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## Local Service Learning in Teacher Preparation Program

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### Abstract

The local knowledge is simply integrated in education and learning process. This study aims to promote local knowledge in school through service learning. The learning process is employed herbal plants to reinforce students learn how to sustain local knowledge with modern life and 21<sup>st</sup> century classroom. Participants consisted of 42 preservice teachers, 11 inservice teachers, and 50 secondary students. Findings revealed that service learning is significantly promoted public mind, self-efficacy, learning satisfaction, and learning process in local knowledge.

**Keywords:** *Self-efficacy; Public mind; Community service; Wisdom; Local knowledge; Instruction*

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## Introduction

The challenge in higher education reform engages many instructors face to preparation 21<sup>st</sup> century learners (Nuangchalerm, 2014a). Instructors need to adapt methods, strategies, and instructional design by themselves than lecture-based or theory-based classroom. They have to develop instructional activities that focus the authentic learning experiences (Kolb, 1984; Maddrell, 2014; Nuangchalerm, 2014b; Stefaniak, 2015). That is, authentic learning experiences provide learners meet undergoing and intellectualization, learners can get opportunity to interact with situation and solve the problem by mind-on and hands-on activities (Butin, 2010; Prasertsang & Nunagchalerm, 2013; Nuangchalerm, 2014c). Learning experiences can shape learners' prior understanding to fit with new experiences and then form to be suitable mindset. Developing an authentic learning experience in a situated learning environment can provide learners to simulate professional practices within the lesson and attributes.

The study employed local knowledge which is importantly used in villages and school community. Students perceived and appreciated in local knowledge, it can be related to modern classroom and 21<sup>st</sup> century instruction which invited by service learning. Service learning is an alternative teaching method that provides learners interact with real-life experiences in a situated-learning environment. Program of study employed preservice teachers learn community, local knowledge, and then create learning activities for secondary school students. According to Mahasarakham University had launched project one curriculum one community taking philosophy of education, "public devotion is a virtue of the learned". The service learning projects were implemented sufficiency economy of King Bumibhol Adulyadej (Nuangchalerm & Chansirisira, 2012). This study employed herbal plants knowledge and introduce to school curriculum. The project need preservice teachers have situated-learning environment match with community. The purpose of this paper is to explain how service learning was integrated into learning herbal plants uses in school to sustain local knowledge by providing learners with opportunities to participate in authentic learning activities. Also, public mind, self-efficacy, and learning satisfaction are investigated.

## Methodology

### Community Setting

The study investigates herbal plants knowledge and some local knowledge in which related to learning process and construction. Studying community is not far from Mahasarakham University just 5 km. because it is easy to go and preservice teachers decide to participate community. Khaow Yai Pittayasan school which is secondary school is the target school, located in *Baan Non Siew*. The history of *Baan Non Siew* can be summarized that it was establish in B.E. 2470 by the first cohort settling: Mile Wonghatan, Somung Salee, Loon Nontsuwan, Chan Khamdee, Sor Thongchanhart, and Juan Singsuwan. This cohort tried to set pattern of life and community by emphasizing Bhuddist-based life and sufficiency-based community.

*Baan Non Siew* located in the southern part of Kantarawichai district, Mahasarakham Province around 20 Km. and also far from Mahasarakham Province 15 km. The school was located in the western part of the community. Location of village is not far from Chi river and sometime flooding occurred, then they were moved to higher land where plenty of *Siew* (Common name of tree). The community members named this area *Baan Non Siew* (Baan-Village, Non-high land, Siew-common name of local plant). There were 87 families, 350 community members, mostly farmers, and love to survive with friendly environments. The location of this community can be shown in figure 1.

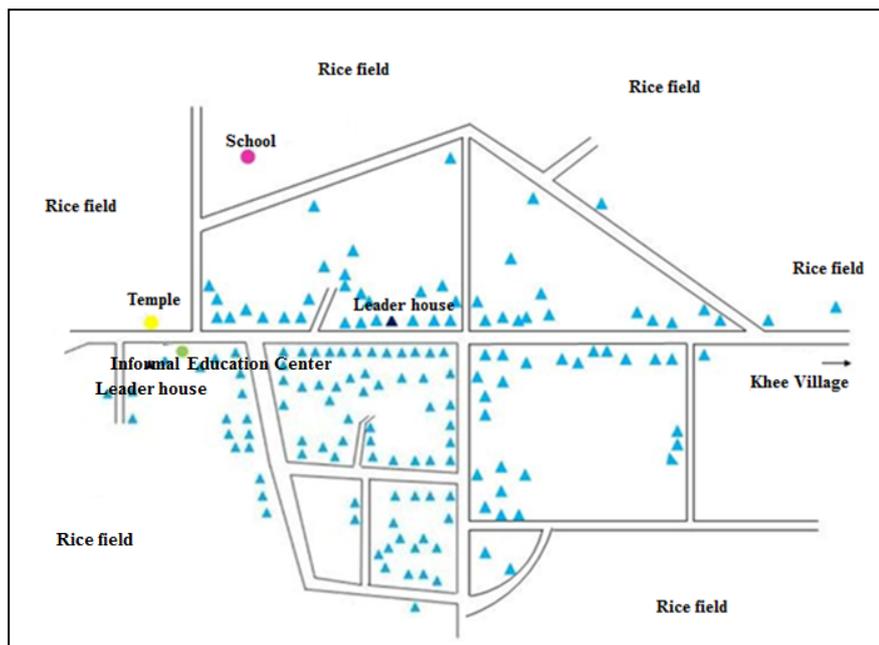


Figure 1. Map of *Baan Non Siew*

Mostly, community members were Buddhist and sincerely appreciated in Buddhist philosophy. Temple was a mindful-centered people located in the southern part of community. They were promptly regulated with sacred community ceremony, was called *HEET SIB SONG* (12 ceremonies a year for northeast villagers in Thailand). *HEET SIB SONG* was set in each month that they called *BOON* (merit ceremony) which transmitted by the old generation to next generation.

January	Boon Koom Khaow
February	Boon Khaow Chee
March	Boon Pawhed
April	Boon Songkran
May	Boon Bungfai
June	Boon Sumha
July	Boon Khao Punsu
August	Boon Khao Pradub Din
September	Boon Khao Sark
October	Boon Org Punsu
November	Boon Kathin
December	Boon Kao kum

### Panel Participants

The panel participants consisted of 42 preservice teachers who are target group employing service learning. Fifty secondary students and 11 teachers are target group implementing local knowledge through service learning. Five experts provide understanding in local knowledge and herbal plants information. The study was started by employing qualitative methods for collecting data and mapping local knowledge about herbal plants. Analyzing data was to integrate nature of data and then designed through service learning. Two courses were Community and Education, and Curriculum Design and Development which preservice teachers enrolled in first semester, academic year 2014. The course provided preservice teachers understood sustainable development, local knowledge, and teacher profession to society.

### Service Learning Setting

The study employed service learning to effort preservice teachers to learn in the community by developing learning activities in school. They have to intellect and undergo on herbal plants in the local community. Instructional process can be explained into 3 phases: Preparation, Action, and Reflection.

*Preparation-* preservice teachers and researcher decide to seek information in target community which is not far from university. The qualitative information is collected by interviewing and observation. Preservice teachers and researcher are cooperating worked with community members. The herbal plants is a major theme that we interest because the community success to distribute various kind of plants in both community and temple. In addition, preservice teachers share their ideas about learning activities that school requires. *Action-*the service learning project was set between preservice teachers and secondary school students aims to transmit herbal plants knowledge and its implication in terms of media and learning process. Data were collected by interviewing, questionnaires, and videotape recording. *Reflection-*the service learning project finished, preservice teachers have to discuss and reflect of what and how they learn from learning activities. The point of we learn focus media and learning process which they perceived. They also reflect about herbal plants and local knowledge which community preserve and transferred to new generation.

## Results

Preservice teachers learn local knowledge and nature of knowledge construction through interviewing, traditional knowledge will be transferred to next generation by speaking or informal learning. They have trial and error, but process of learning infused with ceremony and beliefs. Herbal plants are widely distributed in local community by different purposes. Some are food, learning media, home decoration, assorted plants for ceremony and so on. Monk let this hidden knowledge by establish herbal plants garden in the temple for community members. Propagation herbal plants are not strictly in some sectors temple, village, and school decided to keep herbal plants as useable knowledge.

Preservice teachers wonder local knowledge and community than those before works with villagers. They took a motorcycle to community and raise some criteria that concerns not only herbal plants, but also others traditional knowledge, way of life, and social contexts are observed and described as follow.

*“I have just known villagers had much more knowledge which we never know”*

*“I am very happy to study community and walk around community because these knowledge cannot be found in the textbook or classroom”*

*“My home town had these plants, but I never know about its significance”*

*“If we didn’t come out classroom, we could not see local knowledge that close to way of our life and our community”*

Local knowledge is an accumulated that this study try to understand in current of educational reform, especially 21<sup>st</sup> century learners characters in localization and globalization. Public mind of preservice teacher is studied by collecting questionnaires to measure how they perceive to service learning project (table 1).

Table 1. Public mind of preservice teachers after implement service learning project

Item	$\bar{x}$	S.D.	Level of public mind
Social problems will be solved if I understand and pay attention to solve in cooperatively	4.342	0.627	high
Public service make me aware and care to other feelings	4.395	0.547	high
Local knowledge should be used for servicing our community	4.184	0.652	high
I am ready to do with group working and community	4.632	0.489	highest
I agree to change my behaviors when community required	4.184	0.609	high
When school need some helps, I can join and share	4.105	0.559	high
I can work with others as well as group decided	3.711	0.694	high
After used, I always turn of electricity devices for green nature	3.711	0.898	high
I am ready to do as traffic rules and laws	4.079	0.712	high
I am ready to do public activities	4.368	0.589	high

Table 1 showed that preservice teacher perceived their public mind when service learning projects implemented. They are ready to do with group working and community in highest level. However, other items indicated that they have public mind at high level. To make sure that service learning project which allows preservice teachers learn community and local knowledge can also shape their self-efficacy which this study reported (table 2).

Table 2. Self-efficacy of preservice teachers after implement service learning project

Item	$\bar{x}$	S.D.	Level of self-efficacy
I want to change myself	4.658	0.481	highest
I never give it up	4.105	0.798	high
I satisfy my abilities	3.868	0.704	high
I satisfy my life	4.053	0.655	high
I can change others to new opinions	3.289	0.654	medium
I am a friend-centered society	3.395	0.495	medium
I always admired by friends	3.237	0.675	medium
I happy to do some activities with friends	3.895	0.649	high
Friends accept my opinions	3.605	0.638	high
Parents allow me to express opinions	4.474	0.603	high
Teachers allow me to express opinions	4.316	0.574	high
I always success with my works	3.526	0.603	high
I like to do it by myself	4.289	0.611	high
I proud to do social activities	4.184	0.609	high

Table 2 showed that preservice teacher perceived their self-efficacy when service learning projects implemented. They want to change themselves in highest level. However, other items indicated that they have almost self-efficacy at high level. Some items are at medium level such as I am a friend-centered society, I can change others to new opinions, and I always admired by friends.

The study also investigates how service learning project reach the outcomes by allowing preservice teachers and students share their learning experiences. Also, situated-learning environment is simulated for preservice teachers. They expressed feeling of what and how project succeed by reflection process through learning satisfaction (table 3).

Table 3. Learning satisfaction of preservice teachers after implement service learning project

Item	$\bar{x}$	S.D.	Level of learning satisfaction
Knowledge and experiences			
1 Learning experiences relevant to course of study	4.031	0.740	good
2 Learning activities promote us to understand the course of study	3.969	0.647	good
3 Direct learning experiences through service learning help us to understand local knowledge and real life experience	4.438	0.669	good
4 Service learning invites us to learn outside classroom which local knowledge appeared	4.531	0.621	very good
Learning benefits			
5 Service learning provides us to have essential knowledge and experiences	4.375	0.554	good
6 Service learning allows us to share knowledge and learn together	4.563	0.504	very good
7 Service learning provides us to work in systemic	4.313	0.592	good

Learning outcomes revealed that service learning meet the requirements of learning process in the 21<sup>st</sup> century and philosophy of education. Preservice teachers reflected their satisfaction at good and very good levels. Service learning invites us to learn outside classroom which local knowledge appeared and service learning allows us to share knowledge and learn together showed at very good level. It is suitable for community study, local knowledge transferring, and absorbing way of villagers' life.

## Conclusion

Instructional practices in higher education need to be successful when the principles of instruction meet nature of learners which is done in a situated learning environment. It can be considered that learning environment might want to emerge from local knowledge where students growth and survive. Local knowledge should be infused in the learning process, how villagers learn between traditional knowledge and modern knowledge for transferring practical knowledge to the community. Local knowledge is a factor for surviving that community is rich than those university explore with lecture-based learning.

Service learning is a means to providing students with real-life experiences in a situated-learning environment. It is an educational approach that combines community service, academic coursework, and work-based applied learning. It has the potential to change student attitudes toward a course and a subject (Butler, 2013; Maddrell, 2014; Stoecker, 2014). Service learning is a powerful pedagogical tool that linking community service to academic learning where is local knowledge and

modern knowledge are rich (Campbell, 2013). It integrates students' classroom instruction with community learning experiences (Schelbe *et.al.*, 2014). Also, assisting students build community connections, applying theory and essential skills, socializing to profession, and increasing self-awareness to diverse culture (Eyler & Giles, 1999).

The characteristics of professional teachers are prepared by the process of higher education when preservice teachers are incubated through situated instructional strategies. Creating professional teachers concern knowledge sharing, skills practicing, and shaping teachers' attributes during the program of study (Darling-Hammond & Lieberman, 2012; Darling-Hammond *et.al.*, 2014). Modern classroom in higher education is not strictly occurred with theory-based, but skills-based learning to all learners is needed. Teachers are key element that preserve or sustain local knowledge in which they work in local community (Schelbe *et.al.*, 2014; Walshaw, 2014). It can be supported that if teachers have no positive attitudes on local knowledge, then they will be destroyed learning culture cultivating by community (Aikenhead & Michell, 2011).

This approach of learning has become a popular trend in undergraduate learning activities. That is, it allows students to participate in an organized knowledge, skills, and attributes which community determined and reflected on the community service in such a way to gain further understanding of course content, appreciation of local knowledge, and enhancing sense of public mind. The local knowledge will be preserved as well as community service success. Learners will be appreciated with local knowledge and way of learning, traditional values, skills and morale and so on (Dixit & Goyal, 2011; Seider, 2013).

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