

## **Innovative Educational System of Comprehensive Vocational Skills by the Integration Curriculum**

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### **Abstract**

Research and develop the quality of comprehensive vocational skills teaching and learning for non-formal and volunteer teachers through the GEO-Social integration curriculum. The objectives are to: 1. Assess the need for developing the quality of vocational skills teaching and learning in the GEO-Social integration curriculum 2. To improve the quality of vocational skills teaching. 3. To evaluate the use model for developing the quality of teaching and learning of vocational skills, targeting 20 teachers and 44 youth. The research tools include the teaching and learning development model, and the GEO-Social integration curriculum consists of learning management, data analysis, and suitability checks. The results found that 1) the results of the needs assessment and 2) the improving the quality of vocational skills teaching through the GEO-Social integration curriculum has a high level - of quality. The result of finding the efficiency value is equal to 82.40/92.39 3) The experimental results of the development model found that youth have knowledge of practical skills, and the performance is at a high level. 4) The effectiveness of the GEO-Social integration curriculum found the quality of the teaching and learning development model consisting of learning management is suitable and consistent in implementation, which is at the highest level. In terms of learning, the results show that learners have knowledge and learning skills at a high level.

**Keywords:** teaching quality, vocational skills, non-formal teachers and volunteer teachers

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## Introduction

Thai education has a limitation regarding the curriculum and teaching system, emphasizing that memory can lead to a lack of creativity. The factors supporting high-quality teaching and teacher management are still not evenly distributed, especially in up-country areas. It found that the curriculums offered without considering the demands of the job market. Developing a learning system enables learners to guide their learning and utilize knowledge to generate income. Having professional skills in alternative education creates a space that will be a solution. All partners continue to cooperate in the education system (Sompong Jittaradab, 2021)

Providing spatial education is an important mechanism to help informal youth who have left the education system more than 20,500 people in Chaiyaphum Province. Informal teachers and volunteer teachers have started to work to promote the overall assistance of informal children through the holistic learning process that involves a working mechanism consistent with problems and situations, life models for children outside the system who can make a living in terms of skills and self-management are obtained (Weerathep Worarat Pathumcharoenwattana and Suwithida Charungkattikul, 2021: online)

Learning is a form of inheritance. Traditional wisdom combined with new learning can be a short-term course in which learning about professional skills integrated content with social capital, religion, culture, and way of life by developing an integrated curriculum for geo-social management linked to the community network. (Duanpenporn Chaipugdee, 2022)

Therefore, we embrace the concept of the Sufficiency Economy Philosophy. Providing the youth focus on their interests, needs, and problems as local vocational core content. Improving the quality of teaching and learning vocational skills by adopting a mechanism for non-formal education activities in the type of vocational skills appropriate to the community that make additional income, and there will be training to enhance necessary career skills (Sumalee Sangsri, 2012) Teaching design focuses on individualized instruction with different learning styles, making it a teaching planning pro-

cess that analyzes learning elements and emphasizes individuals. Especially for underprivileged youth to have equal access to educational services. (Duenpeng Chai-pakdi, 2022)

Therefore, the researchers are interested in improving the teaching quality for non-formal teachers together with volunteer teachers, focusing on enhancing change, organizing activities or learning experiences, and providing basic occupational skills for underprivileged youth.

Improving teaching quality and learning management must go through the process of implementing learning integration activities. Teachers play a crucial role in developing content, such as inserting activities and maintaining between thinking and practice in the learning process.

The evaluation focuses on evaluating by Authentic Assessment and reflecting the evaluation results to the students through the mechanism for developing the competencies of non-formal teachers based on the Area-based concept.

Collaboration teachers outside the education system work together to provide guidance and mentorship, such as self-learning, core competency development, alternative education among informal education, learning path design, and being a lifelong learner. That is the process for driving the system to exchange methods for building networks to create opportunities to help the target group between children and youth.

The concepts of Mariam Nilphan (2015), Oliva (2013), Armstrong (2003), Wiles and Joseph (2011), Wiles (2009), Finch and Siegel (1999) come to synthesize and summarize the four steps of vocational skills intensive curriculum development: 1) basic investigations, 2) curriculum development, 3) curriculum experiment, and 4) evaluation and improvement.

The concept of Duanpenporn Chaipugdee (2022): Integrated teaching helps with learning transfer, enabling students to understand the components of learners, which motivates them to see the relationship between subjects, and reduce duplication of content. Students learn various practical experiences, Morality, values, and ideal characteristics that increase students' potential for a lifetime.

The concept of; "lifelong learning" emphasizes that individuals should not live without learning. This study brings about a learning process puts forward a learning process, in which individuals can acquire knowledge from their surroundings throughout their lives to develop and fully realize their potential.

When a person graduates from a school or educational institution, education or learning will not end because it is only a part of lifelong learning. As the foundation of living, lifelong learning is an overview of education or learning in the profession to further pursue and increase knowledge through a combination of Formal and Non-formal Education connected to life.

The concept of knowledge management is based on Pornthida Wichianpanya (2004:43-48) and divided into the following six steps: defining knowledge, seeking knowledge, knowledge creation, exchange knowledge collecting, and acquisition and applying of knowledge (Kemis, and McTaggart. The Action Research Planner, 1990:53-90)

In summary, Teaching development focuses on improving and organizing learning activities or experiences that center on vocational skills and cultivate necessary skills for young people. To have a career, it is essential to prioritize self-awareness, honesty, sacrifice, diligence, patience, responsibility, punctuality, and the attitude to recognize the profession's value.

The conceptual framework in this research is used by the action research method. The principle has consisted of 6 steps: (1)Vocational learning design (2) Objectives of teaching vocational skills (3) Knowledge establishing (4) Vocational skills teaching(5)individual vocational skills learning, and (6) Comprehensive vocational skills learning. Non-formal and volunteer teachers collaborate to improve the quality of teaching vocational skills for disadvantaged youth.

## Research Objectives

1. To assess the need to develop the teaching quality through the GEO-Social integration curriculum
2. To develop teaching quality and vocational skills through the GEO-Social integration curriculum
3. To evaluate teaching quality and vocational skills through the GEO-Social integration curriculum

## Research Methodology

This study is a research and development method using Mixed Methodology combining quantitative research methods and Qualitative Research Methods. The steps are as follows:

Step 1 Survey the needs for developing the quality of teaching and integrate information by focus group discussion of 5 experts.

Step 2 (R1): Outline the development of teaching quality by integrating the GEO-Social integration curriculum. Instructions were designed using the method of interviewing experts and the opinions of the target group. The tools used to collect data are interviews and analyzed by averages, percentages, and descriptive summaries.

Step 2.2 (D1) Develop the quality of teaching and learning that is a teaching design, evaluating, and verified by a group of 5 experts.

Step 2.3 (R2) Implementing the GEO-Social integration curriculum into learning activities for the experimental group.

Step 2.4 (D2) Improving the quality of teaching and learning of vocational skills through the use of curriculum by collecting the data, observing classroom teaching process, and interviews to put the suggestions for improvement.

Step 3 The results of improving the quality of vocational skills teaching include 1) vocational skills teaching for non-formal teachers and 2) learners' learning skills by collecting the data from the works of the target group participating in the activities. (Continuous application of research results from Research Ethics Certificate No. 037/2020 dated 31 May 2021 - 31 May 2022 issued by the Faculty of Nursing Chaiyaphum Rajabhat University )

## Results and Discussion

Research and develop the quality of comprehensive vocational skills teaching and learning for non-formal and volunteer teachers through the GEO-Social integration curriculum.

1. The assessment of GEO-Social integration curriculum construction requirements reveals eight key elements: 1) purpose, 2) principles, 3) objectives, 4)

structure/content/learning time, 5) activity and content, 6) methods for utilizing learning resources and materials, 7) evaluation guidelines, and the development model of vocational skill curriculum construction, including the process of integrating social geography into the curriculum. And 8) the focus is on the following steps:

(1) Needs Assessment (NA): This step involves identifying the desired outcomes for students and analyzing the results.

(2) Curriculum Development (D): This step involves the collaborative development of the curriculum between the researcher and the teaching team. It includes planning the course implementation and writing a lesson plan.

(3) Implementation (I): This step involves the instructor applying the curriculum in teaching. It includes (SP) preparation stage, a participation stage, a practice stage to cultivate skills and work achievements, a presentation stage for students to evaluate a product, a publicizing product evaluation stage, and a product disclosure stage for bringing students' work achievements into society.

(4) Reflection and Evaluation (RE): This step involves analyzing the results during and after the learning process to assess the progress and learning outcomes and to be systematized for curriculum evaluation. According to Pratichaya Soijit and colleagues (2021), the focus of research and development in teaching methods is to improve instructional design capabilities by integrating self-directed learning concepts. The student diagnostic experience tends to acquire knowledge and skills, while teachers are encouraged to facilitate in the groups. This approach promotes exchanging ideas, drawing conclusions, and assessing teaching design abilities and individual perceptions capabilities.

Based on Panya Thongnин (2011), it is essential to integrate learning, practice, and social connections within the curriculum structure. This entails the development of 8 integrated learning units that merge various subjects in both extracurricular and classroom settings. Interventions are

crucial in improving vocational skills among vulnerable youth with learning difficulties, and this involves collaborative planning between school teachers, off-campus educators, and community speakers. Emphasizing the connection between lifestyle and community learning resources is crucial in achieving common educational goals and collaborative planning between school teachers, off-campus educators, and community speakers. The focus is connecting lifestyle with community learning resources to achieve academic goals.

2. Results of developing the quality of teaching and learning vocational skills with the GEO-Social integration curriculum (D 1).

2.1 Results of developing the quality of teaching and learning vocational skills of volunteer and non-formal teachers to study basic information regarding a geo-social integration curriculum. The outline consists of the introduction, the goals, objectives, and structure of the geography society integration course are as follows: 1) silk lotion production, 2) disabled weaving (Saori), 3) sugarcane product.

A study by Saline Udompol and Marium Nilphan, 2017 focused on developing a career integration curriculum to enhance creative problem-solving skills. The study detailed the following steps: (1) Researching basic information for course development; (2) Designing courses; (3) Testing the curriculum; (4) Evaluating its effectiveness. The study found that (1) research for course development should prioritize career-focused information; (2) the quality of course design was high, with a high level of 82.40/92.39; and (3) curriculum trials demonstrated that students displayed improved problem-solving abilities and professional characteristics. Due to the development of comprehensive courses in geography and society, an analysis of needs has been conducted based on social background to develop the curriculum.

2.2 The students had a high level of knowledge, practical abilities, and practical characteristics, according to Paitoon Sinlarat (2014),

The study of inventive learning aims to encourage students to create productive work and acquire new knowledge. Additionally, teachers play a role in organizing the learning process for students, starting from integrating existing and new knowledge. It involves working with creative advantages on their own.

2.3 The effectiveness of enhancing the quality of teaching and learning through the GEO-Social integration curriculum by non-formal and volunteer teachers, divided into three sub-curricula. Part 1 includes documents for the GEO-Social integration curriculum, learning units, and lesson plans that had a high level of appropriateness and consistency. In Part 2, students have the knowledge and the ability to perform at a high level.

3. The evaluation of the GEO-Social Integration Curriculum showed that the learning management units and lesson plans effectively organized youth learning. As a result, the youth gained knowledge and performed basic occupational tasks at a high level.

In line with Wichai Wongyai (2018), the study focuses on current trends in curriculum development in the 21st century, emphasizing innovative teaching methods utilizing local learning resources. The objective is to encourage students to think creatively and take pride in their learning resources. The study emphasizes the following aspects: 1) Emphasizing the learning process, 2) Encouraging practice, 3) Promoting self-directed learning, 4) Creating a natural classroom environment, and 5) Utilizing real-life media in the community to complement teaching and learning activities: stimulate the desire for knowledge and creativity, promoting self-motivated, lifelong learning in a context of freedom.

Data collection through their participation in teaching activities, aiming to enhance their knowledge, understanding, skills, and other components of their work.

## Explicit knowledge

Development of vocational skills teaching, which comprises the following components: 1) Designing engaging vocational learning activities 2) Setting clear objectives for vocational skills teaching 3) Developing a deep understanding among teachers and students 4) Implementing practical teaching techniques to impart vocational skills 5) Fostering individualized vocational learning 6) Integrating comprehensive vocational skills through self-directed learning. By using the GEO-social integration curriculum, the outline consists of the introduction, the goals, objectives, and structure of the geography society integration course are as follows: 1) silk lotion production, 2) disabled weaving (Saori), and 3) sugarcane product processing.

## Conclusions

1. The assessment of the needs for developing the quality of teaching and learning with the GEO-Social integration curriculum (R1) found that the synthesis of the elements of the curriculum was: 1) Preparation of curriculum planning, including the aims of curriculum that are consistent with the social context and needs of students and communities. 2) Workshops for teachers to apply the curriculum in and outside the classroom. Arrange learning experiences in learning resources. 3) learning management by using flexible times according to ability level appropriately. 4) learning materials and lesson plans. 5) provide a learning resources center where students learn through the community. So that students will learn by practicing themselves incautiously, and the results of learning will come from the exchanging of knowledge such as extra-curricular activities 6) Evaluation of the use of the curriculum and improvement using GEO-Social integration curriculum of volunteer and non-formal teachers are at a high level.

2. Results of developing the quality of teaching and learning vocational skills with the GEO-Social integration curriculum (D 1)

2.1 Results of developing the quality of teaching and learning vocational skills of volunteer and non-formal teachers to study basic information regarding a geo-social integration cur-

riculum. The outline consists of the introduction, the goals, objectives, and structure of the geography society integration course are as follows: 1) silk lotion production, 2) disabled weaving (Saori), 3) sugarcane product.

2.2 The research has found that students had a high level of knowledge, practical abilities, and practical characteristics. Teachers utilize vocational skills teaching, which comprises the following components: 1) Designing engaging vocational learning activities 2) Setting clear objectives for vocational skills teaching 3) Developing a deep understanding among teachers and students 4) Implementing practical teaching techniques to impart vocational skills 5) Fostering individualized vocational learning 6) Integrating comprehensive vocational skills through self-directed learning, as shown in the picture.

2.3 The effectiveness of enhancing the quality of teaching and learning through the GEO-Social integration curriculum by non-formal and volunteer teachers, divided into three sub-curricula. Part 1 includes documents for the GEO-Social integration curriculum, learning units, and lesson plans that had a high level of appro-

priateness and consistency. In Part 2, students have the knowledge and the ability to perform at a high level.

3. The evaluation of the GEO-Social Integration Curriculum showed that the learning management units and lesson plans effectively organized youth learning. As a result, the youth gained knowledge and performed basic occupational tasks at a high level.

## Research Suggestion

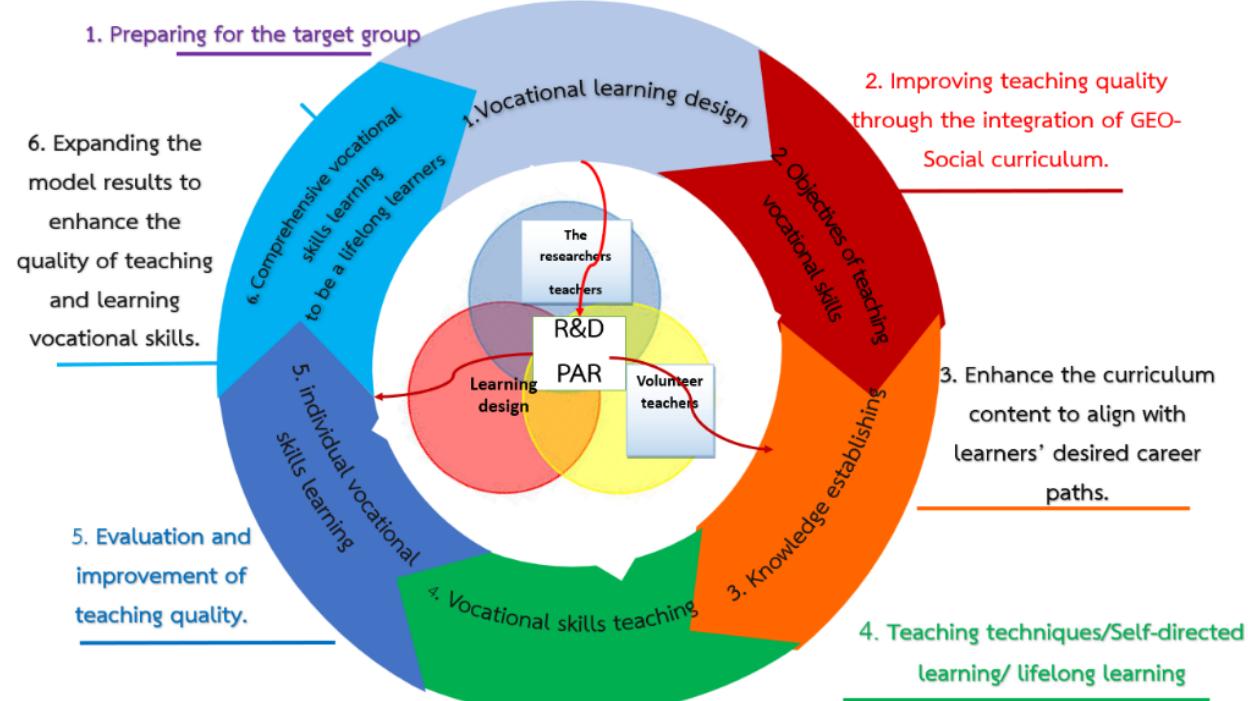
- Problem-solving and vocational skills should be developed to practice on products within learning resources, becoming a lifelong learning community.

- Promote skills development, product development, and student activities to the market through the Internet.

## Implications of the research

- Expand opportunities for geo-social integration in the curriculum and vocational with a learning community-based learning approach (CBL).

- Integrate the social landscape with career learning management and extend results to other social environments using technology for product sales.



## References

Ministry of Education. Education policy for underprivileged children. Office of Educational Policy and Planning Office of the Secretariat of the Education Council. Bangkok: Ministry of Education, 2005. (in Thai)

Chaipugdee, Duanpenporn. Learning management science for a society of lifelong learning. Khon Kaen: Khon Kaen University Printing House, 2022. (in Thai)

Chaipugdee, Duanpenporn. "Development of innovative curriculum for teaching and learning productivity Creative-ly based on local herbal learning resources." Academic Journal of Curriculum and Teaching at Sakon Nakhon Rajabhat University 13, no. 36, (2022):1-9. (in Thai)

Chaipugdee, Duanpenporn. "The process of inheriting and continuing the wisdom of folk medicine led to the health care of people in Ban Sai Ngam Village, Moo. 3 and Moo. 12, Na Siew Subdistrict, Mueang District, Chaiyaphum Province." Academic Journal of Curriculum and Teaching at Sakon Nakhon Rajabhat University 5, no. 12, (2023):61. (in Thai)

Wichianpanya, Pornthida. Knowledge Management: Basics and Applications (Knowledge Management). Bangkok: Thammakamon Publishing, 2004. (in Thai)

Nilphan, Marium "Innovative Development of Basic Education Interacting with the community through the use of local museums and learning resources Promoting creative learning." Humanities, Social Sciences and Arts, 8 no.1, (2015):52-53. (in Thai)

Pathumcharoenwattana, Weerathep and Worarat, Charungkiattikul, Suwithida. "Important mechanisms in Working to help children Outside the education system in Chaiyaphum Province." Accessed October,14 2021. [https://www.matichon.co.th/article/news\\_2749453](https://www.matichon.co.th/article/news_2749453). (in Thai)

Jittaradab, Sompong. "6 Models of Creativity: The driving force of informal children. Central, Eastern, and Western NetworkPartners." Accessed October,14 2021. <https://mgronline.com/entertainment/detail/9640000095346>. (in Thai)

Sangsri, Sumalee. Non-formal education management for lifelong education according to the Education Act 1999. Bangkok: Center for the Promotion of Informal Education, Department of Non-Formal Education. Bangkok: Ministry of Education, 2012. (in Thai)

Kemmis, and McTaggart. The Action Research Planner. 1990: 53-90