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Original Research Article

Development of Area-based Learning Innovation through Miang Culture to Promote Green Citizenship for Social Studies Teachers in the Upper Northern Thailand

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Abstract

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*Corresponding Author's E-mail: piriyatachagul.g@gmail.com Phone: +66 624 149090 With reference to the article on development of area-based learning innovation through Miang culture to promote green citizenship for social studies teachers in the upper northern Thailand, the researcher expected to present a paradigm of area-based learning management that promotes green citizenship and a guideline to develop area-based education quality in the upper northern Thailand. The research brought experience from social studies implementation, on-site visit to Pa Miang community to integrate with learning activities leading to designing activities whose emphasis was placed on learners to use to adapt a paradigm shaped by an educational paradigm. The important goal is enhancing green citizenship by using the cultural context of Miang, an important native plant of communities located on high lands of the upper northern Thailand, as a base, and citizen power that accesses Miang cultural context in their areas to achieve sustainable learning. This paradigm shift focused on a participatory learning process by allowing learners to create body of knowledge through area-based learning instruments and activities to achieve "creative learning innovation" as pedagogical knowledge for developing global citizen to the future.

Keywords: Area-based Learning Innovation, Miang Culture, Green Citizenship, Social Studies

INTRODUCTION

Area-based learning management is considered an innovation supporting education to achieve progress in an efficient manner so as to reduce educational inequality and develop educational quality. Area-based learning management is an integration giving importance to curriculum management plans and learning experience that give chances to learners for responding to demands on economy, society, culture, natural resources and environment, especially in areas adhering to identity maintenance, value of culture being their roots.

Meanwhile, it can fulfill other social requirements especially creating equality and equity to communities (Chulakorn Masatienwong et al., 2012). Besides, areabased learning management can develop citizen participation (Ngai and Koehn, 2010; Ritchie et al., 2015) by means of learning of children of disadvantaged groups that are driven to be marginalized learners (Avery and Hains, 2017; Donovan, 2016).

However, area-based learning inspects how uniqueness in local context of learners has any effect on

learning experience of learners (Avery and Hains, 2017). The findings from the research indicated that most arealearning highlighted interest at learning components of learners which include academic results (Lieberman and Hoody, 1998) that connect to social and emotional commitment (Goralnik and Nelson, 2017) and increased ability in terms of thinking and learning skills (Miller and Twum, 2017). In addition, area-based learning management could enhance citizenship to learners (Endreny, 2010) through learners' perception of local context, enabling the education to play a part in developing relationship between learners, schools, and communities (Gallay et al., 2016). Therefore, area-based learning is a learning reform guideline of the whole system associated with administrators, teachers, learners and communities by using communities as a learning base and changing paradigm of learners communities to gain flexibility, allowing learners to create knowledge from hands-on experience so that they will be able to bring their knowledge and experience to community change in a sustainable manner.

"Miang" is a native cultural plant on high lands of the upper northern Thailand that has been used to engage in various rituals in accordance with Lanna people's beliefs. Miang is in the same family as tea which can be found in Chiang Mai, Chiang Rai, Mae Hong Son, Lampang, Phayao, Phrae, and Nan. Other than being a cultural plant used in rituals, Miang is a biome plant indicating fertility and purity of forests as well since Miang thrives under the shade of big trees and grows in rain forests and upstream forests class 1A only. Thus, Miang is a native cultural plant playing a vital role in conserving upstream forests and forests that have inherent value to every breath of all living things in this world.

With regard to social and cultural dimensions, Miang is a part of ways life, consumerist culture and a fundamental of social relationship of Lanna people for such a long time (Chalermchon Boonkiatsakul, 2007). Lanna people commonly kept Miang in mouth as a snack. In the old days, every house had Miang as a snack for eating within their families or welcoming guests or relatives who paid them a visit. Miang was placed together with a bowl of betel nut and a can of tobacco. Lanna people ate Miang at the same time they smoked a cigarette after meals. Those who did not smoke would eat only Miang. At present, Miang is still important for arranging religious ceremonies or Buddhist rituals of Lanna people such as a housewarming ceremony, Pah Bah (forest robe) ceremony, Buddhist ordination, Krathin ceremony, funeral ceremony, etc.

In terms of environmental dimension, Pa Miang (Miang forest) system is a source for conserving biodiversity, not only tea varieties but also various kinds of plants and animals. In Miang forest, there are plants that grow naturally like perennial plants, undergrowth, plants that live off other plants, climbers, parasite plants, ferns, herbaceous plants. Thus, Miang forest is an

agroecosystem consisting of biodiversity, especially plants useful to livelihood of Pa Miang community like edible plants that grow naturally and are grown, perennial plants that villagers grow and leave them to grow naturally to provide a big shade for Miang trees or for other benefits including herbal plants and perennial plants that villagers take care of to control the balance of an ecosystem and water sources (Chalermchon Boonkiatsakul, 2007).

It can be seen that Miang eating culture of Lanna people has been shown in rituals and beliefs as well as agricultural ways of communities located on high lands of the upper northern Thailand. Though new generation youth are not familiar with the word Miang and Miang eating, they know it in the form of "tea" and give more value to "tea". The study on the value of "Miang" through an educational system can help raise awareness of roles and duties of a new generation of citizens in conserving forests being important treasure of the country, can help create a learning process and enhance perspective towards Miangas a cultural plant. It is a guideline for an educational reform to build food security by using a native plant as a learning base. It is a guideline to develop a learning process to elevate educational quality and reduce educational inequality as well as elevate learning accomplishment of educational institutions in the area in opening a boundary of learning curriculum development that aims to enhance citizens to have desirable characteristics as required by the area so as to fulfill the demands of society, natural resources and environment, especially local communities that adhere to identity maintenance and value of culture that are the roots of them.

Therefore, the development of area-based learning innovation through Miang culture is a guideline for learning management that is meaningful to people in the area since the value and importance of Miang culture that are passed down to the new generation people seem to be decreasing due to current circumstances that are a weak point maintain a production base and sustainable livelihood. It is an educational reform that enables learners to visit an area of the study and learn about their locality to study community context, create body of knowledge, design valuable processes and products to society through learning experience and activities in conjunction with making collaboration between teachers and learners, learners and learners which enables learners to learn themselves, society, the world, and solve ongoing problems in an efficient manner.

Conceptual and Theoretical Framework

Development of area-based learning innovation to promote green citizenship

The conceptual framework and theories mentioned above

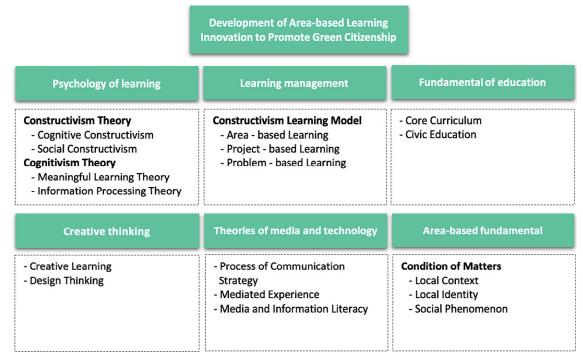


Figure 1. Conceptual framework and theories related to development of area-based learning innovation to promote green citizenship

are synthesized from review of related literatures and research studies and it was found that the important component related to the development of area-based learning innovation consists of 6 fundamental aspects as follow: (Figure 1)

Psychology of learning

- 1.1 Constructivist Theory whose fundamental is from cognitive constructivism and social constructivism. It is believed that learning is a process of creating rather than receiving knowledge. Goals of learning will support knowledge creation rather than making an effort for knowledge transfer. Constructivist theory focuses on creating new knowledge suitable for learners and environments that embrace learners are important to create meaning as the way things are (Duffy and Cunningham, 1996), which is a method used for learning management based on the important principle that learners must engage in learning by doing to create knowledge.
- 1.2 Cognitive Theory: It is believed that learning is an outcome of the process of thinking, understanding, perceiving ongoing problems or stimulating and combining experiences in the past of learners that cause learning. It is necessary to use an intellectual process to be a vital part of learning; for example, meaningful learning theory of Ausubel (Ausubel, 1963) which said that learning in schools was most likely learning by heart,

good and meaningful learning must be able to combine something known before. Learning principles according to this theory must consist of presentation of concept. paradigm frame or conceptual framework of some issue for learners before teaching in that content would be taken place, helping learners learn that content meaningfully. The other one is information processing theory. Importance is given to an intellectual process between stimulants and responses. The concept offered that learners should discover and collect knowledge by themselves by choosing to pay attention to connect new knowledge with existing knowledge or arrange knowledge in order to make it meaningful (Mayer, 2009). Such learning is worth developing learning ability of learners in terms of quantity and quality. It means that learners not only increase the quantity of what they learned, but also arrange and collect knowledge to be in a good order for retrieving by the time they require.

Learning management

No matter it is area-based learning, project-based learning or problem-based learning, these sciences of learning contain important characteristics of learning as 1) help learners create knowledge and understanding of what they learn by themselves, 2) learning new things depend on existing knowledge and current understanding, 3) social interaction is important to learning and 4) learning activity management that is

similar to real life enables learners to have meaningful learning.

These sciences of learning are learning with the concept that each learner will learn best when they create their own body of knowledge. Such learning gives learners a chance to create their knowledge from what they knew before that leads to creating new body of knowledge and understanding from hands-on experience. Learners will be encouraged to survey probability, think how to solve problems, test new concepts, make collaboration with others, review problems, and finally present the best solution that they discover. These types of learning believe that knowledge is a specific issue of each area, society, culture, and environment.

Fundamental of education

- 3.1 The basic education core curriculum is a curriculum specified to develop all learners in the basic education. It is a directional frame to develop a curriculum at a local level and educational institution curriculum necessary to develop all Thai children and youths to be of higher quality with regard to acquisition of essential knowledge and skills required for learners' lives in the constantly changing society. Learners will also be able to acquire knowledge for continuous lifelong self-development.
- 3.2 Education for enhancing citizenship: Education driving strategies to create citizenship will be a tool to lead the country to survive and overcome crisis in an efficient manner. When the country is full of value citizenship, it leads to quality social creation and development of the roots of strong society, being the key of sustainable development (Lertporn Udompong, 2015). Important principles of education to enhance citizenship must develop learning innovation in the form of engaging in activities, learning by doing, learning through the process of thinking and analyzing so that learners will see more significant connection. The important thing is teachers must perform their duties in connecting learning with real life experience both inside and outside classrooms to enable learners to have knowledge and understanding of citizenship until thev have consciousness and spirit towards to their communities and society.

Creative thinking

4.1 Creative learning is something from thinking, intellect and methods of education. It changes the 1st trend of education from a consumerist system like other people do to be the 4th trend. That is to make a creative product. It is education to make thinking or new innovations creatively to enable learners to have new ideas, society to have people with new ideas and create new products

without following consumerism that leads to crisis as seen in previous days.

4.2 Design Thinking: It is a creative thinking process used to make understating of problems deeply. Users are the center and creative thinking and perception from many people are shaped ideas or guidelines to solve problems together. Those guidelines are tested and developed to obtain a guideline or innovation that can fulfill a certain context or situation. There are 5 procedures of design thinking as 1) empathize; understand area context, 2) define; specify problems or points,

3) ideate; form an idea of a particular thing unlimitedly, 4) prototype; make a prototype of a product, and 5) test; make a test of a prototype to solve a problem.

To achieve creative products, learning management should newly specify characteristics of learners by enabling learners to have characteristics that can resist consumerism or be a smart consumer. Meanwhile, learners are allowed to think and create new products. The major characteristics comprise 1) critical mind; this enables learners to have understanding, learning, strength, and be not victims of economy, politics and society, 2) creative mind; learners have to have creative thinking or create new things for themselves and society, 3) productive mind; when new things are thought, that thought must be made in tangible manner. That means new products with value of people and empirical evidence and 4) responsible mind; creating new thing must consist of responsibility for themselves, society, and external environment which are important fundamental of morality and ethics of citizenship.

Creative learning and design thinking are a fundamental in creating innovation to fulfill demands or solve social problems at present and a guideline in developing areabased learning innovation that other people or other places do not have, enabling that area to gain more success.

Theories of media and technology

Since the central mass media cannot report and reflect problems occurring in communities in timely manner, local media or the communities should have their own media and the media should be a tool to relay information, news, or body of knowledge from one place to other places. Those who will perform the duty of community media to make community identity widely known to outside or public are "a group of children and youths" who play an important roles and duties to drive the community media to occur rapidly in a tangible manner clearly. These children and youths must be media literate and consider media creatively, become a mediator in producing learning media to pass on stories or cultures in their locality to public (KorakotJamnian and Methawee Jamnian, 2017). It is consistent with Mackay's opinion (Mackay, 1995) showing that video media were

powerful and persuasive as well as can grasp a point related to human behaviors. This type of media is made for easy understanding, providing entertainment, raising awareness and providing knowledge to audience. Therefore, video media should be promoted to a group of children and youths to know how to create and produce.

Area-based fundamental

Area-based education management is a guideline of education reform to develop human resources to achieve maximum efficiency through various conditions of integration that embrace learning situations or circumstances in terms of local context, local identity, social phenomenon or other special characteristics of areas according to appropriateness on the basis of community collaboration.

Based on the above mentioned concepts and theories, the development of area-based learning innovation is integrated human resource development that gives importance to a model of curriculum management and learning experience that builds an opportunity, equality and equity to communities so that learners can jointly create economic, social and cultural progress in their locality with great pride. In the meantime, it promotes creation of continuous learning society and becomes a lifelong learning source.

Paradigm of development of area-based learning innovation through producing video media to promote citizenship for social studies teachers

Today learning innovation used in classrooms is varied in terms of models and methods, resulted from technology advancement used for media production. This is to fulfill the demand of development of learning innovation and to be consistent with learners' interest in the digital era. The study of Cambridge University in conjunction with The British Film Institute (as cited in Peechapanga Nirattimanon, 2017) found that digital video production, in particular a short film, could help learners develop their skills better with regard to reading skill, writing media literacy, printing, and presentation gave related to animation. The study pective associated with digital video made by learners

- 1. Learners' creation would help present learners' individuality in an efficient manner.
- 2. A social process enabled learners to play different roles because learners had to join together to work and received hands-on experience from different roles; for example, being a scriptwriter, being a director, etc. Learning process would occur when learners took action. Learners could learn from a group of their friends, problems they found from surrounding environment which

was integrated as activities related to learning management.

3. Development of creative thinking related to digital video produced by learners could help learners communicate with animation words and language. That means practicing learners to use animation to communicate instead of spoken language with production components such as soundtracks, camera angles, illustration, etc.

Consequently, area-based learning management through video media production is an inspection of how local identity of learners has an effect on learning experience of learners. Consideration taken into the outcomes obtained from the area-based learning management, there were important findings which were the outcomes of a systematic review of empirical research as follow:

- 1. Feeling about area had a direct and significant effect on learning experience of learners.
- 2. Learners' learning had a positive effect from areabased operation.
- 3. A group of teachers responded to social and political pressure such as pressure from standard and curriculum evaluation that was too hard through the application of area-based learning process.
- 4. Relationship with communities on education could have a positive effect on learners, teachers, and communities better.
- 5. Structural conditions such as personal factors, curriculum without local context, teachers' time pressure that kept making restriction and enhancing an educational process.

Based on the above-mentioned information, concepts and principles of the area-based learning management paradigm can be concluded in 5 points as:

- 1. It is a learning management system having a pattern of curriculum management, learning process management, and learning experience management adhering to community context, economy, society, ways of life and culture, natural resources and environment including a direction of development in a certain area.
- 2. Learners and parents have to choose a curriculum and learning according to their interest, aptitude, and capability.
- 3. Schools have a duty to study and analyze requirements of a learning curriculum and learning process in accordance with capability of learners and areas.
- 4. Collaboration should be made with related agencies in developing a curriculum, managing learning process, preparing a curriculum manual, preparing integrated learning plans, developing instructional media or organizing training to develop preparedness in using a curriculum to teachers for developing learning to learners.
- 5. Learning and learning experience management to learners must be conducted through the whole curriculum and the learning model must be the one that build a

chance to learners and consistent with area capability. Collaboration with leaders and organizations in areas must be sought to integrate intellectual power for managing necessary resources for learning.

However, an important paradigm should provide learning management so that learners can discover knowledge (Inquiry Cycle) in advance, revealing learning outcomes of learners who can develop their creative skills for media production through the following stages (Sukon Sintapanon, 2015 as cited in Korakot Jamnian and Methawee Jamnian, 2017).

Stage 1: Drawing attention (Engage). Before media production is carried out, information related to context and situations of local culture, learning purpose, background or examples of work that learners can produce by themselves should be given. The objective of this state is to encourage learners to pay attention and be eager in what they are going to learn. It is an introduction to a lesson to gain learners' attention to participate in activities.

Stage 2: Discovering and searching (Explore). This stage is to open a chance to learners to participate in giving their opinions, sharing their experience in what they encountered and trying to make an activity plan; for example, thinking about a point for presentation, working guidelines, etc.

Stage 3: Explanation (Explain). In this stage learners will present their ideas and information from the stage 2 by allowing their friends to play a part in explaining and sharing their opinions. Learners will explain what they would like to present by themselves to encourage audience to agree with them; for example, specifying a point and content of presentation through video media, selecting a location for shooting a video, etc.

Stage 4: Expansion of knowledge (Elaborate). Learners will be given a chance to practice skills and operation as required by learners or learners can apply what they learned to expand their knowledge or skills in new situations. Meanwhile, learners are given a chance to put their knowledge into practice at a real work situation.

Stage 5: Evaluation (Evaluate). Learners will present their projects and listen to opinions from their instructors and friends that what they learned and practiced in a real-life situation is correct and acceptable more or less. Therefore, the author concluded the value and restrictions of the area-based learning management through video media production which are the findings from the author's experience as follow (Charin Mangkhang et al., 2019).

- 1. Learning experience and area-based learning management through video media production can provide learning choices greater than a factory model
- 2. Planning for area-based operation: The caution for teachers who are interested in applying area-based operation is attention should be paid to various operation problems; for example, weather changes that often occur can become an ongoing obstacle (Miller and Twum,

- 2017), community circumstances during a rainy season is difficult for management, some areas are a difficult management of safety and risk are commute, and something that teachers have to keep in mind or when learners are taken out of a school area, they may face a lot of risks such as seeing wild animals, accidents, being slippery, and seeing some strangers. Generally, those who support area-based learning interpret learning of learners as a real-life risk which is considered a benefit of area-based learning (MacQuarrie et al., 2015). However, opinions of other instructors, administrators or learners may not be the same. Creation of teaching models that are different from the existing ones requires instructors to find additional materials and resources. Resource access as mentioned is another challenging point for educational personnel who require to highlight area-based learning (Miller and Twum, 2017).
- 3. System-based obstacles and conditions: This point is quite similar to the operation as mentioned earlier but with some additional challenges resulted from a school structure, previous educational system and old-fashioned school structure; for example, a strict timeframe and different content teaching will limit potential in using a progressive method, expenses that have to be supported from administrators, difficulties, extra time and readiness for responsibility. All of these can cause problems to teachers in charge to be responsible for (Sias et al., 2017).
- 4. Personal problems and interpersonal problems: It was found that most teachers expressed their worries by the time they conducted area-based teaching. Learners may ask some questions that teachers cannot answer. The feeling that they did not prepare themselves ready or were not ready to teach, according to their instincts, may discourage them to teach with area-based learning. The important thing is most teachers prefer to teach the way they are used to. In relation to relationship between schools and communities, an increasing challenge that they have to overcome, especially schools in rural areas and low-income schools is the fact that teachers do not live in the same community as learners who belong to such context (Yamauchi and Purcell, 2009). These differences can hinder an attempt to build successful relationship and collaboration activities.
- 5. Time pressure of teachers: Teaching time of teachers and area-based education may become a big burden for teachers. Ideologically, area-based learning has to be combined with the teaching of teachers each day via an integrating method of multiple subjects instead of increasing in the existing curriculum (McMillan &Vasseur, 2010). Nevertheless, it was found that a strict educational system and pressure embracing teachers, goal achievement, and responsibility in evaluation probably cause this ideology cannot be possible.
- 6. Social and political aspects, especially the policy on testing of education levels that has a direct effect on learning curriculum management (Yamauchi and Purcell,

2009) as it is the central standard of the country, enabling schools to experience difficulties in learning management.

According to the aforesaid information, area-based learning management through video media production, especially a short film, is a guideline for the whole learning system reform which is associated with administrators, teachers, learners or students, and communities by relying on communities as a learning area of learners. Making a learning area must adapt a paradigm for learners and communities to have flexibility. Learners are creators of knowledge from their hands-on experience in everyday life so that they can bring the knowledge and experience to change their communities in a sustainable manner.

METHODS

This research is research and development. The researcher has specified the steps of the development of area-based learning innovation through Miang culture to promote green citizenship for social studies teachers in the upper northern Thailand with 4 steps as follows:

Stage1: Study concepts, theories and research from secondary data that will be used as a framework for enhancing spatial learning skills to promote green citizenship.

Stage 2: Development of an innovative model for spatial learning contain with synthesis of components of learning styles, synthesis of steps for learning activities and synthesis of important characteristics of Green citizenship skills. With the population and sample groups as There are 5 schools in the context of different areas and researcher selected the sample groupby purposive sampling and accidental sampling were: 1) A social studies teacher and 5 students from each schools in different area contexts to obtain at least 25 people from the sample groupto collect data from in-depth interviews and focus group discussion.

Stage3: Assessing the quality of the learning model by questioning the satisfaction of learners and social studies teachers through focus group discussion. Which is a participatory evaluation model for those involved in the discussion to find conclusions from the development of area-based learning innovation through Miang culture to promote green citizenship for social studies teachers in the upper northern Thailand. To analysis of strengths, weaknesses, problems, and obstacles as well as providing opinions and recommendations.

Stage4:Improve the learning model and get a new learning innovation that is suitable for the context of the area and ready to be used.

FINDINGS

Area-based learning management through Miang culture to promote green citizenship for social studies teachers in the upper northern Thailand

With regard to the results of the area-based learning management through Miang culture to promote green citizenship for social studies teachers in the upper northern Thailand, the author made a conclusion from the findings in the research on "King Bhumibol's Science: Creative Learning Through Miang Culture to Promote Green Citizenship in Different Context Areas in the Northern Thailand". The results indicated that school development that supported a learning process of learners and creating environmental consciousness are principles of promoting global citizenship. They are major ideas to develop local school curriculums that aim to create green citizenship to have thinking and analytical skills for seeing complexity of problems and connectivity of economic, social, environmental and cultural aspects. The important point is being ready to put knowledge into practice to obtain changing results without hesitation and delay at local level, national, and global levels. Therefore, schools play an important role in helping learners to learn from hands-on experience from what they actually practice and they would grow to be citizens who have social responsibilities.

As a consequence, the author made a conclusion of 4 important aspects of school mission so that they can be used to analyze, develop, and manage local curriculums in environmental education schools as follow:

- 1. Policy on environmental education and a management structure are important factors that support other mission to be successful or develop schools as a whole system, being the mission under the direct responsibility of administrators significantly.
- 2. Learning process management is important mission that builds sustainability to schools and learners. Implementation carried out by an environmental education process in learning management according to the core curriculum must be designed to be suitable and consistent with the context of communities that learners belong to.
- 3. Resource and environment management in schools is "indirect" learning management to learners who become a role model of "practice methods" in schools for magnifying the outcomes to families and communities of learners accordingly.
- 4. Participation and environmental education networks focus on participation of all sectors related to learning management of learners; between personnel from all divisions in schools, schools and schools, and schools and external communities.

Nonetheless, development of local wisdom curriculum in environmental education schools should integrate learning strands that cover global warming problems and

the sufficiency economy for sustainable environment. Enhancement of area-based learning through Miang culture will be education that focuses on collaboration between educational institutions and communities for learning management related to Miang that can fulfill area-based social demands with ideology associated with demands of learners, teachers, and communities significantly.

In relation to the mentioned study results, the author made a conclusion of area-based learning activities through Miang culture to promote green citizenship for social studies teachers in the upper northern Thailand as shown below:

Unit of Instruction 1 - Understand Miang: Community economic crop

Different models of learning techniques are used to create knowledge, understanding of the context of Miang culture, consisting of 8 minor plans, i.e.

- 1. What is Miang?: Induction method.
- 2. Miang and social contexts: Self study method (Independent study).
- 3. Miang and local beliefs: Mind mapping.
- 4. Dimension of Miang Our dimension: The Winnetka Plan.
- 5. Learn about Miang Learn through communities: Participatory learning.
- 6. Kuen or Miang Perfect reconciliation: Reconciliation learning.
- 7. Miang community Community of sustainable happiness: Brainstorming learning and learning through questioning.
- 8. Creative product Our Miang innovation: Participatory learning.

Unit of Instruction 2 – Access community: Miang community way of life

It is a study on community way of life and creating Miang culture in the context of oneself by using 7 community studying tools, consisting of 10 minor plans, i.e.

- 1. Community learning
- 2. Life story
- 3. Genogram
- 4. Local history
- 5. Community calendar
- 6. Community organizations
- 7. Local health systems
- 8. Geo social mapping
- 9. Story making by children
- 10. Storytelling about community.

Unit of Instruction 3

Community development: Creative media for Miang strong community; It is the development of body of knowledge related to the context of Miang culture in each area through the production of creative media, consisting of 7 learning plans, i.e.

- 1. Knowing media in everyday life: Importance and media utilization.
- 2. Media literacy: Media are taken into consideration creatively.
- 3. Creative media production: Development of leaflets.
- 4. Creative media production: Posters for creative areas.
- 5. Creative media production: Review of social posts.
- 6. Creative media production: Narrative storytelling (Storyboard).
- 7. Creative media production: Video presentation.

Unit of Instruction 4

Nawatwithi (Inno-life tourism-based community): Green citizenship; It is learning through the development of learning skills to increase learning potential of learners, consisting of 8 developing plans of learning skills to build sustainable communities through green citizenship, i.e. Plan

- 1. Plan 1: learning goals.
- 2. Plan 2: opening areas of learning.
- 3. Plan 3: areas of knowledge sharing.
- 4. Plan 4: surveying the context of surrounding areas.
- 5. Plan 5: living lessons.
- 6. Plan 6: strong citizens.
- 7. Plan 7: lesson learned.
- 8. Plan 8: applying to everyday life.

The above-mentioned units of instruction indicated that learning activities could promote learners to have well-rounded learning, i.e. 1) water conservation, 2) keeping green spaces clean and overseeing green spaces, 3) waste management, 4) art and culture conservation, 5) energy conservation, 6) be a good world citizen and 7) creative learning.

Therefore, the development of area-based learning innovation through Miang culture to promote green citizenship for social studies teachers in the upper northern Thailand is to understand the context of communities and areas and reflect understanding of the society people belong to, which enables them to conserve and cherish what they are expected to belong to. It helps learners to learn Miang way of life or the background associated with their primitive culture. The old beliefs resulting in ways of life of Lanna people enhance people to be aware of the importance of Miang associated with Lanna people, encourage people in the areas to be alert and collaborate to create works that lead to social changes in a sustainable manner.

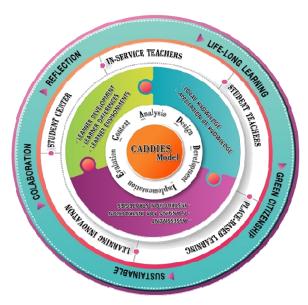


Figure 2. Creative learning innovation model for areabased learning to promote green citizenship or CADDIE Model

Summary and conclusions

The development of area-based learning innovation to promote green citizenship is considered development of operational learning innovation with holistic approach to teacher development for locality by using the concept of developing community resources and human resources to raise awareness of all circumstances in people's lives in terms of body, mind, intellect, cognition, and aesthetics. Emphasis is placed on knowledge and experience sharing, mutual discussion, raising questions and thinking over consequences, leading to problem solving that supports the development of quality of life of people in the communities. Opening creative spaces or areas will promote learners to express their different perspectives which can lead to a conclusion of lessons and learning.

The development of area-based learning innovation through Miang culture to promote green citizenship for social studies teachers in the upper northern Thailand will help enhance people in the areas to understand the context of communities, especially knowing local wisdom through short film media production that will encourage media to be produced in different patterns. Meanwhile, it enables learners to learn an important process of media production starting from on-site visit, planning, and presentation as good skills in the future. Besides, integration of local wisdom learning allows learners to access communities where they come from and feel not far away from them as well.

With reference to the synthesis of conceptual framework, theories, and study results, the author made a conclusion of a creative learning innovation model for area-based learning to promote green citizenship according to the conceptual framework of Richey, Seels and Glasgow known as "CADDIE Model" (Richey, 1986 and Seels and Glasgow, 1990) as follow: Figure 2

The area-based learning innovation model to promote green citizenship is a new model of science of learning for teachers of social study for elevating education quality and reducing education inequality by means of a system approach to design and develop learning, allocate learning resources to be appropriate to regional environments and circumstances with the following 6 phases: 1) context phase: C, 2) analysis phases: A, 3) design phases: D, 4) development phase: D, 5) implementation phase: I, and 6) evaluation phase: E or known as "CADIIE Model".

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