educational reform in the second decade approved by the Council of Ministers on 18 August 2009 [2:36]. The vision for educational reform in the second decade for the next ten years is "quality learning among Thais throughout their lives". The phenomenon would be occurred only when systematic educational and learning reform has taken place in terms of three main aspects and four new aspects. The three main aspects are composed of principles for developing education quality, standards and learning among Thais, principles of educational and learning opportunities and principles in supporting participation by all sectors in society to manage and arrange education. The "new four" educational reform structure comprises the following:

- 1) to develop quality of new age Thais
- 2) to develop new age teachers in new teacher products by training teachers to be more prepared, have spirits of being a teacher and having a high profession
- 3) educational facilities and learning source development in the new age whereby all levels of educational facilities and categories must be developed as quality learning sources with the development of other learning sources such as libraries, museums, zoos, science and technology parks, etc., as learning centers for the general population and
- 4) to develop new management with emphasis on power distribution for the most flexible and independent educational facility management together with the emphasis of good governance principles [2:36].

In order to ensure that educational reform in the second decade achieves its objectives, *the Committee for the Second Decade of Education Reform*, chaired by the Prime Minister, has set forth the following strategic goals, indicators and operational goals from now to the end of 2018: 1) Thais and Thai education must have quality and meet international standards; 2) Thais must seek learning with ability to learn on their own, love to read and continually seek knowledge; 3) Thais must be good with basic morals, conscientiousness and desired values, considering common interests for the benefit of all, possessing public-mindedness with a democratic culture and 4) Thais must be able to think, act and solve problems with skills in thinking and in practice with problem-solving ability, creative thinking and communication ability [3]. In raising the educational standards and quality, highly important variables in achieving successful educational reform are teacher quality, quality development of new age teachers who facilitate learning in students as a profession with value and ability to attract good and talented people who love teaching to become teachers, thereby necessitating the importance of driving for qualitative production for society. Hence, raising educational quality standards through school education systems is imperative because learning is guided by teachers and students in classrooms. Teachers must manage various need situations in classes, including social, emotional and pressure situations occurring with students at an average of thirty students per class or more to help students learn and grow to become good students in the

future. The standards will be raised if teachers can work effectively in classrooms. How can the agencies and organizations involved help teachers in these situations? The answer that raising the quality of education “depends upon teachers” may not sound fair for this enormous responsibility because part of output quality is an effect of input factors and the mission should not be left as the duty of teachers or educational staff alone [4:1].

One study that triggered interest in raising students’ learning achievements by using measurement and assessment concepts in classes among academic experts throughout the world is the “Inside the Black Box: Raising Standards through Classroom Assessment” study by Black and Wiliam in 1998 who found formative assessments to have an effect size of 0.40 – 0.70 on capabilities and learning achievement while also finding formative assessment to have the greatest effect size among variables related to educational development which helped Great Britain raised its level in the Trends in International Mathematics and Science Study) from the middle of forty-one countries to one of the top five [4:3]. Furthermore, Stiggins [5:1] has mentioned that

“If we want to raise learning achievements, we have to emphasize the development of assessment systems in classes and give equal weight to the importance of assessment of learning and assessment for learning because current education systems usually give more importance to assessment of learning than assessment for learning”.

Therefore, learning assessment concepts and methods must be reformed to solve the problems and raise education provision standards through educational processes with teachers as a key mechanism as in many countries, realizes the significance and has turned to promoting the assessment for learning concept [6:10].

Many academics in the field of educational evaluation and assessment [6] are currently showing greater interest and support for students, education guides and school executives to implement “assessment for learning” concepts and methods in classes rather than emphasizing only “assessment of learning” in line with the specifications of central education agencies. With regard to aggressive concepts and practices continually and seriously carried out in assessment for learning, executives of the Education Testing Service (ETS) of the United States were found to have shown particular interest and invited Stiggins, the administrator of the Assessment Training Institute (ATI) founded in 1992, to work with ETS in 2006. (www.assessmentinst.com/about-ets/about-ets-ati). This was the “turning point” of assessment at the EST where a world class assessment agency turned to support the concept of assessment for learning apart from operations in line with key obligations in the assessment of learning from a broader perspective (such as assessment by SAT, TOEFL, GMAT and GRE test forms) which have been conducted over a long period of time [6].

Regarding guidelines for development in raising education standards by using the concept of assessment for learning, Stiggins [5] interestingly proposed that, in maximizing learning achievements, we must pay more attention to assessment for learning system development in classes as follows: 1) investing as much in assessment for learning as investing in assessment of learning; 2) preparing development curriculums regarding assessment for long-term learning to improve teachers and executives in gaining professional expertise; 3) modifying standards for issuing teacher and executive profession licenses to be consistent with emphasis on the assessment of learning and assessment for learning skills and 4) obtaining management processes to ensure that

teachers and executives have accurate assessment skills in terms of supporting and storing students' learning documents.

As a professor teaching education educationist and academic service on measurements and assessments for society, the researchers have gained awareness and realizes the importance of raising the education standards. Furthermore, in the role of development to support successful learning in line with educational reform policies in the second decade, the researcher holds the opinion that the second recommendation provided by Stiggins to arrange development courses on assessment for long-term learning aimed at developing teachers and executives to achieve professional expertise is a feasible option for Thailand's current education situation and will be able to push for educational reform concepts to achieve national goals.

Therefore, teacher improvement models concerning assessment for learning are an interesting topic of study. New Zealand's education was interested because New Zealand is classified as one of the ten countries with the best education in the world. Furthermore, the country gave importance to education from a shared belief that "education is an important foundation in national economic and social development". Furthermore, New Zealand is a country reputed as one of the leading countries offering successful educational reform from centralization to decentralization of education power to education facilities and the public with systematic strategies and methods together with cooperation from the public and private sectors, various organizations and the public which gives importance to education as a foundation in national economic and social development, thereby making New Zealand's educational reform undeniable successful.

Because of the aforementioned significance, the researcher gained an interested in comparative study about models for developing teachers in terms of assessment for learning by studying Thailand and New Zealand within the scope of contents and activities in the process of developing teachers.

2. Significance of the study

The research would be significant, as it will give policy direction on professional development in term of assessment for learning in Thailand, because there is a correlation between sustained teacher professional development (PD) and improvements in student achievement (OECD, 2014a). Professional development is also a more cost-effective way of improving student outcomes than reducing class size or increasing student learning time (Musset, 2010). It will also help in developing model of school effectiveness. It will further establish a foundation of professional development program.

3. Scope of the Study

The aim of this research was to comparative study about models for developing teachers in terms of assessment for learning by studying Thailand and New Zealand within the scope of contents and activities in the process of developing teachers. It was a documentary research and qualitative research. Researchers used comparative analysis followed Bereday's method [9:28] and set the scope for conducting the research as follows:

3.1 Research Procedures

Step 1 Setting common goals

According to the study of concept, theory, documentary, philosophy, educational policy and involved research New Zealand, it can be analyzed the main principles of education, economic factor, both in Thailand and New Zealand. So, there are geographical factor, political factor, language factor, religious and moral factor and racial factor. Both different and similar role of education.

Setting specific objectives Step 2 Setting

Setting specific objectives by analysing problem and obstacle for educational reformation, raising of Thai educational management and the role of educational development to success. According to the policy of education management and the role of educational development to success second suggestion about the second decade, there is an opinion that Stickins educational reformation in professional learning on assessment for learning in long term to develop teachers and administrators as educational management and the roles of the professional is an appropriate option for current condition of Thai education. The researcher strongly expected that researcher that are higher education institutions and teacher institutions. This research could support the concept of educational reformation to achieve the national goal.

Therefore, there were three items in To study the progress of teacher development (setting specific objectives; 1) measurement and evaluation for learning development in Thailand and New Zealand, and 2) To make the policy proposal for related departments to have ways to create strategies for teacher development in measurement and evaluation for Thai learning development.

Step 3 Collecting data

The Information for Research

The information to analyze in the research is about the formation of enhancing measurement and evaluation skills for learning development in teacher institutions and official teachers in Thailand and New Zealand. The research of documentary includes researches, articles, books, textbooks, journals from printing media, electronic media, interview of professors and observation from teachers and administrators' practicing of measurement and evaluation for learning development at a primary and high school by depending on assistance from Massey University in contacting with the school in New Zealand.

Information Sources

- Online information (Web site) of Thailand and New Zealand Ministry of Education
- National Library
- Office of Basic Education Commission
- Interview of related people
- Related researches

Instruments

- Data collecting sheet created by the researcher

Data collecting

The researcher collected the data of national education development plan, Education act, policy of education management, education curriculum, and formation of teacher development in measurement and evaluation for learning development. The researcher of documentary included researches, articles, books, textbooks, journals from printing media, electronic media, interview of professors and observation from teachers and administrators' practicing of measurement and evaluation for learning development at a primary and high school.

Sample Group

The sample group of those who are professional in assessment for learning development in New Zealand and Thailand, consists of professors who took part in policy determination and practice way about measurement and evaluation for learning development in classes, professors who took part in policy determination and curriculum development of producing teachers, and teachers from school the total is 15 people.

Step 4 Describing and interpreting phenomena

When the information was collected at the third step, this step is the explanation and interpretation. The researcher compared what was explained and interpreted the phenomena appeared from the collected data. The analytical results from the study of documentary, related researches, interview of professors, and observation were from data qualitative analysis, including content analysis, typological analysis, constant comparison, component analysis, and analytic induction

Step 5 Classifying or analysing for differences and similarities

The analysis of So it can be .differences and similarities is an interpretation of differences and similarities concluded into the result of the study about the progress of teacher development (parts; 1 on assessment for learning in Thailand and New Zealand and 2) the policy offer for related departments to create strategies for teacher development on assessment for learning in Thai context.

4. Literatures

4.1 Education of Thailand

History of education in Thailand

A country with educated people would be a peaceful society since they know how to communicate with each other thoughtfully and they look for the country's benefit rather than for small group interests. Same as many scholars say that investing in high quality education is among the most powerful measures to reduce poverty and inequality and to promote long-term economic growth.

Thailand has had an uninterrupted educational system for the past 700 and more years, dating back to Sukhothai period during the thirteenth century [10]. During Sukhothai period, King 'Ramkhamhaeng the Great' invented the first Thai alphabet that has been used continuously to the present. This alphabet was modified from time to time until the present system of writing was formed. At first, in Sukhothai period and Ayutthaya period, education was provided to children of nobles by scholars and to commoners by monks. Then, in Bangkok period, public schools were opened in the reign of King Rama V. Since then, boys and girls have enjoyed their opportunities to be educated in both public and private schools of their choices. Besides, vocational and technical schools have also been established to produce a skilled manpower. Public and private universities are located in various parts of the country providing higher education in various fields for the development of the country [10]. The current education system in Thailand is the product of many influences which have shaped and tempered it over the centuries. The first educational system was quite similar to that of the monastic and cathedral schools of medieval Europe in that it had a religious approach and was centered in the Buddhist temples. During the Second World War, Thailand was affected by both the invader and supporters of the Allies. After the War, the country has changed socially, politically, and economically. These events dramatically affected educational system. [10]

The National Education Plan (2002-2016)

Three educational objectives and 11 policy guidelines for implementation are specified for Ministry of Education and related government agencies as follows [11]:

- 1) All-round and balanced human development
 - 2) Building a society of morality, wisdom and learning
 - 3) Development of social environment
- (1) Developing all people to have access to learning;
 - (2) Learning reform for the benefit of learners;
 - (3) Inculcating and strengthening morality, integrity, ethics, and desirable values and characteristics;
 - (4) Manpower development in science and technology for self-reliance and enhanced competitiveness capacity;
 - (5) Developing a learning society to create knowledge, cognition, the good behavior and integrity;
 - (6) Promotion of research and development to increase the knowledge and learning of Thai people and Thai society;
 - (7) Creation, application and dissemination of knowledge and learning;

- (8) Promotion and creation of social and cultural capital;
- (9) Reduction and elimination of structural problems for social justice;
- (10) Development of technologies for education; and
- (11) Systematizing of resources and investment for education, religion, art and culture.

From the objectives and policy guidelines, during the past years, Thai governments have set main strategic goals that may differ from government to government but can be summarized as:

1. Human development with a focus on knowledge, happiness, health, a loving family, a pleasant environment, and a peaceful and caring society.
2. Movement toward a knowledge-based society by placing people at the center of learning and focusing on human, potential, competitiveness, morality and ethics.

The educational system in Thailand

Education and literacy development have a long tradition in Thailand [12,13]. Today's education system aims to build and support practical and academic skills, social competencies, moral and democratic values, and a national identity. Over the years, Thailand has expanded the number of years of free schooling available to Thai youth, and the country now offers a range of schools to meet students' different needs. However, students in remote areas or from disadvantaged backgrounds do not have access to the same quality of education as those in other parts of the country, and there are inefficiencies in the overall governance of the system [13:45].

Structure of schooling

Thailand provides three types of education; formal, non-formal and informal. Since 1999, formal education has been divided into basic and higher (tertiary) education. Basic education is offered free of charge and includes pre-primary, primary and secondary levels. Compulsory education starts at the age of six and lasts nine years, consisting of primary schooling (grades P1-6) and lower secondary education (grades M1-3). Pre-primary education became part of basic education in 2004. It is not compulsory, but has been made free of charge since 2009 in order to facilitate access [13: 46].

School types

Thailand's education system includes a variety of public and private schools. The Ministry of Education is by far the most important education provider, but ten other public bodies oversee their own institutions, which educate more than 1.1 million students. Many institutions offer primary and secondary education combined, and it is common to attend primary and lower secondary education ("extended primary education") or lower and upper secondary education within a single school [14]. Students with special education needs are currently taught in either mainstream or dedicated facilities, but Thailand is making efforts to expand their opportunities

to gain self-sufficiency and integrate into the community.

Recent education reforms

Education in Thailand has received significant political attention in the past two decades. Thai education reform developed out of the country's recognition that its education system needed to transform to adapt to domestic and global changes and to better support sustained economic growth. This reform can be divided into several phases, the most recent of which began with the 1997 Asian economic crisis and the writing of a new Thai constitution [12]. A major reform was implemented in 1999 under the aegis of the National Education Act. Despite Thailand's progress in increasing overall access to education, translating other reforms into action has been an ongoing challenge. The country will need to establish and effectively implement a new long-term reform agenda in order to improve the quality of the education system and, in turn, meet broader development goals [13:53].

The National Education Act and the key reform areas

Thailand's 1999 National Education Act (NEA) introduced sweeping changes to improve the quality of the education system. Moving away from a highly centralized structure of education governance, the NEA called for education financing and administration to be decentralized to ESAs, LAOs and schools, mirroring the government's wider efforts to devolve administrative responsibilities. It established equity and student-centered – rather than rote – learning as guiding principles for the education system, calling for all segments of society to be able to participate in education and for all learners to develop themselves at their own pace and to the best of their potential. The legislation also introduced policies to transform the curriculum, student assessment, the role of teachers and school leaders, and, to a lesser extent, the use of information and communication technology (ICT) in education. These areas, which are examined as part of this OECD-UNESCO review, are key to education reform and to supporting Thailand's broader growth efforts. The curriculum and student assessment can be used to instill and measure the acquisition of competencies needed for success in the 21st century. Teachers are the most important school-related factor in improving student outcomes. [13:54]

The Challenging issues

During the last 20 years, Thai governments have put forth a lot of effort to support education for all in terms of access and quality of education. Many problems have been solved to create a quality education for the school-age population including non-formal education needed for adults. However, there is still some room for improvement, such as equal opportunity in education and quality of education such as Equal opportunity in education and quality of education. Ministry of Education has to work harder on these issues. Comprehensive teacher-training would be one of the key factors in improving the whole system. In practice, "All for Education" should be an urgent issue to create quality "Education for All" as the country has long been promoting.

4.2 Education of New Zealand

New Zealand has one of the most devolved school systems in the world. The 1989 Education Act established

self-managing schools as Crown entities and gave responsibility for the administration and management of schools to elected Boards of Trustees. Average student learning outcomes are very good by international comparison. The current priorities for the school sector are to lift student achievement in literacy and numeracy, enable all young people to achieve worthwhile qualifications. Evaluation and assessment are a key element in national strategies towards achieving these goals [15].

Education system in New Zealand

Structure of schooling

Structure Levels of education The New Zealand school system is organized in three levels and offers a range of different schooling options [15].

- 1) Early childhood education (typical ages 0-5): Early childhood services are not provided or managed by the state.
- 2) Primary education (Year levels 1-8; typical ages 5-13): Schooling is compulsory from age six, but most children start primary school at age five.
- 3) Secondary education (Year levels 9-13; typical ages 13-18): The most common form of secondary education covers five years (Year levels 9-13).

There are also two school forms that fall in between primary and secondary education: Composite schools provide education from Years 1-13 (mostly in rural areas) and junior high schools deliver education for Years 7-10.

Education settings Semi-private and private schooling While the vast majority (85%) of New Zealand students attend state schools. State-integrated schools are state schools that follow the national curriculum while retaining a “special” character. About two-thirds of the state-integrated schools are Catholic schools. Private schools usually offer either religious education or a particular education philosophy (such as Steiner or Montessori schools). It is not compulsory for private schools to follow the national curriculum [15].

Distribution of responsibilities

New Zealand has one of the most devolved school systems in the world. As part of a major administrative restructuring, the 1988 Tomorrow’s Schools reforms centralized policy decision making to the national level, eliminated the administrative structures for primary schools and devolved responsibility for the management of individual schools to elected Boards of Trustees. The Ministry of Education is responsible for national education policy and provides most of the funding for state schools. It also develops the curriculum and assessment standards and sets minimum standards for becoming a teacher. Teacher and principal salaries are negotiated at the national level every three years with the respective unions. The Ministry is also in charge of overall system monitoring and has the power to intervene in failing schools. The Ministry of Education has 4 regional offices

and 16 district offices that are supported by a number of local offices across New Zealand. The Ministry is supported by three key agencies at the national level. The Education Review Office (ERO) is the main accountability agency responsible for evaluating and reporting on the quality of education, the New Zealand Qualifications Authority (NZQA) ensures that qualifications obtained in New Zealand are robust and credible and the New Zealand Teachers Council (NZTC) provides professional leadership for effective teaching and teacher education.

The 1989 Education Act established self-managing schools as small Crown entities. Responsibility for the administration and management of each individual school was given to a Board of Trustees. The Boards typically consist of elected members from the school community, the principal, a staff representative and a student representative (in secondary schools). Boards of Trustees hold a wide range of responsibilities including strategic management, school self-review, appointment and employment of staff, finance, property, health and safety and compliance with legislation. Boards of Trustees must deliver on government policies. They are accountable both to the government and to the local communities. The school's management team is led by the school principal and is accountable to the Board. In smaller schools, management and educational leadership tend to be combined in the position of the principal. The 1989 Education Act defines the school principal as "professional leader" with three main functions: executive (implementing the Board's policy), instructional (leading the school's staff) and reporting (providing information on the school's achievement [16]. Many Board responsibilities, such as selecting and appointing teachers, are usually delegated to the principal.

Policy development

Policy development at the system level is characterized by a strong tradition of consultation with key agencies and stakeholders. Participation of stakeholders in policy development takes various forms such as working parties, advisory groups, organized consultation and pilot studies. This process is intended to ensure buy-in and a sense of ownership from those who will implement and manage the changes. The key groups that are consulted in matters concerning education policy include the School Trustees Association (NZSTA), the Council for Educational Research (NZCER), representatives of specific types of schools (such as the Association of Intermediate and Middle Schools [NZAIMS] and the Catholic Education Office [NZCEO]), the teacher unions, principals' associations, professional organizations, as well as business and cultural stakeholders [16].

Principles of equity and inclusion in education

All education in the state school sector is free of charge. The development of the education system has emphasized "the right of every student to expect a similar standard of education regardless of school location and size" [15]. The New Zealand Curriculum states its commitment to strong equity principles, including; 1) Ensuring high expectations for all students, 2) Respecting the Treaty of Waitangi and the bicultural foundations of New Zealand, and 3) Valuing cultural diversity and inclusion of all students in a non-sexist, non-racist and non-discriminatory way.

The school system is comprehensive from primary through to upper secondary education and few distinctions are made between academic and vocational programmes in upper secondary schools. Most special education students participate in regular school settings. The Education Act provides that state and integrated schools are obliged to enroll all students in their local area, regardless of their level of impairment or educational need. In 2009, only 0.4% of New Zealand students were enrolled in schools specializing in teaching students with certain types of disabilities. Schools enrolling students with moderate special needs are supported with targeted funding and access to specialists, while students with high needs receive additional individualized funding or support.

Education outcomes

According to results from the OECD's Programme for International Student Assessment (PISA) 2009, the performance of New Zealand students towards the end of compulsory education is significantly above the OECD average in all areas assessed (reading, mathematics and science). However, while on average New Zealand students are among the top performers in the world, the dispersion of achievement scores is particularly large. Among the high-achieving countries, New Zealand had the widest range of scores between the bottom five percent and the top five percent. Performance differences were most pronounced within schools rather than between schools. New Zealand's results in international student assessments have been relatively stable over the past decade showing consistently high average performance, coupled with a wide dispersion of achievement scores [15].

4.3 Assessment FOR Learning

Value of Assessment FOR Learning

Traditionally, schools have used assessment the pending final exam and the threat of low or failing report card grades to motivate students. To maximize learning, our teachers believed, maximize anxiety. Assessment has served as the great intimidator. Pressure to get high test scores and good grades, it was believed, would motivate greater effort and thus more learning. The recent change in the mission of schools has clouded this traditional view of the relationship between assessment and motivation. To see how and why, we must explore our assessment legacy and its motivational intricacies. As you will see, through that retrospective, we will discover a far more productive way for assessment to help students succeed [17:324].

Since 1967, when Michael Scriven articulated the distinction between summative and formative program evaluation, and since 1971, when Benjamin Bloom, Thomas Hastings, and George Madaus extended the differentiation to various forms of assessment, summative assessment has referred to tests administered after learning is supposed to have occurred to determine whether it did. Meanwhile, formative assessment has been the label used for assessments conducted during learning to promote, not merely judge or grade, student success. Clearly, over the decades, the interest (and investment) in summative assessment has far outstripped that accorded to formative assessment, as layer upon layer of tests have been used for classroom grading, as well as for local, state, national, and international accountability testing. Within the past few years, however, formative assessment has emerged as an increasingly prominent tool for school improvement [17:326].

Changing on Assessment

Black and Wiliam offer recommendations for changing this state of affairs. They begin with the student, "the ultimate user" of that assessment information which is geared toward improving learning. To be truly helpful to students, formative information should be focused on the task, not the student; and the student must understand the feedback so as to make use of it. To really succeed, however, students must learn to self-assess "so that they can understand the main purposes of their learning and thereby grasp what they need to do to achieve."

Black and Wiliam have discussed about what makes for effective feedback from teachers, such as opportunity for students to express their understanding, classroom dialogue that focuses on exploring understanding, and feedback which includes opportunities to improve and guidance on how to improve. They conclude with policy prescriptions, starting with the need to change from a focus on standardized tests to what are still the "black box" of actual student learning and to changing classroom practices, particularly formative assessment. Assessment FOR Learning (Formative Assessment) is a process used by teachers and students as part of instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement of core content. As assessment for learning, formative assessment practices provide students with clear learning targets, examples and models of strong and weak work, regular descriptive feedback, and the ability to self-assess, track learning, and set goals [18].

Key strategies of formative assessment

Wiliam (2013) [19] suggested key strategies of formative assessment as follow:

- Learning Intention
- Feedback
- Students as Learning Resources for One Another
- Students Owning Their Own Learning

5. Research Summary

Recommendations to the relevant authorities to create a strategic approach to develop models for developing teachers in terms of assessment for learning in Thailand including of some issues surrounded by professional learning on assessment for learning in Thailand are; Thailand should set professional development on assessment for learning as a national agenda and taking attention seriously. Thailand should use concept of professional learning community (PLC) in professional learning development system. Timing of Professional development on assessment for learning should be 1-2 years. Professional development on assessment for learning should measure output from all important aspects of student not only measure achievement (critical thinking etc). Major factor of Professional development on assessment for learning is relationship between providers and schools and teachers. Thailand's assessment system need to deliver the results needed, including for the interpretation of assessments. Teachers and school leaders need both a theoretical and a practical understanding of the learning and assessment processes. Office of the Higher Education Commission should

make reference to assessment or evaluation in its outline of the skills and knowledge that student teachers are meant to acquire because educational measurement and evaluation is one of the contents of pre-service programmes in their standards of knowledge of Teachers' Council of Thailand's list. The education reform may have to concentrate more on updating teaching methods than on providing teachers with a sound assessment toolkit. Strengthen teacher training and support in assessment for learning. Strengthen the capacity of policy makers in central and local government to use data and research generated by student assessments to inform decision making. Thailand should have resources of the right mix of assessment instruments to measure the full range of skills students need for teachers. Review on Thailand's pre-service programme recruitment procedure which affects assessment behavior of teachers in the country. Thailand should use student assessments such as PISA or national standardized tests to identify schools' or teachers' professional development. TCT should provide a full description of each of the standards or any related competencies, and address in its announced plans to upgrade teacher standards over the next three years. Thailand should evaluate teachers' performance against the standards as part of the licensing process. Thailand should use of authentic and performance-based methods of assessing knowledge and capabilities for license renewal, including interviews, thorough examinations of work portfolios and psychometric tests. ONESQA should provide useful feedback on teaching practice or support professional development. (In many regions, schools rely on teachers to assess their own practice). Schools should have right to select providers themselves. Thailand should be moving towards using student performance results to assess teachers for promotion. The results of teacher performance appraisals could be one factor considered for the purposes of promotion. The strategy should develop a catalogue of professional development opportunities based on the skills needed to deliver the basic education curriculum, work towards system-wide education reform goals, and the needs identified by teachers and schools. Thailand's strategy could set funding priorities for the development, accreditation and delivery of the training. The strategy should focus not only on the content of the training but also on delivery methods, prioritizing school-based, job-embedded learning opportunities whenever possible. The training should be evaluated on an ongoing basis to ensure it is meeting the strategy's goals. Thailand should ensure that teachers are provided with relevant professional development at each stage of their careers, aligned with national standards. Thailand should be enhanced to include mentoring as a key component, aligned with professional standards, and made available to assistant teachers working on temporary contracts. The professional development programme's effectiveness should also be evaluated itself. Thailand should amend standards for the teaching profession. Performance appraisals as part of the induction programme should be tailored to the competencies of assistant teachers, and their successful completion should be a requirement for full teacher certification. As a priority, Thailand should investigate and put an end to any bribery that may be occurring in the certification process. Make efforts to reduce the workload that is taking teachers' attention away from the classroom. Thailand system should assign main task that draws teachers' attention on the classroom, and makes paperwork associated with the school assessment procedures. Reduce inequities by supporting schools in their efforts to improve students' learning outcomes. Conduct ongoing dialogue with teachers' associations to ensure teachers' voices are heard. Develop a framework, including standards, to improve and support school leadership's role to improve teaching and learning in an increasingly decentralized system. Integrating role of university to cooperative with professional development. Professional development funding depends on needed.

6. Conclusion and Discussion

This part, therefore, aims to reflect on key aspects of findings in relation to the main aim of the study and the research questions guiding this study and discuss these with reference to the literature as follows;

Thailand needs to build assessment capacity right across its education system because Building capacity for an effective assessment system is a complex, resource-intensive endeavor. It requires a strong initial foundation, as well as regular efforts to maintain and improve the functioning of the system. The intensity of these demands lead to frequent gaps in assessment systems across the world. Even countries with very high-performing education systems can still lack technical expertise for the continuous assessment of learning. Systemic gaps affect assessment at the classroom level , where teachers often lack the training and the tools to use assessment results to inform practice, but national assessment agencies also face challenges in areas such as human resources [20].

Teachers in Thailand wish to implement good formative assessment, but lack the necessary knowledge. OBEC and ESAs, and targeted support from agencies such as the IPST and NIETS should provide professional development on assessment for learning. And from the initial studies found that teachers had not changed their assessment methods and a later study found that although teachers have positive views of portfolio assessment, they lacked the knowledge and skills needed to successfully implement it in each of its stages. This study concludes that education reform may have concentrated more on updating teaching methods than on providing teachers with a sound assessment toolkit [21].

To improve education outcomes and increase the impact of assessment results, teachers and school leaders need both a theoretical and a practical understanding of the learning and assessment processes. Such an understanding empowers them to design and implement the right kinds of assessment activities and to make full use of the information they collect to improve their teaching practice and tailor it to the needs of students. This in turn requires rigorous teacher training programmes, continued in-service training for all practitioners and other forms of ongoing support such as peer mentoring. Ongoing support builds teacher capacity to apply good practices in their classrooms under many different conditions, in ways that are adapted to the realities of their students, their school and their region [20].

Thailand should strengthen teacher training and support in assessment. Because teachers need to be familiar with the development, use and interpretation of assessments for both formative and summative assessments. Good practice allows teachers to plan assessments that are tied to the curricular standards and to the objectives of the class, to appropriately involve students in formative assessments, and to make proper diagnostic use of the assessments to improve student learning and final learning outcomes. It is critical that Thailand build teachers' professional capacity. Enhanced collaboration among teachers can be a particularly powerful capacity-building process in assessment. Professional development activities are also critical, as are supporting tools such as scoring guides, external benchmarks and innovative assessment tools. Thailand must ensure that teachers have the resources and competencies they need in areas such as employing a wide variety of assessments, making judgments against educational standards, and taking into account cultural and linguistic aspects of student

learning [20].

Thailand should implement policies and programmes to develop measurement and psychometric expertise. This is an absolutely necessary precondition of any quality assessment programme that operates in alignment with recognized professional standards. NIETS needs sufficient professionals familiar with current measurement theory and practice to implement and maintain Thailand's many national testing programmes. Because Thailand lacks the number of academics it needs to establish a local programme in this field [20]. It may be advisable to send several cohorts of students abroad to obtain doctoral degrees in educational measurement at foreign universities with good reputations in this field. Upon their return to Thailand, these professionals would gradually enrich the base of local expertise and over time, training could be shifted towards Thai universities. The costs of this initiative would be minimal compared to the benefits and quality gains in the longer term. In the meantime, local and foreign experts (including current and former officials from assessment agencies in other countries) could be employed as a stop gap to raise Thai assessment practice to international standards.

Thailand should strengthen the capacity of policy makers in central and local government to use data and research generated by student assessments to inform decision making. In most circumstances, it is advisable to leave the actual manipulation of data and the performance of any necessary research in the hands of technical experts and social scientists. Nevertheless, it is necessary to develop a cadre of ministry personnel who are informed enough to understand the issues raised by experts working with assessment data [20].

Thailand should increase Effective use of assessment in the classroom because formative assessments are above all a key pedagogical instrument in a teacher's toolbox. They are typically not rigorous measurement instruments, and in general it is unwise to attempt to treat them as such. What they do provide are ways for teachers to continually gauge student progress, and to adapt instruction to the evolving needs of learners. Whatever shape it takes, good formative assessment provides timely feedback to students, helps them feel safe to take risks, diagnoses learning needs and allows teachers to differentiate teaching accordingly, and engages students in their own learning process [21].

The benefits of formative assessment policies depend on effective implementation, though. The increased policy attention paid to formative assessment strategies in recent years stems in part from a growing body of evidence regarding their positive outcomes. A review of the research on classroom-based formative assessment found that the achievement gains associated with formative assessment were among the highest ever reported for any educational intervention (Black and Wiliam, 1998). Formative assessment should take place in an environment conducive to the improvement of classroom practice, addressing potential logistical obstacles such as overly large groups of students or excessive curriculum requirements. Since overemphasis on "results" often leads to an underdeveloped formative assessment approach, one of the most crucial considerations in designing an assessment framework is to effectively link it to everyday classroom practice [20:168].

As already highlighted about building teachers' capacity can increase the usefulness of assessment results and translate into better education outcomes. Part of building capacity involves improving teachers' formative assessment skills both through high-quality initial teacher education, and ongoing professional development.

Ideally teachers should be able to move beyond superficial approaches to formative assessment and develop the skills required to provide students with detailed, timely and specific feedback on their performance. Shifting attention away from a teacher-centered approach and towards one that focuses on students themselves requires teachers to adapt their techniques to meet diverse learning needs and help students build their own assessment skills to inform their future learning. For instance, teachers need to be skilled at ensuring that students can play an active role in the process through self- and peer-assessment. Collaboration amongst teachers at the school, local, regional and even national levels can be an effective way of further developing such capacities [20:167].

The issue of teacher training and support in the area of assessment, and a traditional emphasis on summative assessment, are hindering policy development and the improvement of student outcomes. Design flaws in Thailand's standardized student assessments and their architecture, together with an apparent lack of comparability of results over time, raise significant risks if test scores are taken at face value in the design of policies, programmes and interventions across the education system. Of equal concern is the impact technical flaws can have on fairness and equity, as they may misclassify performance levels, affecting students' academic future. For these reasons, improving the design and methodological rigor of the country's student assessments should be Thailand's top priority in reforming the assessment system [20].

Thailand already has the infrastructure in place to implement a high quality educational assessment programme. If an institute like NIETS were strengthened both in terms of financial resources and qualified personnel; the national examinations were brought more into line with international professional standards; an enhanced mix of assessments were put in place, guided by common student performance standards; and assessments measuring students', schools' and educators' performance were aligned to meet clear reform objectives, Thailand could make real progress towards developing a world-class assessment system. If all this were coupled with a well-trained teaching profession able to confidently make use of classroom assessments, and interpret and integrate test results into their teaching practice, Thailand would be well on the way to ensuring its education system reliably and efficiently produces the good student outcomes that are a key contributor to economic and social success [20:175-176].

Review on Thailand's pre-service programme recruitment procedure (now providers select candidates for admission using applicants' scores from the Ordinary National Educational Test (O-NET), General Aptitude Test (GAT) and Professional and Academic Aptitude Test (PAT) for admission, and faculties may use their own criteria (such as a university exam)) Top performing school systems tend to select candidates admission with "a high overall level of literacy and numeracy, strong interpersonal and communications skills, a willingness to learn, and the motivation to teach" [22]. Adopting high minimum standards for admission would put Thailand in a stronger position to ensure an appropriate supply of high-quality teachers. Typically, programmes consist of three content areas: 1) foundation courses (learning and development, multicultural education); 2) pedagogical courses (classroom management, teaching methods); and 3) subject matter courses, combined with a practicum component, linking the theory learned in the courses to the practice of teaching [23]. Teachers who complete programmes that include "content, pedagogy and practical components for the subjects they teach feel better prepared for their work than their colleagues whose formal education did not contain these elements" [24].

Thailand introduced an induction programme for new teachers in 2013 (OECD, 2016). Assistant teachers are evaluated by their principal, a senior teacher and a member of the school board every three months throughout their first two years on the job. A key component of most induction programmes what Thailand lack is mentoring [20].

Thailand should use of authentic and performance-based methods of assessing knowledge and capabilities for license renewal, including interviews, thorough examinations of work portfolios and psychometric tests. A well-designed, standards-based performance appraisal system can provide an authentic form of evaluation as it offers the best opportunity to assess actual teaching practice with ongoing improvement as a major goal. (For example, most countries implement a formal teacher evaluation process, conducted by the principal or other senior school staff, which commonly involves classroom observations, interviews and a review of documentation such as lesson plans, pupil performance data and teacher self-evaluations. The frequency of classroom observations ranges from three to six times per year, but where evaluation is implemented, it almost always involves a formal annual meeting between the principal and the teacher. Self-assessments of teaching practice are important, but on their own, they do not provide assurances of high-quality teaching or effective formative development like that offered by a standardized performance appraisal system. The most effective evaluation systems link to and provide opportunities for continuing professional development and reward effective teaching [20, 25, 26, 27].

The strategy should focus not only on the content of the training but also on delivery methods, prioritizing school-based, job-embedded learning opportunities whenever possible (e.g. mentoring, classroom observations and staff discussions, or joint planning focused on different aspects of the curriculum or the development of particular skills).

Thailand should amend standards for the teaching profession. Thailand already has standards for the teaching profession, but they could be amended, in consultation with teachers and stakeholders, to apply to and align more aspects of the profession, including pre-service education, continuing professional development, certification, performance appraisal and career progression, and to ensure they reflect the objectives for student learning in the basic education curriculum.

To support teacher quality, a well-designed performance appraisal system should be implemented, assessing performance against standards. This system should be designed to ensure teachers' ongoing professional development to support student learning. Valuable components would include: criteria to evaluate good performance based the on standards, classroom observation, meaningful feedback, a learning plan, professional development support, and a process for removing unsuccessful teachers.

7. Recommendation

1. The relevant authorities could create a strategic approach to develop models for developing teachers in terms of assessment for learning in Thailand by those findings and recommendation of this research.
2. Other researchers could use those findings to develop model to support teacher's capacity on assessment for learning in Thailand.

3. The relevant authorities could use information from findings to improve institution's procedure or aims.
4. Every organizations which related to educational system in Thailand could work together to go through the same purpose (student's achievement or performance).
5. Professional learning for teachers in Thailand need cooperative working from all parts to set the meaning goal and procedure together.

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