Development of an Experiential Learning Management Model to Develop Career Skills for Primary School Students

Parama Khaewphuang¹

Correspondence: Parama Khaewphuang, Faculty of Education, Phetchabun Rajabhat University, Muang, Phetchabun, Thailand.

Received: January 30, 2024 Accepted: March 30, 2024 Online Published: April 17, 2024

Abstract

The objectives of this research were (1) to develop the experiential learning management model to develop career skills for primary school students, and (2) to evaluate the effectiveness of the experiential learning management model. The sample was divided into two groups: (1) the sample used to evaluate the appropriateness of the learning management model, namely 5 experts in learning management model development and career skills development of students, were obtained by purposive sampling; (2) the sample used to evaluate the effectiveness of the learning management model consisted of 30 students in grade 6 of Ban Khek Noi School, which obtained by simple random sampling. Data analysis statistics were mean, standard deviation, and repeated measure ANOVA.

Research findings showed that (1) the experiential learning management model was appropriate at a high level; (2) the students career skills after using the learning management model at a very good level; and (3) the post-career skills scores of the students who learned from the experiential learning management model were significantly higher than their pre-career skills score at the .05 level.

Keywords: experiential learning management model, career skills, primary school students

1. Introduction

Globalization within the 21st century has brought about quick and exceptional changes in science, innovation, the economy, and society, as well as other zones. Within the world of work and occupation of numerous nations counting Thailand exceptionally much all divisions, both government and private segments mindful of the significance of planning for the advancement of the nation in all angles by defining the national improvement technique "Thailand 4.0". The factor that will lead to the success of such strategies is human resources. Therefore, knowledge, skills, and fundamental characteristics must be arranged accurately, and be mindful of changes in agreement with the National Education Plan 2017–2036, Strategy 3, developing the potential of individuals of all ages and making a learning society with one objective, specifically for individuals of all ages to develop and improve their potential that's reasonable for each age group. The students have been developed with quality knowledge, proficient skills, life skills, and work skills that are in line with the needs of the work market, including having ethics, morals, an open mind, and being able to adjust to living with others in society (Ministry of Education, 2018).

Khao Kho District, Phetchabun Province is domestic to the biggest Hmong community in Thailand where the Hmong Hill Tribes incorporate a unique way of life, culture, and traditions that can be utilized as an implies of making a living income for way better living (Kaewharn et al., 2018). In case people have great career skills, these costs can be utilized to form occupations for financial security for themselves and their communities. However, schools in Khao Kho District where children from diverse ethnic groups and cultures study together regularly oversee learning by staying to the core curriculum. Most of the content and learning activities hence conflict with the children's culture, traditions, and way of life, and are not connected to real life within the community, causing children to not see the esteem of what they learn, not be pleased with their own culture, having low academic achievement and eventually dropping out. The arrangement of the environment both interior and exterior of the classroom and teaching materials is not conducive to students from diverse ethnicities having a great attitude toward each other (Yongyuan et al., 2010). The students, subsequently, saw the significance of learning about ethnic groups within the nation as very small since they thought that it was minor,

¹ Faculty of Education, Phetchabun Rajabhat University, Thailand

boring, and had to memorize. There is no motivating force to learn, resulting in less knowledge and understanding about ethnic groups within the nation (Kunthong, 2017). In expansion, the learners needed social skills and had a terrible attitude toward learning approximately the locality (Camwutjanung, 2006); showing that the teacher's learning management was not practice-oriented. Subsequently, the learners cannot apply it in their daily lives and their career skills.

In arranging for learners to obtain career abilities, instructors play a critical role in collaborating with people, or organizations to supply opportunities for students to pick up real-world work experience. Accentuation on giving knowledge, and skills preparing to form mastery and competency for students to utilize in life by combining knowledge, particular skills, and skills necessary for the career together for the success of students in both work and life (Ministry of Education, 2018). Thai education within the era of Thailand 4.0 should organized into learning activities that allow students to do real work, and integrate knowledge from numerous areas to apply creativity to create various innovations to meet the desires of society. Connect knowledge to practice in solving problems or careers within the 21st century. The model and methods of learning activities emphasize the role and participation of learners in active learning, such as activity-based learning, a project-based learning method, thinking-based learning, including experiential learning (Sadao et al., 2019).

Experiential learning is the process of grasping and transforming knowledge to construct meaning from real-world experience (Kolb, 1984), he said that learning is the process whereby knowledge is created through the transformation of experience; knowledge results from the combination of grasping and transforming experience. Kolb (1984) proposed the experiential learning cycle theory, which includes four stages: concrete experience (CE), reflective observation (RO), abstract conceptualization (AC), and active experimentation (AE). Mcleod (2023) further explained Kolb's experiential learning style theory as follows; 1) Concrete Experience the learner encounters a concrete experience. This might be a new experience or situation, or a reinterpretation of existing experience in the light of new concepts, 2) Reflective Observation of the New Experience—the learner reflects on the new experience in the light of their existing knowledge. Of particular importance are any inconsistencies between experience and understanding, 3) Abstract Conceptualization—reflection gives rise to a new idea, or a modification of an existing abstract concept (the person has learned from their experience) and 4) Active Experimentation—the newly created or modified concepts give rise to experimentation. The learner applies their idea(s) to the world around them to see what happens. However, in Thailand, the Ministry of Education (2018) states the creation of a work experience that aims to help students develop career awareness, career exploration, and career preparation, and find practical ways to experience the real world of work in the workplace and learning resources. The administrators and counseling teachers play a key role in coordinating with individuals, organizations, and institutions to provide students with the opportunity to gain real-world work experience.

In conclusion, experiential learning management is learning management that helps students develop their career skills. Therefore, the researcher is interested in developing experiential learning models to develop career skills for Hmong Hill Tribe students in grade 6, who have local knowledge and career skills and are able to live in a quality society in line with the country's people's development policy. The purposes of this research were 1) to develop an experiential learning model to develop career skills for primary school students and 2) to evaluate the effectiveness of an experiential learning model to develop career skills of primary school students.

2. Method

Step 1 The research model

This study was research and development divided into 2 phases as follows.

Phase 1: Creation and development of learning management model, this phase is divided into two steps, the researcher proceeds as follows:

Step 1: Determine the conceptual framework for career skills to be developed, the researcher reviewed the concepts, theories, and related research and studied the needs of significant people, specifically, grade 6 teachers, primary school administrators, scholastics, and 7 experienced instructors in teaching and learning management. By employing a semi-structured meeting with questions approximately the need for creating career abilities of Hmong ethnic group students the researcher made and synthesized the concept of development.

Step 2: Development of learning management model, the researcher proceeds as follows; 1) Study relevant concepts and theories from relevant documents and research and synthesize them to create frameworks and manuals for the learning management model. As a result of examining the adequacy of the learning management model by 5 experts, it was found that it was appropriate at a high level of 4.09 on average. 2) Make research

tools of the learning management model, namely 1) a manual for using the experiential learning model, 2) a learning management plan, 3) the career skills assessment form for ethnic group students, and 4) an assessment form of the satisfaction of Hmong students in organizing learning activities according to the learning management model. 3) A pilot study was conducted to examine the suitability and feasibility of the learning management model with 1 teacher and 30 students. By meeting to exchange and make knowledge and understanding for teachers until they can organize learning activities according to the learning management model, using a period of 1 day. It found that the students were satisfied with the learning management model at a high level and the teachers had knowledge and understanding and were able to organize learning activities according to the learning management plan. In terms of the period was appropriate for each step of the learning activity. However, what needs to be improved is that the learning management plan within the manual should include details in the process of making children's work so that teachers can use it easily and children can understand it more easily, which can reduce the time to do work as well. 4) Improve the experiential learning management model to develop career skills for students of the Hmong ethnic group as a complete user manual.

Phase 2: Evaluation of the effectiveness of the experiential learning management model, in this phase, the researcher applied an experimental design as a One-Shot Repeated Measured Design. By organizing learning activities according to the learning management model developed with the sample group in the first semester of the 2021 academic year for a period of 6 weeks, 2 hours per week. At the end of the learning activities, the researcher assessed the career skills and assessed the students' satisfaction.

Step 2 Populations and samples

The population used in the research has 2 main target groups: (1) a sample group used to evaluate the suitability of learning management formats, including 5 experts in developing learning management formats and developing career skills for students. (2) Sample group used to evaluate the effectiveness of the learning management model. Consisting of 30 Grade 6 students at Ban Khaek Noi School, using purposive sampling.

Step 3 Tools used in research

Tools used to gather data include:

- 1) Semi-structured interview with questions about students' needs and career skills development needs.
- 2) Assessment form of the appropriateness of the learning management model for developing career skills for students, 5 level rating scale type.
- 3) Learning management plan using a learning management model to develop career skills.
- 4) The student's career skills assessment form is divided into 5 issues, 4 questions each, totalling 20 questions, and has 4 levels of quality scoring criteria (Rubric).
- 5) Satisfaction questionnaire using a 5-level rating scale based on the Likert principle.

Step 4 Data collection

- 1) Documentary study and interviews. The research synthesizes the components of career skills from theoretical concepts regarding career skills and data from interviews.
- 2) Assessment of the appropriateness of the learning management model. The researcher took the learning management model to 5 experts to consider the appropriateness of the learning management model for developing career skills for students.
- 3) Evaluation of the effectiveness of the learning management model. It is a quantitative data collection where the researcher assesses students' career skills with a career skills assessment form and assesses their satisfaction with learning activities according to the learning management model with a student satisfaction assessment form.

Step 5 Data analysis

- 1) Qualitative information. The data were evaluated for study objectives by the research team using interpretational analysis gathered via document analysis and interviews to summarize issues by data group and analyze data relationships.
- 2) Quantitative information. The information acquired from the assessment form was analyzed by the researcher using a statistical package program that could be utilized to examine the data suitably. This is a descriptive statistics analysis that will show the outcomes of statistical analysis as mean and standard deviation.

3. Results

For the research at this time, the research team has classified the data obtained from the study and presented the

research results according to the determined objectives. The study results can be summarized as follows:

- 1) The results of the development of an experiential learning management model to develop career skills for primary school students
- ① The development of an experiential learning management model before try-out that synthesizes the activities process from studying concepts and relevant theories from relevant documents and research results. The main components are principles, objectives, content, activities process, and evaluations

Table 1. An experiential learning management model to develop career skills for primary school students

An Experiential Learning Management Model to Develop Career Skills for Primary School Students

Principles

- 1. Emphasis exists on learning from real-life experiences by using teaching materials and learning resources in the community, participating, and linking previous experiences to create new knowledge until they have their practice guidelines.
- 2. Focus on learners making decisions, reflecting on the consequences of actions, and reflecting on experiences. 3. Focus on helping students interact, communicate, and be accepted by others by learning together as a group and planning activities to achieve common goals.
- 4. Empower learners with a focus on community, listen to learners, encourage them to think and act independently, and connect and apply the knowledge they gain to their daily lives.

Objectives

To develop career skills for Hmong Hill Tribe students which consisted of 1) work process skills, 2) problem-solving skills, 3) knowledge-seeking skills, 4) management skills, and 5) collaboration skills.

Content

The content used in learning management is about Hmong local wisdom and consists of 1) Hmong clothing and 2) Hmong handicrafts **Activity process**

Step 1: Encourage Learning: In this step, the teacher informs the learner of the learning objectives and stimulates the learner's motivation through various positive activities such as game activities, brain-gym, role-plays, simulated situations, etc., to review and link learners' previous experiences to prepare for new experiences.

Step 2: learning Experience: The learners learn together from teacher experience and transfer through lecture, demonstration, and imitation that allows learners to cooperate and partially learn from the teacher's experience, act on instructions, and give students the opportunity to ask questions and share their opinions. Teachers guide learners and encourage them to practice observing and finding problems together.

Step 3: Developing Experience: The learners work together to practice their experiences, analyze and find solutions to problems and approaches that allow them to complete their work more quickly. Teachers help introduce problem-solving techniques and methods to help learners successfully and fully complete the new experience.

Step 4: Creating New Experiences: The learner collectively improves on the experience of Step 3 and applies it to different situations, leading to new experiences. Teachers provide students with opportunities to practice until they gain expertise and confidence.

Step 5: Presenting and Reflecting on Experiences: The learners collaborate to present and reflect on their experiences. Teachers assess learning in a variety of ways and involve students in the assessment.

Evaluation

The career skills of Hmong Hill Tribe students in grade 6 assessed by using a rating scale that measures career competence, and students' satisfaction with the learning management model assessed by using a rating scale.

Source: Khaewphuang, 2024.

- ② When experts evaluated the suitability of the learning management model, the evaluation results of the learning management model showed an overall average score of 4.38, which is a very reasonable score, and found that in accordance with the criteria for considering the suitability of the learning management model set.
- ③ Examination of the quality of the learning management model in a pilot study to examine the suitability and feasibility, found that teachers were satisfied with the learning management model at a high level. The teachers understand and are able to organize learning activities according to the activity plan, the specified time period is suitable for each step of the activity. However, the teachers suggest that the details of the process of making the work should explain more clearly in the learning plan.
- 2) Evaluation results of the effectiveness of the experiential learning management model to develop career skill for primary school students
- ① The student career skills after using the learning management model at a very good level as showed in Table 2.

Table 2. Career skills of students after using the experiential learning model to develop career skills for primary school students

career skill		SD	level
1. Work process skills	3.27	0.64	Good
2. Problem-solving process skills	3.50	0.63	Good
3. Knowledge-seeking skills	3.37	0.62	Good
4. Management skills	3.70	0.54	Very good
5 .Collaboration aptitudes	3.77	0.43	Very good
Summary	3.52	0.60	Very good

Source: Khaewphuang, 2024.

② The students who learned in the experiential learning management model had higher post-career skill scores than pre-career skill scores, with at least one pair of statistically significant differences at the 0.05 level, showed in Table 3.

Table 3. Comparison results of the average career skills scores of students who received learning management using an experiential learning model to develop career skills for primary school students

source of variation	SS	df	MS	F	sig
treatment	80.569	2.474	32.565	391.316	.000
Residual	5.971	71.749	.083		

Note. * P < 0.05. Source: Khaewphuang, 2024.

③ The satisfaction of the students towards the learning management with the learning management model found that the students were satisfied at a very high level with an average score of 4.23.

4. Discussion

1) The development of an experiential learning model to develop career skills for primary school students

The learning management model is characterized by a conceptual framework of career skills that must developed first. Researchers also explored stakeholder needs by establishing a conceptual framework and synthesizing related theoretical concepts, resulting in a simple career skills component. Saylor et al. (1991) found that the development of a learning management model must meet criteria to achieve desired outcomes and be most effective, so this element of career skill was the goal or purpose of the current learning management model development. In line with Khaemmanee (2018), who suggested that the development of a learning management model should begin with clearly defining the development goals of the learning management model. Therefore, this experiential learning model for developing career skills for primary school students is special in that it pursues clear goals from the synthesis of concepts, and theories, and the study of stakeholder needs.

The experiential learning model for career skill development of primary school students was appropriate at a high level. Because, it is supported by theory concept, namely the concept of experiential learning management, consisting of experiential learning cycle theory (Kolb, 1984), constructivist theory (Sukhothai Thammathirat Open University, 2015), constructionism theory (Papert, 1980), and cooperative learning theory (Johnson et al, 1994). Including the concepts of a learning management model that facilitates the development of career skills, there are experiential learning management model (Dennison and Kirk, 1990; Tittly, 1994; Barnard, 1996), and learning management model for practical skills (Harrow, 1972; Simpson, 1972; Davies, 1971). Researchers, therefore, use this in synthesizing and determining the framework for each component of the learning management model. The experts verify the validity of the learning management model, and trial to verify feasibility and improve it. This is consistent with the statement by Joyce et al (2000) that the development of learning management models must be theory-based, and should be checked for quality and practically applied in real situations to improve the identified deficiencies.

2) The evaluation of the effectiveness of an experiential learning model to develop career skills of primary school students.

The research results showed that the career skills of the students after applying the learning management model were at a very good level, and the average career skills scores of the students who learned the learning management model had a difference of at least one pair, with a statistical significance of 0.05. It hypothesized that students' career skills tend to improve after completion of the learning management model, which is the

follow-up stage of career skills, and it suggested that organizing learning activities according to the learning management model might improve students' career skills. This is likely because the learning model consists of the process of organizing learning activities that facilitate the development of a student's career skills, especially the second step, the learning experience. This step involves learners working collaboratively to learn from the transmission of the teacher's experience, step by step through lectures, demonstrations, imitation, and actions to follow instructions, allowing students to ask questions and express opinions together. Teachers provide guidance and support and encourage students to practice observing and spotting problems together. At this stage, students use their senses to learn career skills until they understand them. It can be used in Step 3, developing the experience, this is the step where learners work together to practice common experiences and analyze solutions to problems and approaches to complete tasks faster, and teachers help introduce problem solutions, techniques, and methods that help learners master new experiences accurately and completely. At this stage, students have the opportunity to repeat practice and problem-solving until mastery leads to Step 4, which creates new experiences, where the learner takes the experience from Step 3, improves it, and applies it to different situations, leading to new experiences. Teachers provide opportunities for students to practice until they gain expertise and confidence.

The Ministry of Education (2018) suggested that career skills need to be developed. These are work process skills, such as autonomy, which focuses on practicing how to work both individually and in groups regularly; problem-solving skills, which require learners to find solutions by following a procedure of observation, analysis, developing alternatives, and evaluating alternatives; and cooperative skills, the ability to work with others. The process of organizing learning activities according to the learning management model involves student's focus on encouraging learning through direct experience and hands-on practice. It is intended to guide learners through workflows, working through processes, and practicing the principles of group work. Therefore, to develop the career skills of primary school students, organizing learning activities according to an experimental learning management model can improve their career skills. Similar to Lertwathanawanit (2017), the development of student development activities using project-based projects is considered to develop the career skills and characteristics of secondary school students. The results showed that the students had a good level of overall career skills and a good level of career characteristics. Additionally, Seeharaj (2020) studied project-based learning to develop career skills in food preservation and food processing for Mathayom Suksa's four students. After undergoing project-based learning management, found to have an average of 94.47 percent career skills, exceeding the benchmark of 70 percent.

Student satisfaction with the experiential learning model for developing career skills of primary school students was at a very satisfactory level, consistent with the hypothesis. Teachers need to study and understand the manual on how to use the learning management model to practice the learning management model. The manual explains the process of organizing learning activities. In addition, before using the learning management model, we held meetings to share knowledge and generate teacher knowledge and understanding until learning activities could organized according to the learning management model. The results showed that the students had the most satisfying in terms of learning, the students were interested in learning and practicing, and they were able to put their thoughts and activities into practice. As Saylor et al. (1991) point out, developing a learning management model requires considering the learner's motivation and providing motivating activities to help the learner learn effectively and not get bored while learning. In addition, students can apply the knowledge and skills gained to guide their career path. The research result is consistent with Wattananaiya (2014) who studied the development of an instructional model based on experiential learning in robot kinematics and found that the learners were satisfied with the learning model at a very satisfactory level. In addition, Sutiarj (2018) developed an instructional model based on authentic experiences to enhance the self-directed learning characteristics of lower secondary students. The results of the study revealed that the experimental group learners were satisfied with the teaching and learning management model at a high level.

5. Conclusion

- 1) Development of an experiential learning model to develop career skills for primary school students, before the trial is used with students, there is a synthesis of learning activity steps from the study of relevant theoretical concepts from documents and related research and interviews. The main elements are principles, objectives, content, activities process, and evaluation. The results of the evaluation of the experiential learning model to develop career skills for primary school students were at the level of very appropriate.
- 2) The results of evaluating the effectiveness of the experiential learning model to develop career skills for primary school students; ① the career skills of students after using the experiential learning model to develop career skills primary school students are at a very good level, ② average career skills scores of students who

received learning using the experiential learning management to develop career skills for primary school students has at least one pair of differences with statistical significance at the .05 level by the career skills of students after completing the learning management, which is the career skills follow-up period tend to increase, and ③ students are satisfied with the experiential learning management model for developing career skills for primary school students at a high level.

6. Suggestions from the Research

- 6.1 Suggestions for Implementing Research Results
- 1) Teachers should study and understand the experiential learning model for developing career skills for primary school students in detail, completing every step before implementation, there may also be an exchange of knowledge between teachers to expand the body of knowledge, resulting in clear understanding leading to effective use.
- 2) This research used the assessment tools as a career skills assessment, teachers should study and understand the use of the assessment tools in detail to be able to assess the results according to the objectives.
- 6.2 Suggestions for Next Research
- 1) There should be research and development of a learning management model to develop career skills that are unique and will be needed in the future for students, such as online sales skills, product design skills, etc.
- 2) There should be research and development of learning management models to develop career skills for students using other methods such as STEM education, project work, etc.
- 3) There should be research to follow up on students' career skills after using the experiential learning model to develop career skills for primary school students.

Acknowledgments

Not applicable.

Authors' contributions

Not applicable.

Funding

This research project is financially supported by Phetchabun Rajabhat University, Thailand.

Competing interests

Not applicable.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Canadian Center of Science and Education.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

References

Barnard, I. C. (1996). *The functions of the executive*. Massachusetts, and London: Harvard University Press Cambridge.

Camwutjanung, R. (2006). A study on result of the use of learning activity packages in social, religious and cultural studies subject group entitled Nakhonnayok Province for prathomsuksa four Students. Unpublished Master Thesis. Burapha University. Thailand.

- Davies, I. K. (1971). The management of learning. London: McGraw-Hill.
- Dennison, B., & Kirk, R. (1990). *Do, review, learn, apply: a simple guide to experiential learning*. Oxford: Basil Blackwell.
- Harrow, A. (1972). A taxonomy of the psychomotor domain: a guide for developing behavioral objectives. New York: Longman.
- Johnson, D. W., Johnson, R. T., & Holubec, E. J. (1994). *The nuts and bolts of cooperative learning*. Minnesota: Interaction Book Company.
- Joyce, B., Weil, M., & Calhoun, E. (2000). Model of teaching (6th ed.). Boston: Allyn and Bacon.
- Kaewharn, P., Leetagool, S., Kaewtatip, A., & Thammalangka, S. (2018). Development of local wisdom utilization procedure for economic security of communities in rural areas of Chiang Rai Province. *Journal of Social Academic*, 11(1), 11–19.
- Khammanee, T. (2018). *Teaching sciences: effective learning management*. Bangkok: Chulalongkorn University Press.
- Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. NJ: Prentice-Hall.
- Kunthong, J. (2017). The development of a learning activity package about local ethnic groups for mathayom 5 high school students in Aranyaprathet School Thailand. Unpublished Master Thesis. Rambhai Barni Rajabhat University. Thailand.
- Lertwathanawanit, S. (2017). The development of activities for learner's development by project based learning to enhance career skills and career attitudes for high school students. Unpublished Master Thesis. Silpakorn University. Thailand.
- Mcleod, S. (2023). *Kolb's learning styles and experiential learning cycle*. Retrieved June 16, 2023, from https://www.simplypsychology.org/learning-kolb.html
- Ministry of Education. (2018). *Guidelines for enhancing skills and creating professional experience for students*. Bangkok: Development Group for Guidance Systems, Office of Academic Affairs and Eductional Standards, Basic Education Commission.
- Papert, S. (1980). Mind storms: children, computers and powerful idea. Sussex: Harvester Press.
- Sadao, Y., Sirisampan, R., & Janthajorn, S. (2019). Active learning: creative integration model local wisdom in teaching and learning to society of the 21st century learning. *Mahamakut Graduate School Journal*, 17(2), 124–133.
- Saylor, J. G., Alexander, W. M., & Lewis, A. J. (1991). *Curriculum planning for better teaching and learning* (4th ed.). New York: Holt, Rinehart and Winston.
- Seeharaj, K. (2020). Project-based learning to develop professional skills in food reservation and food processing for mathayom suksa four students, Wiang Chai Witthayakhom School. Unpublished Master Thesis. University of Phayao. Thailand.
- Simpson, D. (1972). Teaching physical education: a system approach. Boston: Houghton Muffin Co.
- Sukhothai Thammathirat Open University. (2015). *Instructional theory in psychology and learning methodology*. Nonthaburi: Sukhothai Thammathirat Open University.
- Sutiarj, K. (2018). The development of instructional model based on authentic experiences to enhance self-directed learning characteristics of lower secondary students. Unpublished doctoral dissertation. Dhurakij Pundit University. Thiland.
- Tittly, M. (1994). *Experiential learning*. Retrieved March 20, 2021, from http://www.sonlifeafrica.com/model/learn.html
- Wattananaiya, N. (2014). *The development of instructional model based on an experiential learning in robot kinematics*. Unpublished doctoral dissertation. King Mongkut's University of Technology North Bangkok. Thailand.
- Yongyuan, B., Thanasetkorn, P., & Chumcheun, V. (2010). A development of multicultural education model in elementary school. Nakhon Pathom: National Institute for Child and Family Development, Mahidol University.

Copyrights

Copyright for this article is retained by the author, with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).