Innovative of Area-Based Learning to Transfer Community Innovation through Phulae Pineapple Living Encyclopedia in Chiang Rai, Thailand

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Abstract

The objectives of the research were 1) to study community innovation knowledge through the Phulae pineapple living encyclopedia in Chiang Rai, Thailand, 2) to develop innovative area-based learning to transfer community innovation through the Phulae pineapple living encyclopedia and to study the results of using innovative of area-based learning through Phulae pineapple living encyclopedia. The methodology of the research was based on Participatory Action Research (PAR). The sample group consisted of 20 community innovation informants and a group of 405 people assessing satisfaction with the Phulae pineapple living encyclopedia accounting for a total of 425 people. The instrument used consisted of 1) unstructured interview forms, 2) forms of encyclopedia quality assessment, and forms of satisfaction assessment. Qualitative data was analyzed based on content analysis and the presentation was in the form of descriptive analysis. Quantitative data was analyzed based on a primary statistical package to find the mean and standard deviation. Study results revealed that: 1. The study on community innovation knowledge through Phulae pineapple living encyclopedia in Chiang Rai, Thailand revealed that Phulae pineapple community innovation knowledge is divided into 5 issues, namely 1) Phulae: Sustainable culture of happiness, 2) Phulae: Self-reliant agriculture community, 3) Phulae: Creative local economy, 4) Phulae: History for living with balance and 5) Phulae: Topography for agricultural tourism; 2. Developing innovative area-based learning to transfer community innovation through Phulae pineapple living encyclopedia revealed that innovative area-based learning developed to be Phulae pineapple living encyclopedia consists of 4 parts, namely 1) BEGIN until becoming ... Phulae, 2) BEHIND Phulae ...background of happiness, 3) TO BE CONTINUE Phulae with sustainable security and 4) Conclusion and the application named Phulae has been developed to be used together with the developed encyclopedia. The results of the assessment conducted by experts revealed that the quality of the Phulae pineapple living encyclopedia was at a very high level and it can be disseminated; 3. The study on using innovative area-based learning to transfer community innovation through the Phulae pineapple living encyclopedia revealed that the group of people assessing satisfaction over the Phulae pineapple living encyclopedia assessed the satisfaction to be at a high level in an overall picture. Moreover, it was found that among the group cultivating and distributing Phulae pineapple, incomes in the household have increased from accessing the goods of the consumer group receiving information of disseminating knowledge through the living encyclopedia and the developed application.

Keywords: innovative of learning, social studies, area-based education, living encyclopedia, geographical indications

1. Introduction

The concept of Sustainable Development Goal 4 (SDGs), the concept of social studies pedagogy, the concept of managing area-based education, the concept of educational management for equality (inclusive education), the philosophy of sufficiency economy, and participation of every sector of the society (all for education) focus on building the educational system equally and throughout, promoting lifetime learning of world citizens to reach the

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universal principle for higher education qualitatively and developing learning skills towards one's local community. This relies on the environment as an important lesson in integrating learning in the science of other fields. One of the operational approaches is to collect mass experiences in the community occurring by analyzing the model curriculum to be used in designing the local curriculum or to use learning methods based on experiences in the society to enhance the national core curriculum. Moreover, this is also the way of organizing learning experiences in which the district and the community take part in every dimension and use this as guidelines in schooling management to be consistent with the conditions and needs of the area-based community and the imagery community which have created the learning process meaningfully. Desired citizenship of every learner is also reinforced by them (United Nations, 2015; Kaewpanya, Mangkhang, & Dibyamandala, 2021; Mangkhang, Yimsawat, Nettip, & Kaewpanya, 2021).

The vision of the basic education core curriculum B.E. 2551 focuses on developing every student who is national power to be a human being with physical, knowledgeable, and moral balance. They should have a conscience of being a Thai citizen and a world citizen who holds on to democracy with the King as the head of the state. They should also have the knowledge and basic skills, including attitudes necessary for education, occupations, and lifetime education. Students are focused importantly based on the belief that everyone can learn and develop themselves according to potential (Ministry of Education, 2008). In terms of building opportunities and equality according to the 20-year national strategy from B.E 2561 to 2580, there are important development goals placing importance on pulling power of sectors, namely private sectors, civil society, and local communities to mutually drive by supporting public unification in thinking and taking actions together for the public (Office of the National Economics and Social Development Council, 2018). Therefore, educational management must focus on integrating area-based identity in the community to be a base for learning management whereby innovative area-based learning must be developed to be in line with the context and identity of the locality together with stakeholders in every sector to build the participatory process in educational management for the people (Education for all).

Therefore, the process of building participation in learning management supporting the needs of the community must place importance on the "community" mainly. Attending meetings to exchange ideas with villagers and the target population must be focused on. Developing learning management through community participation will meet the needs because learning management will lead to developing knowledge management of the community and organizing the community database system to be a scientific source of learning for the community in the area. At the same time, this is also an area for learning which opens an opportunity for interested people to come to study the way of life and ecological culture of the community. Moreover, it was found that the community also has hope for keeping the pattern of conducting life in the traditional way of culture exist sustainably further. Although the external society starts to influence changing roles of the local community more and the way of conducting life has changed a little bit from the previous one, the community still intends to keep stories that are a part of the community. The way of life of the community is reflected through telling stories to children and the youth. This is consistent with the concept of sustainable development in terms of the fact that sustainable development requires educational development based on residence which meets the needs of local people. Moreover, community resources necessary to be used in the future must not be destroyed. Therefore, educational management must focus on enhancing the capabilities of the local community in developing self-reliance and self-management with knowledge, virtues, and ethics without making an impact on life qualities and the environment. This is following the vision of Thailand's "Secure Wealthy Sustainable". In fact, regarding educational management which focuses on enhancing the capabilities of the local community, learning one science may not be enough for current learning management. A variety of learning sciences and cooperation in every science must be relied on to design learning which corresponds to world citizenship development in the new century.

Knowledge transfer is a method of learning management to be used in developing work operated in everyday life to have more qualities and achievements. Qualities of people in the community are also developed to be more efficient and collective consciousness is brought about to create work with values and self-reliance. This is also developing intellectual capital to have potential in future competition for lifetime learning and living with happiness (Panich, 2005; Marquardt, 1996). Building best practices is learning by doing. This is consistent with the concept of Lord Buddha using knowledge management that knowledge management used to propose best practices to propose a medium path as an exit of sorrow extinguishment and the concept of Dewey (1963). For the approach of considering the method of best practices, it consists of 1) The method of practice has been conducted for achievement consistency with expectancy of the people involved or is the method of practice which builds satisfaction to operators, 2) The method of practice has gone through the process of implementation as a circuit evidently resulting in bringing about higher qualities continuously or there is a quality circuit process with the better trend of the success

indicator, 3) The method of practice can be told in terms of what has been done, how to do and why does it have to be done, 4) Results from the method of practice according to standards and indicators or strategies and the main emphasis according to the strategies, 5) The method of practice can be identified clearly that it originates from important factors and the factors has brought about continuous and sustainable practices and 6) The method of practice uses knowledge management (KM) such as doing activities of telling stories stimulating energy in distilling learned lessons from operation. Therefore, the best practice is a knowledge originating from taking actions in real practices, can solve problems already encountered to bring about successes that are best with the community, and can become a role model or guidelines in solving problems for other communities which will operate in the same manner (Moonkham & Moonkham, 2002).

Chiangrai Phulae Pineapples are geographical indications (GI) of Thailand and are goods with specific characteristics of cultivation areas. This has brought about outstanding and delicious products. Currently, Phulae pineapples are local goods with important roles in upgrading life qualities and community incomes in the area. As a result, there is the distribution of incomes and economic security, bringing about community way related to cultivation, care, harvesting, and processing which are the sustainable integrated agricultural system. From the study on data and fieldwork in the cultivation and distribution area in Chiang Rai province areas which have been guaranteed for geographical indications (GI) of Thailand, the researcher team has found problems which are the fact that generally, people do not know about the data regarding geographical indications which are important to economic values of Phulae pineapples. Moreover, there is still no collection of knowledge about Phulae pineapples community innovation to residents which can be disseminated to the general public to acknowledge and understand the outstanding identity of Phulae pineapples. Therefore, the research team sees that there should be a collection of knowledge about Phulae pineapple community innovation as categories and this should be ready to be developed as a learning innovation that can disseminate this knowledge to the public widely.

Therefore, the research team has studied innovative area-based learning to transfer community innovation through the Phulae pineapple living encyclopedia in Chiang Rai, Thailand to study knowledge about pineapple of the Phulae variety of Chiang Rai province and to develop innovative learning to transfer knowledge to widely known. This has also been used together with an application integrated to bring about interestedness ready to disseminate to interested people to gain correct knowledge and understandings through public relations channels regarding knowledge in issues. At the same time, awareness and pride in indigenous plants of Chiang Rai province are raised. Moreover, values are built and added to Phulae pineapple to upgrade the incomes and life qualities of Chiang Rai farmers.

2. Methodology

2.1 Research Form

This research was conducted in the form of Participatory Action Research: PAR through collecting and analyzing data obtained from analysis of documents, unstructured interviews, assessment forms of encyclopedia qualities, and assessment forms of satisfaction. Study results were presented in the form of descriptive analysis by using quantitative and qualitative data to support data synthesis and narration.

2.2 Population and Samples

The population used in the study consisted of 2 main target groups: Informants of community innovation and the group assessing satisfaction over Phulae pineapple living encyclopedia by classifying samples in the research as follows:

The sample of the research:

- 1) Informants of community innovation, namely community leaders, farmers, and villagers accounting for 20 people based on snowball sampling;
- 2) The group assessing satisfaction over Phulae pineapple living encyclopedia, namely students, parents of the students, farmers in the cultivation and distribution area of Chiang Rai Phulae pineapple, and the general public accounting for 405 people based on volunteer sampling.

2.3 The Instruments Used in the Study

The instruments used for data collection consisted of:

1) Unstructured interview forms on community innovation knowledge through Phulae pineapple living encyclopedia in Chiang Rai, Thailand

- 2) Quality assessment forms of innovative area-based learning to transfer community innovation through Phulae pineapple living encyclopedia
- 3) Assessment forms of satisfaction over area-based learning to transfer community innovation through Phulae pineapple living encyclopedia

2.4 Data Collection

- 1) Documentary study is conducted by collecting data on learning management innovation from documents, books, journals, and other secondary data sources appearing in the database to collect basic data. Then, the obtained data are used to support the analysis of educational issues further
- 2) Situational analysis is collecting qualitative data by interviewing the sample group in the research, namely community leaders, farmers, and villagers. The instrument used was the unstructured interview form on community innovation knowledge through Phulae pineapple living encyclopedia in Chiang Rai, Thailand
- 3) Design and development are designing and developing innovative area-based learning to transfer community innovation through Phulae pineapple living encyclopedia and assessing efficiency by experts of learning management to use assessment results and suggestions to develop learning innovation. The instrument used was the quality assessment form of innovative area-based learning to transfer community innovation through the Phulae pineapple living encyclopedia.
- 4) Using innovative area-based learning to transfer community innovation through Phulae pineapple living encyclopedia was assessed to reflect learning results and these learning results went through content analysis. Then, analysis results were used to support the research result discussion. The instrument used was the assessment form regarding satisfaction over the innovation of area-based learning to transfer community innovation through the Phulae pineapple living encyclopedia.

2.5 Data Analysis

- 1) Regarding qualitative data, the researcher team analyzed the data according to the intention of education based on the method of content analysis obtained from documentary analysis and interviews to conclude issues according to the data group. Then, data relationships were analyzed.
- 2) Regarding quantitative data, the researcher team used the data from the assessment form to analyze the data with the statistical package which could analyze the data appropriately. This was an analysis based on descriptive statistics by showing results of statistical data analysis as mean and standard deviation.

3. Results

For this research, the researcher team classified the data obtained from the study and presented research results according to the determined objectives. The study results can be summarized as follows:

3.1 Studying Community Innovation Knowledge through the Phulae pineapple Living Encyclopedia in Chiang Rai, Thailand

Studying Community Innovation Knowledge through the Phulae pineapple Living Encyclopedia in Chiang Rai, Thailand Revealed that the Phulae Pineapple Community Innovation Knowledge was Classified into 5 issues.

1) Phulae: Sustainable happiness culture, 2) Phulae: 1) Phulae: Sustainable culture of happiness, 2) Phulae: Self-reliant agriculture community, 3) Phulae: Creative local economy, 4) Phulae: History for living with balance and 5) Phulae: Topography for agricultural tourism with following details:

Issue 1 Phulae: Sustainable Happiness Culture

Phulae pineapple is an important cash crop of Chiang Rai province and is also an important symbol of culture and important festivals of sub-districts of BanDu, NangLae, TaSud, Muang Chiang Rai district, Chiang Rai province such as Kongdee NangLae Festival, Phulae Pineapple Beauty Contest, etc. This reflects the roles of Phulae pineapple in the way of life and livelihood of people in the community. Moreover, the Phulae pineapple is an important identity representing integrated agriculture of the local community holding on to an agricultural way of self-reliance and development together with changes in the world society.

Issue 2 Phulae: Self-reliant agriculture community

Phulae pineapple was planted for the first time in the sub-districts of Nang Lae, Baan Doo, and TaSud, Muang district, Chiang Rai province, because the 3 areas have geographical characteristics affecting pineapple qualities resulting in registering Phulae pineapple as a GI (Geographical Indications) good. It is a good indication of a

characteristic of the area particularly in that district. Phulae pineapple is outstanding in terms of being tasty, and crunchy with no tongue-biting taste and the core of the pineapple can be eaten. It is sweet and crunchy. During the procedure from cultivation to yield harvesting, human labor from the community is required. This has brought about cooperation and created income from agriculture. Moreover, the Phulae pineapple cropping system can be made in the household without relying on expensive machinery. It is the way of agriculture with self-reliance and generates incomes in the household sustainably.

Issue 3 Phulae: Creative local economy

Phulae pineapple is the main good in generating income for farmers in Chiang Rai province because Phulae pineapple is freshly consumed pineapple. The distribution comes in the form of peeling and not peeling the shell. It is sold in domestic markets and international markets. Moreover, there is the development of Phulae pineapple processed products in many forms such as dehydrated Phulae pineapple, concentrated Phulae pineapple juice, Phulae pineapple crisp rice, Phulae pineapple jam, etc. The interviewed community scholar gave information that processing pineapple products have generated more pineapple consumers because there is a variety, and the product can be kept longer. As a result, many community enterprises have turned to process Phulae pineapple more and the enterprise group has expanded into a strong and secure community as well.

Issue 4: Phulae: History of living with balance

From the fieldwork, data about the history of Phulae pineapple, in brief, were obtained as follows: In 1977, a professor from Chiang Rai Rajapat University brought a propagule of Phuket pineapple classified into Queen variety from Phuket province to plant for the first time at NangLae sub-district, Muang district, Chiang Rai province which is the geographical source of NangLae pineapple well known among consumers. However, geographical factors affected making the planted Phuket pineapple have characteristics different from the Phuket pineapple. This turned out to be a new kind of pineapple with small size fruits, a round shape, a big tuft, standing upright, and no tongue-biting taste. Both the flesh and the core can be eaten. Later, it has been called "Phulae pineapple" whereby the name "Phuket" which was the previous cultivation source was mixed with the word of the new cultivation source which was "NangLae". It was a matter of mixture between pineapple variety and the identity of the area bringing about Phulae pineapple with a particular identity. From the interview, the community scholar gave additional information that Phulae pineapple has been planted widely in 3 areas namely, sub-districts of Baan Doo, NangLae, Baan Kao Tom, and Ta Sud, Muang Chiang Rai district, Chiang Rai province. These are places where it is planted together with NangLae pineapple which is local pineapple perfectly. This has increased the economic incomes of farmers in the community greatly. Farmers alternate growing two kinds of pineapples yearly in order not to oversupply the markets with the goods, causing falling prices. Moreover, there has been the establishment of community enterprises in a lot of communities for processing and distributing products from Phulae pineapple to add value to Phulae pineapple.

Issue 5 Phulae: Topography for agricultural tourism

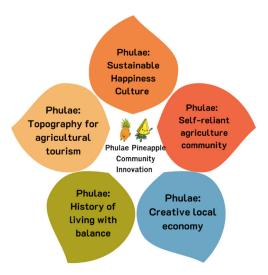


Figure 1. Knowledge of Phulae Pineapple Community Innovation

Source: Mangkhang et al. (2023)

Apart from distributing Phulae pineapple in forms, there are activities of study tours in the Phulae pineapple plantation and the NangLae plantation so that the general public can come to study the way of life of the pineapple community. Moreover, pineapple is used as an important raw material in food to welcome the visitors such as Pineapple Hunglae Curry, pineapple spicy salad, coffee with Phulae pineapple juice, etc. This has made Phulae pineapple interesting to consumers and tourists greatly.

3.2 Developing Innovative Area-Based Learning to Transfer Community Innovation Through Phulae Pineapple Living Encyclopedia

Developing innovative area-based learning to transfer community innovation through Phulae pineapple living encyclopedia revealed that innovative area-based learning developed is Phulae pineapple living encyclopedia which consists of 4 parts, namely 1) BEGIN until becoming ... Phulae, 2) BEHIND Phulae ...background of happiness, 3) TO BE CONTINUE Phulae with sustainable security and 4) Conclusion and the application named Phulae has been developed to be used together with the developed encyclopedia to increase channels in transferring community innovation. The developed application consists of 1) Important data on Phulae pineapple community innovation, 2) Maps of community innovation learning resources used together with 360° technology and 3) Channels of communication with the community of Phulae pineapple cultivation and distribution. Results of assessing innovation qualities by experts are as follows:

Table 1. Results of Assessing Qualities of Innovative Area-based Learning to Transfer Community Innovation through Phulae Pineapple Living Encyclopedia (n=5)

Assessment Items	\overline{x}	SD	Interpretation
1. Innovative area-based learning has a goal of developing local education which is consistent with the concept of Sustainable Development Goals (SDGs).	4.70	0.45	Most appropriate
2. Innovative area-based learning has creative content and presents educational data interestingly.	4.70	0.46	Most appropriate
3. Innovative area-based learning presents community innovation knowledge about pineapple and covers important issues.	4.43	0.79	Very appropriate
4. Innovative area-based learning promotes awareness of the importance of locality identity.	4.62	0.50	Most appropriate
5. Innovative area-based learning promotes understanding in the context of the Phulae pineapple agricultural community.	4.59	0.60	Most appropriate
6. Innovative area-based learning promotes knowledge, geographical abilities, and arts and culture of the Phulae pineapple community.	4.57	0.50	Most appropriate
7. Innovative area-based learning promotes creative ideas.	4.43	0.70	Very appropriate
8. Innovative area-based learning has content in line with local learning resources.	4.35	0.59	Very appropriate
9. Innovative area-based learning brings about new knowledge which can be used to create innovation for the community.	4.40	0.60	Very appropriate
10. Innovative area-based learning presents creative knowledge which benefits the study of other indigenous plants of Chiang Rai province.	4.35	0.53	Very appropriate
Overall	4.51	0.57	Most appropriate

Source: Mangkhang et al. (2023)

From Table 1, shows that developed innovation of area-based learning has appropriateness at the highest level, which reflects that innovation of area-based learning is efficient in transferring Phulae pineapple community innovation and can be used to disseminate to the public.

3.3 The Study on the Results of Using Innovative Area-Based Learning to Transfer Community Innovation through the Phulae Pineapple Living Encyclopedia Revealed that the Group Using Innovative Area-Based Learning Experimented with Using It and Assessed Satisfaction over Innovative Area-Based Learning.

The results of the assessment are as follows:

Table 2. Results of Assessing Satisfaction over Innovative Area-based Learning to Transfer Community Innovation through Phulae Pineapple Living Encyclopedia (n= 405)

No.	Items	Mean	SD	Quality Level
1	Innovative area-based learning has sizes, copies, and letters which are suitable and convenient for use.	3.72	0.77	High
2	Innovative area-based learning is interesting.	3.56	0.75	High
3	Innovative area-based learning has content that is neither difficult nor complicated.	3.70	0.71	High
4	Innovative area-based learning has fun stories persuading us to think along.	3.62	0.45	High
5	Innovative area-based learning can benefit people from reading its stories.	3.70	0.33	High
6	Innovative area-based learning brings about more interest in Phulae pineapple.	4.70	0.52	Highest
7	Innovative area-based learning brings about more understanding of Phulae pineapple.	3.56	0.75	High
8	Innovative area-based learning has content that covers every aspect related to Phulae pineapple.	4.52	0.85	Highest
9	Innovative area-based learning explains the chronology of Phulae pineapple suitably.	3.62	0.78	High
10	Innovative area-based learning promotes bringing about development and extension in other fields.	3.59	0.78	High
	Overall	3.83	0.17	High

Source: Mangkhang et al. (2023)

From Table 2, From results of assessing satisfaction over the innovation of area-based learning to transfer community innovation through Phulae pineapple living encyclopedia, it was found that users of innovative area-based learning had satisfaction at a high level (mean = 3.83). The assessor gave satisfaction over innovative of area-based learning at the most with issues, namely innovative of area-based learning helps bring about interest in Phulae pineapple more, it has content which covers every aspect involving with Phulae pineapple and it has sizes, copies appropriate letters, which is convenient to use respectively. The overall picture shows that innovation of area-based learning is efficient in transferring Phulae pineapple community innovation and it is innovation in developing the local community further.

4. Discussion

4.1 The Study on Community Innovation Knowledge through the Phulae Pineapple Living Encyclopedia in Chiang Rai, Thailand Revealed that Phulae Pineapple is a Geographical Indicator of Chiang Rai Province

It is an economic good and has ties with community ways greatly. From the fieldwork in the area, the Phulae pineapple community innovation knowledge has been synthesized into 5 issues, namely 1) Phulae: Sustainable culture of happiness, 2) Phulae: Self-reliant agriculture community, 3) Phulae: Creative local economy, 4) Phulae: History for living with balance and 5) Phulae: Topography for agricultural tourism. This is in line with the work of Suntipabvivattana & Somboonkaew (2005). Proposing that the Phulae pineapple is a pineapple that originates from the pineapple of the Phuket variety planted in the area of NangLae sub-district, Muang district, Chiang Rai province. The prominent characteristic is the fact that the fruit itself is small an average of four to five fruits per kilogram. The flesh has a golden color and is crunchy. Its taste is aromatic and sweet. The core can be eaten. The Ministry of agriculture and cooperatives (2021) identified the important identity of Phulae pineapple it is the pineapple in the group of Queen species. The fruit is small. The shell is rather thick. When it is ripe, the shell becomes yellow or greenish-yellow. The taste is moderately sweet. The flesh has a yellow color and is crunchy. The whole fruit can be eaten. It is planted in Chiang Rai province.

4.2 From Studying Innovative Area-based learning to Transfer Community Innovation through the Phulae Pineapple living Encyclopedia

It was found that the developed Phulae pineapple living encyclopedia consists of 4 parts.namely 1) BEGIN until becoming ... Phulae, 2) BEHIND Phulae ...background of happiness, 3) TO BE CONTINUE Phulae with sustainable security and 4) Conclusion. The application named Phulae has also been developed to be used together with the developed encyclopedia. The results of the quality assessment conducted by experts revealed that the quality of the Phulae pineapple living encyclopedia was at a very high level and it can be disseminated; This is in line with the work of Suphab (1998) proposing that the human way of life is determined to be different with the culture of the society. The way of life of people in society always changes along with age and depends on the culture of each society. People must learn to adjust themselves to correspond with new things to survive. However, what is necessary for living is Buddhist doctrine regarding conducting life, cultures, and traditions, including four factors. This is the reason why people need to exchange products with one another in the community. Moreover, Sriwilai, (2002) proposed that learning management in the wisdom content and community culture have something to do with you. Learners in the community should know this. In the process of organizing activities in which villagers participate, the villagers are the ones who transfer knowledge themselves. They feel proud of this, and they are glad that they can benefit the community and that there are wisdom successors. Moreover, training learners to know and be able to operate wisdom performance or understand community culture makes the community accept the abilities of the learner. This brings about a good effect on living in the community with an understanding of culture and the learner will become a cultural successor further.

4.3 The Study on Results of Using Innovative Area-based Learning to Transfer Community Innovation through the Phulae Pineapple Living Encyclopedia Revealed that the Group of People Assessing Satisfaction over the Phulae Pineapple Living Encyclopedia Assessed the Satisfaction to be at a High Level in an overall Picture.

Moreover, it was found that among the group cultivating and distributing Phulae pineapple, incomes in the household have increased from accessing the goods of the consumer group receiving information disseminating knowledge through the living encyclopedia and the developed application. Assessment results reflected the satisfaction of users on created innovative area-based learning, which is in the same direction as the concept of Kamjadtuk (2009) states that satisfaction is a feeling of acceptance, a feeling of joy, a feeling of liking in receiving services or receiving responses according to expectation or needs which the person has set. This is in line with Duangkaewruan, Phuwanatwichit & Mangkhang (2016) stating that building the learning process together of every sector in the community using participation in thinking, analyzing, planning, practicing, revising, applying, adjusting, and focusing on building the self-reliant community for the whole system brought to be determined in the operation plan of the local administrative organization will help support the community to have potentials in working sustainably. From viewpoint of experts, they point out that the proposed guidelines for learning management are suitable. This may be explained that the mentioned guidelines are a practical method that does not oppose the way of life, culture, and social conditions in the area. Moreover, the school promotes and supports learning management which emphasizes local identity as an important base affecting area-based learning management as well. This is in the direction of the finding of Mangkhang, Jitviboon, Timcharoen, & Kaewpanya (2021) proposing that the concept of area-based education in the age of the digital society is not only holding on to local knowledge according to the viewpoint of localism but also means new definition so that the district will know itself, understand in its identity and can join locality and universality well. Education can connect local identity with issues of the world society or so-called "local globalization" by postmodern thinkers who can be steadfast or adapt to the trend of globalization. It can also negotiate or interfere, exchange limitless learning between the external development trend and the district, which affects transforming the district into local globalization as well.

5. Suggestions

- 5.1 Suggestions from the Research
- 1) Preparing documents to be the database of historical data should be promoted and learning media should be built in the community to bring about database and learning resources.
- 2) School administrators and community leaders should promote to have cooperation among schools and the community in building learning areas and organizing periods of local study together with the community.
- 5.2 Suggestions for Conducting the Next Research
- 1) Encyclopedias of geographical indications of other kinds should be studied and built such as Doi Tung coffee, Kiew Ngoo sticky rice, Chiang Rai tea, etc.
- 2) Living encyclopedias should be prepared for students or the general public with special needs such as Phulae

pineapple voice encyclopedia or Phulae pineapple 3D encyclopedia etc.

3) A manual for using the Phulae pineapple living encyclopedia should be prepared for convenience in use in other schools.

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