



Education Strategies in the 21st Century Dynamic for Sustainability ASEAN Community of Greater Mekong Sub-region (GMS) Countries

Phosing, P.¹, Jedaman, P.², Jongmuanwai, B.³, Buaraphan, K.⁴, Yuenyong, C.⁵,
Pimdee, P.⁶, Suksup, C.⁷, & Kenaphoom, S.⁸
^{1,2,7}RajabhatMahasarakham University, ²NakhonratchasimaRajabhat University
³Mahidol University, ⁴Khon Kane University, ⁵ King Mongkut's Institute of Technology
Ladkrabang University, ⁶ Office of the Basic Education Commission, Thailand.

Abstract

Education is the main mechanism of development, supporting, cultivating ideas and knowledge for improving education quality. This is to analyzed education strategies in the 21st century dynamic for sustainability ASEAN community of Greater Mekong Sub-region (GMS) on 6th countries as recent study within administrators of Education Ministry, administrators of basic education institutions. Collections by documentary, interviews, and questionnaires to the data. In this regards to the challenges condition in education strategies include education plans, and education policies. Education strategies including educational management and learning management strategies of the factors in CFA to significant. Perspective to education in the 21st century dynamic for sustainability of policy issues in driving mechanisms to education as will be able to driven the development approach towards sustainability practice to achieve as the objectives and goals.

Keywords Education strategies, perspective to education, the 21st century dynamic, sustainability ASEAN community, Greater Mekong Sub-region countries.

DOI Number: 10.14704/nq.2022.20.10.NQ55941 **NeuroQuantology 2022; 20(10): 9639-9657**

INTRODUCTION

In globalization era under to an intense competition and a result as many educational organization to attach a importance to the processes of a developing human resource competence, building the professionalism and leadership of the personnel along with an educational

organization development for adaption and flexibility that is appropriate to situation. Education strategies goals to the quality development and efficiency, educational management and learning management as the opportunities according the participation to supported of education for all.^[1] This requires systematic management

¹Education Council Office. The National Education Plan (A.C. 2018-2037). Bangkok: The Office, Thailand, 2018.



used of the education-driven planning to the successful and can be converted to the practice as a procedure for the problem solving and development, identity change.^[2] The design, education is the main solution of a development to be related in human and society. By Jedaman. P., Buraphan. K., Younyoung, C, & Others ^[3] a “Key” contexts of contemporary educational design to the dynamics change from the transition to the social, economic, environmental, cultural and educational. National Council for Peace and Order (NCPO) ^[4] to driven an education, management, organizing political.

ASEAN community was aggregation of member countries for sustainability communities of the peoples central, peace dynamic and prosperity, capabilities strengthen of highest global competition, including the production networks of a strong regions, creating opportunities and responding to challenges of the politics, stability, economy, and new form threaten of the region affects, and ASEAN identity. Parandekar, Suhas D. ^[5] presented to pillars ASEAN such as, a) ASEAN Political and Security Community (APSC) a focusing member countries of peacefully, solve problems for intermittently, the stable and stability for security of the peoples, b) ASEAN Economic Community (AEC) a focusing economic integration and the convenience of dealing with each other

for the Member countries were a compete with other regions, and c) ASEAN Socio-Cultural Community (ASCC) a providing of a good living for conditions, social security and development in aspects. Education is a tool in the 3rd pillar ASEAN Socio - Cultural Community (ASCC) in human resource development were to meeting the ASEAN community. This is to promote educational cooperation in order to achieve of ASEAN community, an enhance quality of life in the people and sustainable regional development.^[6] This will support the integration process of ASEAN capacity of human resource development to reduce development in the gaps using the education of main mechanism to driven into development as providing the knowledge and understanding to information of the strategic planning of the country in the strengthen ASEAN and world stage. An education is undeniably the key mechanism to develop, promote and embed ideas as knowledge into citizens, society of whole. Education tends to be the core factor for country's long term competitiveness. Education strategies for preparing educational management, creating the environmental education, innovation, linking access to technology and being in the change. Major regional in ASEAN community to connection between Pacific Ocean and Indian Ocean of Greater Mekong Sub-region (GMS) the consisting of south of China, Cambodia, Lao, Myanmar, and Vietnam. The strengthening of the ASEAN Community must also be based on the strength of Greater Mekong Sub-region countries for education strategies based on cooperation with ASEAN member countries in Greater Mekong Sub-region to management of education among neighbors into regional hub were to

9640

² Masintree. K. Strategy and reform to Thailand 4.0. Bangkok: Ministry of Education, Thailand, 2018.

³ Jedaman. P., Buraphan. K., Younyoung, C, & Others. Analysis of Sustainable Leadership for Science Learning Management in the 21st Century under Education THAILAND 4.0 Framework. International Conference for Science Educators and Teachers (ISET). AIP Conf. Proc. 1923, 030062-10; doi.org/10.1063/1.5019553, 2017.

⁴ National Council for Peace and Order (NCPO). Regional educational reform under Ministry of Education. Bangkok: Royal Thai Government Gazette Office, Thailand, 2019.

⁵ Parandekar, Suhas D. “Thailand: Analysis of Efficiency of Educational Expenditures.” World Bank Discussion Paper for Public Finance Management Report. Washington D.C.: Pearson, 2011.

⁶ Chinsethawong, K. Strategies for driving education into ASEAN community. Veridian E-Journal, Humanities, Social Sciences and Arts: 7(2), pp. 140-155, 2016.



paradigm- shift in “Border” were to “Bridge” in “Nation to Nation” were to “City to City” through the concept of “Extending Nation” in the border between Thailand and neighboring countries will gradually decay, a bridge between education.

Educational management and learning management strategies are to important process and ongoing activity, education leaders’ into operations, personnel cooperate seriously to achieve the goals. An impact of such transformation can be seen in various aspects ranging from society, economics, environment and politics. Strategic formulation is a smart plan that can be implemented to achieve goals.[7] By Mans Nilsson, Dave Griggs and Martin Visbeck [8] the strategies enable the organization to determine the direction and objectives of operations in a concrete manner and in accordance with the changing conditions effectively. Education strategies based on clearly defining goals, objectives and directions for future operations.[9] And consistent with all-around changes.[10] Strategy is important because it allows organizations to define objectives that align with their mission and lead to success and effectiveness.[11] This research to analyzed education strategies in the 21st century dynamic for sustainability

ASEAN community of Greater Mekong Sub-region countries.

2. THEORETICAL FRAMEWORKS

Education management to whole as system, holistic in all aspects at the same time, because education component to interconnectedness. Phakphaswiwat, S.[12] Strategies are defined as decision-making processes associated with anticipation of environmental changes, which are decisions based on adaptation to future changes. Ubonwat, T.[13] the strategies was approaches of proactive measures consistent with the organization's direction, developed by executives to take advantage in order to achieve the organizational objectives in accordance with the changing conditions of organization actual situation. Strategy management approaches by Coukos-Semmel, E.D.[14] were to, 1) environment factor analysis into strengths, weaknesses, correlations between opportunities, obstacles in organization's operations, 2) establishing organization direction consisting of scope, mission, objective, 3) strategy formulation by selecting strategies are relevant to the process, affecting the success of organization, 4) strategy implementation throughout the process of creating an action plan, organizational structure, organizational culture, organizing processes and personnel responsibilities, defining operational procedures to lead to success, 5) strategic control is to supervise and follow up operations according to established strategies, success indicators,

9641

⁷Somprach, K. Administration Strategy. Bangkok: Success-media Print Office, Thailand, 2015.

⁸Mans Nilsson, Dave Griggs and Martin Visbeck. “Map the interactions between sustainable development goals, a simple way of rating relationships between the targets to highlight priorities for integrated policy”. Nature, vol. 534, p. 7607, 2016.

⁹UN-Habitat. Goal and Strategic Direction of the Organization. UN-Habitat Results-Based Management Handbook, 2016.

¹⁰ Robbins, S.P. and Coulter M. Organization Theory: Structure, Design, and Applications. New Jersey: Prentice-Hall, 2007.

¹¹Forcadell, F.J. and Guadamillas, F. A Case Study on the Implementation of a Knowledge Management Strategy Oriented to Innovation. Knowledge and Process Management, 9(3), pp.162-171, 2012.

¹²Phakphaswiwat, S. Strategic Management. 6th Edition. Bangkok: Amarin Publishing, Thailand, 2015.

¹³Ubonwat, T. The art of formulating an organizational plan towards excellence. 4th edition, Bangkok: Productivity Institute, Thailand, 2016.

¹⁴Coukos-Semmel, E.D. Knowledge management : processes and strategies used in United States research universities. Boca Raton, Fla: Ed.D. dissertation, Florida Atlantic University, 2002.



and assess the overall successful. Management education into the era of traditional view on emphasizes knowledge, memory, arithmetic and learning from practice is a guideline of education used up to the present. [15] It's the factor in creating and developing an effective educational strategies. In accordance with the education strategies to give priority to human resources, this plan is formulated to enhance citizens' overall quality.

A fundamental way to improve citizens' quality and promote their all-round development for a better life. [16] Education must be enhanced if a nation is to prosper. Education strategies of paradigm-shift in the 21st century of education strategies to developmental goals. The goals for improve the quality of life, social security, equality fairness to importance for educational driven to concrete actions of the impacts to output and outcome, and goal, vision achieves were to, a) strategic 1: fairness create of societies, b) strategic 2: human resource development to the lifetime learning societies for sustainability, c) strategic 3: create of the balances and stabilities, d) strategic 4: create of knowledge base economics and environmental, e) strategic 5: create of economics linking between the countries, stability of regional counties, f) strategic 6: natural resources, environments management for sustainability. [17] Important strategy for a leading to effectiveness including academic administrative promotion approach, administrative supporting approach for

educational goal, administrative effectiveness approach for student promotion, the promotion for stakeholder approach and competing value approach, knowledge management and source of knowledge approach to sustainability management in educational leadership and creating the educational capacities, a creating efficiency of human resource and educational equality, participations based on collaboration, creating the knowledge of global citizenship and digital citizenship, a networking and connectivity. [18] Education strategies for sustainability ASEAN community in Greater Mekong Sub-region countries to enhance the effectiveness of academic administration by developing, promoting students to meet 21st century standards, enabling students to develop the 21st century skills, educational innovation, technology integration, meanwhile, management Learning management courses must focus on learning of science, mathematics, technology throughout learning management process aimed at improving student performance. Supporting administration to the goals of educational management through continuous professional development of teachers in research studies. Seeking to develop educational innovations to keep up with the changes of the world by classroom action teaching to create new knowledge, and to build good morale for workers in order to retain quality personnel, quality assurance of education. Development of curriculum to be up-to-date, targeting learners, having educational philosophy, vision, uniqueness, clear mission of educational management, promoting the appreciation of the students have stakeholder.

9642

¹⁵Chiangkul, L. State of Thai education and educational reforms to keep up with the 21st century world. Bangkok: Education Council Office, Thailand, 2016.

¹⁶ Hoy, W.K, & C.G. Miskel. Educational Administration: Theory, Research and Practice. 7th ed. New York McGraw-Hill, 2005.

¹⁷National Economic and Social Development Board. The Twelfth National Economic and Social Development Plan A.C.2018-2021. Bangkok: The Office, Thailand, 2018.

¹⁸ McGillivray, M. & Carpenter, D. Narrowing the Development Gap in ASEAN: Drivers and Policy Options. London: Routledge, 2013.



Challenges across much replacing teacher-centered modes of information dissemination that encourage rote learning by students with approaches to teaching and learning that encourage greater engagement and student learning autonomy focus on the development of problem-solving skills and capacity for creativity. Reform process in this regard is well advanced of learning management strategies. The 21st century learning framework is aimed at learners who have the characteristics of the 21st century, where they use core knowledge to integrate their experiences with the skills for living in the 21st century are learning and innovation skills, information skills media and technology, life and career skills.^[19] Learning management will use the 21st century learning promotion system, namely learning standards system, learning skills assessment system, curriculum and teaching system, career development system, learning resource system and learning atmosphere.^[20] Transforming student learning to achieve outcomes that are truly essential to students, aiming to enable students to build their own body of knowledge and transcend subject matter to learning for life in the 21st century.^[21] The teachers must not bring the contents of the textbooks to lectures for students to remember and then use them to test their knowledge. Teachers must teach students to be human beings who learn to use skills for life in the 21st century, to design learning and facilitate learning, to learn

from hands-on learning as a stimulus. To inspire a desire to learn that leads to an eagerness to explore, to gather knowledge from different sources to support and argue from previous experiences to create a new paradigm. Significant education strategies in the 21st century dynamic for sustainability ASEAN community of Greater Mekong Sub-region countries were to the challenges condition in education strategies, educational management strategies in the 21st century dynamic for sustainability, learning management strategies in the 21st century dynamic for sustainability. CFA to associate the factors of educational management and learning management strategies for sustainability. Perspective to education in the 21st century dynamic for sustainability of policy issues in driving mechanismsto educationas will be able to driven the development approach towards sustainability practice to achieve as the objectives and goals.

9643

3. THE METHODOLOGY

Research of education strategies in the 21st century dynamic for sustainability ASEAN community of Greater Mekong Sub-region (GMS) countries was mixed method research on the qualitative study aimed to documentary study, and interview on multi-contextual and cultural perspectives by interview questionnaires within key informants, on quantitative study to survey by questionnaire within the samples into the methods.

*3.1 Academics Gold:-*The academics gold of the challenges condition in education strategies on ASEAN community of Greater Mekong Sub-region countries, education strategies in the 21st century dynamic of educational management and learning management strategies for sustainability ASEAN community of Greater Mekong Sub-

¹⁹Lederman, N. G., J. S., & Abd-El-Khalick, F. Teaching science in the 21st century: Alternative certification: Aspirations and realities. The National Science Teacher Association, 2006.

²⁰ Lunenburg, F. C., & Ornstein, A. C. Educational administration: Concepts and practices. Belmont, California: Wadsworth, 2010.

²¹Jedaman, P, Phoncharoen, C, Jongmuanwai, & Others. Educational management 4.0 on result based management process to driven a uplifting sustainable education in the 21st Century. Journal of Psychology and Education. 57(9), pp.1226-1237, 2020.



region countries, and CFA to associate the factors of educational management and learning management strategies for sustainability ASEAN community of Greater Mekong Sub-region countries, include the perspective to education in the 21st century dynamic for sustainability ASEAN community of Greater Mekong Sub-region countries.

3.2 Participants:- Research areas on ASEAN community of Greater Mekong Sub-region (GMS) into 6 countries include Thailand, Southern China People's Republic, Union of Myanmar Republic, Lao People's Democratic Republic, Vietnam Socialist Republic, Kingdom of Cambodia. A Key informant on individual in-depth interview such as administrators of Education Ministry, administrators of basic education institutions, from the Mekong Sub-region in 6 countries of 10 each, who received from voluntarily participating in research projects, and by purposive sampling, totaling 60 people. Sample into survey such as the administrators of basic education institutions, from the Mekong Sub-region in 6 countries, they all were by multi-stage cluster sampling and population size determinations to obtain samples, using the equation by Yamane' proportion of 95%, totaling 480 people.

3.3 Research Instruments:- Instruments were to, 1) the structure interview questionnaires of 3 sets on educational management strategies in the 21st century dynamic for sustainability, on learning management strategies in the 21st century dynamic for sustainability, and on perspective to educational management in the 21st century dynamic for sustainability, there are to a item of objective congruence of 1.00, 2) the semi- structure questionnaires of 2 sets on 5 rating scales into CFA to associate the factors of educational management and learning

management strategies, there are to the confidence as the whole questionnaires of 0.87, 0.89, respectively.

3.4 Collections Method:-The collections this study were to; *Step 1:-* study documentary review of the challenges condition in education strategies on ASEAN community of Greater Mekong Sub-region countries in a "key" points of education plans, and education policies to analyze and synthesize the main goals of educational management, this is a qualitative study. *Step 2:-* study documentary of educational management and learning management strategies in the 21st century dynamic for sustainability as the frameworks for implementation, gather information to analyzed as the conceptual frameworks. *Step 3:-* individual in-depth interview by the interview questionnaires on educational management strategies on the factors of educational leadership, creating the educational capacities, creating efficiency of human resource, educational equality, participations based on collaboration, creating the knowledge of global citizenship, creating the digital citizenship, networking, connectivity, true assessment and learning management strategies to the factors of integrated knowledge for the 21st century, the 21st century skills, curriculum development, awareness formation, learning and innovation skills, life and career skills, information, media and technology skills, the 21st century attributes, assessment of the 21st century skills, lifelong learning based on multi-contextual and cultural perspectives within 60 key informants. *Step 4:-* use the information obtained from the documentary study with the information obtained from the interview a leading to analysis and synthesis on educational management and learning management strategies of the factors and indicators, there are the qualitative study. *Step 5:-* survey by questionnaires within 480



samples to collect data and analyze the results into CFA to associate the factors of educational management and learning management strategies with empirical data, there are to quantitative study. *Step 6:-* individual in-depth interview by the interview questionnaire on perspective to education in the 21st century dynamic for sustainability of policy issues in driving mechanismsto educationas will be able to driven the development approach towards sustainability practice within 60 key informants a leading to analysis and synthesis of the factors and indicators, this is the qualitative study to the data.

3.5 Inquiries Method:-The inquiries method into data analysis on qualitative data was analyzed by using three main stages, e.g., data reduction, data organization, data interpretation to conclusion. Quantitative data was analyzed by descriptive statistically analysis including mean, standard deviation, including Confirmatory Factor Analysis (CFA) was conducted to analyze the factors associated with educational management and learning management strategies in the 21st century dynamic for sustainability by LISREL program.

4. RESULTS

The results to education strategies in the 21st century dynamic for sustainability ASEAN community of Greater Mekong Sub-region (GMS) of 6th countries were followed:

a) Challenges condition in education strategies on ASEAN community of Greater Mekong Sub-region countries.

Challenges condition in education strategies on ASEAN community of Greater Mekong Sub-region countries by comparison in

“key” points of education plans, education policies to shown on table 1.

Table 1. The challenges and indicators in education strategies on ASEAN community of Greater Mekong Sub-region countries.

<i>Greater Mekong Sub-region Countries.</i>	<i>Challenges in education strategies.</i>	<i>Indicators.</i>
<i>Thailand.</i>	1. Education plans.	<ul style="list-style-type: none"> • <i>Comprehensive and balanced development of people as the main base for improving the quality of education, learning at all levels of education.</i> <ul style="list-style-type: none"> • <i>Cultivating and enhancing learners to have morals and ethics, values, conscience and pride in being Thai, discipline, public mind that takes into account the common interests.</i> • <i>Increasing educational opportunities for everyone to have access to education and learning services, producing and developing manpower in accordance with the needs of global market, building capacity, cooperation with countries.</i> • <i>Development of standards and systems for educational quality assurance, production and development of teachers and educational personnel to ensure quality and standards.</i> • <i>Promoting research and development to create innovative knowledge and intellectual property, develop a knowledge management system, and create a mechanism for utilizing research results, improving the educational environment.</i> <ul style="list-style-type: none"> • <i>Use of information technology for the development of quality</i>



		<p>education and lifelong learning.</p> <ul style="list-style-type: none"> Improving the efficiency of education administration, promoting participation in education management and supporting education, mobilizing resources from various sources and investing in education. 			<p>motivated.</p> <ul style="list-style-type: none"> Implementing technology systems in comprehensive education, developing professional skills, skills and competencies of educators.
	2. Education policies.	<ul style="list-style-type: none"> Emphasis on organizing, promoting education for people of all groups and ages to gain knowledge, quality and potential for self-development, building a knowledge-based society, enhancing competitiveness, creating educational opportunities To be able to be a potential person, a valuable human capital in Social empowerment, building a learning society, professional learning community, career promotion, innovation development and educational technology use. 		2. Education policies.	<ul style="list-style-type: none"> Encouraging students to have morals and good citizenship, strengthening the national education system in preparation for the 21st century to raise educational standards, creating a great nation in human resources, modern education and a lifelong learning society.
			Union of Myanmar Republic	1. Education plans.	<ul style="list-style-type: none"> Education promotion where children from 5 - 10 years of age to attend school free of charge, curriculum review, teaching process focused on elementary school. Initiating a national formal education plan of implementing development, reforming the basic education curriculum, restructuring teaching and upgrading the quality of teacher education. Assessments are consistent with changes in curriculum according to international standards. The education system is conducive to the creation of a learning society.
Southern China People's Republic	1. Education plans.	<ul style="list-style-type: none"> Focusing on supporting learners to have morals and good citizenship (Civic Virtue) i.e., love the motherland, love the people, love labor, love science, and love socialism, the preparation of educational plans in the school system (Formal Education). good quality both teaching and research In-depth education reform to raise educational standards in strengthening the national education system of preparing the 21st century. Building a great country in human resources, modern education and a lifelong learning society. Cultivating initiative and focus on creativity, encouraging young people to be curious and 		2. Education policies.	<ul style="list-style-type: none"> Developing both basic and advanced technology expertise to build quality and skilled people, the adoption of a new assessment system based on the use of multimedia classroom systems to enhance teaching and learning.
			Lao People's Democratic Republic	1. Education plans.	<ul style="list-style-type: none"> Emphasis on primary education, technical education and public literacy, emphasis on education for human capital development and poverty alleviation. Designating education as a social



		<p>necessity to be trained to develop in a manner consistent with economic adaptation, upgrading the national education for production in line with the goals.</p> <ul style="list-style-type: none"> • Education for all and education has been a policy priority to support economic and social development. 			<p>quality of education in the direction of reaching world-class higher education, teaching and learning processes that reach international standards, educational outcomes in line with the economy and society, modern management of education and decentralized processes towards a learning society, emphasis on training in advanced science and technology.</p>
	2. Education policies.	<ul style="list-style-type: none"> • Emphasis on upgrading the quality of education. Both the quality of teachers through the training program for the quality of the curriculum, the development of teaching tools to ensure quality and to be able to produce on their own at the provincial level. Improving the coherence of sectors in the education system, a promoting the participation to connectivity between educational institutions, industry, private sector, strengthening education administration and planning. 	Kingdom of Cambodia	1. Education plans.	<ul style="list-style-type: none"> • Educational promotion. By making education an important part of the goal to reduce poverty to raise the potential of economic competitiveness to the international level, human resource base and people's education equally. • Upgrading the quality of education and improving the planning of education management, emphasizing the level of action plans in line with trends in demographic and economic changes.
Vietnam Socialist Republic	1. Education plans.	<ul style="list-style-type: none"> • Focusing on inclusive education, improving the quality of education in a direction that reaches global higher education. • Respond to the national, regional and local economic and social development. • Aiming for a learning society to bring education away from underdevelopment. • The emphasis on the training of advanced science and technology personnel, and management competence leads to the competence and potential of educational management. 		2. Education policies.	<ul style="list-style-type: none"> • Education for all that gives importance to equal and effective education, to be good students, good citizens to help promote social and economic development. Quality education according to international standards in a way that is competitive in the labor market, the world that drives society and the economy is developing.
	2. Education policies.	<ul style="list-style-type: none"> • Emphasis on comprehensive and comprehensive educational management and preparation of basic education, improving the 			

The challenges condition in education strategies on ASEAN community of Greater Mekong Sub-region countries of education plans to education policies were to emphasis on organizing and promoting education for people of all groups and ages to gain knowledge, quality and potential for self-development, building a knowledge-based society, enhancing competitiveness,



creating educational opportunities to be able a potential person, a valuable human capital in social empowerment, building a learning society, innovation development and educational technology.

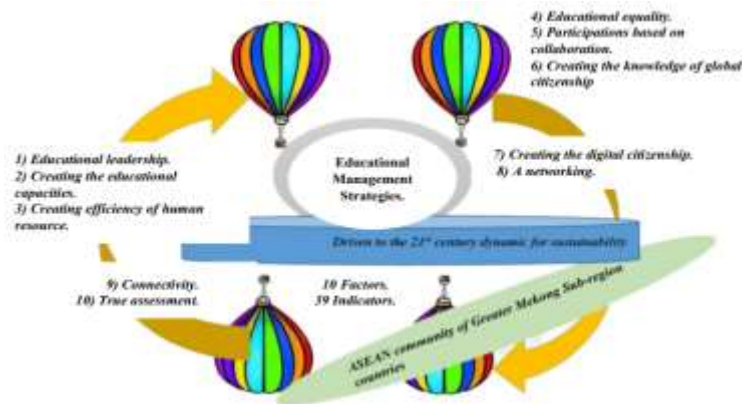
b) Education strategies in the 21st century dynamic for sustainability ASEAN community of Greater Mekong Sub-region (GMS) countries.

Education strategies in the 21st century dynamic for sustainability ASEAN

community of Greater Mekong Sub-region (GMS) countries on educational management and learning management strategies in the 21st century dynamic for sustainability were followed:

1. Educational management strategies in the 21st century dynamic for sustainability in the factors and indicators to shown on figure 1, and table 2.

Figure 1. The factors of Educational management strategies in the 21st century dynamic for sustainability.



9648

Table 2. Factors and indicators of educational management strategies in the 21st century dynamic for sustainability.

Strategies	Indicators
1. Educational leadership	1.1 Having a broad vision, a culture of learning excellence in operation, and systematic development, determining the values expected from an action-oriented vision of future success. 1.2 Being a valuable leader in education, and having a paradigm in driving a learning culture, building the competence and thinking processes, a wisdom society, a learning society, and a knowledge-based society. 1.3 Promoting the learning to encompass interests, abilities, individual differences, management of education with the planning and management systems as a response to changes in the 21 st century. 1.4 Knowledge management to enhance the quality of education, arrange the learning process according to the actual conditions to standard quality. 1.5 Management and development a focusing on performance and modifying development in the methods to integrated form contribute as driving into positive and quality direction.
2. Creating the educational capacities	2.1 Focusing on specific abilities, emphasis on analytical thinking skills, and creating innovative media to create new knowledge, and learning management emphasizes of the learning process by integrating various contents together. 2.2 Creating the scientific and technological excellence, innovation, professional skills to be the foundation for building the future. 2.3 Empowering and cultivating 21 st century skills-based learning, and raising professional skills while driving a knowledge-based economy of skills in the 21 st century. 2.4 Innovative learning management through digital technology, quality innovative media,



Strategies	Indicators
	<p>providing an environment that is conducive of learning and creates an environment for teamwork and exchange of knowledge to create new experiences.</p> <p>2.5 Cultivation of learners with curiosity, curiosity to inspire learning that molds mental traits, skills, desirable attributes.</p>
3. Creating the efficiency of human resources	<p>3.1 Promoting lifelong learning and enhancing human capital development, development of teachers in terms of competence, knowledge, and skills in using technology in an integrated way to connects a learning and working.</p> <p>3.2 Promoting the development of innovative learning management, and modifying the learning process to be connected to the real life of the learners.</p> <p>3.3 Developing the learners and learning management with special needs to achieve their own potential, creating the educational management system to facilitate real-world learning.</p> <p>3.4 Promoting important foundations in knowledge building, cultivating systematic thinking processes, and encouraging the learners to discover their own the potential.</p> <p>3.5 Creating professional learning community, encouraging motivation, and focusing on individuality.</p>
4. Creating the educational equality	<p>4.1 Promoting universal, quality, and equitable educational services, supporting the use of educational technology comprehensively and inclusively.</p> <p>4.2 Creating awareness of environmental conservation, morality, and ethics.</p> <p>4.3 Creating a support system, and building social immunity for learners.</p> <p>4.4 Inspiring the learners to be enthusiastic, creative, and self-assessed.</p> <p>4.5 Engaging the learners to participate in creative and developing operations, creating a learning environment.</p>
5. Participations based on collaboration	<p>5.1 Joint thinking, joint decision-making, joint action, joint supervision, monitoring and evaluation, sharing responsibility, and building an integrated network of cooperation that is mutually supportive, and generous in helping each other.</p> <p>5.2 Responsibility who feel committed to work, trust and trust, cooperation, mutual benefit, and trust.</p> <p>5.3 Seeking the cooperation and encouraging all sectors to participate in the management of diverse education</p> <p>5.4 Determining the policy plans and strategies through coordination among the network partners, and knowledge management, building knowledge, understanding, and correct attitudes to lead to full participation.</p>
6. Creating the knowledge of global citizenship	<p>6.1 Reinventing the curriculum aimed at developing citizenship learners in the 21st century.</p> <p>6.2 Changes in teaching and learning aimed at developing citizenship learners in the 21st century.</p> <p>6.3 Changing the measurements and assessments aimed at improving citizenship learners in the 21st century.</p>
7. Creating the digital citizenship	<p>7.1 Upgrading of learning management aims to develop learners on digital citizenship in the 21st century.</p> <p>7.2 Creating a good identity both online and in the real world.</p> <p>7.3 Recognizing and dealing with various cyber threats smartly.</p>
8. Networking	<p>8.1 Building positive change leadership, and adjusting work processes to achieve effectiveness and lead self, group, and organization to success.</p> <p>8.2 Understanding and looking at problems in new creative ways, the relationship between technology and innovation is applied to optimize practical results and problem-solving.</p> <p>8.3 Utilize the creative power of cooperation to achieve key goals.</p>
9. Connectivity	<p>9.1 Working towards the future, planning and proactive, emphasizing a quality mission.</p> <p>9.2 Working with others to achieve the objectives.</p> <p>9.3 Appreciation and mutual assistance in the learning management process that shows connection and continuity.</p> <p>9.4 Productive and cost-effective use of resources, performance monitoring.</p>
10. True assessment	<p>10.1 Should emphasize the use of authentic assessment in order to inform their reasonable decision-making.</p> <p>10.2 A variety of methods to assess and sources of data must be used in the authentic assessment process in order to generate possible solutions or ways of a specific problem.</p>



Educational management strategies in the 21st century dynamic for sustainability in the 10 factors were to, 1) educational leadership, 2) creating the educational capacities, 3) creating efficiency of human resource, 4) educational equality, 5) participations based on collaboration, 6) creating the knowledge of global citizenship, 7) creating the digital

citizenship, 8) networking, 9) connectivity, and 10) true assessment have to 39 indicators.

2. Learning management strategies in the 21st century dynamic for sustainability in the factors and indicators to shown on figure 2, and table 3.

Figure 2. The factors of learning management strategies in the 21st century dynamic for sustainability.

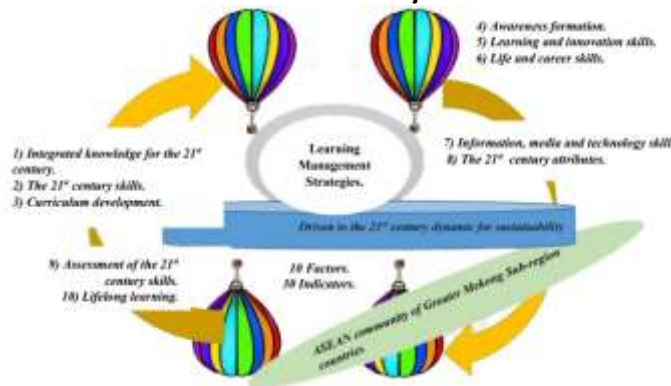


Table 3. Factors and indicators of learning management strategies in the 21st century dynamic for sustainability.

Strategies	Indicators
1. Integrated knowledge for the 21st century.	1.1 Changing the way students learn to achieve results that are truly important and necessary for students aiming for students to create new knowledge on their own. 1.2 Transcending subject matter into learning for life in the 21st century, by teaching students to be human beings who learn to use skills for living in the 21st century 1.3 Design of learning management and facilitate learning for students to learn from the action that has a stimulating point to inspire the desire to learn that leads to active research. and gather knowledge from various learning sources to support or counter the assumptions of familiar answers from old experiences to create a new paradigm to replace the old by using project-based learning throughout activity base learning.
2. The 21st century skills.	2.1 The 6 R; 1) reading skills, 2)writing skills, 3)arithmetic's skills4) relation science skills, 5) relation technology and innovation skills, and 6) relation qualityskills. 2.2 The 12 C; 1) critical thinkingskills, 2) creativity skills,3) creative tension skills, 4) criticalproactively skills,5) communication skills,6) collaboration skills,7) collaborative cultural skills, 8) competency skills, 9) connecting skills, 10) composition skills,11) controlling skills, 12) cost effectiveness skills. 2.3 The 3 E; 1) empowerment skills,2) efficiency & effectiveness skills, 3) evaluation skills)
3. Curriculum development.	3.1 Curriculum structure of the national curriculum should be more intensified have strict quality control. 3.2 core curriculum should only be a framework for the schools and teachers to work around and adjust to each of their own the context in a teaching. 3.3 Should to a promoted of board-based and holistic learning; putting more emphasis into creating as "Curriculum of Thinking".
4. Awareness formation.	4.1 Building knowledge, understanding, and defining important issues for building a global society. 4.2 Driving culture and way of life that coexist with different social contexts. 4.3 Building an understanding of human beings together in terms of race and culture, including



Strategies	Indicators
	<i>the use of different language cultures to seamlessly.</i>
5. Learning and innovation skills.	<p>5.1 Learning and building creative thinking using techniques of multiple perspectives, creating new perspectives that are open to common opinions, building understanding, improving and analyzing, including assessing angles. looking to develop an understanding of creative thinking.</p> <p>5.2 Collaborating creatively with others for personal development, taking action and always communicate new perspectives with others by opening up and responding to new perspectives of embedding opinions, and evaluating the work of the group to improve work in new ways.</p> <p>5.3 Viewing failure as a learning opportunity and the application of learning to innovations with practical implementation of creative ideas to achieve concrete results.</p>
6. Life and career skills.	<p>6.1 Learning to adapt well in changing conditions Get smarter to live with life skills in the 21st century world.</p> <p>6.2 Creating new products that respond to lifestyles based on contexts, environments leading to dissemination of techniques and methods.</p> <p>6.3 Developing strategic skills, entrepreneurship in various careers.</p>
7. Information, media and technology skills.	<p>7.1 Information literacy.</p> <p>7.2 Media literacy.</p> <p>7.3 Information, communication and technology literacy (ICT).</p>
8. The 21st century attributes.	<p>8.1 Functional features including adaptation and leadership.</p> <p>8.2 Learning attributes including self-direction, and self-monitoring of learning.</p> <p>8.3 Moral attributes including respect for others, honesty, and a sense of citizenship of the nation and the global society.</p>
9. Assessment of the 21st century skills.	<p>9.1 Balancing the qualitative assessment, emphasizing the benefit of the feedback from students' actions to improvement.</p> <p>9.2 Use technology to optimize testing, measurement and evaluation.</p> <p>9.3 Tracking, analyzing and collecting qualitative information of individual and group students, including academic achievement and desirable characteristics, competence and professional aptitude of students.</p>
10. Lifelong learning.	<p>10.1 Learning resources, process of learning, learning by doing.</p> <p>10.2 The 21st century learning environment.</p> <p>10.3 Learning management that combines flexibility, and learning through key processes of question learning, search learning, construct learning, communicate learning, and service learning of applying and extending knowledge for society.</p>

9651

Learning management strategies in the 21st century dynamic for sustainability in the 10 factors were to, 1) integrated knowledge for the 21st century, 2) the 21st century skills, 3) curriculum development, 4) awareness formation, 5) learning and innovation skills, 6) life and career skills, 7) information, media and technology skills, 8) the 21st century attributes, 9) assessment of the 21st century skills, 10) lifelong learning have to 30 indicators.

c) CFA to educational management and learning management strategies for sustainability ASEAN community of Greater Mekong Sub-region countries.

CFA to associate the factors of educational management strategies (EDMS) of 10 factors such as, educational leadership (EDMS.1), creating the educational

capacities(EDMS.2), creating efficiency of human resource (EDMS.3), educational equality(EDMS.4), participations based on collaboration(EDMS.5), creating knowledge of global citizenship(EDMS.6), creating digitalcitizenship(EDMS.7),networking(EDMS.8), connectivity(EDMS.9), true assessment (EDMS.10) into the weight of the factors and validation consistent with empirical data to shown on figure 3. And CFA to associate the factors of learning management strategies (LMS) of 10 factors such as, integrated knowledge for the 21st century (LMS. 1), 21st century skills (LMS. 2), curriculum development (LMS. 3), awareness formation (LMS. 4), learning and innovation skills (LMS. 5), life and career skills (LMS. 6), information, media and technology skills (LMS. 7), the 21st century



attributes (LMS. 8), assessment of the 21st century skills (LMS. 9), lifelong learning(LMS. 10) into the weight of the

factors and validation consistent with empirical data to shown on figure 4.

Figure 3. CFA to associate the factors of educational management strategies (EDMS) into the weight of the factors and validation consistent with empirical data.

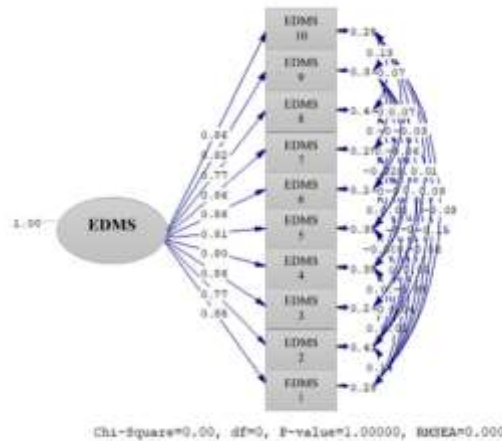
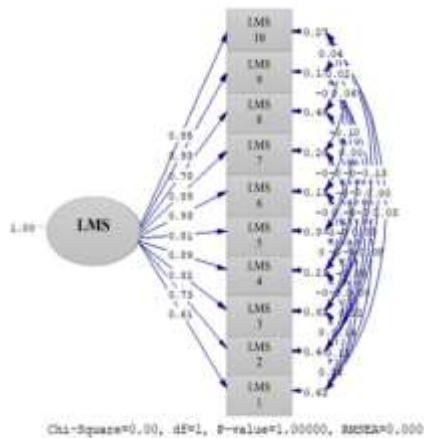


Figure 4. CFA to associate the factors of learning management strategies (LMS) into the weight of the factors and validation consistent with empirical data.

9652



CFA to associate the factors of educational management strategies (EDMS) of 10 factors as, educational leadership (EDMS.1), creating educational capacities(EDMS.2), creating efficiency of human resource (EDMS.3), educational equality(EDMS.4), participationson collaboration(EDMS.5), creating the knowledge of global citizenship (EDMS.6), creating the digital citizenship (EDMS.7),networking(EDMS.8),connectivity(

EDMS.9), and true assessment (EDMS.10) to consistent with the empirical data were significant levels of 0.01. CFA to associate the factors of learning management strategies (LMS) of 10 factors as, integrated knowledge for the 21st century (LMS. 1), 21st century skills (LMS. 2), curriculum development (LMS. 3), awareness formation (LMS. 4), learning and innovation skills (LMS. 5), life and career skills (LMS. 6), information, media and technology skills (LMS. 7), 21st century attributes (LMS. 8), assessment of the 21st century skills (LMS. 9), lifelong learning(LMS. 10) to consistent with the empirical data were significant levels of 0.01.

d) Perspective to education in the 21st century dynamic for sustainability ASEAN community of Greater Mekong Sub-region countries.

Perspective to education in the 21st century dynamic for sustainability of policy issues in



driving mechanisms to education as will be able to drive the development approach towards sustainability practice were followed:

1. Developing the education system to raise the competitiveness level, to get the country out of middle-income trap for being the well-being with more balanced growth. Create wisdom-based society and supportive learning environment to shift thinking paradigm to reform the societies and driven the culture of lifelong learning.
2. Building the well-balanced human resource to enhance of the potential as well as to embed morality and happiness.
3. Creating the quality system by the strong and integrated foundation of enhancing the educational and increase responsiveness to any changes in the 21st century dynamics of putting more emphasis on productivity, equality and balance a building.
4. Creating the well-balanced and well-rounded of quality citizens to assist them in a finding their specialties, recognizing their own potential and thriving for lifelong learning.
5. Sharpen to the management system of finding the balance between centralization and decentralization, and also a putting the more emphasis on educational management in local area to succeed, the central government has to be the one who set the overall framework and direction whilst local agents still the possess freedom to adjust curriculum and teaching an instruction according to their context.
6. Teachers are at the heart of learning management, the focus is on

creating high quality teachers, excellent quality, intensive teacher selection.

7. Teaching professional is a highly sought after and respected as professional by cultivating teacher skills, fostering a network of teachers' self-improvement through exchanging experiences. Setting up a comprehensive to the teachers development system, adjusting the salary rate to be as high as the advanced professional, raising the standards in the teachers as the career path to the progress.
8. Assessment as there should be no national tests. Actual objective for assessment should be about evaluating each students' learning development by using formative assessment.

5. DISCUSSION

Challenges in education strategies of education plans to education policies. Educational management and learning management strategies to the CFA to associate all factors were significant. Perspective to education in the 21st century dynamic for sustainability of policy issues in driving mechanisms to education as will be able to drive the development approach towards sustainability practice. Because, education strategies as raising the idea of educational reform that gave rise to the idea of driving educational philosophy into liberal view by a focus on the participation and model procurement, appropriate, conformity with social conditions come together to consider. Education is the cornerstone of national rejuvenation and social progress for a having a broad vision, a culture of learning excellence in operation, and systematic development, determining the values expected from an

9653



action-oriented vision of future success, being a valuable leader in education. By Robinson, S. L.^[22] to presented the trust and the breach of the psychological contract to found that roles and leadership and training, development, focusing on Emphasis on teaching quality, leadership strategies adopted to define a clear strategy are team building, problem solving, cooperative decision-making, trust building, motivation, empowerment, accountability, providing opportunities and continuous process improvement. Management of education with the planning and management systems as a response to changes in the 21st century, knowledge management to enhance the quality of education as driving into positive and quality direction, planning and proactive, emphasizing a quality mission with others to achieve the objectives. ^[23] Framework of education on policies as the spatial support performance and management a leading to concrete action, administration of education relates to the development of educational quality. Building positive change leadership, and adjusting work processes to achieve effectiveness and lead self, group, and organization to success, understanding and looking at problems in new creative ways, the relationship between technology and innovation is applied to optimize practical results and problem-solving include of utilize the creative power of cooperation to achieve key goals. Wongmoon, M., Hansombat, P., and Seechomphu, C.^[24]into development of

educational institution management to support the liberalization of the ASEAN Community, with educational management guidelines consisting of development of educational management standards, personnel development and participation, curriculum development and learning management, learner quality development through the promotion and development of innovative media, learning resources and technology to stimulate learning for students. Changing the way students learn to achieve results that are truly important and necessary for students aiming for students to create new knowledge on their own, transcending subject matter into learning for life in the 21st century, design of learning management and facilitate learning for students to learn from the action to create a new paradigm by using project-based learning throughout activity base learning. Chinsethawong, K.^[25]Strategies for driving education into ASEAN community include promoting learner development to knowledge, competence and skills in the 21st century, developing educational personnel to have knowledge, skills transferring knowledge, developing educational administration. Perspective to education in the 21st century dynamic for sustainability of policy issues in driving mechanismsto educationas will be able to driven the development approach towards sustainability practice on the main objective of education. Education gold in the future to should be a focusing the most on issues of quality and relevancy. Creating the quality system by the strong and integrated foundation of enhancing the educational, increase responsiveness to any changes in the 21st century dynamics of putting more emphasis on

²² Robinson, S. L. Trust and the breach of the psychological contract." *Administrative Science Quarterly*, 41, pp. 474-499, 2014.

²³Mungchu,A, Teemueangsa, S., and Jedaman, P.Science educational management of "SIAOE model" for sustainability the quality improving a Thai's Basic education, Thailand.*Journal of Physics: Conference Series* 1835: IOP Publishing. doi:10.1088/1742-6596/1835/1/012096, 2021.

²⁴Wongmoon, M., Hansombat, P., and Seechomphu, C. Development of educational institution management to support the liberalization of the ASEAN Community . The

15th National and International Academic Conference: NakhonSawanRajabhat University, Thailand, 2016.

²⁵Chinsethawong, K. Strategies for driving education into ASEAN community. *Veridian E-Journal, Humanities, Social Sciences and Arts*: 7(2), pp. 140-155, 2016.



productivity, equality and balance a building.

6. CONCLUSION

Education strategies in the 21st century dynamic for sustainability ASEAN community of Greater Mekong Sub-region (GMS) countries into the challenges condition in education strategies of education plans to education policies were to emphasis on organizing and promoting education for people of all groups and ages to gain knowledge, quality and potential for self-development, building a knowledge-based society, enhancing competitiveness, creating educational opportunities to be able to be a potential person, a valuable human capital in social empowerment, building a learning society, professional learning community, career promotion, innovation development and educational technology. Educational management strategies in the 10 factors were to, 1) educational leadership, 2) creating the educational capacities, 3) creating efficiency of human resource, 4) educational equality, 5) participations based on collaboration, 6) creating knowledge of global citizenship, 7) creating digital citizenship, 8) networking, 9) connectivity, and 10) true assessment have to 39 indicators. Learning management strategies in the 10 factors were to, 1) integrated knowledge for the 21st century, 2) the 21st century skills, 3) curriculum development, 4) awareness formation, 5) learning and innovation skills, 6) life and career skills, 7) information, media and technology skills, 8) the 21st century attributes, 9) assessment of the 21st century skills, 10) lifelong learning have to 30 indicators. CFA to associate in all factors to consistent with the empirical data were significant levels of 0.01. Perspective to education in the 21st century dynamic for sustainability of policy issues in driving

mechanismsto educationas will be able to driven the development approach towards sustainability practice on the main objective of education as “Education Output” is composed of the main goals were to access, equality, quality, efficiency and relevancy. Education strategies in the 21st century dynamic for sustainability to achieve as the objectives and goals this to important, because there are allows organizations to define objectives that align with their mission and lead to achieve goals, means, targets, indicators on the paradigm-shift as the main mechanism of development, supporting, cultivating ideas and knowledge for improving education quality.

7. RECOMMENDATION

Strategic to management of participation, and the networks:- Management in the form of joint ownership of school directors, teachers, stakeholders from learning engagement, curriculum.*Strategic to area-based management:-* Regardless of affiliation, is integrated in academic management for the development of quality education.

REFERENCES

- [15] Chiangkul, L. (2016). State of Thai education and educational reforms to keep up with the 21st century world. Bangkok: Education Council Office, Thailand.
- [6,25] Chinsethawong, K. (2016). Strategy for driving basic educationto ASEAN community.Veridian E-Journal, Humanities EditionSocial Sciences and Arts, 8 (1), pp. 140-155.
- [14] Coukos- Semmel, E.D. (2002). The Knowledge management : processes and strategies used in United States Research Universities. Boca Raton, Fla:



- Ed. D. dissertation, Florida Atlantic University.
- [1] Education Council Office. (2018). National Education Plan (A.C. 2018-2037). Bangkok: The Office, Thailand.
- [11] Forcadell, F.J. and Guadamillas, F. (2012). A Case Study on the Implementation of a Knowledge Management Strategy Oriented to Innovation. *Knowledge and Process Management*, 9(3), pp.162-171.
- [16] Hoy, W.K, & C.G. Miskel. (2005). *An Educational Administration: Theory, Research and Practice*. 7th ed. New York McGraw-Hill.
- [21] Jedaman, P, Phoncharoen, C, Jongmuanwai, & Others. (2020). Educational management 4.0 on result based management process to driven a uplifting sustainable education in the 21st Century. *Journal of Psychology and Education*. 57(9), pp.1226-1237.
- [3] Jedaman. P., Buraphan. K., Younyoung, C, & Others.(2017). Analysis of Sustainable Leadership for Science Learning Management in the 21st Century under Education THAILAND 4.0 Framework. *International Conference for Science Educators and Teachers (ISET)*. AIP Conf. Proc. 1923, 030062-10; doi.org/10.1063/1.5019553.
- [19] Lederman, N. G., J. S., & Abd-El-Khalick, F. (2006). Teaching science in the 21st century: Alternative certification: Aspirations and realities. National Science Teacher Association.
- [20] Lunenburg, F. C., & Ornstein, A. C. (2010). *Educational administration : Concepts and practices*. Belmont, California: Wadsworth.
- [2] Masintree. K. (2018). *Strategy and reform to Thailand 4.0*. Bangkok: Ministry of Education, Thailand.
- [8] Mans Nilsson, Dave Griggs and Martin Visbeck. (2016). "Map the interactions between sustainable development goals, a simple way of rating relationships between the targets to highlight priorities for integrated policy". *Nature*, vol. 534, p. 7607.
- [18] McGillivray, M. & Carpenter, D. (2013). *A Narrowing The Development Gap in ASEAN: The Drivers and Policy Options*. London: Routledge.
- [23] Mungchu, A, Teemueangsa, S., and Jedaman, P. (2021). Science educational management of "SIAOE model" for sustainability the quality improving a Thai's Basic education, Thailand. *Journal of Physics: Conference Series* 1835: IOP Publishing. doi:10.1088/1742-6596/1835/1/012096.
- [4] National Council for Peace and Order (NCPO). (2019). *Regional educational reform under Ministry of Education*. Bangkok: Royal Thai Government Gazette Office, Thailand.
- [17] National Economic and Social Development Board. (2018). *Twelveth National Economic and Social Development Plan*. Bangkok: Office, Thailand.
- [5] Parandekar, Suhas D. (2011). "Thailand: Analysis of Efficiency of Educational Expenditures." *World Bank Discussion Paper for Public Finance Management Report*. Washington D.C.: Pearson.
- [12] Phakphaswivat, S . (2015). *The Strategic Management*. The 6th Edition. Bangkok: Amarin Publishing, Thailand.
- [22] Robinson, S. L. (2014). Trust and the breach of the psychological contract." *Administrative Science Quarterly*, 41, pp. 474-499.
- [10] Robbins, S.P. and Coulter M. (2007). *Organization Theory: Structure, Design, and Applications*. New Jersey: Prentice-Hall.
- [7] Somprach, K. (2015). *Administration Strategy*. Bangkok: Success- media Print Office, Thailand.



- [13] Ubonwat, T. (2016). Art of formulating an organizational plan towards excellence. 4th edition, Bangkok: Productivity Institute, Thailand.
- [9] UN-Habitat. (2016). Goal and Strategic Direction of Organization. UN-Habitat Results-Based Management Handbook.
- [24] Wongmoon, M., Hansombat, P., and Seechomphu, C. (2016). Development of educational institution management to support the liberalization of the ASEAN Community. The 15th National, International Academic Conference: Nakhon Sawan Rajabhat University, Thailand.

