INSTRUCTIONAL MODELS OF SOCIAL STUDIES TEACHERS TO THE DEVELOPMENT OF CRITICAL THINKING SKILLS FOR LIVING IN THE 21st CENTURY

Panadda Pandeeka* and Jarunee Maneekul

Faculty of Education, Chiang Mai University, Chiang Mai, 50200, Thailand

*Corresponding author: jub_dara@hotmail.com

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Abstract

The global society in the 21st century is known to be a circumstance lending to rapid changes. This affects the way of life throughout the globe and causes both positive and negative impacts. For this reason, in order to survive in this society, it is essential that learners in the 21st century possess critical thinking skills in order to be able to analyze and synthesize the information which has been received and be able to adapt themselves to the recent circumstance. Therefore, the instructional models of social studies teachers which aim to develop critical thinking skills for living in the 21st century has played a significant role in education and the development of learners. Education is an important foundation to prepare learners to live in the society, to develop and become knowledgeable and skillful people, and to have positive attitudes that will enable them to live with other people as a global citizen in a peaceful society. It is vital to bring the curriculum up to date and plan to produce and develop human resources in the country based on every social dimension and the tendencies of future changes resulting in efficient and sustainable development. Thus, social studies teachers should be aware of the changes in 21st century and design an instruction to promote skills for living in the 21st century. For this reason, promoting critical thinking skills becomes more important in education in the 21st century education. These instructional models consisted of 1) the instruction emphasizing on cognitive domain in

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order to create the body of knowledge leading to conceptual skill 2) the instruction focusing on psycho-motor domain in order to practice practical processes leading to the development of overall skills 3) the instruction with effective domain to create the value of applicable development 4) the instruction with process skills leading to practical development 5) the instruction with integration to integrate every knowledge.

Keywords: Instructional model; critical thinking skills; living in the 21st century

Introduction

The current global circumstances, the environment that has been always changed, and the rapid progress of science and technology have direct impacts on the social conditions. Thus, it is significant to prepare people in the country to be ready for any changes. There are two vital skills to live in the 21st century that everybody should learn from primary level to tertiary level and throughout their life. These are: critical thinking and problem-solving skills (Panitch, 2012). It is particularly significant that the instruction of social studies teachers promotes critical thinking to every learner so that they can carefully think and deliberate before deciding in the society where they can be tempted by media and various information which come in written and spoken forms. Information can be true and fake; therefore, it is essential for the learners to be able to think critically or to be able to solve the problems.

According to the aims of National Education Act B.E. 2542 and additional amendment (2nd Issues) B.E. 2545, critical thinking skills are considered to be one of the desirable attributes. This skill aims to give a priority to thinking and emphasize on the development of learner's thinking process. Hence, educational institutions and other related departments provide instructions promoting thinking process, management skills, confrontation, and knowledge adaptation to prevent and solve problems. In addition to this, both professional and academic curriculum should aim to train people so that they can balance between knowledge, thinking ability, and capability. Academics should also encourage learners to become moral and responsible members of society. Thus, education is important for the development of our country.

Critical Thinking Skills

According to educational reform in the 2nd decade (B.E 2552-2561) based on educational policy, students in grade 1-6 should possess basic thinking skills and any kinds of suitable instructions promoting effective thinking skills should be provided to them. Therefore, teachers play a significant role in developing the potential of the students and encourage them to learn based on their potential and their efforts. In addition to this, technology

should be utilized in the instruction. It is therefore essential that teachers should seek a direct or design instructional model to promote advance critical thinking skills which also corresponds with cultural context and local environment. This will help create the balance of thinking model. Therefore, a variety of instruction models should be implemented by using only one method. The instruction should create thinking balance and should not use the students as a subject to study in an experiment. It is vital that the teachers choose the appropriate methods to stimulate the students to think. This can lead to changes or the development of the new thinking principles, especially to promote critical thinking and achieve effective learning.

There are several scholars and psychologists who have given the definition of critical thinking. For example, Watson and Glaser (1964) stated that critical thinking consists of attitudes, knowledge, and skills. Attitude can be referred to the thoughts of seeking knowledge and the acceptance to prove whether it is true and apply the inference knowledge, summary, generalization to make a reasonable decision based on the evidence and logic principles. It also includes the skills to use attitude and knowledge to evaluate and decide. Additionally, Ennis (1985) mentioned that carefully focusing on deciding to believe or act allows an individual to make the right decision. Hence, an individual who has critical thinking skills should possess 12 sub-skills which are 1) Identifying clear questions or problems with certain criteria to decide a possible answer 2) Thinking and analyzing argumentative information by identifying reasonable and reliable information as well as identifying the similarities and dissimilarities of existing opinion or information and making a conclusion 3) Asking challenging questions and clearly answering them. The examples of the questions are: Why? What is an important issue? What is the meaning of this message? What are the possible examples of this case? What is your opinion on this issue? What are the differences? What is the reasonable information? 4) Identifying reliable sources of information which cannot be argued and is accepted to be reliable or comes from a reliable expert 5) Observing and judging the results from one's observation. In other words, the information should come from the 5 senses. Sound, sight, smell, taste and touch. Information should be immediately recorded. 6) Deductive reasoning and thinking is the ability to implement the main principles to subordinate principles or to apply the main principles to other circumstances. 7) Inductive thinking and reasoning is to summarize and refer to the population. The sample group has to be the representative of the population before the induction. Data should be accurately collected based on a plan and there should be enough information to draw an inductive conclusion. 8) Evaluating the value by considering choices based on sufficient information as well as weighing between positive and negative impacts before deciding. 9) Giving a definition and identifying the meaning such as words with a similar meaning, classifying, grouping, operational definition, and providing good and bad examples 10) Establishing assumptions, consequences or effects that may occur afterwards. 11) Making a decision that leads to practice by identifying the problems, choosing the criteria, creating options, and selecting the best possible choice that can lead to practical practice 12) Interacting with others and understanding oneself and other people. They should be able to effectively evaluate the situations and cooperate with other participants. They should also be sensitive to other people's reactions and be able to fully adjust themselves to other people's personalities. Furthermore, Snyder (1993) also stated that critical thinking is the ability to solve the problem by understanding information and using systematic thinking, soul, and creative as well as reasonable experience. It also refers to the ability to analyze information. The Secretary's Commission on Achieving Necessary Skills (2011) has similarly concluded that the attributes of thinking critically are to study, research, give reasons, and think creatively. This results in thoughts and the evaluation of the thoughts. It is to see things, think, and solve problems.

In addition, many Thai scholars have defined the meaning of thinking critically. For example, Lueboonthawatchai (2000) stated that critical thinking skills is to use intelligence based on knowledge, and skills to think rationally and deliberately. They also stated that critical thinking is to review the facts and problematic issues which lead to assumptions and proper conclusion before making an action. Lorsuwankul (2003) mentioned that it is the ability to think with goals, decide, and control oneself based on the results from interpreting, analyzing, evaluating the arguments, and referring to a conclusion from reliable sources in order to prove the facts. It also includes the ability to explain the evidence, vision, methods, and criteria as well as to consider the

context to make a decision which is dictated on what to believe and what to practice. Moonkam (2004) claimed that thinking critically is reasonable thinking, resulting from deliberate thinking with criteria and reliable evidence leading to a conclusion and effective decision making whether what the right thing is, what to believe, what to choose or what to do. Furthermore, Pornkul (2011) said that critical thinking is a strategy creating confidence to the thinkers as their thoughts have been through many steps of systematic thinking with many reviews. Therefore, the production of these thoughts is in high quality and useful. Sinthaphannon et al. (2012) concluded that critical thinking means the reasonable and systematic thinking based on researched fact, evidence, and information required to decide, consider, and reasonable analyze before deciding whether to believe.

In conclusion, critically thinking is an intelligent process using knowledge, reasonable thinking skills, intuition, creative thinking, carefully deliberating, as well as reviewing facts and using problems solving to find well drawn conclusions. This is followed by a proactive process to prevent the problems from occurring again.

Critical Thinking Skills and Social Studies

Critical thinking is the important skill for social studies. It is therefore the role of the social studies teachers to train their students to have critical thinking skills. Critical thinking requires basic to advance thinking levels. They include: remembering, recalling, interpreting, comparing, categorizing, summarizing, referring to the information, assuming, predicting, analyzing, synthesizing, and evaluating.

Social studies is a subject that relates to the relationships between human and environment. The contents in social studies are selected to teach students from primary level and secondary level, so that students can apply the knowledge in their daily life. In general, the learning area of Social Studies, Religion and Culture covers a wide range of as areas. Thongsukdee (2001, pp. 73-74) has reflected her view on social studies and has suggested that it promotes a sense of being an active citizen and concern the common good. The contents of this subject have been systematically integrated in many fields

such as: social science, mathematics, and natural science. For this reason, a variety of instructions should be provided to the students. Consequently, a social studies teacher who creates the knowledge, thinking, and moral foundation should attempt to promote a developmental process of critical thinking, by integrating it in the learning area of Social Studies, Religion and Culture.

Social Studies Instruction

In social studies instruction, it is vital to develop the potential of the learners to be able to survive and happily live with other people in the society. Learners should be able to appropriately adopt their knowledge and understanding to the changing social conditions with balance and sustainability. The significant aims of social studies are to promote many skills such as social skills, thinking skills, deciding skills and solving skills which serve the needs to develop the citizen of our country and become a vital base for global citizen. Therefore, the instruction of social studies or the learning area of Social Studies, Religion and Culture should allow students to use their intelligence, knowledge, thoughts, capability, skills, values, and good attitudes. They should do this by considering the appropriate age and maturity of the learners. It is also important to promote cooperative learning method so that the learners can develop and expand their thoughts from their knowledge acquired from the integration of their surrounding conditions. The skills to be developed are as follows:

- 1) The development of cognitive skills can be promoted by the instruction aiming that the learners should have the knowledge and understanding of the contents. The instruments used to promote thinking are systematic thinking and thinking skills such analysis thinking, synthesis thinking, critical thinking, solving-problem thinking, and creative thinking as well as integrating other contents.
- 2) The development of social skills can be promoted by the instruction, aiming that the learners should have practical skills to create basic life skills such as self-awareness skills, deciding and problem-solving skills,

researching for knowledge skills, adoptive skills, communicative and interacting skills, planning skills, and managing as well as teamwork skills.

3) The development of affective domain and attribute should ensure that learners have the skills to develop values and attitudes to adjust to different social needs, for example, applying Buddhist principles to their daily life.

For this reason, in order to develop the three aspects, it is essential to design and provide learning activities corresponding to each aspect. The details are as follows;

- 1) For the development of cognitive skills, the learners should be able to learn from various resources in different contexts both in the classroom and outside of the classroom. The learners should study whether there is an important local learning resource where they can collect the information and try to understand the information by various methods. These may include: observation, interview, listening to the instruction, self-practicing, note-taking, and reading the documents. After that, the information should be arranged. The learners should be able to write a draft with important issues, insert pictures, order the information, present and discuss the relationships of the information. Finally, they will be able to write a report and use it as a foundation to analyze and develop their conclusion.
- 2) For the development of social skills, learners should be able to apply the skills in working environment. They should also be able to successfully express their opinions, discuss, and draw a conclusion to make a reasonable decision. These skills require social skills, such as: working in a subordinate group and main group, coordinating with outsiders, travelling and living during the time to explore the local area to enhance various learning system which can be used to solve the problems and obstacles.
- 3) For the development of affective domain and attitude, learners should be able to apply the knowledge and skills from the practice to promote the values and attitudes. The information that learners receive from local areas should be assessed until they have a depth knowledge and understanding if its importance. In addition, they should be proud of, love, and want to preserve their local areas. They should be passionate about developing their own area and country afterwards.

According to the social studies instruction above, the teachers should consider knowledge, skills, and attitudes promoting systematic thinking or thinking method. Therefore, the instruction should be student-centered and provide various learning resources which are the basis of reinforcing effective knowledge, thinking, experience, and the attitudes in society.

The Skills for Learners in the 21st Century

The skills of 21st century according to the framework of the Partnership for 21st Century Learning can be divided in to 3Rs + 8Cs. Wijarn Panitch also added 2Ls which stand for learning and leadership resulting in 3Rs + 8Cs + 2Ls. 3Rs stand for 1) Reading 2) Riting 3) Rithmetics + 21st Century Themes and 8Cs stand for 1) Critical Thinking & Problem Solving 2) Creative & Innovation 3) Collaboration, Teamwork & Leadership 4) Cross-Cultural Understanding 5) Communication, Information & Media Literacy 6) Computing & Media Literacy 7) Career & Learning Self-reliance 8) Change. Last but not least, 2Ls stand for 1) Learning Skill and 2) Leadership

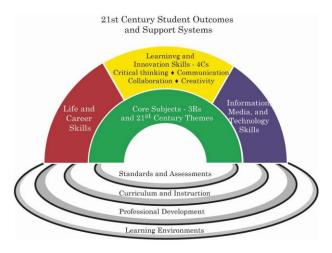


Figure 1: 21st Century Framework

Source: https://www.gotoknow.org/posts/544932

Panitch (2014) mentioned the skills for living in the 21st century that the contents of subjects are important to establish the framework and strategies to instruct the interdisciplinary in the core course and add the skills of 21st century to every core course. The details are as follows;

- 1) The skills for learning and innovation will determine the readiness of the learning to work in more complicated working environment. The skills are creative and innovative thinking, critical thinking and problem-solving skills, as well as communicative and cooperative skills.
- 2) The skills in information, media, and technology are required as nowadays, information is spread through media and technology. The learners should be able to show critical thinking skills and apply them to various practice using their knowledge in media and technology.
- 3) Life and career skills which lead the learners to succeed nowadays, are flexibility, creativity, and social and cross-social skills, productivity, accountability, leadership, and responsibility.

According to a report, Learning: The Treasure Within, which has been proposed to UNESCO by the Commission of Education in the 21st Century, the goal of international education to be achieved in 2023 is that the global citizen should be a lifelong learner (Commission of Education in the 21st Century) in order to be survive in the world of rapid changes. The instruction should aim to create new and various experience both inside and outside classroom. This corresponded to the policies of Office of the Basic Education Commission in 2008, as it is stated that the instruction provided to the learners should allow them to do activities through the process of their brain such as listening, speaking, reading and writing, linking the relationships, and comparing. The learning results can be shown in the forms of lecturing, explaining, demonstrating, practicing or researching from different kinds of media that the learners can use to learn more effectively.

According to the study of educational management of ASEAN countries and Dialogue Partners in 2013, it has been found that educational management of Japan since 1980s has always focused on flexibility, creative thinking, and the increase of students' opportunities to express themselves. Additionally, they have placed an importance on the development of

thinking ability, critical thinking, and creative thinking together with emotional development as thinking skills are one of the most significant factors to build efficient education. This is because thinking skills are a foundation that students can use to apply their knowledge to live in the 21st century and build their careers. Currently, the educational management in Japan is more progressive than Thailand. The educational in Japan is one of the best educations in the world. According to The World Top 20 Education Poll in 2018, Japan was ranked on the third (Manager Online, 2018). This reflects the succeed in educational management of Japan as they valued thinking skills, disciplines, shared social values, and the respect in education. The tools that made education in Japan successful are 1) the effective education system that serves the needs of the students in every level, 2) the curriculum that is compatible with local contexts and the needs of local people, 3) the instruction providing problem solving and learning experience focusing on real life contexts rather than memorizing textbooks, and 4) the evaluation emphasizing on the development of the students resulting in more creativity, more productivity of the students, better critical thinking skills, better systematic thinking skills, and better information managing skills. The students with these skills are known as "Productive Students".

According to the study of learning principles, there are four learning principles which are known as the foundation of lifelong instruction. The first principle is learning to know referring to the instruction that promote the students to seek for knowledge and research and learn by themselves resulting in new knowledge and the development of previous knowledge. The second principle is learning to do, which means that the instruction should allow the learners to practice by themselves so that they can exchange their experience and work with other people leading to the exchange of their knowledge. This can create the new creative work, which can be useful to both the learners and to the society. It can also be used to confront and solve problems. The third principle is learning to live together can be defined that the instruction can be provided via many activities such as project work in order that the learners can learn how to live with other. This creates a better understanding of others in terms of history, culture, values. This allows them

to learn about duty and rights of themselves in a democracy. They can practice leadership and fellowship in different contexts. The fourth principle is learning to be, which means that learning with freedom and responsibility for their own roles should be promoted. The students should be encouraged to be able to decide and solve problems in their classes. They should be able to learn with their full potential and develop their unique qualities, so that they can use their individuality to become successful.

For this reason, the development of the instruction should aim to develop the potential of the students to be learned in the 21st century. Teachers should be the only facilitator to promote the learning. In other words, everyone should be responsible for learning that aims to develop the model of instruction. This will promote learners to develop to their potential.

In conclusion, to provide social studies instructions to develop critical thinking for living in the 21st century, the teachers should conduct their instruction based on the needs and interests of their learners and allow them to participate in the learning process as much as they can. The instruction should emphasize on constructing the body of knowledge via researching and experimenting by the learners' authentic experience. The instruction should also focus on self-reliance in order to promote the skills that can be applied in their daily life. Self-evaluation should be implemented in order to allow the students to understand themselves and be ready to improve or develop themselves. Therefore, I have collected the learning area of social studies, critical thinking skills for living in the 21st century, the instructional model of the 21st century for learners and the roles of social studies teachers. This is summarized in the table below, which also illustrates the Instructional Models of Social Studies Teachers to Development of Critical Thinking Skills for Living in the 21st century. The details are as follows;

Table 1: Instructional Models of Social Studies Teachers to Development of Critical Thinking Skills for Living in the 21st century.

The Learning Area of Social Studies	Critical Thinking Skills for Living in the 21 st Century for Learners	Instructional Model of the 21st Century for Learners	The Roles of Social Studies Teachers
Religion	1) 2Ls skills which are learning and leadership	1) To Communicate and interact between each	The teacher is the researcher who raises
Morality		individual.	questions and encourages students to think
Ethics		2) To apply inductive and deductive interaction between	widely and solve the problems based on
		individual	moral principles which can be applied to
		3) To manage their emotions and skills in working life	their daily life.
		4) To decide and solve problems in principles.	
Civics culture and social	1) Information, Media, and Technology Skills	1) To respect and see the values of their dignity and	The teacher is the designer who designs
living		humanity	their own instruction through various
		2) To practice and integrate the knowledge with their	activities, media, materials,
		daily life.	assessment, and evaluation promoting
		3) To be aware of media and technology	cooperation with other people.

Table 1: (continued)

The Learning Area of Social Studies	Critical Thinking Skills for Living in the 21st Century for Learners	Instructional Model of the 21st Century for Learners	The Roles of Social Studies Teachers
Economics	1) Life and Career Skills	To be aware of choosing to consume good products and technology To intelligently choose to consume the products To apply Sufficiency Economy Philosophy to their daily life.	The teacher is the decision maker who stimulate the learners to think and live by applying the Sufficiency Economy Philosophy.
History	1) Critical Thinking Skills	1) To use the truth from the process of observing, questioning, researching, collecting, interpreting, translating the knowledge from local community. 2) To conserve local culture and Thai wisdom. 3) To realize the value of participating in local activities.	The teacher is the referee who facilitates, clarifies, and supports analysis thinking and critical thinking. The teacher will give advice to the students who are not familiar with thinking process in order to seek knowledge.

 Table 1: (continued)

The Learning Area of Social Studies	Critical Thinking Skills for Living in the 21 st Century for Learners	Instructional Model of the 21st Century for Learners	The Roles of Social Studies Teachers
Geography	1) Learning and Innovation Skills- 4Cs	1) To create an innovation supporting environmental	The teacher is the analyzer leading to the
	consisting of	balance.	students to the right direction. The teacher
	Critical Thinking	2) To be aware of media and technology	is also the decision maker deciding how
	Communication	3) To predict the use of natural resources and	much the students has learnt by asking
	Collaboration	environment	questions to test thinking process.
	Creativity		

It can be seen that instructional models of social studies allows teachers to develop critical thinking skills in the 21st century. It aims to develop creativity, the acceptance of changing, the capability to understand and deciding, attitudes, analysis, the ability to identify questions and how to apply it to the learners' daily life. This requires a skillful instructor who is highly motivated. It is the teacher that should create an innovative learning environment to manage the classroom. This will allow the students to develop their knowledge, skill, and attitude to be a complete human in the 21st century.

The Guidelines for Instructional Models of Social Studies Teachers to the Development of Critical Thinking Skills for Living in the 21st century

According to the Instructional Models of Social Studies Teachers to the Development of Critical Thinking Skills for Living in the 21st century, the process can be summarized as follows;

- 1) Questioning is the step that allows the learners to observe the phenomena leading to curiosity. Then the students are encouraged to ask important questions as well as predict the answers by researching from various resources and draw conclusions from the temporary answers. The essential skills are 1) Observing to gather as much as information as they can 2) Asking question from basic level to advance level and 3) Accessing information by reading, listening, watching, and taking notes (literacy) in order to predict the answer by induction reasoning and conclude the answers.
- 2) Planning resources is the step that allows the students to design/plan in order to collect the information from many learning resources as well as applying deduction reasoning. The essential skills are: 1) Searching and evaluating the information 2) Literacy 3) Reasoning and 4) Numeracy to measuring the analysis.
- 3) Creative knowledge is the step of quantitative and qualitative analysis. The data can be communicated though graph, interpretation, conclusion and explanation in order to create the body of knowledge which is the core knowledge of truth, definition, concepts, principles, rules, and theories allowing the students to create their own body of knowledge. The essential skills are: 1) Data analysis, numeracy and statistics 2) Literacy 3) Data

interpretation and 4) Induction reasoning which are used to construct and conclude the body of knowledge.

- 4) Communication is the step allowing the students to present their knowledge via clear, accurate and comprehensive verbal language use. The essential skills are: 1) Literary 2) Summarizing comprehensive language 3) Information presentation such as 3)1 writing essay, academic reports, research reports, and articles and 3) 2 verbal presentation which is to give an effective speech in public, school, community as well in ASEAN and international community.
- 5) Community development is the step to let the students practice how to apply their knowledge to benefit the society. It can be the knowledge of innovation that takes responsibility for the society and shows that they are caring and sharing leading to peaceful and sustainable society. The essential skills are 1) Constantly working in a team 2) Applying knowledge and learning method 3) Creative problem solving 4) Responsible skills and 5) Caring and sharing skills

Instructional Models of Social Studies Teachers to the Development of Critical Thinking Skills for Living in the 21st century

The instructional model of social studies teachers to develop thinking skills can be improved and applied to social studies to develop critical thinking skills for learners in the 21st century in order to help them adapt themselves to the new contexts and become a good citizen with responsibility, knowledge, skills, morality, and ethical values. As there is a variety of instructions aiming to develop in Thailand, I therefore, synthesize and present five instructional models to develop thinking skills. The details are as follows:

Model 1: The Instructional Models Focusing on the Development of Cognitive Domain to Create the Body of Knowledge of Conceptual Thinking

This model allows the learners to have better knowledge and understanding of the contents which come in the form of truth, concepts, or conceptual thinking. The social studies teachers should be able to instruct in terms of 1) Conceptual Instruction by Joyce et al. (1996) who developed the

concept of Bruner, Goodnow, and Austin 2) Instructional Model of Gagné (1985) 3) Conceptual Instruction based on Joyce et al. (1996) which developed the concept of Ausubell 4) The instruction focusing on memorizing of Joyce et al. (1996) and 5) The instruction using graphic diagram of Jones et al. (1989), Clarke (1991), and Joyce et al (1992).

Model 2: The Instructional Models Focusing on the Development of Psycho-motor Domain in Order to Practice Overall Skills

This model aims to develop the capacity in practice, action or other performances. The social studies teachers use these instructions which are 1) The instruction aiming to develop the practical skill of Simpson (1972) 2) The instruction on practical skills of Dave in 1967 and 3) The instruction of practical skills based on the principles of practical skills.

Model 3: The Instructional Model Focusing on Affective Domain to Create the Development of Application

This model aims to illustrate feelings, attitudes, values, morality, and ethics. The social studies teachers can apply the instructions such as 1) the instruction to develop affective domain by Bloom (1956) 2) The instruction using discussing of Joyce et al. (1996) which was developed from Oliver and Shavers concept and 3) the instruction using role play from Shaftel and Shaftel (1976)'s concept.

Model 4: The Instructional Model Focusing on Process Skills to Learn Practical Development

These are skills related to process of intelligence. The social studies teachers can apply the instructions such as: 1) The instruction aiming to research knowledge based on category by Joyce et al. in 1996 who developed the concept of Thelen 2) The instruction that applies inductive reasoning of Joyce et al. (1996) who developed the concepts of Taba in 1967 3) The instruction promoting creative thinking by Joyce et al. (1996) who developed the concept of Gordon and 4) the instruction that teaches about the process of problem solving by Torrance (1962).

Model 5: The Instructional Model Focusing on Integration the Body of Knowledge

This instruction integrates between contents and methods. It has been very popular because it has been corresponding to the principles focusing on the develop of overall skills or integrated development. The social studies teachers can apply the instructions which are 1) Direct instruction proposed by Joyce et al. in 1996 2) The instruction using story telling by Bell and Harkness in 1997 3) The instruction of 4MAT from Mc Carthy cited in Niranthawee and Phumman in 1999 which was developed form the concept of Kolb and 4) The instruction using cooperative learning based on the concept of Johnson and Johnson in 1974.

In conclusion, the instructional models suggested in this article are both interesting and innovative. It shows that it can give effective impacts on the teaching and learning process if the teachers really pay attention on it and try to understand it as well as try to properly apply it based on the purposes of each instruction. This can make their instruction more effective and it can motivate the students to learn more, leading to the development of their thinking ability and their overall skills.

The Application of Instructional Models of Social Studies Teachers to the Development of Critical Thinking Skills

The instructional models of social studies of social studies teacher which can be chosen based on the foundation and contexts of the students are:

Model 1: Using Problem-Solving to Develop Critical Thinking

Critical thinking can be developed by problem solving skills which based on two learning instructions of critical thinking (Issarangkul Na Ayuttha, 2012, pp. 50-51) The first instruction is to promote critical thinking by studying and analyzing the methods from other people who have solved problems in each situation in the society as well as the problems about human relationships. In this foundation, students should be encouraged to think critically and be capable of solving problems. To learn from other people's methods of solving problems, teachers can present this through historical contents, use examples, and discuss various options to solve the problems. The

second instruction is to learn through real problems because these problems directly affect learners and are crucial to their everyday life.

Model 2: Using Argumentative Problems to Develop Critical Thinking

For the model using argumentative problems to develop critical thinking, teachers may choose the problems from the media to use in the instruction because students can use their critical thinking skills. They will be able to use their synthesizing skills to distinguish between facts and opinions of other people. They will be able to do the processes of checking, establishing an assumption, and searching for evidence to make a reasonable decision. This method is used to also allow the students to be aware of advertising techniques and be able to analyze each advertisement. Also, Peace Education is applied. Peace Education is a concept aiming to develop the citizens in the society to be reasonable, love peacefulness, be able to cooperate, and solve the conflicts by using peaceful methods rather using violet ways. This concept can be integrated in the class (Sukhothai Thammathirat Open University, 2011: 2-54) consisting of the following principles:

- 1) Perceiving critically affects the understanding of current situations and situations that may occur in the future.
- 2) Conflicts, Stress, and Violence are parts of human life but it can be solved by using reasonable and peaceful methods.
- 3) Understanding the differences, compromising, and forgiving are very essential in the society that interdependence among one another is required.
- 4) Creating a better understanding is vital to mankind.

Model 3: Using Case Study

Case study is the method used by sociologies to create the body of knowledge in many fields. The case study should be the real situation with argumentative values so that the students can analyze whether what they believe is right or wrong. The reason why argumentative problem is used is because it can be studied by many different methods. In addition, the opinions such as the political and governance argumentative problems or even the principles of Thai language can be checked. Furthermore, the problems should not be complex and will not take too much time. Sometimes, role play can also

be used. The aforementioned methods can be used to develop critical thinking among the learners and encourage them to present various thoughts through the links of analysis process.

Model 4: Using Textbooks as a Means to Develop Critical Thinking

Teaching argumentative issues and the search for the truth. Issarangkul Na Ayutthaya (2012: 55) has mentioned that there are three instructional models that uses textbooks to enhance critical thinking. The first model is when the teachers present the texts describing in the textbooks or the teachers can refer to the textbooks and raise certain questions to stimulate the students to think and interpret important issues. This method allows the students to summarize important and useful principles. The second model is when the teacher presents principles, attitudes, or reference which corresponds with the contents from the textbooks. Based on the principles, the teachers will stimulate the students to investigate the believes of those principles and the accuracy of the information. Moreover, the students should possess the knowledge of the principles. The third model is to use the contents of argumentative problems. This method allows the students to think deliberately and curiously, enabling them to interpret the information to create nuanced answers.

Model 5: Using the Process of Critical Thinking Development

The process of critical thinking development consists of two steps. The first step is to identify a topic to think critically. The students should know the topic aiming to be taught by the teachers. For this step, the teachers should analyze the skills related to critical thinking skills and allow the students to thinking critically as it is the aim that has been set up. A specific training for each skill is also significant. The teacher should design an activity and prepare the materials to support the students to have the expertise in the specific skills. An assessment for the process of critical thinking should be implemented by analyzing each aspect of the information as well as reviewing the skills which has been taught and discussed in the classroom. This can be referred a step to follow up the development. The second step is to develop critical thinking and the contents according to the curriculum. The students will have rights and

freedom to express the skills they have learnt. The teachers should emphasize on adopting the skills learnt in the class to the students' daily life.

Model 6: Using Current Problems in the Present to Practice Problem-Solving and Decision-Making Skills

This model allows the students to examine and establish an assumption leading to the development of critical thinking. Studying the real problem promotes social problem-solving skills, rather than letting the students think and investigate the topics in social studies. The students will be divided into small groups in order to study the assumptions proposed by the teachers. Each student in the groups will be responsible for investigating the assumptions. The students are allowed to search freely and draw a conclusion whether to accept or deny the principles based on the knowledge and facts from their own research. This model will lead the students to the process of thinking based on research methodology through the investigation and the practice to search for conclusions. This can enhance students to a higher potential.

In conclusion, the instruction emphasizing on the authentic experience of the students provides concrete experience to the students that they can investigate and draw a conclusion. This can be applied to the new situation. In each step, the students have to use much of their thinking skills. Cooperative learning skills are also promoted in the classroom. The teachers are only the facilitators who give advice and lead the activities.

Conclusion

For the Instructional Models of Social Studies Teachers to the development of Critical Thinking Skills for Living in the 21st century, the teachers and learners should consistently cooperate in each step of the instruction to design various instructional models of critical thinking and problem-solving. To design the instruction of critical thinking skills and problem-solving skills, it is important to emphasize on enabling the students to have logical thinking, such as: inductive thinking, deductive thinking, facilitating the students to have systematic thinking using critical thinking to

decide and conclude based on the analysis. Then, the students can use it to interpret and thoroughly and critically review the material. In addition, students should be able to ask important questions, allowing them to clarify each aspect. This will lead to better solution by implementing Project-Based Learning or Problem-Based Learning. However, as the social studies teachers should take on the roles as instructors and instructional designers. Ultimately, they should promote critical thinking to the learners so that they can be successful in their work and life in the 21st century society.

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