

PalArch's Journal of Archaeology of Egypt / Egyptology

THAI EARLY CHILDHOOD EDUCATION EXTERNAL ASSESSOR COMPETENCY INDICATOR DEVELOPMENT

*Khanidtha Tangwarasittichai*¹, *Punnee Leekitchwatana*², *Paitoon Pimdee*³
^{1,2,3} King Mongkut's Institute of Technology Ladkrabang (KMITL), Thailand

¹n.nid_2550@hotmail.com, ²klpunnee@gmail.com, ³paitoon.pi@kmitl.ac.th

Khanidtha Tangwarasittichai, Punnee Leekitchwatana, Paitoon Pimdee. Thai Early Childhood Education External Assessor Competency Indicator Development – PalArch's Journal of Archaeology of Egypt/Egyptology 18(3), 120-132. ISSN 1567-214X

Keywords: Competencies, Early childhood education, External assessors, Indicators, ONSEQA, Qualitative education, Thailand.

ABSTRACT

The study's intent was to develop competency indicators for use by Thai early childhood education (ECE) external assessors (EA) by use of a qualitative research methodology. Ten experts identified three main elements, 17 sub-elements, and 59 indicators. After which, two focus groups of ten experts each determined which elements/indicators they deemed as most important. The competencies were then grouped into three main elements including knowledge, skills and personality. Analysis of the data by use of SPSS Statistics v.21 included the mean (\bar{x}), the standard deviation (S.D.), and Cohen's kappa coefficient (κ). The study's results from the two focus groups of experts revealed that they perceived the external assessor's skills as most important. This was closely followed by each EA's personality, then their personal knowledge. Furthermore, both focus groups were in near agreement of sub-element EA competency appropriateness. In Group 1 these were the assessor's *quality assurance attitude*, their *honesty*, the need for *continual educational self-development*, and their ability at *information technology utilization*. In Group 2, qualities deemed most important were the assessor's *planning abilities*, the need for *continual educational self-development*, their *quality assurance attitude*, and their *honesty*.

1. INTRODUCTION

As early as 1997, the Thai Constitution formalized the importance of the development and provisioning of care for young children (UNESCO IBE, 2006). Additionally, the revised constitution stipulated that the Thai government must provide basic services for children and family, especially Thai Early Childhood Care and Education (ECCE) programs. Today, management of these programs is undertaken by a multitude of local, national, and private organizations, which include Sub-district Administration Organizations (SAO), Department of Local Administrations (DoLA), the Office of Basic Education Council (OBEC), the Office of Private Education Commission (OPEC), and the Thai Ministry of Education (MOE). Furthermore, educators and administrators have been tasked with goals including laying a solid educational foundation, while also instilling moral and ethical values as well as discipline in early age children (National Strategy Secretariat Office, 2018). Additional objectives in Thai early childhood development include physical, mental/emotional, social, and intellectual well-being (UNESCO IBE, 2006).

The process of quality control, quality inspection, and quality assessment of educational institutions, as well as harnessing results from the internal quality assurance process along with the external quality assessment (EQA) of an education institution is a vital process in the development of educational quality (Office of the Higher Education Commission (OHEC), 2014; ONESQA, 2017).

In light of this, the EQA and quality assurance (QA) process in Thailand was tasked to the Office for National Education Standards and Quality Assessment (ONESQA), which now plays a key role in assessing and maintaining educational quality in Thailand (ONESQA, 2017; Pitiyanuwat, 2007). Pursuant to National Education Act (NEA) of 1999 (Chapter 6) as amended by Act (No. 2) 2002 on Educational Standards and Quality Assurance, it was stipulated in Section 49 that ONESQA be established to develop criteria and methods for EQA, while also conducting educational management assessments (ONESQA, 2017).

Operation of EQA, managed by ONESQA, pays attention to vision, mission, strategy, and management of any particular assessed education institution (Pornrungrroj, 2013). Each institution is scheduled for an assessment every five years (which is mandated by law) (ONESQA, 2017; Yuthavong, 2014), and is commonly referred to as '*rounds*' or '*cycles*' (Pitiyanuwat, 2005), with the first 5-year cycle commencing in 2000. Other important roles of ONESQA in ECE external assessors are their certification, recruitment, training, and the maintenance of the quality, integrity, and reliability of EAs (ONESQA, 2017; Pitiyanuwat, 2005; Sriputtarin, 2008; Stevahn et al., 2005).

Moreover, the definition of 'education institutions' was expanded to include ECE institutions in the amendment to the National Education Act of 1999. Therefore, all units involved in ECE are required to develop standards to control and monitor the quality and delivery in each of their programs. According to Lewis and Heckman (2006), the investment in developing ECE is a good value for long-term investment and pay off rate is as high as seven fold. Also, according to UNESCO and UNICEF cost benefit studies, ECCE programs have the highest return on investment in human capital, and investment in ECCE programs are less expensive and bring long-term benefits that outperform investment in later stages of education and remedial skills development programs (UNICEF, 2013). This is consistent with Thai

government pronouncements and policies which has also identified the value of ECE for the preparation of future workers and members of society.

Furthermore, ONESQA uses EA as a method to monitor, inspect, and verify the quality and standards of each educational institution. This assures that each institution is conforming to the prescribed standards in maintaining and improving educational quality (Thepkanjana, 2013). External assessors are also supposed to be independent and neutral in applying their expert judgment in the EQA process, which over the years and various assessment cycles, have been given difference labels.

As an ONESQA *'friendly assessor/true friend'* (ONESQA, 2015), each EQA is tasked to:)1(to acquire information indicating the institution's strength and weakness, key success factors, and sources of any identified problems,)2(to provide recommendations on quality development for assessed institutions and its parent organization,)3(to encourage educational institutions to conduct continual quality development and internal quality assurance, and)4(to report each institution's EQA findings to relevant agencies and the public at large (OHEC, 2014; ONESQA, 2013). Readers should also note that ONESQA used the phrase *'true friends'* for EAs in the initial Round 1 and Round 2 assessments, but starting in Round 3, EAs were referred to as *'Ambassadors of Quality'* (ONESQA, 2015). These *Ambassadors of Quality* were further tasked to provide advice and recommendations for each educational institution's quality improvement.

Additionally, over the years, each EA's Śīla (Sanskrit) has been discussed. This also includes the Buddhist ideas of morals, virtues, and ethics. Additionally, according to ONESQA's (2013) 2011 – 2015 EA manual, each individual should possess 'Dhamma' (desirable practices), which includes honesty, responsibility, civility, fairness, and discretion (Figure 1).

Other desired EA characteristics have also been identified by UNESCO (2019) and Vista, Kim, and Care (2018). In these studies, data collection skills were also identified as key issues, which are closely related to information technology. Moreover, in Thailand, after 20 years of preparation of data from each ONESQA assessment cycle, data collection has become a topic of concern, with one study indicating that teachers spend nine of every 200 school days each year preparing for ONESQA's evaluation assessment visit (Mala, 2018). Therefore, an EA's data collection efficiency is of great concern at many educational levels, which is a targeted input area for the qualitative research of this study.

This is consistent with an OECD (2017) study from New Zealand in which key elements for the quality of educators was identified. These aspects included the staff's qualifications, their process quality, time management skills, teamwork and communication skills, communication between staff and parents, management and leadership, and the opportunity for professional development.

Figure 1. Thai educational institution external accessor Śīla and Dhamma desired characteristics.

Sīla (prohibition)	Dhamma (desirable practices)
<p>1. Not to be dishonest. Do not accept bribes/gifts/feasts or any benefits from conflicts of interests or other businesses.</p> <p>2. Not to be selfish. Do not perform the task carelessly such as to have other people work in their stead or neglect their duties. Also do not submit untruthful reports.</p> <p>3. Not to be aggressive. Do not act belligerently or disgracefully.</p> <p>4. Not to be prejudiced. Do not perform duties out of love, hatred, obsession or fear.</p> <p>5. Not to be careless. Do not reveal confidential information of educational institutions or involve extraneous people in the assessment process.</p>	<p>1. Be honest. Strictly observe moral and ethical codes as well as professional ethics.</p> <p>2. Be responsible. Dedicate to perform the assessment to their best by examining all data, give recommendations and work on both the drafts and the final report by themselves.</p> <p>3. Be civil. Observe the rules of the educational institutions appropriately as ambassadors of quality.</p> <p>4. Be fair. Perform the duty with neutrality, accountability and truthfully.</p> <p>5. Be discreet. Firmly keep confidential data of individuals and educational institutions.</p>

Source: ONESQA (2013)

Therefore, at the policy level, the Thai government needs to have solid overall information and data on quality and standards at all levels of education under all agencies to serve as guidelines for the formulation of effective policy on education and resource allocation for all levels of education. As such, ONESQA heeded the words of Deputy Prime Minister Professor Dr. Yuthavong given at an ONESQA conference in 2014, in which in the opening speech he stated that “ONESQA should learn from standards and criteria of international quality assurance agencies, and apply the new knowledge to formulate its future assessments” (Yuthavong, 2014, p. 17).

As such, ONESQA undertook a series of foreign evaluations of foreign external accessor indicators (ONESQA, 2019) between the *Taiwan* Assessment and Evaluation Association (TWAEA), the *Japan* University Accreditation Association (JUAA), and the Office for Standards in Education, Children’s Services and Skills (Ofsted) of the United Kingdom (McAleavy, 2013). This led to the signing of a Memorandum of Understanding (MoU) on EQA collaboration between ONESQA and JUAA in September 2017 (ONESQA, 2017), and the adoption of indicators from the U.K.’s Ofsted for the fourth round of Thai national assessments. It should also be noted that the fourth round of EA was delayed for nearly two years due to criticism from various levels, which re-commenced in August 2018 (Mala, 2018). In a speech at an ONESQA sponsored conference, Thailand’s education minister stated that the fourth ONESQA round was completely different from the previous rounds as there was neither a score nor an indicator used to gauge an educational institution’s ability at passing or failing (Mala, 2018).

Additionally, ONESQA continues to focus on the quality of EA who will be playing a vital role in assuring the quality of Thai educational institutions at all levels (ONESQA, 2013). Therefore, it is paramount that each EA have the ability to communicate with each ECE’s institution management effectively. In this regard, EA competencies are critical in carrying out their assigned tasks impartially. It is also necessary that each EA be able to conduct continuous educational self-development (Beusaert et al., 2011). UNESCO has also identified the need for self-assessment, assessment by peer review, and site visits as important elements in quality assessments (Martin & Stella, 2007). Consequently, it is necessary for

ONESQA and EQA units to have adequate information on the competencies of existing EA as a means to properly manage and develop external assessor competencies. The acquired information will also lead to systemic improvement in supervising, protecting, and monitoring EQA implementation and goals. Finally, EAs need to gain credibility from each educational institution they access, while also establishing a warm, trusting and amicable atmosphere (ONESQA, 2013).

In conclusion, the authors consider it is essential ECE external assessors develop their competencies, which includes their knowledge, skill, and expertise. The study's intention is to define and analyze how well an expert defined list of elements and indicators fit with the existing theory and other EA competency theories. From this empirical model, a future study will test the correlation of external assessors on early childhood education.

1.1 Research Objectives

The research intent was to develop external assessor competency indicators in early childhood education in Thailand.

2. RESEARCH METHODOLOGIES

The study was divided into the following seven steps:

2.1 The Literature Review

A literature review of documents and papers related to the competencies of external assessors for ECE was carried out. The research team then studied and conducted research on relevant subjects for both Thai and foreign external assessors in ECE. The acquired results were then digested to formulate a conceptual framework for conducting research and developing tools for further studies.

2.2 Expert Interview Questionnaire Development

The conceptual framework was used for the semi-structured questionnaire development used in the in-depth interview of experts for the study (Sriputtarin, 2008). The expert's feedback and input were used as the main source of information for this research. Thereafter, the accuracy of the contents was reviewed. The interviewed experts consisted of:

2.2.1 Three experts on early childhood education.

2.2.2 Two experts on educational measurement and evaluation.

2.2.3 Three experts on educational quality assessment.

2.2.4 Two experts on educational management.

2.3 Interviewing of Experts

From May 2019 to August 2019, each of the ten experts was interviewed. During each 90 minute interview, each research team member would pause and summarize the expert's audio responses to verify the accuracy of the information being taken during the interview.

2.3.1. Summary, interpretation, and analysis of the contents

The research team transcribed the audio recordings of the interviews and summarized them. The summaries were then sent to all of the ten interviewed experts to confirm the correctness of the information. Research validity and confidence were assured by use of triangulation which uses more than one method to collect data on the same topic (Ozan, 2019). Furthermore, triangulation captures different dimensions of the same phenomenon, and assures the diversity and quantity of data that can be used for analysis (Thurmond, 2001).

From the expert’s final comments, the researchers formulated a list of external assessor competency indicators used in ECE.

2.3.2 Reviewing and confirmation of information by means of focus group dialogue

Additional review and confirmation of the study’s initial ten experts’ external assessor competency indicators was accomplished by two focus groups of experts. The two groups of experts were given the tasks to review and to confirm the previous research and findings. This is a technique suggested by Fern (1982) in which it is stated to be an excellent source for idea generation.

Concerning Group 1, this group was comprised of ten ONESQA early childhood education certified external assessor trainers. Moreover, Group 2 was comprised of ten individuals who were members of ONESQA’s Committee for Development of Assessment Systems for Basic Education (“Onesqa: Leading the drive for quality”, 2009). Subsequently, the two groups of experts reviewed and weighed the suitability of the competency indicators. Analysis of the data by use of *SPSS Statistics v.21* included the mean, standard deviation, and Cohen’s kappa coefficient (κ) (Laerd Statistics, 2018) which was used to measure inter-rater reliability for the qualitative items (Fleiss & Cohen, 1973) (Table 1). Cohen’s kappa coefficient (κ) has been described as a more robust measure than simple percent agreement calculations, as κ takes into account the possibility of the agreement occurring by chance (Vieira, Kaymak, & Sousa, 2010). Moreover, a perfect measurement agreement is indicated by a κ value = 1.0.

Table 1. External assessor correlation level.

Kappa Statistics	External assessor correlation level
0.75 – 1.00	very good
0.40 – 0.74	good
0.00 – 0.39	low

3. RESEARCH RESULTS

From the study’s research on Thai ECE assessor competency indicators, it was determined that the results could be categorized into three categories. These included three main elements, 17 sub-elements, and 59 indicators as detailed in Table 2.

Table 2. Analysis results of external assessor competency indicators in ECE.

Main Elements	Sub-Elements	Indicators
Knowledge	Early Childhood Education (ECE)	Knowledge and understanding of the ECE standards framework. Knowledge of ECE goals. Knowledge and understanding ECE management patterns. Knowledge of early childhood development. Knowledge of the suitable use and configuration of media in early childhood development.
	Institutional Context	Knowledge of the context of ECE management. Knowledge of ECE management context diversity.

Main Elements	Sub-Elements	Indicators
	Educational Quality Assurance	<p>Knowledge of ECE quality assurance standards and indicators.</p> <p>Understanding of ECE internal quality assurance concepts and methods.</p> <p>Understanding of ECE external quality assurance goals, emphasis, criteria and methods.</p> <p>Knowledge of analysis and synthesis of data and information of external ECE assessments.</p> <p>Knowledge of external ECE assessment results conclusion.</p> <p>Knowledge of external ECE assessment recommendations.</p> <p>Knowledge of external ECE assessment results utilization.</p>
Skills	Planning Abilities	<p>The ability to prepare clear steps in the external assessment process will lead to tangible results.</p> <p>A successful and beneficial external assessment process requires an advanced study of the agenda, the criteria and methods to be used, data and information collection skills, a clear conclusion of the results, and the format for writing the assessment report.</p> <p>Pre-examination of each institution's self-assessment report and previous EQA report will help in advanced evaluation planning.</p>
	Data and Information Collection	<p>Selection of suitable tools for data and information collection depends on the prescribed scope and agenda of the assessment.</p> <p>The ability to collect and organize information relating to possible problems that might arise.</p> <p>The ability to prioritize and harness information technology, while looking for flexible solutions of anticipated problems.</p>
	Assessment Results Conclusions	<p>The ability to conduct an S.W.O.T analysis of each institution which includes strengths, weaknesses, opportunity and threats using ONESQA's criteria.</p> <p>The ability to explain assessment results that correspond with the assessment criteria used in the context of assessed institution, as well as having the ability to give an account of the educational management goals with observable data.</p>
	Delivering Recommendations	<p>The ability to suggest and deliver clear and beneficial institutional guidelines that improve educational standards.</p> <p>The ability to explain guidelines and suggest alternatives to institutions for their improvement, development and benefit.</p> <p>Assessor recommendations should be useful to the relevant agencies involved and helpful in the planning, supervision and monitoring of supportive and collaborative efforts.</p>
	Writing of Assessment Reports	<p>Writing of assessment reports should be concise and clear, as well as maintaining all essential information.</p> <p>Assessors must have the ability to offer clear, detailed and supporting explanations for their conclusions of the assessed ONESQA items, while faithfully following the prescribed formats.</p>
	Team Work	<p>Assessors must have the ability to work as a team with other members on the assigned tasks.</p> <p>Assessors must have the ability to assist and support other team members to achieve common goals.</p> <p>Assessors must have the ability to express constructive opinions and listen to different ideas of all team members, as well as argue positively in the exchange and sharing of opinions with other team members.</p> <p>Assessors should respect and support other team members.</p> <p>Assessors should have the ability to exchange, listen and accept opinions of other team members.</p> <p>Assessors should have the ability to communicate with other team members in which a mutually beneficial solution is arrived at that conforms to the principles, guidelines and criteria of the external assessment.</p>
	Continual Educational Self-Development	<p>Assessors should seek out new knowledge and skills useful in self-development and life-long learning.</p> <p>Each assessor should network, exchange knowledge and experiences with</p>

Main Elements	Sub-Elements	Indicators
		other external assessors to enhance assessment skills. Assessors should have the ability for self-appraisal and self-improvement.
	Information Technology Utilization	Assessors should have the ability to use digital devices to receive and send data and information. Assessors should have the ability to use digital devices to search for information, to store data and information, and to process information. Assessors should have the ability to use digital devices and on-line social media to exchange information with others and their colleagues.
Personality	Friendliness	Assessors should always have a constant awareness on the benefits and importance of EQA. Assessors should always be polite, modest and amicable. Assessors should serve as a role model in whom they are knowledgeable, experienced, and respectful. Assessors should serve as trusted advisors who can deliver sound advice, reasonable suggestions, and comprehensible explanations. Assessors should tolerate rumors, comments and criticism, while also be able to endure hardships under time constraints and pressure. Assessors should have the ability communicate under difficult circumstances. Assessors should maintain their professionalism by not gossiping.
	Quality Assurance Attitude	Assessors should be aware of the benefits of improving institutional educational quality. Assessors should give 100% to the performance of their assigned duties.
	Impartiality and Fairness	Assessors should perform institutional assessments with impartiality and fairness, while maintaining high ethical standards. Assessors should perform institutional assessments in an unbiased manner.
	Punctuality	Assessors should perform their duties in a manner which is in agreement with the institution being assessed. Assessors should deliver external assessment reports on schedule.
	Honesty	Assessors should perform their assessments with accuracy, transparency, and straightforwardness, while maintaining accountability. Assessors should perform deliver authentic assessment reports. Assessors should refrain from seeking benefits from ONESQA insider information that has not been disclosed to the public.
	Ability to Solve Immediate Problems	Assessors should have the wisdom and insight to solve immediate problems. Assessors should have the ability to solve problems quickly, flexibly and logically.

Table 3 and Table 4 detail the results from the focus group experts concerning the appropriateness of the three *main elements* and 17 *sub-elements* identified for the study. Table 4 results indicate that the distinguished experts rated all 20 elements at a ‘good’ level. Furthermore, when considering each element (Table 3), it was determined that all three *main elements* were deemed to be highly ranked, with values for *skills* being the highest ($\bar{x} = 4.53$, S.D. = 0.39). This was closely followed by *personality* ($\bar{x} = 4.51$, S.D. = 0.38), and then *knowledge* ($\bar{x} = 4.37$, S.D. = 0.48).

Table 3. Evaluation results on external assessor competency indicator appropriateness in ECE derived from the two focus groups of experts.

Main Elements & Sub-Elements	Level of Appropriateness			
	Group 1		Group 2	
	\bar{x}	S.D.	\bar{x}	S.D.
1. Knowledge	4.37	0.48	4.36	0.36
Early Childhood Education (ECE)	4.20	0.63	4.40	0.84
Institutional Context	4.50	0.70	4.10	0.87
Educational Quality Assurance (EQA)	4.40	0.69	4.60	0.69
2. Skills	4.53	0.39	4.52	0.21
Planning Abilities	4.30	0.82	4.70	0.67
Data and Information Collection	4.50	0.70	4.60	0.69
Assessment Results Conclusions	4.60	0.69	4.40	0.84
Recommendation Delivery	4.60	0.69	4.40	0.69
Writing of Assessment Reports	4.60	0.84	4.50	0.70
Team Work	4.30	0.67	4.50	0.70
Continual Educational Self-Development	4.70	0.48	4.70	0.67
Information Technology Utilization	4.70	0.67	4.40	0.69
3. Personality	4.51	0.38	4.53	0.26
Friendliness	4.30	0.82	4.60	0.69
Quality Assurance Attitude	4.70	0.48	4.70	0.48
Impartiality and Fairness	4.50	0.52	4.30	0.67
Punctuality	4.60	0.51	4.40	0.69
Honesty	4.70	0.48	4.70	0.48
Ability to Solve Immediate Problems	4.30	0.82	4.50	0.70
Average	4.47	0.28	4.47	0.20

\bar{x} = mean, S.D. = standard deviation, Group 1 = ONESQA early childhood education certified external assessor trainers, Group 2 = ONESQA’s Committee for Development of Assessment Systems for Basic Education members

Results of the evaluation of the inter-rater (also referred to as ‘judges’ or ‘observers’) (Laerd Statistics, 2018), reliability of the two groups of experts have a Kappa (k) statistic’s value = .405, with a differentiation value of 0 being significant $p < .01$). This indicates that there is correlation between the Thai ECE external assessor competency elements and indicators. The analysis also confirms the evaluation carried out by the two focus groups of experts in Table 4.

Table 4. Results of evaluation of value of inter-rater reliability of the two groups of experts.

	Value	Asymptotic standard error (ASE) ^a	Approx. T ^b	Approximate Significance
Evaluators Confidence	.405	.112	3.402	.001
Evaluators)Measure of agreement	10			
Kappa N of valid cases(

^a Not assuming the null hypothesis, ^b Using the ASE assuming the null hypothesis

4. DISCUSSION AND CONCLUSION

The study’s experts identified three main elements, 17 sub-elements, and 59 indicators important in the consideration of Thai early childhood education external assessor competency. Moreover, the qualitative analysis results are in agreement with similar characteristics and competencies for Thai external assessors as defined by Thailand’s Educational Review Office)ERO(.

Furthermore, policies for the recruitment and hiring of external assessors has listed)1) the individual's experience,)2) their professional knowledge,)3) their skills and technical proficiency, and)4) their personality and personal values, as personal characteristics needed to be an external assessor.

From the 20 individuals involved in the two focus groups, it was determined that three sub-elements from Group 1 (were the most appropriate characteristics deemed necessary for an external assessor. These were the assessor's *quality assurance attitude*) $x = 4.70, S. D. = 0.48$), their *honesty*) $x = 4.70, S. D. = 0.48$), the need for *continual educational self-development*) $x = 4.70, S. D. = 0.48$), and their need for *information technology utilization*) $x = 4.70, S. D. = 0.67$).

In Group 2, qualities deemed most important were the assessor's *planning abilities*) $x = 4.70, S. D. = 0.67$), the need for *continual educational self-development*) $x = 4.70, S. D. = 0.48$), *quality assurance attitude*) $x = 4.70, S. D. = 0.48$), and their *honesty*) $x = 4.70, S. D. = 0.48$). It is also interesting to note that both groups of experts were in near agreement except for their value placed on an external assessor's *planning abilities*.

Moreover, these high values ($x = 4.70$) are in agreement with other studies and reports in which early childhood educators were determined to benefit as their level of information technology (IT) proficiency increased (Arikan et al., 2017). Also, both UNESCO (2019) and Vista et al. (2018) identified the importance of IT skills in ECE. Finally, Pimdee and Leekitchwatana (2019) added that educational institutes at different levels need to adjust their patterns of teaching, learning, and management, so that they are better able to utilize the advantages of information technology.

Honesty and personal ethics has also been identified in numerous Thai studies and documents as a factor deemed of great importance in the consideration and training of an external assessor as well (ONESQA, 2017; Pornrungrroj, 2011; Yang, 2013). This is also consistent with Odklun et al. (2014) who identified ethics as the most important aspect in fame in EQA of Thai nursing education.

In Thailand, *Śīla* and *Dhamma* are viewed as 'professional' traits (ONESQA, 2013), with Stensaker (2008) determining that EQA is a key driving force behind the increase of higher education professionalization. Moreover, professionalization can be accessed by the means in which educational offerings are designed and operate while using technology-based information systems to assess an institution's performance and educational outcomes (Stensaker, 2017). This is consistent with the outcome from this study in which *information technology utilization* was viewed by both expert groups as an essential skill by ECE external assessors.

Some have hypothesized that psychological traits are how institutions shape childhood and adolescence experiences and their behavior (Engel & Weber, 2007). Others feel 'traits' are personality characteristics that are genetic in origin and thus difficult to modify (Eysenck, 1990). However, others feel that personality is a phenomenon within itself, and not as a result of individual environmental dynamics (Boyle, 2008; Pimdee, 2020).

Finally, the study identified three main elements (categories) for the use in early childhood education by EAs. Ranked by importance, these were skills, personality, and knowledge,. This is backed-up by an OECD (2017) study from New Zealand in which ECEC

environments were stated as being required to use an early childhood curriculum framework which details ECE settings in terms of knowledge, skills and attitudes (personalities). Also, Shaharudin et al. (2020) added that in ECE professionalism, disposition, knowledge, skills, and practices were important elements as well.

Therefore, study results from the two focus groups of experts revealed that they perceived the external assessor's skills as most important. This was closely followed by each EA's personality, then their personal knowledge.

5. SUGGESTIONS

5.1 Utilization of Research Results

5.1.1 Thailand's ONESQA and other international ECE agencies might consider reviewing how this study's list of expert developed ECE external assessor competency indicators would fit with their current assessment guidelines. This would then have the potential to assist with the development of each EA's knowledge, skills, and personality.

5.1.2 Parent organizations could also make use of these EA competency indicators in the application and development of their internal assessors.

5.2 Further Research

5.2.1 The research provides an excellent jumping off point for the revision and/or development of ECE EA evaluation manuals. Such a manual has the potential to increase each agency's future ECE and EA effectiveness and performance.

5.2.2 Finally, this study's indicators could serve as the foundation for the development of EA competency indicators at other levels of education.

REFERENCES

- Arikan, A., Fernie, D. E., & Kantor, R. (2017). Supporting the professional development of early childhood teachers in head start: A case of acquiring technology proficiency. *Elementary Education Online*, 16(4), 1829 – 1849. <https://doi.org/10.17051/ilkonline.2017.342996>
- Beausaert, S. A. J., Segers, M. S. R. & Gijssels, W. H. (2011). Using a personal development Plan for different purposes: Its influence on undertaking learning activities and job performance. *Vocations and Learning*, 4, 231 – 252. <https://doi.org/10.1007/s12186-011-9060-y>
- Boyle, G. J. (2008). Critique of the Five-Factor Model of Personality. In *The SAGE Handbook of Personality Theory and Assessment: Volume 1—Personality Theories and Models*; SAGE Publications Ltd. pp. 295 – 312.
- Early Childhood Development Agency. (2019, September 13). *Launch of Singapore preschool accreditation framework (SPARK) quality rating scale for 0-6 years*. <https://tinyurl.com/y47z53kf>
- Engel, C., & Weber, E. U. (2007). The impact of institutions on the decision how to decide. *Journal of Institutional Economics*, 3(3), 323 – 349. <https://doi.org/10.2139/ssrn.935024>
- Eysenck, H. J. (1990). Biological dimensions of personality. In L. A. Pervin (Ed.), *Handbook of Personality: Theory and Research* (pp. 244 – 276). Guilford.

- Fern, E. F. (1982). The use of focus groups for idea generation: The effects of group size, acquaintanceship, and moderator on response quantity and quality. *Journal of Marketing Research*, 19(1), 1 – 13. <https://doi.org/10.2307/3151525>
- Fleiss, J. L., & Cohen, J. (1973). The equivalence of weighted Kappa and the intra class correlation coefficient as measures of reliability. *Education and Psychological Measurement*. 33, 613 – 619. <https://doi.org/10.1177/001316447303300309>
- Laerd Statistics. (2018). Cohen's kappa using SPSS Statistics. <https://tinyurl.com/y5gvxvqr>
- Lewis, R. E., & Heckman, R. J. (2006). Talent management: A critical review. *Human Resource Management Review*, 16(2), 139 – 154. <https://doi.org/10.1016/j.hrmr.2006.03.001>
- Mala, D. (2018, August 11). After delays, Onesqa to begin evaluations. *Bangkok Post*. <https://tinyurl.com/y3jnxvvt>
- Martin, M., & Stella, A. (2007). *Fundamentals of educational planning*. UNESCO IIEP. <https://tinyurl.com/y34h8gae>
- McAleavy, T. (2013). QA as a means to educational improvement. *Proceedings ICQA 2013*, Bangkok, Thailand, 31 – 41. <https://tinyurl.com/y5jqnzsh>
- National Strategy Secretariat Office. (2018). *National Strategy 2018 – 2037*. Office of the National Economic and Social Development Board. <https://tinyurl.com/y3h8716a>
- Odklun, P., Baikularb, P., & Evans, K. (2014). The impact measurement model of external quality assessment for nursing education, *ICQA 2014 Proceedings*, Bangkok, Thailand, 79 – 90.
- OECD. (2017). Starting strong IV: Monitoring quality in early childhood education and care country note – New Zealand. <https://tinyurl.com/y2zpk223>
- Office of the Higher Education Commission (OHEC). (2014). Manual for the internal quality assurance for higher education institutions 2014. <https://tinyurl.com/yxjalmp7>
- Onesqa: Leading the drive for quality. (2009, November 24). *Bangkok Post*. <https://tinyurl.com/y5blzbmg>
- ONESQA. (2013). Manual for assessors: Third-round of external quality assessment for vocational education 2011-2015.-- Edition 3.-- Bangkok: Office for National Education Standards and Quality Assessment (Public Organization). <https://tinyurl.com/y44kg3pw>
- ONESQA. (2015). Quality assurance in Thailand. Office for National Education Standards and Quality Assessment. <https://tinyurl.com/y5ewrpxw>
- ONESQA. (2017). A glimpse at assessment for continuous improvement. Office for National Education Standards and Quality Assessment. <https://tinyurl.com/y5ra2swx>
- ONESQA. (2017, September 22). Signing of MoU on External Quality Assessment Collaboration between ONESQA and Taiwan Assessment and Evaluation Association (TWAEA) and the Meeting of Joint-Accreditation Project on Vocational Education Institutions. <http://www.onesqa.or.th/en/content-view/11402/1646/>
- ONESQA. (2019). Performance monitoring report: Operating and risk management cycle – The first six months of the fiscal year 2019 (1 October 2018 - 31 March 2019). (Thai). <https://tinyurl.com/y3ggdzmg>
- Ozan, C. (2019). Authentic assessment increased academic achievement and attitude towards the educational measurement of prospective teachers. *International Journal of Evaluation and Research in Education*, 8(2), 299 – 312. <https://doi.org/10.11591/ijere.v8i2.18564>
- Pimdee, P., & Leekitchwatana, P. (2019). Structural equation modeling of teaching behavior in Internet use of teachers in Thailand. *TEM Journal*, 8(4), 1499 – 1507. <https://doi.org/10.18421/TEM84-56>
- Pimdee, P. (2020). Antecedents of Thai student teacher sustainable consumption behavior.

- Heliyon*, 6(8), e04676. <https://doi.org/10.1016/j.heliyon.2020.e04676>
- Pitiyanuwat, S. (2005). The external assessment of quality assurance in Thailand. *Journal of Research Methodology*, 18(1), 71 – 92. <https://tinyurl.com/y6bujmzu>
- Pitiyanuwat, S. (2007). School assessment in Thailand: Roles and achievement of ONESQA. *Educational Research for Policy and Practice*, 6(3), 261 – 279. <https://doi.org/10.1007/s10671-007-9023-0>
- Pornrungraj, C. (2011). Ambassadors of quality, true friends who provide inspiration for educational institutions. *Matichon Daily Newspaper*. <https://tinyurl.com/y6mrv3h2>
- Pornrungraj, C. (2013). QA Innovations in Thailand. *ICQA 2013 Proceedings*, Bangkok, Thailand, 27 – 28. <https://tinyurl.com/y5jqnzsh>
- Shaharudin, S. M., Rajak, N. A., Junus, N. W. M., & Samat, N. A. (2020). Development and validation of early childhood care and education pre-service lecturer instrument. *International Journal of Evaluation and Research in Education*, 9(1), 188 – 194. <https://doi.org/10.11591/ijere.v9i1.20415>
- Sriputtarin, S. (2008). Developing a model for certifying external assessors in educational quality assessment of basic education. *Educational Journal of Thailand*, 2(1), 73 – 83. <https://tinyurl.com/y5dmknab>
- Stensaker, B. (2008). Outcomes of quality assurance: A discussion on knowledge, methodology and validity. *Quality in Higher Education* 14 (1), 3 – 13. <https://doi.org/10.1080/13538320802011532>
- Stensaker, B. (2017). External quality assurance in higher education. *Encyclopedia of international higher education systems and institutions*. Springer. https://doi.org/10.1007/978-94-017-9553-1_523-1
- Stevahn, L., King, J. A., Ghere, G., & Minnema, J. (2005). Establishing essential competencies for program evaluators. *American Journal of Evaluation*, 26(1), 43 – 59. <https://doi.org/10.1177/1098214004273180>
- Thepkanjana, P. (2013). Quality assurance in education. *ICQA 2013 Proceedings*, Bangkok, Thailand, 11 – 12. <https://tinyurl.com/y5jqnzsh>
- Thurmond, V. A. (2001). The point of triangulation. *Journal of Nursing Scholarship*, 33(3), 253 – 258. <https://doi.org/10.1111/j.1547-5069.2001.00253.x>
- UNESCO. (2019). *Brief 5 - Using data to improve the quality of education*. <https://tinyurl.com/y5pms64a>
- UNESCO IBE. (2006). *Thailand early childhood care and education (ECCE) programmes*. UNESCO International Bureau of Education (IBE), Geneva, Switzerland. <https://tinyurl.com/yy9527hv>
- UNICEF. (2013). *Evidence for ECD Investment*. <https://tinyurl.com/y8pzlkgj>
- Vieira, S. M., Kaymak, U., & Sousa, J. M. C. (2010). Cohen's kappa coefficient as a performance measure for feature selection. *International Conference on Fuzzy Systems, Barcelona, Spain*. <https://doi.org/10.1109/fuzzy.2010.5584447>
- Vista, A., Kim, H., & Care, E. (2018, October 18). *Use of data from 21st century skills assessments: Issues and key principles*. <https://tinyurl.com/y9bxgbnl>
- Yang, F. (2013). Evaluation ethics. *Proceedings ICQA 2013, Bangkok, Thailand*, 100 – 101. <https://tinyurl.com/y675xsga>
- Yuthavong, Y. (2014). Quality assurance and accreditation of educational institutions. *ICQA 2014 Proceedings*, Bangkok, Thailand, 13 - 17. <https://tinyurl.com/y6yev62c>