Active Learning Management on Social Studies in Thailand: Research Synthesis

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Abstract
There are many researches on active learning management in Thailand applied by different disciplines such as, Mathematics, Sciences, and Social Sciences, etc. The students were found to be fatigued studying subjects with lots of contents such as social studies. Active learning has been found to be the essential tool improving student’s understanding in each subject areas. Additionally, the social studies area was found to be the one employing this method most. This study then aims to synthesize past research on applying active learning social studies subjects during 2012-2017. The data was collected from 68 research papers with topics on active learning in social studies, which were published on the database of Thai-Journal Citation Index Centre (TCI) during 2012 – 2017. Six topics were synthesized: 1) active Learning management techniques 2) attributes to be developed 3) target group 4) research instruments 5) statistics 6) research outcomes. The results found that the mainly employed active learning methods were techniques used to develop cognitive domain such as problem based learning, brain based learning, and building conceptual framework. The timing employing active learning in classroom was seen to be at least 1 – 2 months with the levels of students learning by active learning method were found to be grade 6-12 students, the measurement and evaluation methods were found to be examination, observation, and informal interview during the activities, and the data analysis using descriptive and inferential statistics with t-test revealed that active learning could improve cognitive, affective, and psychomotor domains. The instructors may need to consider the methods that suit students most, as well as the improvement of traits and subjects, to gain the best benefit using active learning methods with the students.

Keywords: Active Learning, Social Studies

Introduction
To establish a curriculum purpose was the most important objective in learning management. This research focused on social, religion and culture studies referred to as “Social Studies” in the context of Thai’s education which emphasized the peaceful co-habitation both in Thai and global societies, civilities, religious doctrine embracement, recognition of significances of resources and environments, nationalism and esteem in Thainess (Ministry of Education, 2008). Social studies consisted of 5 domains i.e. 1) Religions, Moralities and Ethics; 2) Civil duties, Cultures and Social Lives; 3) Economics; 4) Histories, and 5) Geography with the standard inclusive of all curriculums’ goals for 21st Century under the swiftly global change. Teachers had to prepare the students’ development from kindergarten to senior high school level of Generation Z (National Social Welfare Promotion Committees, 2005), (NSTDA, 2017) who felt that they were special, confidence, pride, intolerant, depended on technologies and loved convenience; however; the strength were public minds, environment preservation, disciplines, law abidingness greater than the preceding generations, due to being well nurtured
Social studies teachers therefore should take these strengths into consideration to develop learning of their students.

Social studies teachers had to well understand the economic conditions and National Economic and Social Development Plan for integrating them in learning management for social studies in the same direction as the conclusion of Thanin Pha-aim (2015): economic developments during previous 5 centuries were satisfactorily successful. The production structures changed from agricultures to industries and services with sufficient potentials to develop for establishment of production bases to enhance to enhance the national economic to attain a lever of wealthy country in upcoming future. In National Economic And Social Development Plan, 12th Edition (2017-2021); there were 6 national strategies were specified within the scope of national development to complete the vision of “Stability, Prosperity and Sustainability” and uphold the principle of “Sufficiency Economy” as the following: 1) Strategy for stability, 2) Strategy for increase of competitiveness, 3) Strategy for development and potential enhancement, 4) Strategy for provision of social opportunity and equality, 5) Strategy for building better eco-friendly living quality, 6) Strategy for balancing and development of state administration and management (Thanin Pha-aim, 2015). Therefore, the learning management of Social Studies in 21st Century required to support Thailand's development under Thailand 4.0 Model (Suwit Maysinthree, 2015), to obtain high income and enhance the economy by innovation of 4 dimensions of balanced development: balanced prosperity, economy, environment conservation and well-being social, enhancement of human intellect, as well as required to modify the education to meet “Thailand Education 4.0” in which the textbooks and evaluation were subject to be modified and changed to be line with the curricula which focused on critical thinking and learning skills for 21st Century. To teach Social Studies in 21st Century, therefore, required the modification of learning management in order that the students could experimentally practice until learning skills for fulfillment of the curricula were earned, as well as to be ready to become good citizen to move forward Thailand 4.0; Social studies teachers and students were required to cooperate in learning management which would provide experiences applicable for real lives as mentioned further in this article.

Learning management for Social Studies within the context of swift change was required to consider the learning skill of 21st Century which was started in U.S.A. pursuant to the concept of “New Future Skills: Learning Skill of 21st Century” (Ministry of Education, 2014) developed by Partnership for 21st Century Skills (P21) who intended to promote youths' 3R: Reading, wRithing and aRithmetic and 7C: Critical Thinking & Problem Solving, Creativity & Innovation, Cross Culture Undestanding, Collaboration, Teamwork & Leadership, Communication Information & Media, Computing & ICT literacy, and Career & Learning Skills. The core subject and skills for 21st Century living were English, Reading, Global Language, Arts, Arithmetic, Economics, Sciences, Geography, Histories, Government, and Civility. Schools required to promote high level of academic excellence as well as inserted skills for 21st Century living into all core subjects, such as; knowledge on world, finance, economy, business and entrepreneurship, civility, health, environment which were relevant to all 5 domains of Social Studies. With reference to learning standards (Ministry of Education, 2008); it was deemed that to teach Social Studies in 21st Century, teachers had to work hard to arrange learning activities to fulfill the set goals of each curriculum. The researcher therefore would like present student-centered learning which teachers played an important role to...
develop the students to become valued human resources for national development in conformity to the 20-year National Strategies.

There were many researches reflecting the outcome of learning management by implementation of Active Learning to enhance various desirable characteristics of students, such as: knowledge, attitudes, skills and desirable behaviors. Therefore, in order to synthesize such body of knowledge, the researcher gathered a number of researches published in Thai-Journal Citation Index Center during 2012-2017 and synthesized them to construct a new applicable body of knowledge

**Objectives**

1. To study the problems of education management of Thailand
2. To synthesize active learning management for Social Studies Department in Thailand

**Literature Review**

The researchers synthesized the comprehensive student-centered learning management of which the details were as follows:

**Constructivism:** Constructivism is a learning philosophy (Funderstanding, 2011) relevant to the nature of human’s knowledge. This term carried both psychological and social meanings. In the psychological aspect, Jean Piaget proposed that children’s learning were fast and subjective processes of each person. Vygotsky expanded the domain of learning for each person that learnings were constructed by language communication with the others. In the social aspect, Emile Durkheim et al. believed that social environments affected constructions of new knowledge (Thitsana Khammanee, 2011). In the view of constructivism, learning was a cognitive psychology concludable, based on the study of Ausubel & Piaget, that 1) students constructed their own knowledge from the interrelations between things they experienced and their existing knowledge by means of cognitive apparatus; 2) intellectual structures were resulted from thinking endeavor. As students individually constructed their knowledge through psychological apparatus; instructors could not change the student’s intellectual structures, however, they could only assist the students to modify their intellectual structures by creation of situations which caused unbalanced states. The teachers played their roles in learning requiring them to provide an opportunity for the students to construct their own individual intelligence, as well as to interact with the students, for example; by suggesting, questioning, stimulating the students’ self-learning and inventing, group-work assignment, evaluation of student’s ideas, thinking and problem-solving skills, as well as developing students to be respectful to thinking and reasons of the other persons. The students played their roles to practice and construct their own knowledge simultaneously, whereas the expected roles of the students were that they would willingly and voluntarily participate the learning activities, seek for knowledge for several sources, solve problems reasonably, inspire their own feeling and thinking, analyze their own behaviors and those of the other, collaborate, be responsible for the works assigned as well as be able to apply the thing they learned to their daily living.

**Passive Learning:** Passive Learning is a learning apparatus which increased only 50% of students’ records, meanwhile; Active Learning allowing the students to present their academic works, learn from simulation including actual training, increased 90% of students’ school-record. The teachers played a role to arrange student-centered activities focusing on knowledge application and utilization in reality, as well as create participation and conversation, promote
good interaction of students either with teachers or classmates. All activities should provide various challenging and collaborative learning. The students should play a role to participate in learning which enabled them to construct their own knowledge and manage their learning on their own as well as promoting collaboration, instead of competition, with the other students, exert work-disciplines and providing situations requiring students to read, listen and think by focusing on advanced thinking (Chaiyot Rauengsuwan, referred in Sathaphorn Pharuethikul, 2016). Social studies teachers therefore had to plan the learning by focusing on experimental practice in all aspects: religions, civil duties, economics, history, geography with clear and apparent designs. The crucial point was that teachers should be open-minded and accept the expressions and opinions of students.

**Active Learning.** Active Learning was a learning apparatus in which the students experimentally practiced and implemented the thinking process relevant to things they learned (Bonwell, 1991); which was the arrangement of learning activity based on the 2 basic hypotheses that 1) learning was a natural endeavor of human, and 2) each person had different ways of learning (Meyers and Jones, 1993; the role of students were altered from recipient to co-creators of knowledge (Fedler and Brent, 1996).

Active Learning was one of the learning apparatuses; connotatively translated; as a learning through practice or operation where “knowledge” was constructed from experiences obtained. This learning process required the students to participate in more active practice rather than merely listen, as well as required the arrangement of learning through reading, writing, responding, and problem analyzing which will make students to think advance, for example; analysis, synthesis and evaluation. In other word; if knowledge were a kind of “food”; Active Learning is one of “How to cook” such food. For production of such food; a way of cooking was needed. Regardless, taste of such Food was relied on cookers’ experience and expertise.

Active Learning made the students to maintain their record stronger and longer in comparison to Passive Learning, due to the fact that Active Learning was in line with the memorial function of human brain in which students’ participation, interaction with classmates, instructors and environments as well as learning by active practice itself were recorded in long-term memory. The existing knowledge thereby was still maintained and accumulated in the greater amount and would last for a longer period than an ordinary learning.

**Research Method**

This research is a synthesis of the literature review relevant to active learning management and its application for development of students’ characteristics. 68 literatures implemented in this research were published in Thai Journal Citation Index Center during 2012 – 2017. The points to be synthesized were as follows:

1. Active Learning Management Techniques
2. Attributes to be developed
3. Target Group
4. Research instruments
5. Statistics
6. Research outcomes

The syntheses were undertaken by the researcher by content analysis, while the acquired fundamental data were presented by descriptive statistics.
Research outcomes

The first Objective: To study the problems of education management in Thailand.

The problems of education management of Thailand were concluded as follows (Wiriya Laeuchaiphanich, 2014; Emmy Nichanan; 2014):

1. Declined quality of primary education. Based on PISA’s Programme for International Students Assessment Test of Organization for Economic Cooperation and Development, it was found that only 1% of Thai students succeeded a high level of science learning. In addition, based on Ordinary National Education Test (O-Net), it was found that, in 2015, average scores of all core subjects of either in 6th grade primary school, 3rd grade secondary school and 6th grade secondary school nationwide were lower than 50%. The average scores of approximate 470,000 students in 6th grade primary schools (National Institute for Education Testing Service; 2559A) were 48.39 for Thai Language, 47.64 for Social Studies, 36.61 for English, 41.76 for Arithmetic and 41.55 for Sciences, while; the average scores of approximate 650,000 students in 3rd grade secondary school (National Institute for Education Testing Service; 2559B) were 42.62 for Thai Language, 46.24 for Social Studies, 30.64 for English, 32.40 for Arithmetic and 37.63 for Sciences, and the average scores of approximate 423,500 students in 6th grade secondary school (National Institute for Education Testing Service; 2559C) were 49.36 for Thai Language, 39.70 for Social Studies, 24.98 for English, 26.59 for Arithmetic and 33.40 for Sciences.

2. Teacher Issue: Thai favored the professions of medical practitioners and engineers. Even though, there were approximate 12,000 teachers produced each year, only 3,000 - 4,000 of them entered government service. Due to declined salary, the intellect people were not motivated to be teachers. In addition, teachers also were confronted with financial debt and issues.

3. Production of the graduate did not match with the requirement of Thai industrial sector which required the occupational graduate to reach 50% of all graduates; however; the actual number was only approximate 27% in the market.

4. Quality of undergraduate education: There were several universities encountering education management problems relevant to break-even of the courses, therefore, the graduate from the branches required lower capital were inundate, resulting in lack of the graduate from the scarce branches.

5. Lack of research, development and innovation: In 2005, there were approximate 50,000 Thai teachers in undergraduate level education, however; the number of research publication was only 2,000 (200,000 per year for U.S.A., 50,000 per year for Japan, 40,000 per year for U.K., and 12,000 per year for China). Based on the World Bank’s record (Thailand Position, 2012); the number of researchers per one million citizens (2007) were as follows: 4,979 in Sweden, 5,409 in Japan, 4,672 in Korea, 4,673 in U.S.A., 5,955 in Singapore, 1,077 in China, and only 316 in Thailand which was a very low figure.

6. Education Management Problems: Applications of several curricula were failed. Not only teachers who failed to understand the curricula affected Thai youth’s learning, but their teachings were also not in line with requirements and expectations of the guardians. Therefore, education management problems should be urgently resolved. The government, Ministry of Education, politicians, students, teachers, education personnel as well as guardians should
cooperate in such resolution through the guardian associations, schools, education districts, and seminars by utilization of researches as a foundation for problem resolving.

**The second objective**: To synthesize active learning management for Social Studies Department in Thailand

The researcher synthesized the literatures published in the data base of Thai-Journal Citation Index Center during 2012-2017, by searching “Social Studies”. There were 187 literatures found, then 68 literatures with comprehensive active learning management techniques mentioned were chosen. There were 6 points to be synthesized as reflected in the following table:

*Table 1*
The results of synthesized active learning management for Social Studies Department in Thailand

<table>
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<th>Points to be synthesized</th>
<th>Fundamental Outcome</th>
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| Comprehensive Active Learning Management Techniques | The popular comprehensive active learning management techniques were as follows:  
1) Media  
2) Problem based learning  
3) Project based learning  
4) The integration active learning techniques  
5) Conceptual framework  
6) CIPPA  
7) 4MAT  
8) Lesson study  
9) Investigate learning  
10) Field trip  
11) KWL  
12) Cooperative learning  
13) Student team learning  
14) Brain based learning |

| Variables to be developed | 1) Learning achievement developments  
2) Creativities  
3) Teamwork  
4) Critical thinking  
5) Discretional thinking  
6) Problem solving skills  
7) Adaptation  
8) Knowledge durability |

| Target Groups | 1) Primary students  
2) Secondary students  
3) Undergraduate students |

| Research Instruments | 1) Learning management plan  
2) Examination  
3) Evaluation forms of each characteristic to be studied  
4) Observation forms of each characteristic to be studies  
5) Questionnaires on opinions/satisfactions/attitudes |
Student-centered learning management: The core curricula of primary education 2008 (Ministry of Education, 2008) focusing on student-center principle, therefore; various learning management process were required, such as; integrated learning, knowledge construction learning, thinking, social process, problem and situation encountering, learning from experiences, experimental practices, management, researching, self learning, attribute development, as well as designation of learning management by selecting teaching methods and techniques, media/learning sources, measurement and evaluation, suitable for the students to fully develop their own potentials. Social studies teachers therefore should implement student-centered learning apparatus (Ministry of Education, 2008) by analyzing each student individually, setting the goals suitable for each student, designing learning patterns and management in consideration of difference of each student, providing proper atmospheres for learning, preparing and selecting appropriate media, evaluating students' progress with several methods, applying the evaluation results for students' remediation and development inclusive of improving learning management. At the same time, teachers had to support the changes of roles, and the student had to set goal, plan and be responsible for their own learning, knowledge seeking, learning source accesses, analysis, synthesizing, addressing questions, finding answers or problem resolving by several ways of experimental practices, concluding the things acquired from self learning and applying to each situation, interacting, collaborating with group and teachers, evaluating and continuously develop their own learning apparatus.

Social studies, 21st century learning skills and knowledge construction philosophies affected the students in the 21st century as follows (Wijarn Wanich, 2012): 1) The students had independence to choose, express their own opinions and characteristics, 2) they wished to make modification in conformity to their own meaning, satisfaction and needs, 3) they may inspect reality and background, 4) they had self-confidence and interaction with the others in order to founded an organization, 5) they preferred to have fun and deemed their playing as a part of
working, learning and social living, 6) their cooperation and correlation was deemed as a part of every activity, 7) they needs fast communication, information finding and question addressing, 8) they created innovations for every thing in their lives. Social studies teachers had to be aware that the students were in Generation Z, so they were required to design and facilitate the students’ learning for experimental practice in order to create living skills for 21st century (3R and 7C), as well as promote brain development (Wijan Wanic, 2012) in line with the concept of Howard Gardner as per the 5 following domains: academic and discipline, synthesis, creativity, respect and ethnic in order to create intellectual dimension. Active learning (Parnward Auoyphorn, 2014) was a learning management in which the students experimentally practice and apply things they practiced to arrange learning activities on 2 basic hypotheses i.e. learning was a natural endeavor of human and each person had different way of learning where the students’ roles changed from knowledge recipients to co-creators. Active learning could be recorded in the long-term memory resulting in a stronger and greater quantity of knowledge.

Based on the research synthesis, the researcher focused on active learning management in compliance with the concept of constructivism and active learning in application to 5 domains of learning management for social studies i.e. 1) Problem-based learning, 2) Project-based learning, 3) Creativity-based learning and 4) Lesson Study, and 5) Open Approach.

**Problem-based learning** (Phisan Suwannoi, 2015) was invented by John Dewey; who proposed the concept that learning was constructed by active and experimental practice. This lead to the Problem-based learning development by Faculty of Health Sciences, McMaster University, Canada. Problem-based learning used the real problems as the learning context for the students to develop several skills, for example, thinking, discretion, critical thinking, synthesis, creative thinking. Even though, this learning was usually applied to sciences learning; it was also suitable for application to social studies. The significant characters of Problem-based learning were as follows: 1) this learning focused on student-centered principle, 2) carried out with 5-8 group of students, 3) where teachers play roles of facilitator and advisor, 4) problems were utilized to stimulate (stimulus) learning, 5) problems implemented should be ambiguous and obscure provable many resolutions and answers, 6) students would resolve problems and seek for new information on their owns, and 7) evaluations were made from the real situation throughout the learning process. For learning products obtained from studying researches on problem-based learning, it was found that there were 7 steps in learning activity (Phisan Suwannoi, 2015) i.e. 1) Learn all meanings of all vocabularies and contents reflected in each problem, 2) Specify the problem and data required, 3) Brainstorm and analyze each problem, 4) Make description and hypotheses relevant to problems so brainstormed, 5) Specify the learning objectives for seeking the information to be implemented for the discussion of the analysis outcome, 6) Self-research from various media and learning sources as well as develop learning skills, 7) Report and conclude the results to formulate principles and ways for future application. Teachers play a role to address ‘How’ questions to every student, as well as provide suggestion and advices, for example; How the discovered ideas could be figuratively correlated by mind-mapping? What is the conclusions? Who was benefitted from the points of studies, and what we get from practical evaluation? by means of data valuation, finding and specifying the problems, knowledge acquisition, application and problem resolving, authentic assessment, specifying assessment criteria, discussion, writing diaries, experimental reports, self-rating, and interviews. The effects on students were that students had their chances to develop both
contextual knowledge and skills in line with physical contexts and submit the applications for reality, as well as develop critical thinking, analytical thinking, rational thinking, synthesis thinking, creative thinking which resulted in life-long problem-solving and effectively collaboration with the others, learning motivation, and being ensured of their knowledge durability. As social studies were relevant and correlated to problems in daily lives, therefore the problem-based learning was suitable, since all incurred social, ethnic, economic, political, environment and disaster problems incurred affected every person. Therefore, to undergo trainings of problem solving was a preparation of each student to be ready to face their real lives and happily and peacefully cohabit. The 1st table reflected below was analyzed by the researcher from social studies, religions and cultures, exemplified a series of problem specification for social studies.

**Project-based learning** Project-based learning supported life-long learning in line with constructivism and cooperative learning in which the teachers systematically provided to students living experiences enabling the students to construct body of knowledge on their own, develop their creativities, problem-solving thinking and higher order thinking, collaboration, found their leadership and fellowship. Project-based learning consisted of 4 types of learning activities: Survey project, experimental project, development project, and theoretical project. The characteristics of Project-based learning were specified by Autodesk Foundation (Thomas, 2000) as follows: 1) participation and attentions of students, 2) provision of actual meanings and contexts for learning, 3) enjoyment of students for complicatedness of problems in reality, 4) Allowing students to select and determine in significant issues, 5) connections of students with community’s resources and experts, 6) Intension to develop students’ knowledge and skills, 7) management of learning for several fields of knowledge to resolve and promote comprehensive understandings, 8) Provision of opportunity of self-recognition and evaluation, 9) Provision of beneficial products, and 10) arrange events for presentation to public. The process of project carrying out consisted of the following steps (Faculty of Management, Ubonrachathani University, 2015): 1) Title designation, 2) Proposal planning and review by teacher, 3) Operation of the approved plans, 4) Reporting, 5) Presentation, and 6) Evaluation. Teachers should play their roles as instructor of theories, principles, procedures, and thinking methods, as well as stimulate the student to come up with the titles and project writing, suggest, guide the sources of knowledge, and working procedures, skills, techniques needed for project carrying out, allocate budgets and instruments, support, advise, liaise with teachers and relevant persons, follow up, as well as preside as an audit committee to inspect and evaluate each project, and hold exhibitions. Students would be benefitted in several aspects, such as: Learning to work, cooperate, plan, function, expression, know their own duties and be accountable, work in group, lead, follow, develop, think, allocate, be on time, and solve problem. The most important benefit was that they would understand their communities, human and happily and peacefully cohabit. In Table 2, the research analyzed from learning social studies, religions and cultures, and presented the titles of project experimentally carried out by students as a guidance for management of social studies education to promote 3R & 7C skills.

**Creativity-based learning** Creativity-based learning was a derivative from Problem-based learning (Wiriya Laeuchaipanchich, 2014A) in which students might undergo skill trainings, however, still lacked creativity. It was found from several researchers that differences of pre-learning and post-learning scores acquired from Problem-based learning were very few. Therefore, after application for creativity to Problem-based learning, it was found that students
could develop more advanced creativity, enjoy their learning, gain knowledge for explaining phenomena occurrence and solving problems, as well as they were supported with the learning skills of 21st Century. Teachers played their roles to support the learning by arrangement of Creativity-based learning in 8 aspects and under 9 atmospheres (Wiriya Laeuaiaphanich, 2014B). Such 8 aspects consisted of 1) inspire and stimulate learning, 2) provide opportunity that student might seek, collect, screen and construct their knowledge, 3) teach upon any question addressed, 4) provide opportunity for students to individually solve problems, 5) implement games as a part of learning, 6) work in group to carry out project, 7) creatively present the results, and 8) evaluate the outcomes as set in each goal, while the mentioned 9 atmospheres consisted of the circumstances under which 1) students have maximum amount of time for their research, discussion and presentation, 2) description in details would be avoided, however; questions would be addressed for students’ attention, 3) teachers avoided to render absolute judgement such as right-wrong, 4) teachers supported their students in thinking, 5) subjects students interested would be applied and supported by the contents in text books 6) students should spend greater than 90 minutes to integrate several subject relevant to the problems studies by cooperation of 2-3 teachers, 7) teachers focused on students’ development and evaluate the same to make the students be aware of their own progress, 8) students should participate voluntarily and cooperate with their teachers, and 9) teachers should avoid to administer unnecessary punishment and listen to the stories of their students, and simultaneously propose new idea and learn from their students. Teachers should encourage their students and express opinion in proper occasion. For example, same problems might be utilized in both Creativity-based and Problem-based learnings, however, teacher should create the atmospheres supporting their students to promote creativity. For the Creativity-based learning regarding ‘Conservation of fresh water sources’, there should be the following process: 1) attract the students to be interested in fresh water resources and water pollution from newspaper, television news, research or surrounding problems, 2) have students to address questions and issues for researching relevant fresh-water resources and water pollutions, 3) divide students into groups and have students to undergo research through various technologies and sources, 4) during researches, teachers may discuss with students to awaken their attention or explain any issues as needed by students, 5) analyze and synthesize data and information for creative problem-solving, and 6) present the achievement of each groups.

**Lesson Study and Open Approach.** Lesson Study and Open Approach was a concept utilized by many teachers in Japan for development of their career for over 100 years, in order to self-develop as well as develop students’ learning. Stickler & Hebert as referred in Suladda Loifah and Maitri Inprasith, 2004, studied and reflected that there were high achievements in development of Lesson Study of Japanese teachers to modify the learning behaviors in class to be in line with the purpose of Japanese Education Reformation. Lesson Study was a design of continuous development to meet the set goals for students’ education by focusing on learning management in the context of teachers’ involvement in class and cooperation with other teachers. Teachers participated in this project realized their roles in supporting the development of body of knowledge, teaching and learning, and career improvement by Lesson Study, of which the process were as follows (Wijan Phanich, 2014): 1) set goal and plan learning management by teachers’ cooperation to specify their goals and plans for learning management regarding the points to be developed, 2) apply learning management and observe class by
assigning one of the teachers as an instructor, while the other and school management function to observe and record the data relevant to thinking process, learning, behaviors, and other events occurring in class, 3) jointly discuss on teaching, exchanging and analyzing of student, and record teachers’ learning in order to reflect thing they learned in order to apply the same for modification of teaching and learning in the following education year. At first, Lesson Study was integrated with an innovation, Open Approach, in the field of Arithmetic, however, after that it was also applied to other subjects as suitable. Open Approach (Wijan Wanich, 2014) was a learning management where teachers utilized situational question, open-end question in learning process and each student would propose their resolutions. This approach involved with in class exchange of knowledge, learning, thinking and studying either inside of every student and with other students. The theories supporting Open Approach were constructivism which motivate and inspire students to have trial and error until they could construct their own knowledge which advanced the level of knowledge and group-study, resulting in impregnate with potentials and ability of problem-solving and creativity in new issues and under new conditions which causes intrapersonal changes applicable for improvement of learning management, as well as teachers and students themselves, envision teachers to clearly understand the students’ potentials; and facilitate the process of Lesson Study to be succeeded. Maitri Inprasith (Thipphawan Phuankdee, 2011) had carried out a research and development project for Arithmetic by means of Lesson Approach and Open Approach for over 10 years with the objectives to make the classes focus on learning management for students to gain experiences in several domains with open-end questions, support problem-solving process to promote various ways of thinking, systematic and reasonable thinking in which the learning management of Open Approach (Arithmetic High Order Thinking Project, 2015) was as follows: 1) Quote open-end questions of 3 types: Open Process (there were several correct means for problem-solving); Open Outcome (there were several correct answers); Open Development (the studies problem could develop to a new problem); after the problem situation was determined, teachers would divide students in class into groups 3-5 persons per group. 2) Self-study: each group will cooperate and discuss with their members to conclude and rationale the cause and methods of answer acquisition. 3) Discuss and compare with other ideas in class, present the same to classmate then teachers would join the discussion to develop a new problem for development of the further learning management. 4) Conclude and connect with the ideas of students to conclude the similar and different lessons to find the answers of each group. Application of Lesson Study and Open Approach in Social Studies to develop thinking skills of students to be succeeded. For example: learning management by Lesson Study and Open Approach for Water Pollution consisted of the following processes: 1) Set goal and plan learning management by teachers and create their common and mutual learning management relevant to water pollution, 2) Execute such plan in practice and teaching observation by other teachers, 3) Present the result in order to discuss on learning, exchanging and analyzing in relations to learning. Open Approach can be executed as per the following steps: 1) Introduce problems to class and simulate the situation leading to resolve water pollution, such as: “Water in the canal adjacent to school was spoiled which killed many fish”, 2) Do activity and self-learn: student gathered information by several means on their owns to find the sources, effect, prevention and resolution for water conservation, 3) Discuss and compare the results with classmates: students presented their achievements to classmates and teachers would join discussion for further development of new problem as well as develop new learning management, 4) Conclusion by
connecting all ideas of students in class acquired from their lessons to conclude their studies, such as; principles of fresh water conservation, connection with reality to preserve their surrounding water resources.

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