

DEVELOPMENT OF LEARNING PROCESS MODEL: THE MORALS AND ETHICS OF EARLY CHILDHOOD IN 21st CENTURY

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Abstract

One of essential morals and ethics for early childhood in the 21st century is self-discipline. Research aims to 1) develop the model of learning process of the morals and ethics of the early childhood in the 21st century, 2) to study effectiveness of the implementation of model of learning process of the morals and ethics of the early childhood in the 21st century, 3) evaluate and accept the model of learning process of the morals and ethics of the early childhood in the 21st century.

This research and development was organized into 4 phrases. Sample was the 80 pupils who was study in the kindergarten under the Nakhonnayok Primary Educational Service Area Office in the educational year 2021. Cluster random sampling was employed in this research. The experimental group has 40 persons who was learning by using the model of learning process of the morals and ethics of the early childhood in the 21st century, and the control group which was learning by using the traditional of learning process model has 40 persons. Research instruments consisted of 1) lesson plan of the learning of morals and ethics of the early childhood in the 21st century, 2) evaluation form of the morals and ethics behavior the early childhood in the 21st century, 3) evaluation form of the physical literacy the early childhood, and 4) evaluation and accept form the model of learning process of the morals and ethics of the early childhood in the 21st century. The research design which was using in this study was the pretest-posttest control group design. The obtained data was analyzed using mean (\bar{X}) standard deviation (S.D.), t-test dependent and content analysis

The results showed as follow. 1) The model of learning process of the morals and ethics of the early childhood in the 21st century consisted of 7 dimensions, and the efficiency was 81.12 / 82.23 2) Students in the experimental group were higher than the control group at statistical significance at the .01 level, and 3) The model of learning process of the morals and ethics of the early childhood in the 21st century was suitable in the highest level.

Keywords: Learning Process Model, Physical Literacy, Morals and Ethics, Early Childhood

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Introduction

The fundamental morality in society is “ Self-discipline” because discipline helps an individual to control themselves, restraint from doing wrong, and do good things by themselves. The study found that childhood morals tends to decline due to several reasons: 1 population, the number of single families increased, and children lack social skills, 2 interpersonal relationship, children lack interpersonal relationship and they are aggressive, 3 lack of knowledge and understanding in accepting other people's opinions, and 4 staff or teachers at schools lack skills and ability to promote prosocial behavior (Satchel, 1992

Cultivating self-discipline should start from birth to 5 years old. It is the most important period in paving the foundation for the quality of life of children who will develop into adulthood in the future. If children are well promoted, they will grow up to be quality adults who can live happily in the 21st century society, and develop the country further. Consequently, the government has arranged for the promotion of morals and ethics. It is set in the Early Childhood Education Curriculum B.E. 2560 (Ministry of Education, 2017 to develop all children to achieve quality physical, emotional, mental, social, and intellectual development, become happy to learn according to their age, have life skills, and act according to the philosophy of sufficiency economy, be disciplined, and recognize being Thai (Ministry of Education, 2017. Learning management of early childhood is integrated with activities through various plays which is consistent with the royal initiative of Her Royal Highness Princess Maha Chakri Sirindhorn who provides an integrated education through play and learning in which teachers insert knowledge while children play is playing (Kulaya Tantipalachiva, 2007.

Nowadays, children's lifestyles, learning, and plays have changed. Children have reduced plays, and they have inappropriate physical movements according to the child's development. It reflects the great need to allow children to have regular physical activity because physical activities will help children early childhood age to develop appropriately, and these help children to practice self-discipline (WHO. 2010; Marheni et al., 2021. In addition, the development of movement from a young age will result in physical literacy, enabling them to move with confidence, and controlling various movement. This provides positive effects on brain skills for executive functioning for successful life, especially inhibition and attention, and also affects other ages (Da Silva and Arida, 2015.

Researchers are interested in applying the concept of constructivist theory to design a learning process model that allows learners to play the most important role in the learning process model, exchanging opinions and experiences, gathering information and summarizing opinions by using a variety of interesting learning process activities that will encourage students to apply their own experiences to connect new knowledge from interactions in learning together and build self-knowledge (Settle, 2011. This is to the enable early childhood to develop morals and ethics in terms of self-discipline and have a good quality of life.

Objectives

Research aims to 1 develop the model of learning process of the morals and ethics of the early childhood in the 21st century, 2 to study effectiveness of the implementation of model of learning process of the morals and ethics of the early childhood in the 21st century, and 3 to

evaluate and accept the model of learning process of the morals and ethics of the early childhood in the 21st century.

Literature Review

Learning Process Model referred to a pattern of active learning for early childhood that was invented and designed based on constructivism. The children can gain experiences through activities using Physical Literacy for integration resulting in effective physical movements. Therefore, children can develop confidence and achieve variety of learning from their direct experiences in order to develop comprehensively in all aspects. The principle consists of 4 steps: 1 The study of related theoretical concepts 2 Model development 3 Model verification 4 Improving and presenting the model.

Morals and Ethics refers to the virtues of Early Childhood in the 21st century, acting conscientiously and resulting in responding appropriately to the situation. Morality and Ethics are what lead to success, achieving learning goals and living happily in society. Morality and Ethics consist of 1 Patience 2 Responsibility and 3 Compliance with social rules.

Physical Literacy referred to the physical movements with accuracy and confidence, accompanying with the understanding of how to perform those movements to engage in physical activity as a part of day-to-day life. Physical Literacy consists of: 1 Motivation and confidence 2 Physical ability 3 Knowledge and understanding of movement and 4 Encountering physical activity in active lifestyle.

Early Childhood refers to children aged from 5-6 years old, attending their 3rd year of kindergarten under the Office of Primary Education Regional Area Office Nakhon Nayok, Nakhon Nayok Province, in academic year 2021.

Conceptual Framework

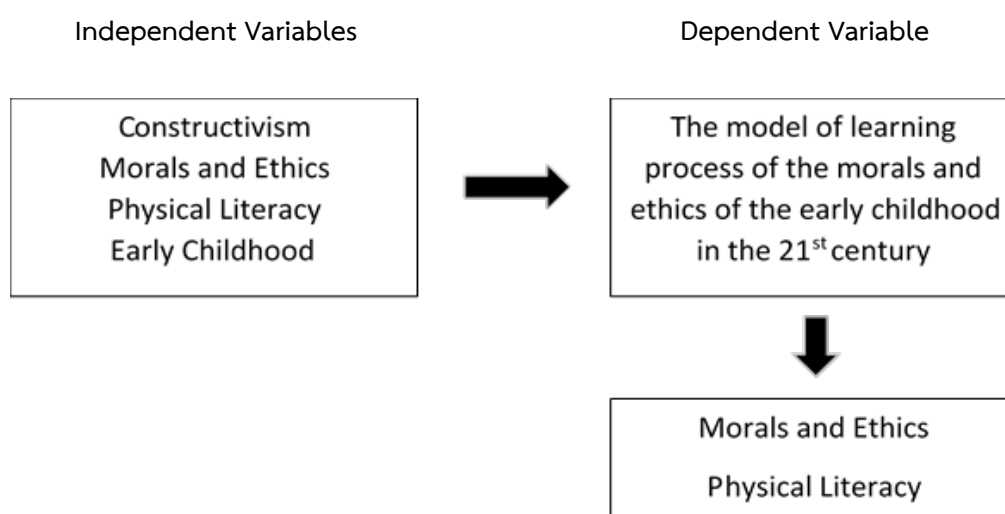


Figure 1 Conceptual Framework

Research Methodology

1. Population and Samples

The subjects were the early childhood studying in Kindergarten 3, aged 5-6 years old in schools under the office of primary education regional area office Nakhon Nayok, Nakhon Nayok province, in academic year 2021 from 4 schools, 20 from each school, with the total number of 80 subjects. The students from each school were mixed- ability early childhood including morals, ethics, and physical literacy.

2. Research Instrument

This research had 4 instruments as follow;

2.1 Lesson plans of the learning process of the morals and ethics of the early childhood in the 21st century were 24 plans. These plans were created by follow the Likert's criteria that was rating scale had 5 levels and they were examined by 5 experts who were approval these plan at the very high level (\bar{X} = 4.79, S.D. = 0.52).

2.2 The morals and ethics evaluation form of the early childhood in the 21st century was observation form which had 12 items and full score was 36 points. The Cronbach's alpha reliability test found that were between 0.756-0.788, item difficulties were between 0.24-0.55, and discriminant were between 0.27-0.66.

2.3 The physical literacy of early childhood was observation form which had 16 items and full score was 48 points. The Cronbach's alpha reliability test found that were between 0.796-0.875, item difficulty was between 0.25-0.56, and discriminant were between 0.28-0.66.

2.4 The evaluation and accept model of the learning process of the morals and ethics of the early childhood in the 21st century was evaluation form which built along with Likert's criteria that was rating scale had 5 levels and they were examined by 5 experts who were approval these plan at the very high level (\bar{X} = 4.57, S.D. = 0.48).

3. Collection of Data

3.1 All participating children were tested for morality, ethics, and physical literacy by ranking the achievements in order from lowest to highest. The pairs of children with similar achievements, and the children were divided into 2 groups: the training group was organized with a learning management model, totaling 40 students, and the control group was taught with regular teaching, totaling 40 students. Then, teachers observed the children's moral, ethical, and physical literacy behaviors before attending the program until completing the program, and after the program. For the Protocol of training group, complex training program consisted of 24 lesson plans.

3.2 Experimental group consisted of 40 participants attending morals and ethics classroom of complex training program, whereas, the control group consisted of 40 participants attending the class of general training program.

3.3 The research design is The Pretest Posttest Control Group Design. Both groups were trains in each part for at least 50 minutes, 3 times a week, totaling 8 weeks, 24 lesson plans, morals and ethics behaviors and physical literacy were evaluated before, and after the program were evaluated.

3.4 The learning process model of the morals and ethics of the early childhood in the 21st century was examined by using evaluation form.

4. Data Analysis

4.1 The efficiency (E1/E2) of the lesson plans of the learning process of the morals and ethics of early childhood in the 21st century was employed by using the morals and ethics behavior form.

4.2 The indicators of the effectiveness of the lesson plans of the learning process of the morals and ethics of early childhood in the 21st century was employed by using the morals and ethics behavior form of the early childhood in the 21st century which come out with the achievement test score after learning.

4.3 The indicators of the effectiveness of the lesson plans of the learning process of the morals and ethics of early childhood in the 21st century was employed by using the physical literacy of early childhood that come out with the achievement test score after learning.

4.4 The model of the lesson plans of the learning process of the moral and ethics of early childhood in the 21st century was acceptable by evaluation form of the lesson plan model of the learning process of the morals and ethics of early childhood in the 21st century.

Results

1. The results of the development of the learning process model on morals and ethics of the early childhood in the 21st century consisted of 7 aspects: 1 the concept and the initial agreement of the learning process model, 2 the principle of the learning management model 3 Objectives of the learning process model, 4 Teaching and learning activities organized into 4 stages: Inspiration, Construct, Application, and Reflection, 5 Support for learning, 6 Roles of teachers, and 7 Roles of learners. The quality of suitability was at a high level. (\bar{X} = 4.45, S.D. = 0.53

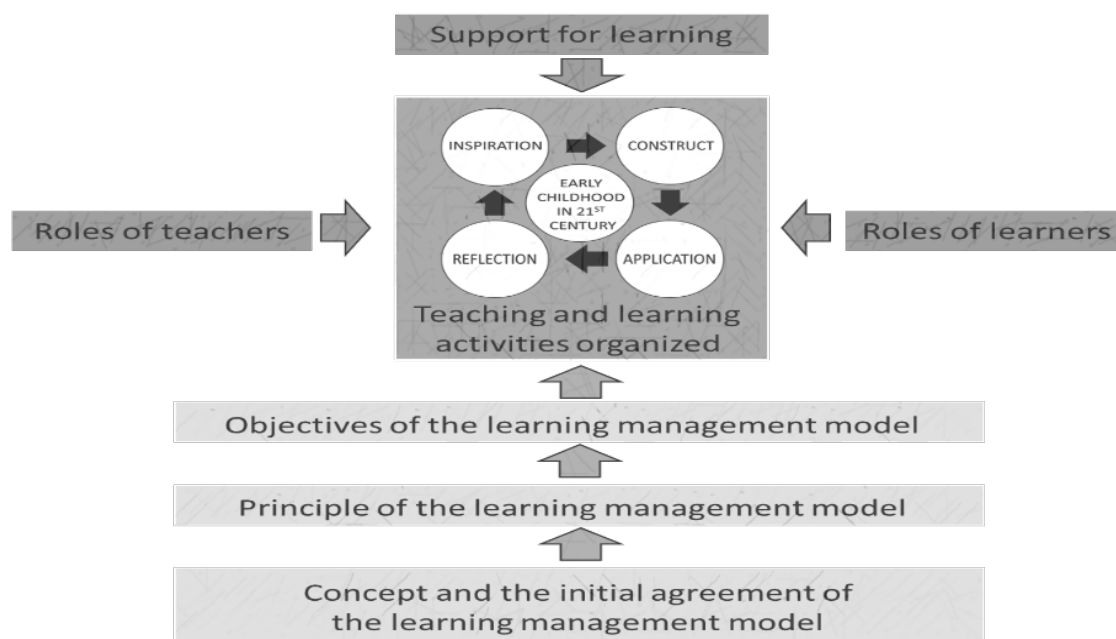


Figure 2 The learning process model on morals and ethics of the early childhood in the 21st century

Result of the efficiency of the lesson plans of the learning process of the morals and ethics of the early childhood in the 21st century follow criteria 80/80 that showed in the table 1.

Table 1: Result of the efficiency of the lesson plans of the learning process of the morals and ethics of the early childhood in the 21st century follow criteria 80/80

Efficiency's test	N	Exercise (48)		Test (84)		Efficiency
		\bar{X}	%	\bar{X}	%	
Single	3	38.4	80.00	68.14	81.12	80.00/81.12
Group	9	38.76	80.75	69.01	82.15	80.75/82.15
Field work	30	38.94	81.12	69.07	82.23	81.12/82.23

From table 1 showed that the indicators of the efficiency of the lesson plans of the learning process of the morals and ethics of the early childhood in the 21st century had met the criteria of the single at the 80.00/81.12, Group 80.75/82.15, and field work 81.12/82.23

2. Result of the evaluation of the effectiveness of the model of the learning process of the morals and ethics of the early childhood in the 21st century

2.1 The comparison results of morals and ethics achievement of the early childhood between the experimental group and the control group after finishing the program that showed in the table 2.

Table 2 The comparison results of morals and ethics achievement of the early childhood after attending the program.

Morals and ethics	\bar{X}	S.D.	t	p
Patience				
Experimental group	9.9	0.67	5.811	.000
Control group	8.75	1.06		
Responsibility				
Experimental group	10.08	0.79	6.956	.000
Control group	8.58	1.11		
Compliance with social rules				
Experimental group	10.6	0.84	8.246	.000
Control group	8.98	0.92		
Total				
Experimental group	30.58	1.17	11.178	.000
Control group	26.30	2.11		

According to Table 2 , the results of comparison of the morals and ethics achievements of preschool children after participating in the activities revealed that after participating in the experimental group activities, there was a morals and ethics score patiently waiting, Responsibility and compliance with social regulations were significantly higher than the control group at the .01 level.

2.2 The comparison results of physical literacy of the early childhood between experimental and control group after attending the activity that showed at the table 3.

Table 3 The comparison results of physical literacy achievement of the early childhood in the 21st century after attending the program

Physical literacy	\bar{X}	S.D.	t	p
Motivation and Confidence				
Experimental group	5.53	.51	22.693	.00
Control group	3.2	.41		
Physical ability				
Experimental group	31.13	.72	140.879	.000
Control group	11.48	.51		
Knowledge and understanding of movement				
Experimental group	2.3	.46	10.005	.000
Control group	1.28	.45		
Encountering physical activity in active lifestyle				
Experimental group	8.0	.00	58.599	.000
Control group	3.7	.46		
Total				
Experimental group	46.65	.77	160.738	.000
Control group	19.38	.49		

According to Table 3, the results of the comparison of the achievement of physical literacy of preschool children after participating in the activities revealed that after participating in the activities of the experimental group showed that the scores of physical literacy, motivation, and confidence, physical abilities, knowledge and understanding of movement, and encountering physical activities in an active lifestyle were significantly higher than the control group at the .01 level.

3. Result of the acceptable of the model of the learning process of the morals and ethics of the early childhood in the 21st century was showed in the table 4.

Table 4 Result of the acceptable the model of learning process of the morals and ethics of early childhood in the 21st century

List of learning process	Accuracy		Appropriateness		Feasibility		Usefulness	
	\bar{X}	S.D.	\bar{X}	S.D.	\bar{X}	S.D.	\bar{X}	S.D.
1. Model descriptive	4.58	.52	4.59	.48	4.57	.53	4.55	.54
2. Model appropriate for developing the moral and ethical	4.50	.44	4.54	.47	4.51	.56	4.66	.53
3. Experiential learning plan	4.53	.44	4.51	.56	4.52	.47	4.54	.47
4. Learning process	4.57	.52	4.57	.53	4.55	.54	4.57	.53
5. Learning support	4.50	.41	4.50	.43	4.52	.45	4.53	.43
6. Teacher's roles	4.51	.55	4.50	.43	4.51	.56	4.50	.43
7. Student's roles	4.52	.43	4.52	.47	4.51	.56	4.53	.50
8. Applying the model	4.65	.51	4.66	.54	4.65	.52	4.66	.55
Total	4.55	.48	4.55	.49	4.54	.52	4.57	.49

From table 4 showed that result of the acceptable of the model of learning process had very high which was total mean of the opinion of the model of the learning process between 4.54 – 4.57 which considered in each component found that accuracy, appropriateness, feasibility, and usefulness were higher than criteria at the level of 3.51

Discussion

1. The model of learning process of the morals and ethics of the early childhood in the 21st century consisted of 7 dimensions, and the efficiency was 81.12 / 82.23 which met the criteria at 80/80 because of E_1 was approximately equal E_2 so that the lesson plan had quality enough to implementation. Similarly, to Chaiyong Phomwong (Brahmawong, 2013) that found that if E_1 closed up to E_2 and no more than 5%, lesson plans which designed and developed well were high quality as well. Additionally, the lesson plans of the learning process and developing process were approval by experts including tryout and testing the lesson plan with the control groups. Likeness the research of Bairaksa and Srichailard (2020) found that efficiency of the lesson plans of the computer assisted instruction was higher than criteria 80/80 at level of 83.83/82.33.

2. Effectiveness of the model of the learning process of the morals and ethics of the early childhood in the 21st century found that achievement test after learning both the morals and ethics and physical literacy were raising at significant level of 0.01 because of the model of learning process supported and engaged student's learning very well especially in the lesson plan of the morals, ethics, and physical literacy. Learning process management that focuses on making children

fun, feel familiar, relaxed, and ready to learn (Attaporn, 2014), consistent with Gardner (2017) stating that physical intelligence, helps children to be ready and promote their interest in learning and practice better and encourage children to build their own knowledge of problem solving (Piaget, 1965) in a peer-to-peer manner (Vygotsky, 1978). Learners work together to find a way to put their knowledge into practice by using physical literacy activities like independent play but abide by established agreements (Montessori, 2007) and jointly summarize, reflect, review, collect, and connect knowledge and opinions. Teachers encourage learners to discuss or tell stories linked between what they have learned and their previous experiences. The benefits obtained from learning are consistent with Jirapha Attaporn (2014) that the reflection of learners is a reflection of all knowledge after participating in teaching activities to create a concept.

The results of using the learning process model found that after participating in the activities, learners' knowledge, morality, and ethics namely 1) patience, 2) responsibility, and 3) compliance with social rules, and knowledge of physical literacy namely 1) motivation and confidence, 2) physical ability, 3) knowledge and understanding of movement, and 4) encountering physical activities in an active style, were overall higher than before participating in the activity. In addition, the experimental group score was higher than the control group score. It is consistent with Piaget and Kolberg's theory of developmental psychology that moral development is the same as intellectual development. As humans grow and learn more things, their intellectual abilities increase. Ethics also develops at an intellectual level. Ruddell & Ruddell (1995) encourages learners to act or act on their own by encouraging learners to draw on their pre-existing experiences in their learning, have students share their own experiences. However, if learners do not have much experience in the subject to study, teachers may give an example or the situation first, then learners will be more knowledgeable because they can apply their previous knowledge and experience to the new knowledge they have gained. This is consistent with Vidourek et al. (2011), a physical education teacher who is consistently enthusiastic in teaching will create a high level of motivation for children to learn and motivate or inspire self-improvement which is in accordance with Whitehead (2010), who said that motivation is a key variable in lifelong participation in physical activity. It promotes thinking process for students to be able to think and solve problems, think carefully, be rational, and have good judgment, be creative, and be able to think critically to choose to receive and reject information and news appropriately. This is consistent with Rujirek Komintarachart (2011) that teachers should have morals and ethics that is being a fundamentally good person, having a good heart, and good thinking. Good behaviors also include being good both physically and verbally. Importantly, teachers should have love and compassion for their students, have good personality, dress politely, and respectful manner which are worth being a teacher.

3. The model of learning process of the morals and ethics of the early childhood in the 21st century had very high appropriateness because the model created belong to theory, principle, and procedure of evaluation including experts approved. According to Stufflebeam (1981) said that standard of evaluation consisted of 4 pillars: 1) usefulness standard, 2) feasibility, 3) appropriateness standard, and 4) Accuracy standard. Similarity to Jansook et al. (2017) who studied the development of an evaluation model for assessment of the caring competencies of nursing students in nursing colleges under the Praborommrajchanol Institute found that standards had appropriateness were very high and likeliness of Wongrugs, Kanjanawasee and Ratchusanti (2021)

studied the propriety and possibility of an evaluation model for undergraduate vocational programs: An application of multiple evaluation approaches found that model had very high in the appropriateness and feasibility.

Suggestion

Recommendations for Implication: The application of the program must consider creating understanding and communicating with everyone to realize and trust in value and importance of having moral and ethics. In addition, it is needed to set a certain goal, have good organizational culture, and to have leaders with leadership. To develop the competency for those who involved, holistic learning, family should take care and there should be strong network.

Recommendations for further research: Teachers should apply the model of the learning process of the morals and ethics of the early childhood in the 21st century in other subjects or other skills and encourage teachers find out more teaching strategy.

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