

## **Development of learning innovation of vocational skills and self-reliance for underprivileged youths using lifelong learning resources**

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### **Abstract**

This paper is a research and developments aiming to 1) analyze and synthesize learning innovation of vocational skills and self-reliance for underprivileged youth using 1)lifelong learning resources 2) develop learning innovations 3) investigate the results of using learning innovations and 4) synthesize and propose a learning innovation development model. The sample group used in the research of local wisdom in learning resources was 4 people, 100 non-formal teachers. The research tools consist of a community fundamental survey for learning resources in the community, an interview form, group discussion topics, and an assessment form for the use of learning innovation in vocational skills. The qualitative data were analyzed using the content analysis method. Research findings as models for learning innovation development, consisting of and conditions/Factors/Indicators for Sustainability.

**Keywords:** innovative learning, vocational skills, self-reliance, underprivileged youth, lifelong learning resources

### **Introduction**

Reforming the learning process that responds to changes in the 21st century according to the 20-Year National Strategy 2018-2037 has established strategies to enhance human resource potential, aiming at learners to have learning skills and a willingness to learn at all times (Office of the National Economic and Social Development Council, (N.P.)) Lifelong education is the core of education reform as stipulated in the National Education Act B.E.2542 (Sumalee Sangsri 2003). Lifelong learning policy targets children and youth outside the formal education system, and Thailand has large number of children and youth outside the educational system as many as 1,189,338. There are also poor children and youth at risk of being out of the education system as many as 1,873,830. It is, therefore, necessary to join in creating a lifelong learning ecosystem for youth to have self-reliant careers(Office of the Higher Education Policy Council National Science Research and Innovation Pro-

gram, 2020) Preparation for career and vocational skills is a learning that targets to learners of all age groups (UNESCO, Technical Note).

As for the problem of youth at risk of dropping out of the education system in the educational area of Chaiyaphum, it was found that immigration to work in the city causes the skipped-generation family while having a child drop out of school. For the impact of the COVID-19 outbreak, it was found that more than 20,500 children outside the educational system drop out of the educational system, losing the opportunity to earn income and bearing additional expenses. The project "Finding Youngsters in the Footway: The light shining for safety from COVID-19" has received funding from the Equitable Education Fund (EEF) to support the development of teachers and non-formal children in working as a network to collaborate with Chaiyaphum Rajabhat University to create suitable learning opportunities for children to return to natural learning using

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a mechanism for non-formal education teachers who are volunteer teachers in the community to organize vocational skills learning activities for 1,000 youth people, arranging learning activities that meet the needs of children through learning resources in the community and occupational skills training (Weerathep and Worarat Pathumcharoenwatana, Suwithida Jarungkiatkul, 2020: Online 31 October 2021)

Learning in the 21st century, education management should be in the manner of working with goals and happiness encouraging lifelong learning. In the design of learning and action, teachers should suggest (Wichan Panich, 2012) learning innovation that is suitable for the context of the learners with the education following the context, freedom, and requirements of the community (Sompong Jitradap, Matichon Online, 2022)

In learning from community learning resources from wisdom as a source of knowledge, there is the potential to transfer content, information, and comprehensive knowledge management (Achanya Rattanabon, Sareephan, Supawan, Manaswas, Kowittaya and Weerathep Pathumcharoenwatana, 2005). Its learning process connecting the learning resources includes the body of knowledge in teaching and learning innovation that educational institutions use and networks while the community jointly integrates the learning which becomes conditions, factors, and indicators for sustainability (Duanpenporn Chaipakdee, 2021) and for the development of innovative learning, vocational skills, self-reliance in lifelong learning resources inducing the sufficiency economy to apply appropriately making young people good, wise and self-reliant.

## Research Objectives

1. To analyze and synthesize learning innovations of vocational skills and self-reliance for underprivileged youth using lifelong learning resources
2. To develop learning innovations of vocational skills and self-reliance for underprivileged youth using lifelong learning resources.
3. To study the results of using learning innovations of vocational skills and self-reliance for underpriv-

ileged youth using lifelong learning resources.

4. To synthesize and propose the development model of learning innovations of vocational skills and self-reliance for underprivileged youth using lifelong learning resources.

## Scope of the Research

### Population and the Sample group

The population used in this research consisted of local people in 4 locations used as research learning centers, consisting of;

- 1) Herb learning center of Wat Pa Phatthana, Ban Na Si Nuan, Na Siew Sub-district, Mueang District, Chaiyaphum Province;
- 2) Sila-Ard Temple Learning Center, Ban Na Kai Sao, Na Siew Sub-district, Mueang District, Chaiyaphum Province;
- 3) Comprehensive herbal learning center of Sai Ngam community, Na Siew Sub-district, Mueang District, Chaiyaphum Province.

The sample used in the research was 100 non-formal teachers selected by purposive sampling from 4 communities.

### Scope of the Content

- 1) General condition and context of the community in the learning center for the development of learning innovation of vocational skills and self-reliance for underprivileged youth.
- 2) The development of learning innovations of vocational skills and self-reliance for underprivileged youth using lifelong learning resources.
- 3) Community participation process in the development of learning innovation, organizing activities for vocational skills learning and self-reliance for underprivileged youth using lifelong learning resources.
- 4) Guidelines for the management of learning innovation of vocational skills and self-reliance for underprivileged youth using lifelong learning resources.

### Scope of the Research Variables

The independent variables were learning innovations of vocational skills, and self-reliance for underprivileged youth using lifelong learning resources.

The dependent variables were the results

of using learning innovations of vocational skills and self-reliance for underprivileged youths using lifelong learning resources.

### Scope of Study Area

There are 4 learning resource communities namely: 1) Herb learning center of Wat Pa Phatthana, Ban Na Si Nuan, Na Siew Sub-district, Mueang District, Chaiyaphum Province; 2) Sila-Ard Temple Learning Center, Ban Na Kai Sao, Na Siew Sub-district, Mueang District, Chaiyaphum Province; 3) Comprehensive herbal learning center of Sai Ngam community, Na Siew Sub-district, Mueang District, Chaiyaphum Province. 4) Ban Don Kok Herb Learning Center, Khok Sa-Ard Sub-district, Nong Bua Rawe District Chaiyaphum Province

### Research Methodology

This research is a research and development; participatory action research in the form of mixed method research (Mixed Methods Research) with the following research steps.

Step 1 (R1) Study the context and learning innovations of vocational skills and self-reliance for underprivileged youth using lifelong learning resources in the following 4 learning resources; 1) Herb learning center of Wat Pa Phatthana, Ban Na Si Nuan, Na Siew Sub-district, Mueang District, Chaiyaphum Province; 2) Sila-Ard Temple Learning Center, Ban Na Kai Sao, Na Siew Sub-district, Mueang District, Chaiyaphum Province; 3) Comprehensive herbal learning center of Sai Ngam community, Na Siew Sub-district, Mueang District, Chaiyaphum Province. 4) Ban Don Kok Herb Learning Center, Khok Sa-Ard Sub-district, Nong Bua Rawe District Chaiyaphum Province; which is a network linked with Chaiyaphum Rajabhat University. This is survey research to investigate how the context and learning management conditions of local learning resources can be used for developing learning innovations, and organizing learning activities.

It is to study the context of community participation or of individuals involved in education management by conducting the study with teachers outside the formal education system with a small group of meeting to learn the joint research process along with Chaiya-

phum Rajabhat University. The head of the research project and community working group, knowledgeable person or curator of local learning resources are obliged to collect, verify, data synthesize the data including studying ways to develop learning activities, vocational skills, and self-reliance for underprivileged youth using local lifelong learning resources, with the following actions:

1) Conduct research team meetings to plan the research and determine joint project guidelines.

2) Select a learning source in the community to experiment with learning innovation development to obtain a total of 4 learning resources.

3) Conduct a meeting with community researchers to clarify the objectives of the research plan in the sub-research project, research action plan, and research methods.

4) Periodically follow up on the performance of the research.

5) The research team and project advisors went on-site to visit learning resources to clarify research objectives and research guidelines to communities and involved parties, exploring the situations of wisdom and learning resources and the learning process of people in the community, participation of the community including studying the condition of learning resources and

6) The research team along with local researchers held a group discussion to study problems, requirements, opinions, and suggestions for promoting vocational skills learning from communities and involved parties.

Step 2 (D1) For the development of learning innovations of vocational skills and self-reliance for underprivileged youths using lifelong learning resources; it is the process of creating a model for organizing vocational skills learning activities that focus on learning activities for favorite careers, models of participation, and the use of learning resources in the community for vocational learning activities. Learning innovation consists of short-term career courses integrated with community learning resources, integrated activities, and student development activities as a result of data synthesis in step 1, by proceeding as follows: 1) Com-

munity researchers and communities work together in designing and developing projects or activities using lifelong learning resources which is a result of the study obtained from the study of the community context and SWOT Analysis by linking with concepts, theories, and principles related to the development of learning innovations of vocational skills and self-reliance. 2) Research team and community provide “The meeting for presenting guidelines in developing activities on Innovation Development Model for Vocational Skills Learning and Self-reliance for underprivileged youth using lifelong learning resources”. And researchers, research consultants, community researchers, and co-researchers discussed to exchange ideas to find conclusions in the development of learning innovations of vocational skills and self-reliance for underprivileged youth.

Step 3 (R2) Trial of learning innovations of vocational skills and self-reliance for underprivileged youth using lifelong learning resources”; The research team research and project consultant participate in activities organized by each area according to the guidelines for the development of learning innovations of vocational skills as obtained from community participation and suggestions from researchers to exchange knowledge between community researchers in each area. However, during the trial of learning innovations including short-term course and community learning resources, integrated activities, and youth development activities, evaluation and improvement are required throughout the trial period.

Step 4 (D2) Evaluate, improve, and develop the process for developing learning innovations of vocational skills and self-reliance for underprivileged youth using lifelong learning resources; both quantitative and qualitative assessment methods were used and the main issues for assessment are the development model for learning innovations of vocational skills and self-reliance for underprivileged youth using lifelong learning resources, participatory processes and the use of lifelong learning resources with the processes, as follows; 1) Evaluate the learning of vocational skills by collecting data from the participation in projects or

activities that promote occupational skills learning of target groups and relevant parties in terms of knowledge, understanding, achievement, skills, and performance. 2) Evaluate the utilization of the community participatory learning innovation by studying the process, productivity, impact, and sustainability of the project or activity promoting vocational skills learning. There are 4 indicators of the effectiveness of vocational skills learning activities, namely: process, productivity, impact, and sustainability. 3) Expand learning innovations and community participatory working processes by using in the form of activities, media, methodologies, short courses, etc. 4) Conduct meetings to present the results of community participation activities and to feedback to the community. 5) Analyze and synthesize an innovative development model for community participatory learning innovation using local learning resources to promote vocational skills learning; and 6) Summarize the research results by a joint meeting between the research team and informal teachers, and the working group. Report research results obtained from the study of learning resources, the results of vocational skills learning activities, and vocational skills learning innovation development. Use the content analysis method to present narratively. (Research Ethics Certificate No. 037/2020 dated 31 May 2020 - 31 May 2021 issued by the Faculty of Nursing Chaiyaphum Rajabhat University)

## Conclusions

1. The analysis and synthesis of learning innovations of vocational skills and self-reliance for underprivileged youth using lifelong learning resources in 4 research locations including : 1) Herb learning center of Wat Pa Phatthana, Ban Na Si Nuan, Na Siew Sub-district, Mueang District, Chaiyaphum Province; 2) Sila-Ard Temple Learning Center, Ban Na Kai Sao, Na Siew Sub-district, Mueang District, Chaiyaphum Province; 3) Comprehensive herbal learning center of Sai Ngam community, Na Siew Sub-district, Mueang District, Chaiyaphum Province. 4) Ban Don Kok Herb Learning Center, Khok Sa-Ard Sub-district, Nong Bua Rawe District Chaiyaphum Province; the results indicate that there is an appropri-

ate learning resource context for the development of learning innovations and the communities and agencies, both government and private sectors support to cooperate in organizing activities very well and continuously.

2. The results of the development of learning innovations of vocational skills and self-reliance for underprivileged youths using lifelong learning resources, it was found that learning innovations consist of short-term courses that integrate knowledge and lifelong learning resources in the community, integrated activities, and student development activities.

3. The results of using learning innovations of vocational skills and self-reliance for underprivileged youths using lifelong learning resources, it was found that the target group using innovations in learning vocational skills and self-reliance has awareness and consciousness of the use of learning resources in the community for maximum benefit resulting in the preservation of arts and culture in the community and the country. While many parties participate in the development of learning innovations of vocational skills and self-reliance for learners. And learners of such learning innovation take pride in their work and understand the learning process linked to local learning resources

4. In the synthesis and presentation of a model for developing learning innovations of vocational skills and self-reliance for underprivileged youth using lifelong learning resources, the results in the synthesis of the process for developing innovation of community participatory vocational skill learning using learning resources to promote vocational skill learning in 4 locations, the operational results in organizing activities are classified into 4 areas as follows:

4.1 Research and Development; Conducting the research in the 4 local learning sources, this research is completely and correctly conducted following the research methodology while the researcher can design the research that focuses on participatory action research. The research methodology is consistent with research objectives and research results meet the research objectives as defined and the research can be applied effectively.

4.2 Participation; development of learning innovations using 4 local learning resources, community members participate by thinking and making decisions together, sharing information, participating in activities, evaluating and sharing benefits in every step of the activities.

4.3 Learning; the development of learning innovations using 4 local learning resources resulted in the learner's understanding of project implementation, joint activities, and learning how to build a self-reliant career, gaining confidence in the subject to learn.

#### 4.4 Vocational Skill Building

The development of learning innovations using 4 local learning resources allows them to take initiative in doing several activities making the participants able to produce work-pieces. Models for learning innovation development, consisting of

1) the principle of the model; is participatory innovation development

2) the purpose of the model; is to develop innovation in vocational skills learning, and local learning resources to promote vocational skills learning

3) Stages of the models, consisting of ; (1) Analysis of community context and learning center conditions (2) Build understanding with the research team (3) Collaborate with the research team and build a network (4) Participate in the planning meeting (5) Innovation development design (6) Participate in knowledge-sharing and analysis activities (7) Participate in activities (8) Demonstrate the results of the activity (9) Participate in the evaluation, providing feedback, and (10) Expand the results and build networks.

4) Conditions/Factors/Indicators for Sustainability: (1) Implementation of the model should take into account the knowledge of innovation, learning, vocational skills, self-reliance, and network learning resources (2) Support of educational institutions and communities (3) Development of learning innovation, vocational

skills, and self-reliance to be successful, we must pay attention to networks and communities in the operation. In this regard, the learning innova-

tion development model is presented as shown in the diagram.

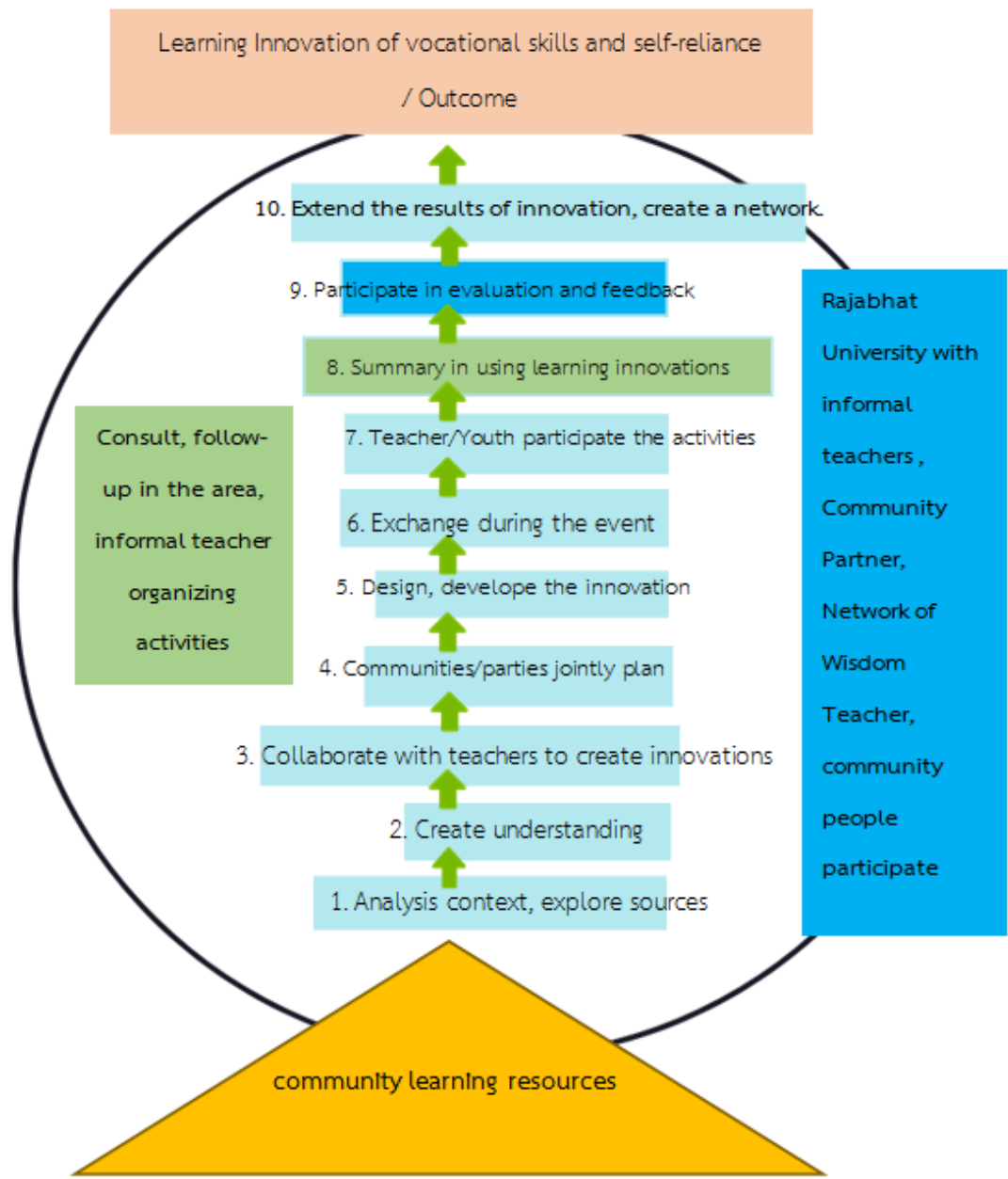


Diagram : Learning innovations of vocational skills and self-reliance for underprivileged youths using lifelong learning resources. (Duanpenporn Chaipugdee) 2022



## Discussion

### 1. Development of learning innovations.

The development of learning innovations of vocational skills and self-reliance from all 4 locations, it was found that vocational skills learning innovation consisting of integrated short-term courses and local learning resources, integrated learning activities, and learning-based learner development activities available in all 4 locations of lifelong learning resources have helped promote knowledge and the competencies of learners effectively. When considering the development of learning innovations in 4 locations with key dimensions of innovation, it was found that learning innovations provide newness, economic benefits, and the use of knowledge and learning ability in vocational skills training, and innovation development (Knowledge and Creativity Idea). This is because learning innovation has a process of development from the needs of learners, teachers, and people in the community that support the social context. which is consistent with Ninphan and Siriwan Wanichwattana Worachai (2015: 48 – 61) which found that learning innovations will help promote knowledge and creative thinking processes which will result in creating a strong knowledge base that can be used to develop methods for managing innovative learning more effectively.

### 2. Participation

The development of learning innovations of vocational skills and self-reliance reliance for underprivileged youth using lifelong learning resources, it was found that in all 4 learning sources, the community participated in the innovation development starting from analyzing the context and fundamental information, planning, designing innovation and activity, implementation, and evaluation by the community while informal teachers and folk wisdom jointly discussed to exchange ideas in formal and informal group discussions making people in the community have more awareness. This process is in line with Sanong Lohitwiset (2022, online February 14, 2021:7820-Article Text-21120-23620-10-20160810), which concluded that learning in the community using learning resources for the profession, existing wisdom, and people sharing knowledge, think and

plan together, act together, and share results which may lead to the building of a learning society in the community. Cohen and Uphoff (1977: 7-9) stated that participation must be involved in four processes namely: 1) Participation in decision-making from the early stages. Decision-making during the activities. 2) Participation in the activities. (Implementation) 3) Participation in receiving benefits which may be social benefits. 4) Participation in the evaluation and inspection. This may be due to the development of participatory learning resources has a body of knowledge circularly connected to the operation, together with planning, joint action, joint observation, and feedback.

### 3. Learning vocational skills, self-reliance

The development of vocational skill learning innovation and self-reliance with the community as a process to promote vocational learning for underprivileged youth in 4 lifelong learning sources, the result indicated that underprivileged youth provide work pieces that reflect the learning that results in creating vocational skills. This is due to the developed learning innovation consisting of integrated learning activities, various teaching methods, and learning activities for learners to freely practice and apply skills and learning processes. The learners demonstrate their knowledge and skills for taking action from their interests and needs by using community learning resources as their learning base having steps in organizing learning activities which consist of preparation, learner activities, and management after learning. This is in line with Mariam Ninphan and Siriwan Vanichwattana Worachai (2015: 48 – 61) who found that the learners had work-pieces that reflected creative learning since the developed learning innovation encourages learners to use their skills, the learning process to its fullest potential, and learners demonstrate their knowledge and skills and taking action from their interests or things that they want to seek for answers by using community learning resources as a learning base. This is consistent with Kanjana Ngaorangsi (2015), who stated that learning general knowledge is for survival in life, developing thinking rationally and creatively, and practicing until clarified. This is also consistent with Uthai Dulyakasem (2002) who summarized the learning

process is an important mechanism of human society for living with the community as an important element. And the self-reliance learning exchange process is used to create a network consisting of self-learning, learning in problem-solving and resources in community learning resources.

The learning process for self-reliance consists of the following key elements: (1) Awareness of self-reliance (2) Understanding of self-reliance (3) Lifestyle adjustment for self-reliance (4) The ability to solve problems for self-reliance, which is consistent with the meaning of Suwithida. Jarungkiatkul (2015) concluded that learning, and self-improvement in working life. and peaceful coexistence with others in society cause people to change their behavior since the process of learning for self-reliance is consistent with Phakaphon Salathong (2019) who found that the development pattern for self-reliance learned from self-reliance is a learning process that leads to change which is the learning based on real life. And this is consistent with Thanasoulas, D. (2000) who found that in the self-reliant learning process, teachers must be responsible for inspiring learners, guiding and directing them toward their goals. Because in the self-reliant learning method, the control has to be passed from teacher to student while both sides exchange ideas, and chat with each other during class. This is consistent with Esan Yamali (2019), who concluded that the factors promoting self-reliant learning focus on lifelong learning management which consists of cultural factors, factors related to learning how to learn and strategic training, and learning environment factors. And the role of the teacher must act as a supporter or giving advice, guidance, or facilitator (Riley, 1997; Scharle & Szabo, 2000). This is consistent with Edward De Bono (Edward De Bono, 1982) who mentioned the quality of productivity in the free expression stage where learners only dare to express themselves freely. The production stage is merely some of the skills. It doesn't have to be a new creation. But in the stages showing the new ideas of learners together with the innovative learning of vocational skills, it is a collaboration of people in the community, village sage, and the wisdom that participate in planning the work for stu-

dents to learn from cooperation, causing confidence in learning. Marut Pattaphol (2019) stated that innovation can be derived from creativity as the basis that learners look for opportunities rather than problems by using a variety of perspectives. The creation of innovation skills can occur with learners along with daily learning management. Career skills are the cause of learners of the future. It is a way to create opportunities for learners as working skills (Hard Skills) and skills for working (Soft Skills). The vocational skills of people in the community are therefore one of the learning options for youths who are disadvantaged in education and desired profession through actual practice, which can be developed into higher education or future career options.

## Suggestions

### Suggestions for applying the model

1. Innovation responds to the needs of people in the community, including formal and informal educational institutions leading to the integration of teaching and learning innovation
2. The innovation driving should adopt the model by creating a network, and expanding the results to cover educational institutions of all systems and levels.
3. The community should have knowledge about participatory action research, learning professional skills, bringing content about the community learning resources local wisdom to be defined as innovations
4. Learning innovations must be integrated with teaching and learning management and not different from teaching and learning so that they can be extended to other target groups including being a guideline for educational institutions to further develop

## Policy Recommendations

### Recommendations for educational institutions

1. At the basic education level, teaching and learning should be provided using community learning resources to promote career-building learning as supplement subjects.
2. At the higher education level, there should be an integration of information on learning resources



in the community to promote the learning of vocational skills, self-reliance, and the leaning of interdisciplinary and multidisciplinary subjects suitable for the age of the student

### **Recommendations for the Community**

1. People in the community should have a set of knowledge in learning resources that they can transfer.

2. Involved parties should support the budget for the development of lifelong learning resources for the community.

### **Recommendations for Lifelong Learning Resources**

1. Lifelong learning resources should have a variety of career learning activities that integrate the ideas and understanding of work and the lives of different learners.

2. A self-reliant vocational skills learning center should be provided for learners to be self-led learners. (Self-directed Learner)

3. Personnel from many agencies should be provided to develop community career learning activities to expand the dimension of participation and the network of learning resources

### **Recommendations for further research**

1. Learning innovations should be studied, especially the integration of both further education and career guidance systems.

2. Studies and research on learning innovations using learning resources should be conducted for connecting local problems with the curriculum in integrating learning with work, vocational education, higher education, and lifelong learning goals

## **References**

- Archanya Ratana-Ubon, Sareephan Supawan, Manatwas Kowittaya and Weerathep Pathumcharoenwatana.(2005). Learning Management of Lifelong Learning Resources: Public Parks. Bangkok: Office of the Education Council.
- Chansri Simsin, Phusit Boonthongtherng, Tasanee NakhunSong. (2016). Community Innovation for Lifelong Learning. Journal of Educational Administration, Year 12 No. 1 (2016): January-June 2016
- Cohen, J.M. and Uphoff, N. Rural. (1977). Development Participation: Concept and Measure for Project Design Implementation and Evaluation. New York: Cornell University.
- Commission of the European Communities.(2000).A Memorandum on Lifelong Learning (COMMISSION STAFF WORKING PAPER),(Brussels: 2000).
- Duenpenporn Chaipukdee. (2020). Development of an innovative curriculum for teaching and learning creative productivity based on local herbal learning resources. Journal of Curriculum and Instruction. Sakon Nakhon Rajabhat University, Year. 13, Issue 36, January-April 2021, pages 1-9
- Esna Yamalee. (2019). Self-reliant learning, looking at a variety perspectives and applications. Ratchaphruek Journal, Year 11, Issue 3, September - December 2019, pp. 1-10.
- International Labour Organization. (2019).“Skills policies and systems for a future workforce,” Issue Brief Prepared forthe 2<sup>nd</sup> Meeting of the Global Commission on the Future of Work, February 15-17, 2018.
- International Labour Organization. (2019). Work for a brighter future – Global Commission on the Future of Work, (Geneva: 2019).
- Kanchana Ngaorangsee. (2015). Training Manual for Researcher Development Program. Bangkok: Office of the National Research Council of Thailand and the Association of Researchers of Thailand.
- Mariam Ninlaphand and Siriwan Wanichwattana Worachai (2015). Learning innovation development at the basic education level with community participation using museums and local learning resources to promote creative learning. Thai edition, Humanities, Social Sciences and Arts, Year 8, Issue 1, January - April 2015.
- Office of National Higher Education Science Research and Innovation Policy Council (2020). A Study Report on Promoting Lifelong Learning to Support Sudden Transformations and Global Crisis. Research Report on Man-

- power Strategies of the Office of National Higher Education Science Research and Innovation Policy Council (2020). Online : 12 December 2022 <https://www.nxpo.or.th/th/report/9519/>
- Office of the Education Council (2017). National Education Plan 2017-2036, 1st edition, Bangkok: Prikwan Graphic
- Office of the National Economic and Social Development Council. (N.P.) National Strategy B.E. 2018 – 2037 (short edition).
- Pakaphon Salathong. (2019). The development model for self-reliance of farmers in Chachoengsao Province. Journal of the Association of Researchers, Year 24, Issue 3, September - December 2019, pages 74 – 90).
- Riley, P. (1997). The guru and the conjurer: aspects of counseling for self-access. In P. Benson,&P.Voller (Eds.), Autonomy and Independence in language learning (pp.114-131). London:Longman.
- Sanong Lohitwiset (2022). Learning Community. Online 14 February 2021: 7820-Article Text-21120-23620-10-20160810).
- Scharle, A & Szabo, A. (2000). Learner autonomy: A guide to developing learner responsibility
- Sompong Jitradap.(2022). Matichon Online, dated 14 December 2021) [https://www.matichon.co.th/columnists/news\\_1092807](https://www.matichon.co.th/columnists/news_1092807)).
- Sumalee Sangsri.(2003). “Learning Society,” in Encyclopedia of Education, In the Honor of Her Royal Highness Princess Maha Chakri Sirindhorn Edition On the occasion of His Majesty the King’s 4th birthday, April 2, 2003. Bangkok: Por. Sor. Pattana Publishing Company Limited.
- Suwithida Charungkiatkul (2015). Philosophy and Concept of Learning Society. Bangkok: Chulalongkorn University Press.
- Thanasoulas, D. (2000). What is learner autonomy and how can it be fostered? The Internet TESL Journal, 6, pp.1-11. UNESCO Institute for Lifelong Learning, Lifelong Learning (Technical Note).
- Uthai Dulyakasem (2002). Social science for the development of research and development concepts. Ayutthaya:- Tianwattana Printing House.
- Weerathep and Worarat Pathumcharoenwatana Suwithida Jarungkiatkul. (2020). Matichon Online 31 October 2021 [https://www.matichon.co.th/article/news\\_2749453](https://www.matichon.co.th/article/news_2749453))
- Wichai Wongyai and Marut Pattaphol. (2019). The development of creative skills for innovation. Printed at the Innovation Leaders Center in Curriculum & Learning (LCCL), Bangkok
- Wichan Panich. (2012). A way of building learning for students in the 21st century. Bangkok : Tathada :Sodsri Foundation-Saritwong.