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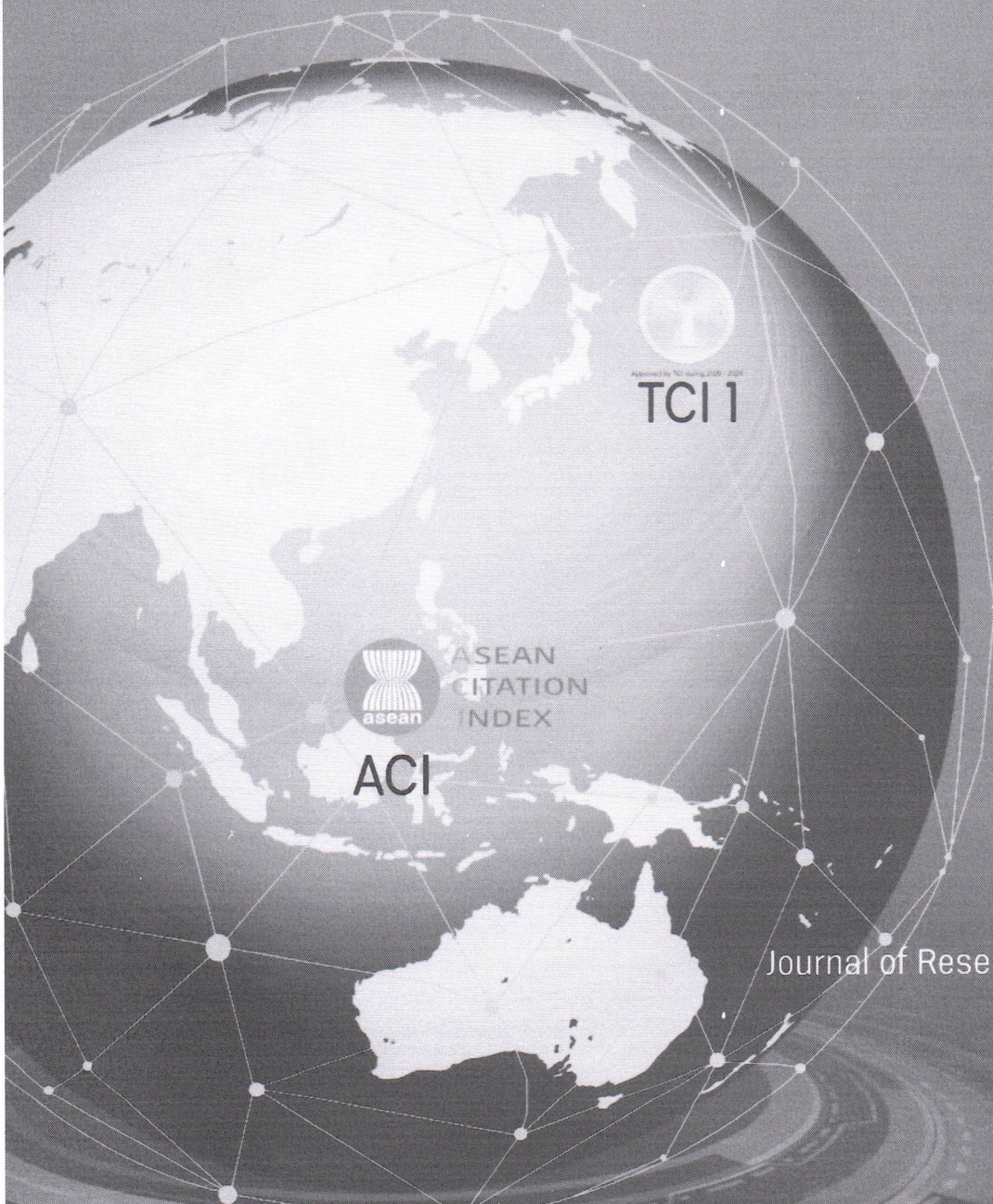

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Institute of Research and Development Chiang Mai Rajabhat University, Mae Rim Center

180 Moo 7, Chotana Road (Chiang Mai-Fang),

Khi Lek Subdistrict, Mae Rim District, Chiang Mai Province 50180

Telephone +665 3885 950 https://so05.tci-thaijo.org/index.php/cmruresearch/index

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The Integration of Community-Based Technology Transfer using the KWL Plus Technique for the Acceleration of Sustainable Community Enterprises in Phetchabun Province

Thitikarn Kaeowiset
Faculty of Education, Phetchabun Rajabhat University, Thailand
E-mail: thitikarn.kae@pcru.ac.th

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Abstract

This study aims to create and develop technology transfer and local wisdom through community involvement in the production of the rice-based Thai dessert known as Krayasart while also monitoring and evaluating the technology transfer and local wisdom processes. The sample group for this study consists of Ban Na Ruamjai Women's Community Enterprise and a total of 40 participants who are enthusiastic about taking part in the manual transfer project on fusing technology and local expertise to advance community enterprises about producing Krayasart using the KWL Plus technique. The following research resources were employed: (1) data recording of conversations with community business groups regarding the Krayasart, (2) the KWL Plus technology transfer methodology, and (3) a satisfaction survey for the KWL Plus technique manual's use of local knowledge, using which project participants are questioned. The findings indicate that the handbook on technology transfer using the KWL Plus technique is a manual that is appropriate for both technology transfer and local wisdom, and it includes information on nine distinct knowledge areas. The IOC result is 0.93, which is a helpful number that fits within the assessment range of 0.5 to 1.00 for the IOC efficiency. In order to improve community enterprises that educate people how to construct the Krayasart using the KWL Plus app application, the researcher has created a handbook for fusing technology with local expertise. Results of the transfer showed that, with a mean of 4.73 and a standard deviation of 0.45, the project's participants were satisfied with their participation in the manual transfer of technology integration and local knowledge for the advancement of community enterprises in the highest-quality Krayasart production using the KWL Plus technique.

Keywords: Integration, KWL Plus technique, Community enterprise, Krayasart, Phetchabun

Introduction

A classic dessert called "Krayasart" was derived from the Phuen, Mon, Lao, and Thai cultures. However, these sweets are utilized in auspicious events because they carry the history of "Sart Thai Day," which is how the community interacts with the environment, this makes them a special representative of local delicacies. In order to continue the tradition and earn merit at the temple, the villagers help stir Thai Krayasart dessert and mix it with bananas in the tenth month. This type of regional dessert is known as a traditional dessert tradition on Sart Thai Day, and it is thought to be a reflection of the wisdom in the development of regional food products since ancient times and has been derived from nature. Since pandan leaves have properties that help nourish the heart, nourish the lungs, and help refresh the throat, using them as an ingredient to make something smell good will make it taste appetizing, for instance, this is a reflection of the community's wisdom from each era, which has been preserved. (Wongprateep, 2014) Additionally, "Krayasart" is regarded as a dessert that derives from the knowledge of the Thai people who mix different grains with sugar and sugarcane juice to create a dessert that can be kept for a long time and is a nice dessert. It takes a lot of time and work for many people to make agitation, therefore agitation necessitates family togetherness. Important components include popped rice, Khao Mao, beans, sesame, and sugar, by combining them all, they may be cooked and then formed into balls or sheets. It is clear that the essence of the Sart Thai Day tradition is not only about desserts used in making merit, but also in the intention of creating happiness unity within the family, filial piety to the ancestors, and the act of kindness among neighbors as well. The villagers will take the dessert to make merit and distribute it to neighbors after it has finished stirring. (Orthom, 2012)

As a result, Krayasart dessert can be seen as a dessert that has been passed down through the cultures and traditions of Thailand and many other peoples. It is frequently used in auspicious ceremonies and is thought to be unique in the traditions it has inherited. Most Sart Thai Days are made late in the early rainy season or at the start of winter, when the first crops of the year are harvested, and it is also a day for making merit. Krayasart is a fine dessert made from fresh ingredients because it uses the produce from beans, rice, and sesame as its main ingredients. Additionally, there is a belief that making merit with the first produce from the rice fields during the harvest season is considered a merit for the prosperity and prosperity of the rice fields and agricultural crops. (Department of Cultural Promotion, 2016)

In the province of Phetchabun, the majority of people work in agriculture, and the majority of their income is generated by this industry. With the government's help, however and as part of the "One Tambon One Product (OTOP) project", which has now brought together numerous groups of people, the government has focused on encouraging people to have a part-time job in order to increase their income from production product. For instance, a group of housewives and members of a community enterprise have come together to produce OTOP products. (Nuengkratok, 2007) "Krayasart" a local food that is valuable, is highly conserved, and should be valued as a distinctive product of the community, is one of the products

distributed as an OTOP type of food. Phetchabun is a province where Krayasart desserts are made both for eating and for distribution as souvenirs, Ban Na Ruam Jai Women's Community Enterprise of Na Ngua Sub-district in Phetchabun Province is one of the manufacturers and distributors in Phetchabun Province and other provinces. Which aims to expand the use of affordable, locally available, and nutrient-dense rice as a raw material for export manufacturing, this rice has a mellow flavor that sets it apart from food produced in other regions, notably Krayasart. In any case, being able to distribute goods that embody Thai people's wisdom and are known throughout the world plays a significant role in the local economy, as well as the economy and society of the entire nation. This results in income distribution to the community and raises the potential of both the local and national economies.

Most community affairs are related to the production of goods, services, or other activities carried out by a group of people who have an affinity, have a common way of life, and join together in such business, whether it is a juristic person or not being a juristic person, to generate income and for self-reliance of families, communities, and between communities. The enterprise groups in Phetchabun Province are primarily made up of product groups and professional groups. (Department of Agricultural Extension, 2018) The nature of a community company's production, marketing, accounting, returns, and profits must consider the crucial traits of a community enterprise that contains at least seven components, specifically; 1) operated and owned by the community, 2) community initiatives produce goods. primarily via the use of local labor, resources, and raw materials, 3) start a community invention that promotes creativity, 4) combining universal wisdom with local wisdom as a foundation is step four, 5) a coordinated operation links diverse tasks in a methodical manner, 6) have a process of learning at their core, and 7) community enterprise networks are groups of individuals who have come together to perform any activity for the benefit of the functioning of the community enterprises in the network in order to promote family and community self-reliance. (Department of Agricultural Extension, 2018) The community enterprises of Phetchabun Province, some of which are at a level that is not ready to participate in commerce in order to promote local knowledge and wisdom, have principles to support and promote the community economy, which is the foundation of sufficient economic growth. In order to boost the local economy and foster higher levels of entrepreneurship among business units, community enterprises must include revenue generation, reciprocal aid, the development of management skills, and the growth of their model.

Also, the origin and significance of the research problem was determined from the traditional dessert making of Thailand according to the local tradition of Phetchabun Province. Which according to the belief that Krayasart dessert is used to pay homage to sacred things and is a dessert that has a long story about the ingredients and benefits of Krayasart dessert that people in Phetchabun have believed for a long time Linking the stories and beliefs of local people.

The study discovered that manufacturing Krayasart dessert is now regarded as a specialty that is valued to the community and has an intriguing backstory. When performing anything, a number of stages are involved, yet there is no method for gradually transmitting information. Additionally, there is a paucity of community-based technology that could include

professionals, which makes it difficult for community companies to succeed. Therefore, to solve the problem, the researcher designed an integrated community participatory technology transfer using KWL Plus technique, for learning management KWL Plus, based on KWL technique it consists of 3 main parts: (K) What do I know, (W) What do I want to learn, and (L) What did I learn. The difference is that KWL-Plus adds (Plus) mind mapping and writing summaries from the readings at the end of the KWL process. (Sornin, 2017) It can be said that the KWL-Plus teaching method is a learning management system that can be used to develop skills in knowledge acquisition, critical thinking, and analysis through reading and practice, as well as developing the skill of summarizing from the conclusion writing stage and from the concept diagram. The KWL Plus learning technique is a procedure that focuses on reading abilities; students are trained awareness in the process of self-understanding, planning, aiming, verifying their knowledge, and structuring material for efficient subsequent retrieval (Duangkaew, 1991), by employing the learner's prior knowledge to aid in the interpretation of the material, as well as the learner's involvement in asking questions to enhance learning and memory. Therefore, the goal of this research is to include the expert community in the dissemination of knowledge, technology, and innovation that emphasizes the thinking process. Describe how your recent experiences and prior ones are connected, in order to transfer technology and use it in accordance with sustainable national plans and objectives for the development of strong communities.

Objective

The research focuses on the design and creation of the process of making Krayasart according to the wisdom of the villagers in Phetchabun Province, which will be passed on from generation to generation in order to keep the knowledge of Krayasart baking together with beliefs of local people, as well as to track and assess the process of technology transfer and local wisdom that accelerates community businesses with community involvement.

Methodology

This research is a participatory action research in which the Ban Na Ruam Jai Women's Community Enterprise, Na Ngua Sub-district, Phetchabun Province participated in the research process, whether in terms of knowledge transfer and production, which is the knowledge gained in Research using the KWL Plus technique. The aforementioned community enterprises have taken part in problem identification and analysis, evaluated the views and requirements of the producer community, and assisted in finding solutions to issues that occur when disseminating information about Krayasart.

This research has chosen a participatory research method, which is a research method that fits perfectly with the context of the research title. Local community enterprises that have gathered together to make Krayasart can generate income for members of the community enterprise both as main income and as additional income according to the needs of each member, to select the sample for the research, the researcher used a simple random sampling method by selecting a sample group from 40 members of the Ban Na Ruam Jai Women's

Community Enterprise that made Krayasart desserts in Phetchabun Province, and the study period runs from October 2019 to the end of November 2020. In the research process, a qualitative research method was selected to collect all dimensions from the members of Ban Na Ruam Jai Women's Community Enterprise in Phetchabun Province, dividing the steps into 5 steps in order to facilitate research and to accurately measure the results of each step section as well. The research tool uses thematic interviews, that the researcher has already designed the structure The questionnaire was designed to measure the opinion level, an expert-reviewed 5-point rating for confidence and accuracy (IOC). In any case, the use of participatory action research is justified by the fact that it allows for the collaborative learning of the community and environment necessary to identify problems and solutions. Until the knowledge is generated, this research is carried out in parallel with development activities, and participants actively take part in the various stages of the sample in the activity. However, the statistics used to analyze the data include mean, percentage, standard deviation and IOC values.

Research Process

This research used a qualitative research methodology, divided into 5 steps as follows;

Step 1: Creating manuals and techniques for KWL Plus learning management from documents, textbooks, and research relevant, to be a study guideline and knowledge transfer manual design, then establishing an area to collect community enterprise data about Krayasart making, studying details about Krayasart, the essence of technology transfer, and local wisdom for the development of community enterprises to advance.

Step 2: In order to define the content and create a manual that will more effectively and appropriately disseminate knowledge, the researcher collected field data on Krayasart at Ban Na Ruam Jai Women's Community Enterprise of Na Ngua Subdistrict in Phetchabun Province using observations, interviews, participatory practices, and photographs of basic information about Krayasart.

Step 3: Create a model for technology transfer and local wisdom with community participation about Krayasart making using the KWL Plus technique by first analyzing the issue, need, and basic information. Then, create a manual for the integration of technology transfer and local wisdom for the advancement of community enterprises.

Step 4: Data synthesis, in which the researcher uses the information gleaned from the analysis, was done by taking into account the learning process and content using the KWL Plus technique in the information transfer process. This information was prepared as a manual for technology transfer and local wisdom by community participation, presented as a training project, workshops, and transfer of manuals on integrating technology and local wisdom to create community enterprises to advance about. There is also a project evaluation form, where specialists check the manual and the assessment form to see if the objectives and the questions are consistent (IOC). According to the results, each questionnaire has a score index, and consistency ranges from 0.50 to 1.00, which is regarded as being within the acceptable requirements, with these findings in mind, by enhancing and changing the survey to make it of better caliber. (Thatthong, 1985)

Step 5: Creating a learning management system and transferring the "The tale of Krayasart a Thai dessert coupled with Thai people" manual are two steps in a project to transfer manuals on the integration of technology and local wisdom to develop community enterprises and advance the

understanding of making Krayasart using the KWL Plus technique. Another step is to complete an assessment form to gauge the workshop participants' progress toward sustainability.

Research Tools

The tools used to collect data according to the research procedures are as follows;

1. A data recording form for interviews with community enterprise groups, with data collection, on the subject of the history of the community enterprise group, the history of the Krayasart dessert of Phetchabun Province, its significance, the origin and relationship between the community and the Krayasart dessert, the process of making it, its advantages and values, and the guidelines for promoting and developing.

2. A guide for combining technology and traditional knowledge to create community companies that improve Krayasart utilizing the KWL Plus approach in cooperation with a group of community-based businesses (Participatory learning appraisal). By employing the KWL Plus approach to learn how to produce Krayasart, there are speakers who have knowledge and comprehension of the transmission of knowledge, history, and knowledge heritage. Using a guide on fusing local knowledge with technological transfer through a handbook on the fusion of technology and traditional knowledge titled "The tale of Krayasart a Thai dessert coupled with Thai people", there is an interchange of knowledge and involvement with the community in addition to the actual practice.

3. A questionnaire with a five-level rating scale based on the Likert principle is used as an assessment form for the integrated handbook on technology transfer and local knowledge for the advancement of a community company to make Krayasart dessert using the KWL Plus approach. Which has passed the quality assessment of three experts, by calculating the consistency index of the objective and the point in question (IOC: Index of item objective congruence) it has a value of 1.00, which means it is valid.

Results

The analysis of data recordings and interviews with community enterprise groups regarding Krayasart formed the basis of the study's findings, and as a consequence, the researcher provides the findings of the two research parts as follows;

Part 1: The findings of the manual's consistency check for integrating technology transfer and local knowledge for the creation of community businesses to promote Krayasart production using the KWL Plus approach. In order to progress community enterprises and the Krayasart dessert-making process using the KWL Plus approach, the researcher has produced a guidebook for the integration of technology transfer and local wisdom. The creation of local wisdom guides was based on information gathered through interviews, the search for pertinent materials and research, and the contribution of subject matter specialists, and people with knowledge of creating Krayasart have evaluated the tool's efficacy using the item-objective congruence (IOC) index to be employed in the creation and development of processes that transfer technology and local knowledge utilizing the KWL Plus approach. It was discovered that all three experts concurred that the information in the manual on the integration of technology transfer and local wisdom

for the development of community enterprises to advance the use of the KWL Plus technique to create Krayasart is suitable and consistent with the objectives, including both suitable for transferring knowledge to the community and interested parties. However, from the efficiency evaluation IOC is in the range 0.5 –1.00 which is a value that can be used, the efficiency was assessed, and it was determined that the IOC value was 1.00.

Then the researcher revised the local wisdom manual on "The tale of Krayasart a Thai dessert coupled with Thai people", which within the handbook contains all 9 knowledge; (1) Krayasart and desserts dating from ancient times, (2) history of Krayasart, (3) beliefs of making Krayasart, (4) characteristics of Krayasart, (5) Krayasart in modern times, (6) raw materials for producing Krayasart, (7) ingredients and methods for making Krayasart, (8) value of Krayasart, and (9) Thai desserts of the day. Which, based on the preliminary content analysis, has been organized according to content. The researcher used the following knowledge transfer steps to encourage project participants to become active learners and participate in learning, including creating activities under the workshop program that included Carr & Ogle (1987) KWL Plus learning management techniques;

Step 1: Step K (What do I know), in which participants read the story "The tale of Krayasart a Thai dessert coupled with Thai people", the facilitator then poses a question or requests that they brainstorm what they are already aware of participants then organize their knowledge into categories and record their classifications on a piece of paper. In any case, knowledge on the history of the Krayasart desert and beliefs, including local lore, have been researched via the learning process (KNOW).

Stage 2: Stage W (What do I want to learn), during this stage participants will jot down a question about Krayasart that they are interested in learning the answer to and hold it during the reading project, at which point they can add questions and answers, to address the demands of the target group both in the past and in the present, the researcher queried the sample about their want to prepare Krayasart dessert in the W (want) stage.

Stage 3: Stage L (What did I learn), participants in this stage keep a note of the knowledge they have learned through reading and look into unsolved questions. They then talk about the learning objectives they have learned from reading, the knowledge they find fascinating, and keep looking for additional information. However, at stage L (Learn), the researcher focused on the transmission of new knowledge from the younger generation to the community as well as the learning of members of community enterprises who had benefited from the experience of the older generation.

Step 4: PLUS Step facilitators review knowledge by mapping and helping each other to summarize and write a conceptual summary from the mind chart, which is useful for participants to assess their understanding. In any case, PLUS step has been developed by the researcher to assist community entrepreneurs in designing superior mind maps by reviewing existing information and developing knowledge maps.

Figure 1 Demonstrate the process of integrating technology and local wisdom to carry out the community enterprise about making Krayasart using the KWL PLUS technique (Source: Researcher, 2022)

However, using the KWL Plus approach, which fosters the development of transferrable abilities, Krayasart information is linked to community and cultural knowledge of the creating and learning style in the analysis and synthesis process (Suttarin, 2004).

Part 2: After conducting the manual transfer project on the fusion of technology and local knowledge to build community enterprises to promote Krayasart production using the KWL Plus approach, satisfaction is the result. Under a series of research projects on the integration of community-participatory technology transfer using the KWL Plus technique to develop community enterprises for sustainable progress of Phetchabun Province, in order from most to least as follows;

Firstly, the project participants were pleased with their involvement in the manual transfer of technological integration and regional know-how for growing community businesses to enhance the production of Krayasart utilizing KWL PLUS approach with mean = 4.73, S.D. = 0.45. Next, with an average of 4.70, S.D. = 0.46, this project serves as a roadmap for individuals who are interested in extending and contributing to the integration of Krayasart knowledge. This endeavor is the next, there is a guidebook on how to combine technology and traditional knowledge with community involvement, and this project includes speakers with competence in educating about the history of the Krayasart desert, with an average of 4.65 and a standard deviation of 0.53. The next order is this project is consistent with the content and objectives of the project, and this project is a collection of knowledge about Krayasart from the community using the KWL PLUS principle, that is K = Know refers to existing knowledge, W = Want to Know, refers to what you want to know from reading, L = Learned, refers to what you know after reading, P = Plus refers to chart writing and writing a summary, found that the mean was 4.63, S.D. = 0.49. The next step is that this project has an integrated manual with images that clearly correspond to the content, with an average of 4.60, S.D. = 0.55. The next order is This project has a step-by-step instruction manual, the content is easy to understand and suitable for those interested in studying Krayasart and useful for transferring to others, with an average of 4.58, S.D. = 0.50. Finally, this project helps to encourage people who are

interested to gain knowledge, the understanding of the Krayasart dessert was increased, with an average of 4.55, S.D. = 0.50.

However, the total assessment of the manual transfer project on the fusion of technology and local knowledge to advance Krayasart using the KWL Plus technique, under the research project on the fusion of community-participatory technology transfer using the KWL Plus technique to drive sustainable community enterprises in Phetchabun Province, with an average of 4.63, S.D. = 0.50, which was evaluated in the highest criterion. The project was good, the material was simple to comprehend, and it promoted Krayasart knowledge while also integrating information into the community to produce sustainable knowledge, according to suggestions from the participants.

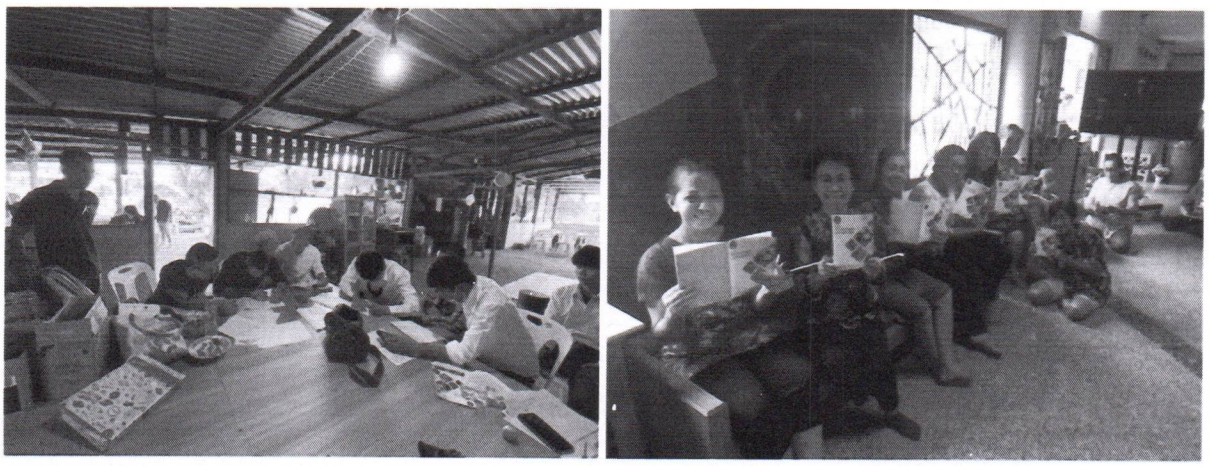

Figure 2 Demonstrate the preparation of a manual for the integration of technology and local wisdom for the implementation of community enterprises about making Krayasart using the KWL PLUS technique. (Source: Researcher, 2022)

Discussions

According to study on the use of the KWL Plus approach to integrate community engagement in technology transfer for the acceleration of sustainable community companies in the province of Phetchabun. It was discovered that this research has created a handbook and built a procedure for sharing technology and local understanding about manufacturing Krayasart utilizing the KWL Plus approach via community involvement. For use in transferring knowledge by the community, which has Krayasart dessert experts from the community enterprise group to participate and strengthen the community enterprise, the researcher has created a manual for the integration of technology transfer and local wisdom for the acceleration of community enterprises about making Krayasart desserts using the KWL Plus technique. Consequently, in order to address the issue of the lack of a method of information transmission that is clearly articulated. As a result, the KWL Plus technique was used to design the integration of community-participatory technology transfer, which aims to enable the community's experts to participate in the transfer of technology, wisdom, and innovation that

places an emphasis on the thinking process and links between old and new experiences. Using challenging questions along with actual experience, practicing the preparation of Krayasart desserts with knowledgeable speakers to impart knowledge and understanding, as well as obtaining knowledge from a manual on the integration of charcoal frying technology and local knowledge on "The tale of Krayasart a Thai dessert coupled with Thai people" along with the exchange of learning about one another's opinions regarding Krayasart are all ways to impart knowledge and understanding, have assisted one another in learning and carrying out activities collectively at every stage of creating Krayasart. This has led to the transfer of technology and its use for self-development in learning as well as promoting knowledge. It also helps to build stronger communities by utilizing learning processes that support the sustainable transmission of this knowledge.

According to Chokrattanachai et al. (2017), who investigated the transfer of healthy bakery technology with the involvement of 58 schools under the Nakhon Ratchasima Provincial Administrative Organization, technology transfer is made possible through bakery production workshops with tools machines that use the knowledge gained in integrating with school-based teaching and learning in local development. It is to manage knowledge through reading for comprehension, which helps to review prior experiences, and participate in new experiences or content, using the KWL Plus learning process as part of the integration of technology transfer. The researcher has organized this workshop project to transfer knowledge with a manual that helps the study participants to see clearly. In this regard, in line with Kaewsara (2012) studied the effect of KWL Plus on learning achievement and perceived ability to learn Thai language among grade 6 bilingual students. Because learning management with KWL Plus can occur if new knowledge can be linked to existing knowledge, it was discovered that bilingual students taught with KWL Plus had better academic achievement and perceived ability to learn Thai language after the experiment was higher than the control group students who received normal instruction. Such connections must be made in a way that follows rules to ensure that information is properly retained in the conceptual framework, leading to the process of transferring technology and local knowledge, which aids in the growth of community enterprises and sustained community engagement.

Including in accordance with the research of Khambunlue (2019) who studied increasing efficiency of cutting process Thai enterprises Kanom (Krayasart) of small enterprises Kanom Thai Ban Tak. However, the objective of this project is to reduce the time and fatigue in the process of cutting Krayasart (a type of Thai dessert) for small enterprises Kanom Thai Ban Tak. Traditionally, this process was done by hand by the enterprise members, most of which were the elderly people, applied the ECRS principle by using S (Simpilfy) to improve work process in designing the equipment, and using the mechanical principle to improve ease of use and maintenance to make it suitable for small businesses and low cost for the instruction. The result revealed that Krayasart cutting time was greatly reduced. Before the improvement, it took 6 minutes per piece (126 minutes per 34 kilogram) whereas after the improvement, the cutting time was 0.5 minutes (10.5 minutes per 34 kilogram) which showed that after improvement, the equipment was able to reduce cutting time by 5.5 minutes per piece (115.5 minutes per 34 kilogram). As a result, the equipment can increase the efficiency of the

cutting process by 96.1%. As well as the researcher has found that it is consistent with the research of Rojpaisarnkit (2013) who studied about "participatory action research for improving hygiene standard and packaging of "Kanom Kayasart" of Banwangkhwai small organic agriculture", and found that some of the production procedures of "Kanom Kayasart" not were not clean and not according to the principles of good hygiene practice. The research was carried out to improve the hygienic production process. As regards the packaging of "Kanom Kayasart" it was found that there were no interesting logo and label. Moreover, the paper stickers attached to the bag, if exposed to moisture or heat, could peel off easily and its colors could also easily fade off. The study had developed and designed a logo for the products and suggested materials appropriate and safe for packaging and with aesthetic improvement. In the past, researchers have also found that a Research and Development on Industrial Potential of Krayasart Products, Macacheep (2013), on the other hand, claims that research and development of the potential of krayasart production to industry is gathering information about the beliefs, culture, and traditions of people who have adhered to krayasart stirring in various localities for a long continuous time, so that the new generation will recognize and see the importance of preserving traditions and supporting Krayasart dessert as a partner in Thai society. In order to increase the value of the items, studies have been carried out to investigate different formulae and consumption habits. In response to the changing and expanding social and market requirements, individuals nowadays are increasingly interested in choosing healthy, helpful, and safe foods as they have started to take their health more seriously. As a result, when looking for Krayasart formula, check for high nutritional value and establish a secure manufacturing technique. Nevertheless, if Krayasart is to be manufactured in big amounts, a stirrer is necessary to ensure that the product is created in huge quantities and is of a high standard of quality.

Conclusion and suggestions

This research led to recommendations, which the study of knowledge related to charcoal frying is an integrated handbook for technological transfer and local wisdom named "The tale of Krayasart a Thai dessert coupled with Thai people" comprising all 9 themes, according to the research findings; 1) Krayasart and desserts dating from ancient times, 2) history of Krayasart, 3) beliefs of making Krayasart, 4) characteristics of Krayasart, 5) Krayasart in modern times, 6) raw materials for producing Krayasart, 7) ingredients and methods for making Krayasart, 8) value of Krayasart, and 9) Thai desserts of the day, and has been communicated through the community participatory workshop project by specialists from Ban Na Ruamjai Women's Community Enterprise, using the KWL Plus technique, in which, in addition to the project participants, they will connect their prior knowledge with new knowledge from the manual and expert speakers, as well as exchange knowledge with one another. It also has developed knowledge from practice, which makes it possible to remember and learn better, resulting in the making of Krayasart that was almost lost again, and resulting in the development of community enterprises has progressed sustainably. This is in accordance with the research of Phudang & Wanida (2020), who examined the transfer of production

technology and management in the manufacturing of "Kanom Kong" to the community following the participants' transfer of technology to the community. By setting up a forum for knowledge exchange and interacting with the community, it is possible to gain knowledge of how "Khanom Kong" is made. This knowledge can then be used to advance professional knowledge, generate income, and satiate the participants in high-level production technology transfer activities.

The following recommendations are made for conducting this research: 1) more product development is needed to make it more engaging, 2) for those who are interested in returning to learn how to make Krayasart dessert, integration of the transfer of interesting local knowledge with the transfer of technology should be produced in the form of animation media to show details of the production process, such as electronic media, online media such as YouTube, and Tiktok, and 3) use the knowledge transfer model to integrate community education management that is based on local wisdom with educational institutions in order to identify and address community education issues that are in accordance with community needs.

In this regard, the researcher will examine KWL in relation to the KWL reading strategy, the pinnacle of the "whole language" movement. This reading strategy is a metacognitive one that frequently passes for a KWL comprehension strategy, is frequently abused, and takes precedence over other pertinent and efficient reading comprehension strategies. (Ogle, 1986) KWL is a metacognitive technique because it is a problem-solving method that puts the reader, not the author, at the center and concentrates on thinking about and establishing a language for the thinking (reading) process. When used incorrectly as a reading comprehension approach, they are the disadvantages of this tactic. Because KWL is reader-centered, its restrictions are a product of readers' existing knowledge. Even when their prior comprehension of the K step is much enhanced, students typically contribute irrelevant, incorrect, or incomplete information during group brainstorming that may make their reading more difficult. (Ogle, 1986) The instructor's job in this scenario is to make the student contributions clear by using analogies, filling in the blanks, and synthesizing the students' collective prior knowledge. Yet, it is necessary to consider if this process is useful and whether the work required justifies the benefit. It is sufficient for teachers to choose reading material for the KWL exercise that students are already quite familiar with.

New knowledge and the effects on society and communities

This investigation focuses on a design and development manual for transferring technology and local knowledge about making Krayasart, a dessert with significant social and cultural value that incorporates local knowledge to support learning and makes use of the KWL Plus methodology. Krayasart is a dessert with significant social and cultural value. Which is a method of learning that seeks to review, activate, and enhance the prior knowledge of the participants (readers), as well as creating goals that stress the advantages of participants' (readers) becoming active learners. This KWL Plus teaching method includes K (What you Know), which involves participants checking their understanding of the Krayasart topic, it also makes use of past knowledge due to associations, new information, and fundamental

knowledge. Moreover, it matters what the participants have experienced, W (Want to know more) - What you want to know is the stage when students must consider what they want to learn, what they will read in the book, and the questions that participants had developed before to reading this, it is also a goal to read. What may be anticipated from the manual reading, then? Krayasart is a Thai dessert made by Thai people. In the step L (What you have learned while studying - What you have Learned), participants investigate what they have learned from the reading by locating the answers to the queries they posed in step W and take note of what they discover through a process of inquiry, research, and practice with the help of local expert speakers, and Plus (summarizing knowledge through mind maps), making thought-image charts, and writing summaries after reading, which is organized as a guideline for a community-participated workshop project to provide knowledge and understanding, disseminate knowledge, and make the Krayasart intangible cultural heritage of Phetchabun Province known to the locals and those who are more interested. The use of local philosophers to impart information together with practical hands-on activities that result in participants learning from actual things and having done it is also recommended as a way to encourage the development of a new learning style. In any event, producing tangible knowledge that can be utilized to broaden one's field of endeavor, contribute to economic growth, and recognize the worth of indigenous knowledge and use it to strengthen local communities in line with national policies and strategies is important. Nonetheless, the findings of this study may be utilized to expand or improve the distribution policies for Krayasart products, serving as a guideline for decisions about the production model and the distribution policies for the goods produced by community companies as well. This type of research will influence the formulation of guidelines, policies for agencies responsible for determining the direction of promoting business to local members in a sustainable manner in line with the sufficiency economy.

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