

Educational Management 4.0 under Sustainable the 21st Century Dynamics Era: Perspective a Thai's Basic Education Management, Thailand

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Abstract

Thailand office of Basic Education Commission (OBEC) is one that has also pushed for improving educational management has to the quality and effectiveness. This research aimed for analyzing the educational management 4.0 under sustainable the 21st century dynamics era to perspective a Thai's basic education management. Factors affecting the effectiveness of educational management include leadership, management, directors and teachers, curriculum and learning management, environment and atmosphere conducive to learning were the factors that directly and indirectly influence. Key factors of educational management 4.0 under sustainable the 21st century dynamics era were management policy and strategic planning, management and human resource development and leadership, creating a work motivation, monitoring and evaluation information system, creating atmosphere for learning. Perspective a Thai's basic education management under sustainable the 21st century dynamics era are trend direction of educational management 4.0, and main goals of educational management 4.0. This paper may have implication of perspective a Thai's basic education management.

Keywords: Educational management 4.0, sustainable the 21st century dynamics era, perspective a Thai's basic education management

Introduction

Establishing clear of educational direction will lead to development for socio- economy, socio- cultural, and socio- educational of sustainability. Which of Thailand 4.0 of targeting for a new strong economy there is a policy vision of developed to an important mission in organizing the development direction for meeting the needs of the 21st century world. Also, the National education planning of Thailand (AD., 2017-2036) we revision and goals of educational management including the management of education for social and national security, production and manpower development, research and innovation to increase the competitiveness, developing the potential of people of all ages and building a learning society, opportunity and equality of educational, educational management for quality of life, and improving the efficiency of educational management. [1] Thai's education in the 4.0 era is a development to reduce inequality, created to equality and capacity of emphasizing skills, knowledge, competency, innovation, analytical thinking, creativity into learning management consistent with the 21st century. Are the dynamics of the 21st century to knowledge-based and technology literacy that includes knowing how to used of knowledge and skills into live and live in the context of an ever-changing era. [2] Therefore, education in the 4.0 era requires the use of various fields of knowledge, including skills for living a happy life can to compete with other countries. Needs to have knowledge, thinking skills, living skills for solving various problems. However, the management of past learning for emphasizing knowledge that is academic content is the core, it may not be enough to have the knowledge and ability that is consistent with the 21st century. When delve into the issue of preparing human resources to support the 21st century were being Thailand 4.0 and Thai's education 4.0 era there are important problem to all sectors that needing accelerate development for maximum the benefits to educational management of developed students center and most important. Educational management 4.0 needs to have a clear direction for dealing with the 21st century which to is full of flow and changes that occurs include geopolitics and geopolitical economics. [3] By education is the main indicator for sustainability national development into social dimension, economic dimension, and cultural dimension from to a planning the education system to be driven to successfully.

Holistic development must have an understanding of the various components involved from the strengthening of concepts and practices to need to consider the terrain and sociology, in parallel for education management more efficiency and effective to sustainable.

This research aimed for analyzing the educational management 4.0 under sustainable the 21st century dynamics era to perspective a Thai's basic education management by specific purpose this study has three main objectives are to; a) analyzed to the factors affecting the effectiveness of educational management4.0 under sustainable the 21st century dynamics era, b) developing the process of educational management4.0 under sustainable the 21st century dynamics era, and c) analyzed to perspective a Thai's basic education management to sustainable the 21st century dynamics era.

Reviews of Literature

Guidelines of Educational Management 4.0: Creating a Learning Society

Kasam Masintree [3] mentioned to guidelines of educational management 4.0 into a dimension for creating a learning society to sustainability of 3rd dimensions were to, a) educational security dimension from creating society, culture and education under the 21st century that is connected and operation into laying foundation and mechanism for creating educational security must to begin at the educational management process to cover a key points in the goal, method of operation, process and strategic plan to action plan, b) educational wealth dimension of capacity building, using and access to technology for integrating the knowledge skills, educational and curriculum development for enhancing an important skills in the 21st century to consistent and linked of efficiency and quality. Developing information and media systems that are appropriate and support learning, promoting the instructional and training to focus on practicality, developing education personnel to have skills and competencies to supports in the dynamics of the world and the 21st century, c) educational sustainability dimension of creating a learning society throughout the development of learning resources with various standards. Increasing the ability to manage education, leadership and governance to show a responsibility for educational management quality to effectively. Are affects the efficiency of the conscious, knowledge and ability and skills, thoughts, attitudes, beliefs, values and behavior to the quality educational management4.0 under sustainable the 21st century dynamics era.

Strategies for Educational Management in the 21st Century

Harmon, Colm, Hessel Oosterbeek, and Ian Walker [4] discussing a strategic concepts with four components are to; 1) strategic analysis to consists of strategic goal were determination of vision, mission, and objective for leading the strategy formulation, strategy formulation is the ways to achieve long-term objectives, 2) strategy implementation and strategic control are the process of changing strategy is set to come true, 3) strategic control is a follow-up of the plan implementation and plan improvement, development of external and internal environments, 4) strategic leadership is the ability of enterprise management And integration of changes within organization to be effective. Educational management 4.0 under sustainable the 21st century dynamics era how to effective it will be depends on the management's role in how important it is to management, and the personnel of education must have knowledge and understanding of work to achieve the goals. Motivation is an indicator of work performance; it is one of the important duties of the executives in order to perform the tasks efficiently.

Research Methodology

Methodology were mixed method research, which combined both qualitative method by documentary review, through brain storming, interview among the key informant of 225 directors of primary and secondary education area offices, and survey by questionnaire with 650 sampling there are the school administrators and teachers in Thai's basic education, Thailand. The participants of the key informant they all were purposive sampling, the sampling they all were multistage random sampling, to collection. **Step I:** involved synthesizing documentary and interview with the directors for studying the factors affecting the effectiveness of educational management4.0 under sustainable the 21st century dynamics era. **Step II:** survey by questionnaire with the sampling for analyzed to the factors affecting the effectiveness includes the direct and indirect influence. **Step III:** involved synthesizing documentary and interview with the directors for developing the process of educational management4.0 under sustainable the 21st century dynamics era. **Step IV:** survey by questionnaire with the sampling for CFA of the factors process. **Step V:** brainstorming with the directors for analyzed to perspective a Thai's basic education management include trend direction of educational management 4.0, and main goals of educational management 4.0 to the data. The data analysis on qualitative data was analyzed by using three main stages of data reduction, data organization, data interpretation to conclusion. The quantitative will be analyzed by descriptive statistically analysis include percentage, mean, standard deviation, Part analysis. Also, Confirmatory Factor Analysis (CFA) to associated with factors process.

The Results

The educational management 4.0 under sustainable the 21st century dynamics era to perspective a Thai's basic education management of the results were as following:

1. Factors affecting the effectiveness of educational management4.0 under sustainable 21st century dynamics era.

1.1 Factors affecting the effectiveness of educational management on 5th factors were followed:

a) Leadership factor: an important mission were raising the level of education to develop quality students to accordant with the 21st century skills, Promoting lifelong learning and promoting human capital development for covering, developing education personnel to increase ability and capability, building a society of wisdom Learning society and knowledge base society into paradigm-shift and driving for a learning cultural, promoting the ability to manage education through innovation, technology and creative thinking. Being a visionary leader and learning cultural ICT that is excellent in operations and systematic development.

b) Management factor: management of education to cover interests and the ability to learn different and diverse, planning the management system that addresses the changes of the 21st century and have to vision that connects the working world by relying on participation from all sectors, managing the knowledge and skills necessary to exist in globalized society, management of real-world resources and learning processes, management that is open to changes from outside, both at the national level Regions and the world.

c) Directors and teachers factor: capacity building for all departments of development in creating innovation and learning management styles as able to adjust the learning process to be relevant to the learner's real lifeof complete in all dimensions for the students can find their own potential and use their full potential of creating an educational system that can facilitate real learning, and giving an importance to the cultivation of thinking processes.

d) Curriculum and learning management factor: a define metrics and assessments in line with the objectives, emphasizing learning management that is responsive to society and community, student's unique abilities, Knowledge management that emphasizes critical thinking skills from the creation of innovative media and technology to create a new knowledge, and attention to social interaction skills include life skills, innovation skills, originality, responsibility, and learning management that increases the ability to practice learning skills according to the skills of the 21st century of students.

e) Environment and atmosphere conducive to learning factor: giving students the opportunity to choose what they are learning to support their aptitudes and interests in to a unique way of learning, providing innovative learning services through digital technology, and educational development that is conducive to comprehensive learning.

1.2 Levels of factors affecting the effectiveness of educational management on the 5th factors to shown on table 1, and direct and indirect influence of the factors to shown on table 2.

Table 1. Mean, standard deviation of the levels of factors affecting the effectiveness (n= 650)

Factors affecting the effectiveness of educational management	\bar{X}	S.D.
<i>Leadership factor</i>	4.47	0.71
<i>Management factor</i>	4.46	0.73
<i>Directors and teachers factor</i>	4.46	0.73
<i>Curriculum and learning management factor</i>	4.50	0.69
<i>Environment and atmosphere conducive to learning factor</i>	4.49	0.70
Totals	4.48	0.70

Table 2. Direct and indirect influence of the factors(n= 650)

Factors	Environment and atmosphere conducive to learning factor			Curriculum and learning management factor			Effectiveness of educational management4.0 under sustainable 21 st century dynamics era		
	DE	IE	TE	DE	IE	TE	DE	IE	TE
<i>Leadership factor</i>	.31**	-	.31**	.10**	-	.10**	.02	.07**	.09**
<i>Directors and teachers factor</i>	.32**	-	.32**	.27**	-	.27**	-	.11**	.11**
<i>Management factor</i>	-	-	-	.12**	-	.12**	-	.03**	.03**
<i>Environment and atmosphere conducive to learning factor</i>	-	-	-	-	-	-	.17**	-	.17**
<i>Curriculum and learning management factor</i>	-	-	-	-	-	-	.20**	-	.20**

** P=.01.

The levels of factors affecting the effectiveness of educational management on 5th factors including leadership factor, management factor, directors and teachers factor, curriculum and learning management factor, Environment and atmosphere conducive to learning factor at high levels of ($\bar{X} = 4.48$, S.D.= 0.70). Also, the direct influence for effectiveness of educational management4.0 under sustainable 21st century dynamics era have to 3th factors by perspective the influences from the most is curriculum and learning management factor has the influence of .20, environment and atmosphere conducive to learning factor has the influence of.02. As the factors that indirect influences leadership factor of indirect influence past to environment and atmosphere conducive to learning factor has indirect influence of .31, and past to curriculum and learning management factor has indirect influence of.07, directors and teachers factor of indirect influence past to environment and atmosphere conducive to learning factor has indirect influence of .32 and curriculum and learning management factor has indirect influence of .11, management factor of indirect influence past to curriculum and learning management factor has indirect influence of.03. This can explain the variance of effectiveness of educational management4.0 under sustainable 21st century dynamics era get a percentage of 23 ($R^2 = .23$). The factors that directly and indirectly influence to statistical significance at the level of .01.

2. The process of educational management4.0 under sustainable the 21st century dynamics era.

2.1 The factors process of educational management4.0 under sustainable the 21st century dynamics era at key of 5th factors to shown on figure 1.



Figure 1.the 5thfactors process of educational management4.0 under sustainable the 21st century dynamics era

The factors process of educational management4.0 under sustainable the 21st century dynamics era at key of 5th factors were management policy and strategic planning, management and human resource development and leadership, creating a work motivation, monitoring and evaluation information system, creating atmosphere for learning to as following;

a) **Management policy and strategic planning:** having the policies that respond to achieving benefits for improving the quality of life and stability, management of education systems both to vocational and life skills, action planning that is in line with goals and success indicators, operations and actually operating, the development of analytical skills, creativity, citizenship in the 21st century, and the creation of a data warehouse, media and providing innovative services through digital technology.

b) **Management and human resource development and leadership:** a capacity development knowledge and skills in using technology integrated, operations with goals, results analysis and methods that can be complemented in a positive direction, development and training for personnel with expertise, encourage the development of knowledge and create innovation, having vision, far-reaching thoughts and can decide Solve various problems in a pressured situation, academic knowledge and use technology to manage the work appropriately and worthwhile, the importance of working as a team and applying the thinking process to achieve common goals, having a good governance and bringing knowledge that integrates job management.

c) **Creating a work motivation:** the determination of incentives or rewards for the performance to be achieved, enhancing work in supportive manner of capacity enhancement, creating pride in work and motivation to work at full capacity and efficiency.

d) Monitoring and evaluation information system: evaluation and monitoring of the performance on a regular basis, operational improvements using information obtained from assessments, the creation of a data collection system and comprehensive technology system, developing and evaluating the performance of personnel with goals for the future.

e) Creating atmosphere for learning: have a networking and promoting ideas innovate, creating a learning atmosphere between personnel at all levels, empowering the practitioner to carry out the workload, creating understand and using performance data from operations.

2.2 The CFA of the factors process of educational management4.0 under sustainable the 21st century dynamics era at key of 5th factors to shown on table 3.

Table 3. Variable factors to Confirmatory Factor Analysis: CFA.(n= 650)

Factors	Variable	Composition weight
Management policy and strategic planning	<i>Having the policies that respond to achieving benefits for improving the quality of life and stability</i>	.69*
	<i>Management of education systems both to vocational and life skills</i>	.70*
	<i>Development of analytical skills, creativity, citizenship in the 21st century</i>	.71*
Management and human resource development and leadership	<i>Capacity development knowledge and skills in using technology integrated</i>	.67*
	<i>Results analysis and methods that can be complemented in a positive direction</i>	.68*
	<i>Development and training for personnel with expertise</i>	.69*
Creating a work motivation	<i>Determination of incentives or rewards for the performance to be achieved</i>	.63*
	<i>Enhancing work in supportive manner of capacity enhancement</i>	.64*
	<i>Creating pride in work and motivation to work at full capacity and efficiency</i>	.65*
Monitoring and evaluation information system	<i>Evaluation and monitoring of the performance on a regular basis</i>	.62*
	<i>Operational improvements using information obtained from assessments</i>	.63*
	<i>Creation of a data collection system and comprehensive technology system</i>	.64*
Creating atmosphere for learning	<i>A networking and promoting ideas innovate</i>	.67*
	<i>Creating a learning atmosphere between personnel at all levels</i>	.69*
	<i>Creating understand and using performance data from operations</i>	.68*

* p < .01.

The Confirmatory Factor Analysis (CFA) to associated with the factors process of educational management4.0 under sustainable the 21st century dynamics era at key of 5th factors including management policy and strategic planning, management and human resource development and leadership, creating a work motivation, monitoring and evaluation information system, creating atmosphere for learning by weight of the composition of all variables are statistically significant level of.01.

3. The perspective a Thai's basic education management to sustainable the 21st century dynamics era include trend direction of educational management 4.0, and main goals of educational management 4.0 were followed:

A. Trend Direction of Educational Management 4.0:

- Raising the level of education in developing learners in line with 21st century skills and creating educational innovation including creating an environment that is conducive to learning.
- Changing the new perspective and the society that has driven the culture of learning to a learning society where everyone has equal opportunities to access.
- Educational management suitable for students with various special needs from excellent learners to students with physical and intellectual disabilities for have the opportunity to achieve their potential equally with other people in the society.

- Creation of development mechanisms to create capacity that produces good results, and improving the quality of education that can be a comprehensive source of learning into parallel with the development of educational personnel to have standard quality.

- Using technology for education is factor that helps expand a quality of education for learners and society, knowledge management systems rely on information technology can help manage learning and integrated use.

B. Main Goals of Educational Management 4.0:

- To inspire learning so that students are enthusiastic and have their own direction, creativity to guide students to set their own goals and ready to be able to self-assess.

- Providing the learners with opportunities for creative and developmental action by creating their own learning environment, encourages learners to discover existing abilities and potential within themselves into an extensive and integrated manner of learning systems (e.g., broad-based and holistic learning).

- Structure of the course and learning management assignments that change the core of teaching and learning from the content to be the learner-centered and integrated goal were as teaching tools And teacher tools for developing knowledge transfer models, and to create a variety of educational paths to give students the opportunity to choose what to study in support of their aptitude, personal interests and ways of learning.

- An instructional that gives the teacher an opportunity to choose a method that is suitable for the student group in the responsibility of the teacher independently able to use a variety of texts, include supporting and promoting learning and good growth for learners into terms of physical, mental, social and health of the learners to be difficult, curious.

- Giving an importance to social interaction skills (e.g., socio- emotional competency) and life skills of aside from general knowledge including innovation skills, creativity, corporate social responsibility and identity.

Discussions

Educational management 4.0 under sustainable the 21st century dynamics era to perspective a Thai's basic education management of the factors affecting include leadership, management, directors and teachers, curriculum and learning management, environment and atmosphere conducive to learning were the factors that directly and indirectly influence of the effectiveness of educational management4.0 under sustainable 21st century dynamics era. A key factors of educational management 4.0 under sustainable the 21st century dynamics era were management policy and strategic planning, management and human resource development and leadership, creating a work motivation, monitoring and evaluation information system, creating atmosphere for learning. Perspective a Thai's basic education management under sustainable the 21st century dynamics era include trend direction of educational management 4.0, and main goals of educational management 4.0 were the creation of an educational system that can facilitate real learning and practical results, focus on enhancing basic knowledge with the creation of cultivating thinking processes that are linked to work from the planning of the management system that responds to the changes of the 21st century in the vision of educational leaders who rely on participation from all sectors in the administration of education.[3]Abraham, Stanley C. [5] strategic planning It is a plan that is based on conditions that emphasize problems or needs for job development were specifying the vision, assigning the mission or mission, specifying the aim, setting the strategy, setting the plan, implementing the plan to achieve the set objectives. Rodgers, C. G. [6] organization management and personnel assignment, job assignment, job control, monitoring and coordination, evaluation according to the plan to check the operation, able to achieve the set objectives. [7]An implication of perspective a Thai's basic education management of leaders with wide vision and promoting continuous learning. And the ability to manage knowledge to an important role in becoming a quality control stream that reflects and connects the knowledge-based economy and society on awareness of mission assignments and development to achieve goals under sustainable the 21st century dynamics era.

Conclusions

Educational management 4.0 under sustainable 21st century dynamics era to perspective a Thai's basic education management of the factors affecting include leadership, management, directors and teachers, curriculum and learning management, environment and atmosphere conducive to learning were the factors that directly and indirectly influence of the effectiveness of educational management4.0 under sustainable 21st century dynamics era to statistical significance at the level of .01.

A key factors of educational management 4.0 under sustainable the 21st century dynamics era were management policy and strategic planning, management and human resource development and leadership, creating a work motivation, monitoring and evaluation information system, creating atmosphere for learning, and to statistical significance at the level of .01.

Perspective a Thai's basic education management under sustainable the 21st century dynamics era include trend direction of educational management 4.0, and main goals of educational management 4.0 are challenges and directions for education, and principles objectives of educational management.

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