

Effects of Social Studies Instruction Using Case Study Method on Democracy concepts and Critical Thinking Abilities of Secondary School Students

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Abstract

This article describes the Effects of Social Studies Instruction Using Case Study Method on Democracy concepts and Critical Thinking abilities of Secondary School Students. The purposes of this research were to test the hypothesis that secondary school student demonstrate higher scores in democracy concepts and critical thinking abilities after using case study method. The participants were twenty-four tenth grade students who enrolled the civic education class. The research instruments were the democracy concepts test with the reliability at 0.81 and The Cornell Critical Thinking Test, Level X with the reliability at 0.71. The experimental instrument was the ninth case-study method lesson plans. The data were analyzed by means of arithmetic mean, standard deviation, and The t-test dependent. The research results were as democracy concepts and critical thinking abilities of secondary school students after learning by using case study method were higher scores than that before using case studies method at 0.05 level of significance.

Keywords: Case Studies method / Critical thinking / Democracy concepts

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Introduction

Thailand has been replacing with a parliamentary democracy for 80 years, but the political conflicts were always led to the several of coup and acts of violence. Thailand has changed the constitutions in every 4 year. Consequently, Thailand's democracy has failed and changed only in its political structure. However, it has never changed the way of life of people. These were the consequences of misunderstanding of democracy among Thai people. According to the report of Office of The Election commission & Office of the Basic Education Commission of Thailand (2009) and Thaewarumitkul (2012), ensured that Thai youths have been studying democracy for 15 years in the pre-tertiary education, but democratic cultures could not be achieved because many of Thai students don't grasp the concepts of democracy clearly.

The considerable problem of Thai education is the hierarchical society. Most of Thai students were taught to be believed and obeyed the leaders without questioning and asking for reasons. The citizenship education in Thailand emphasizes on teaching democracy as a government rather than democracy behaviors (Tantisunthorn, 2012), so that students cannot think logically. Moreover, they lack of analyzing skills. Therefore, the important tasks of all teachers are to establish and to develop habits of democracy. Initially, the teachers need to educate Thai students to understand the democracy concepts and develop their critical thinking abilities. Why we have to improve Thai citizen's knowledge about the concepts together with critical thinking abilities? Several papers have showed that the concepts are the fundamental of higher-order thinking and can enhance understanding between each other. (Arends, 2001). If teacher want to promote democratic cultures and cultivate students to be good citizens, teaching concepts would be the first step of processes (Crick, 2002). They need to give students mutual concepts in terms of law, justice, representative, natural right, liberty, individuality, and welfare. As a result, the development of democracy concepts will help students to understand themselves, to respect other opinions and to accept the social diversity. Jaramillo & Murillo (2013) supported that the citizenship education cannot be completed without the development of critical thinking. When the people are critical thinkers, it will force them to use reasons to overcome individual biases and assumedly that they will not have fallen into any of the logical fallacies or rationalizations themselves (Halpern, 1999; Wood, 2002). There is another reason supported by Ennis (2011). He explained that the critical thinkers are disposed to consider seriously about other people's views, to listen carefully to other reasons and to literally concern about other welfares. These attributes assure that the critical thinking will help improve good citizenship mindset of students.

How could the democracy concepts and critical thinking skills be developed? The strategy of this case study has been normally used in many fields as a basic class discussion. Kauchak and Eggen (2003) cited that the case studies are the most powerful examples that teachers can use to teach the difficulty, complex and abstract concepts, so the theoretical democracy concepts could be simplified through them. Klein, et al (2010) supported that teachers can bring concept of human rights alive in their classrooms through examples they use, questions they raise, through active

discussion, critical thinking and reflection. When the teacher posed the questions “How” or “Why” during the inter-group discussion, students were required to use their appropriate reasons to argue with another group. In the process of using case study, teachers are not only to facilitate students to figure the answers out, but also afford an opportunity to develop communication and problem solving skills (Davis & Wilcock, 2003 p.) Brooke (2006) and Saleewong (2012) coincidentally founded that the case study method can promote Socratic dialogue and critical thinking skills in the visual classroom. However, the effective of it significantly depends on the two strategies; the type of cases and the questions which teachers proposed. In general, case studies should be based on a true story, real life or the contemporary phenomena and the question “why” is very useful to urge student to think critically. Yin (1994) supported that

“if you wanted to know "why" the act had occurred, you would have to draw on a wider array of documentary information, in addition to conducting interviews if you focused on the "why" question in more than one terrorist act, you would probably be doing a multiple-case study”

Using case study instruction helps Thais to not judge anything merely by own views and attitudes. They will investigate more and more facts and use information from different resources before making a conclusion. Besides, they are fostered to participate in democracy classroom and construct the body of democracy concepts in their own mind. To achieve these objectives, I bought a copyright of The Critical thinking Test, Level X by Ennis & Millman (2005), and it was translated into Thai version by Department of Consular Affair, Kingdom of Thailand. The test is accepted to be one of the standard critical thinking tests. It was generally used in many cultures. Importantly, the test items cover the key critical thinking concepts including assumption, induction, deduction, and credibility as well as observation skills.

What is the case study instruction and how it functions?

What is the definition of case study? By term, case study is defined as the description of the complex problem based on human story that illustrates a difficult situation requiring a decision (Stanford University, 1994) It is comprised of several relevant dimensions (Gerring,2004)□ and it is inquired when the boundaries between phenomenon and context are not clearly evident (Yin, 1994). Using the case-study can literally reveal all empirical facts of stories. The case study is normally used in a variety of educational field nowadays. The lecturers traditionally bring it into the classroom as one of active learning strategies. It can boost up student’s motivation and improve student’s main skills; group working, information gathering and analysis, time management as well as practical skills (Davis & Wilcock, 2003: p7). Easily, they could be developed from personal or teacher’s experiences. How can the case study develop democracy concepts and critical thinking abilities? The research of this study analyzed and synthesized information from various papers in terms of teaching using the case study.To achieve the purposes, the researcher has integrated key question

techniques in every process. The case studies method strategies comprise of 5 steps as follows;

1) Presenting the case study: Before presenting the case study, Lane (2007) suggested that teachers have to determine the learner attributes and learning outcomes. In this paper, the case studies based on the true and complex story particularly from political conflicts and democracy situations in Thailand. Teachers give students time to read it carefully.(Stanford University, 1994)

2) Identifying problems: Teacher will ask students key questions; what is the main problem? Where does the situation take place? What is intended by saying that? Then, students identify problems themselves (Saleewong, 2009) (Facione, 2011)

3) Analyzing case study: Students jointed the groups and then they prepare to use a different information and several perspectives to analyze the story. (Choi & Lee, 2009) In addition, students were urged to draw upon principles in political sciences, democracy concepts as well as ethics to solve a problem. (Stanford University, 1994). The democracy concept will be formed in this process.

4) Classroom discussion: There are several strategies in this process. Firstly, teacher passes the question out in order to give student an issue to be discussed. Next, students explored the problems and exchanged their opinions to each other. Then, they presented the intra-group's solutions to others and instructor. (Khamanee, 2009) Importantly, the teacher need to ask some questions that motivate student's critical thinking abilities. Students can understand democracy concepts more clearly when they actively participated in this process. These are very useful to check reasons behind conclusions. The "why" and "how" questions are needed.

5. Conclusion: Teacher asks students to summarize the classroom discussion and then give them time to make conclusions themselves. If all the answers were not be completely carried out, students can be assigned to find more information for the next class session (Stanford University, 1994)

What are the democracy concepts?

The concepts of democracy highlight the intrinsic importance of right, liberty, and equality, rule of laws, majority, election, pluralism, responsibility and political participation. Each concepts is mentioned in the Thailand's Education Basic Core Curriculum 2008. The definitions of each concepts are as follows

Democracy concepts	Description
Right	In the democratic states, It is believed that all human beings are born with dignity so they have right to live, right to participate in public affairs that affects them, right to education, right to elect their representatives, right to take part in associations and particularly right to check and petition government (Bassiouni, et al (1998), Klein, et al (2011)). The

	principle of human rights is ratified by the constitutional law. The concepts is closely relate to liberty, equality, election and political participation.
Liberty	Liberty is freedom. The freedom to speak, freedom to publish, freedom to express their opinions fairly, freedom to own properties and freedom to belong to social or cultural associations (Klein, et al,2011). However, Citizens freedom is linked to others so they can't not treat or break the laws. Gollob, et al (2010) suggested that in the school context, individual freedom of expression must be limited, quite strictly, to guarantee every student has a chance to participate in the debate. Liberty is enshrined in the democracy society.
Equality	Equality means all social members are protected from discrimination. (Bassiouni, et al (1998). Democracy, however, may be differences between citizens by the way of their backgrounds, the government should realize the individual competence without regarding one's race, gender, religion, ethic or whatsoever (Klein, et al,2011).The crucial importance of equality stresses everyone stands under the laws even the prime minister, legislators or state authorities.
Rule of laws	The rule of law has been accomplished by parliamentary vote or public acceptance, No one, therefore, stands above the laws and all citizens are held responsible if they break it (Klein, et al, 2011). To protect citizen's right and liberty, the process of legislating must be fairly, equally and transparently.
Majority	This implies the majority should be sovereign (Coppedge, et al, 2011). In democracy, people exercise their right to vote for their agents at all level including school, local, regional and national election, and all voters must accept the results, the principle of majority rule, however, must be balanced with the protection of minority interests to ensure social cohesion. (Gollop, at el, 2010). The majority is accepted to be a fundamental of democracy. This concept is intimately related to personal right and liberty. Burnham (2011) supported that "I am not living in a democracy if I cannot choose which books to read, which movies to watch... Equally I have to be able to choose which government will make choices on my behalf. But again I have to accept that my choices will eventually be circumscribed by the majority . "
Election	Election means the competition among the multi-party systems though fair, free and periodical election. All citizens can choose their own representatives in the condition of equality, openness and transparency (Bassiouni, et al (1998). If the public officials could not answer common questions, voters have a chance to leave incompetent leaders through elections (Klein, et al, 2011). This confirms that citizens are not stuck with the unsatisfactory leaders for a long time. The

	concept of election is closely linked to majority, responsibility, right and political participation.
Pluralism	Democratic society includes various groups by way of clans, ethics, races, colors, political parties, behaviors, classes, ages, lifestyles, types of learner and opinions. There may be tension or conflict between two groups of people, teachers have to give room for discussion, debate and accommodation of different viewpoint.(Klein, et al,2011). Political tolerance and negotiation are significantly needed.
Responsibility	This concept emphasizes what people do affects others and vice versa, they, therefore, have to take responsibility for their behaviors. Besides, the public officials have to hold accountable for their actions, policies, decisions or indecisions during the time they position in the public offices (Klein, et al, 2011). To balance freedom and equality, teacher need to share speaking time and attention to every student equally (Gollop, at el,2010)
Political participation	Political participation becomes democracy's symbolic (Burnham, 2011) This entails the process that people can connect themselves to the government, to guarantee the right of self-governing (Klein, et al, 2011). It is presupposed that citizens would actively involve in every public decision through associations, elections or referendums. This is closely related to all concepts.

Research Methodology

Participant

The participants were 24 tenth-grade students enrolling in a section of the civic education class at Samsenwittayalai School, the public school in Bangkok, Thailand. They were divided into 3 groups as being classified by high, medium and low social studies learning achievements. Each group has 8 students equally. All students have taken the critical thinking test, Level X, and the democracy concepts test before using case study method. Then, they were asked to participate in the case study method program for 9 weeks. Teacher checked their critical thinking and the concepts again after finishing all processes. The processes shown in table 1.

Experimental group	Pre-test	Treatment	Post-test
E	D ₁	X	D ₂
	C ₁		C ₂

E: Experimental group

X: Case study method program

D₁: Measuring students democracy concepts before the instruction using case study method

D₂: Measuring students democracy concepts after the instruction using case study method

C₁: Measuring students critical thinking abilities before the instruction using case study method

C₂: Measuring students critical thinking abilities after the instruction using case study method

Materials

The materials used in this research comprise of

1. Case studies method lesson plans: To stimulate student's critical thinking abilities and Democracy concepts. Teacher selects nine case studies from different resources such as newspapers, teacher's experiences, history and political books. All of the cases involve the democracy or political situations in Thailand or global society. For example, the case study "the unequal society in India" presents a variety of status in India and how people treat to the person who are differently. Teacher has integrated 5 steps of the case studies-strategies with this study. They are 1) Presenting case study; 2) Identifying problems; 3) Analyzing case studies; 4) Classroom discussion; and 5) Conclusion in every lesson plan. Students were asked to take the Case study method program for several weeks prior to post-test.

2. The Critical thinking Test, Level X: The teacher measured student's critical thinking by using the critical thinking test, Level X (Ennis & Milman, 2005) this test has been used in curriculum and teaching experiments for evaluating the critical thinking ability of a group and for program admission and employment.

The Level X is a 71-item, multiple choice test for students in Grades 5-12+. It may be administered as 50-minutes timed or as an untimed evaluation. The reliability of the test is at 0.71. The component of the test follows

The component of Cornell Critical Thinking Test, Level X

Cornell Critical Thinking Test, Level X	Question items	Score
Induction	3-25,48,50	25
Deduction	52-65,67-76	24
Credibility and Observation	27-50	24
Assumptions	67-76	10
Total	71	71

3. The democracy concept tests.

Teacher generated **paralleled-democracy concepts tests** to evaluate student's achievement before and after using case study method. Each test comprises 30 items

and multiple choices .To test student's concepts in term of right, liberty, equality, rule of law, majority, election, responsibility and political participation. An evaluation of the test using the index of item-objective congruence (IOC) by the social studies experts in Thailand. All experts agreed that all item was clearly measured. The reliability is at 0.81

Results

Table 1 The comparison between democracy concepts of students classified by high, medium and low social studies learning achievement before and after using case study method

Duration	N	(\bar{x})	S	T	Sig.(One-tailed)
<u>Total</u>					
before	24	15.17	3.40	6.350	0.00*
After	24	17.83	3.17		
<u>High-achievement group</u>					
before	8	17.88	2.53	4.314	0.004*
after	8	20.75	1.28		
<u>Medium-achievement group</u>					
Before	8	14.63	2.88	4.202	0.004*
After	8	17.88	1.96		
<u>Low-achievement group</u>					
Before	8	13.00	3.02	2.525	0.04*
After	8	14.88	2.90		

*P< 0.05

According to the table 1, the results founded that democracy concept of secondary school students after learning by using case study method were higher than that before using case studies method at 0.05 level of significance ($\bar{x}_{\text{before}} = 15.17$, $\bar{x}_{\text{after}} = 17.83$)

Table 2 The comparison between critical thinking abilities of students classified by high, medium and low social studies learning achievement before and after using case study method

Duration	N	(\bar{x})	S	T	Sig (one-tailed).
<u>Total</u>					
Before	24	37.54	8.42	9.078	0.00*
After	24	44.42	7.60		
<u>High-achievement group</u>					
Before	8	39.38	6.05	5.974	0.001*
After	8	46.13	4.19		

<u>Medium-achievement group</u>					
Before	8	44.38	3.81	4.357	0.003*
After	8	50.75	4.06		
<u>Low-achievement group</u>					
Before	8	28.88	6.22	5.123	0.001*
After	8	36.38	5.73		

*P< 0.05

According to the table 2, the results founded that critical thinking abilities of secondary school students after learning by using case study method were higher than that before using case studies method at 0.05 level of significance ($\bar{x}_{\text{before}} = 37.54$, $\bar{x}_{\text{after}} = 44.42$)

Discussion

The purposes of this research were to test the hypothesis that secondary school students demonstrate higher scores in democracy concepts and critical thinking abilities after using case study method. Results shown that case study method program is effective in enhancing student's democracy concepts and critical thinking abilities. The high, medium and low social study achievement students demonstrated higher scores after participating in the program. Each step of case study method supports critical thinking and organizes concepts in student's mindset. The results suggest that step of analyzing case studies influences forming democracy concepts. For example, when a researcher taught the concept of Liberty, I presented the words such as violent, military power, freedom to publish, freedom to own property, freedom to speech, lawbreaker and strictly controlled. Students could identify what was related to democracy concepts and what was not. Rybarczyk†, et al (2007) use a case-based approach increases student learning outcomes and comprehension of cellular respiration concepts. The case is comprised of controversial story. Rybarczyk†, et al (2007) used this method with the biology undergraduate students who randomly assigned in the using case study group and disusing case study group.

This finding of the research conforms to the conclusion of Rybarczyk†, et al (2007) that case study leads to increased learning gains and boosted usage of higher-order thinking skills when compared with student-reported evidence previously described. This research, however, could not compare learning outcome between two-groups of students as another group that I taught obviously had higher score in all subjects. Additionally, the results indicate that students greatly improved their critical thinking abilities in the process of discussion. In this step, a researcher checked the reasons behind conclusions by using questions. For instance, why would you bring to this conclusion? Is the definition of democracy concept correct? Why do you believe this end? Were you consider all angles? Please repeat your reasoning again. The results support the findings of Brooke (2006) and Saleewong (2011). Both of them implemented case study method to develop critical thinking of students in the online classes. Those research concluded that case studies promote Socratic dialogue and higher order thinking skills as well as classroom participation. Besides, the significant

factor that improved student achievement learning was the democratic classroom. Wilmer (2002) described that democracy in the classroom can provoke critical thinking among participants in the dialogue. This requires good listening skills. A researcher affords students opportunity to choose their group themselves. All students were asked to share their opinions in the classroom session. They have the right to dispute freely, fairly and equally insofar as they did not break other liberty or classroom rules. All opinions were considered and students were equally respected. These factors were necessarily beneficial to develop democracy concepts and critical thinking abilities of secondary school students.

Conclusion

The instruction using case study method has the potential to develop democracy concepts and critical thinking abilities of secondary school students. Case study method also enhances the classroom participation. Students were trained to analyze and synthesize information before conclusion through case studies. Additionally, future researches may wish to implement a case study to increase creativity, problem solving and communication skills.

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References

- Arends, R. I. (2001). *Learning to Teach*. Boston: McGraw-Hill
- Bassiouni, et al (1998). *DEMOCRACY: ITS PRINCIPLES AND ACHIEVEMENT*. Geneva: Inter-Parliamentary Union
- Burnham, J.W. (2011). *Educational Leadership and Democracy*. Manchester: Centre for Educational Leadership University of Manchester. (Online). Available: <http://www.esha.org/Documents/Educational+Leadership+and+Democracy.pdf>
- Coppedge, et al. (2011). Conceptualizing and Measuring Democracy: A New Approach. [Online] Research Article. June 2011 vol.9/ No.2. Boston: Boston University
Available: <http://people.bu.edu/jgerring/documents/MeasuringDemocracy.pdf>
- Ennis.R.H.& Millman.J. (2005). *Cornell critical thinking test , level X*. Michigan: McNaughton & Gunn.
- Ennis, R.H. (2011). *The Nature of Critical Thinking: An Outline of Critical Thinking Dispositions and Abilities*. Last revised form presentation at the Sixth International Conference on Thinking at MIT, Cambridge, MA, July, 1994.
- Saleewong.D. (2013). *Effects of case-based learning on web using questioning techniques and reflective thinking upon critical thinking of undergraduate students*. Chulalongkorn University: Thesis-database
- Davis.C.& Wilcock.E. (2003). *Teaching materials using case studies*. Liverpool: The UK Centre for Materials Education.
- Facione.P.A. (2011). *Critical thinking: What it is and why it counts*. CA: Insight Assessment.
- Gollob, et al (2010). *Educating for democracy: Background materials on democratic citizenship and human right education for teacher*. Paris: Council of Europe Publishing
- Halpern.D.F. (1999). Teaching for critical thinking : Helping college students develop the skills and dispositions of a critical thinker. *NEW DIRECTIONS FOR TEACHING AND LEARNING*, 80, 69-74.
- Jaramillo.R.& Murillo.G. (2013). Education and critical thinking for the construction of citizenship: An investment toward strengthening democracy in Americas. *Policy Brief Series: Education and Democracy*, 4, 1-20.
- Kauchak.D.P.& Eggen.P.D. (2003). *Learning and teaching: research-based methods*. Boston: Allyn and Bacon.

Klein, et al. (2011). Concepts and Principles of Democratic governance and accountability: A Guide for peer Education. Project supported By the European Union. Uganda:Konrad-Adenauer-Stiftung Uganda office

Lane.J.L. (2007). Case writing guide. from Schreyer Institute for Teaching Excellence <http://www.schreyerinstitute.psu.edu/pdf/casewritingguide.pdf>

Office of The Election commission & Office of the Basic Education Commission of Thailand (2009). The manual of teaching democracy in the elementary school. Bangkok : OBEC

Stanford University. (1994). Speaking of teaching. *STANFORD UNIVERSITY NEWSLETTER ON TEACHING*, 5(2), 1-4.

Tissana Kaemaneet.(2009). Instructional Science. [Fifth edition].Bankok : Chulalongkorn Press.

Rybarczyk†.B.J, et al. (2007). *A case-based approach increases student learning outcomes and comprehension of cellular respiration concepts. BIOCHEMISTRY AND MOLECULAR BIOLOGY EDUCATION*, 35(3), 181-186

Wood.R. (2002). Critical thinking. <http://www.robinwood.com/Democracy/GeneralEssays/CriticalThinking.pdf>

Wilmer.F. (2002). *Pedagogy and politics: Democracy in the classroom. Montana State University-Bozeman*. Retrieved from <http://www.montana.edu/facultyexcellence/Papers/ideological%20conflict.pdf>

Yin.R.K. (1994). *Case study research design and methods*. London: SAGE Publication