



<b>Title</b>	<b>Influences of teachers' expression of personal viewpoints in liberal studies classrooms on the development of students' independent thinking</b>
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## **Abstract**

As Liberal Studies being one of the core academic subjects in New Senior Secondary curriculum in Hong Kong, its effectiveness always arouses debates in the society. Some people believe that it improves the problem of transmission of knowledge in traditional local schooling while some doubt if it can promote students' independent and critical thinking.

The research aims at investigating the possible influence of teacher's expression of personal viewpoints in Liberal Studies lessons on students' development of independent thinking by analyzing the opinions of students, teachers as well as personal observation in class. The samples of the research are 2 Liberal Studies teachers and 46 of form 4 and 5 students who study the subject at a local secondary school. Mixed- method was adopted and the research instruments include questionnaire, one-on-one and group interviews as well as lesson observations.

According to the findings, both students and teachers generally prefer teacher's neutrality in order to minimize unnecessary influences on students' thinking. However, lesson observations show that there is no negative impact on the development of students' independent thinking when teacher discloses personal stance, which is in

line with previous research. Since this research covers 2 modules of Liberal Studies only, more research about teachers' expression of personal viewpoints in other modules and at different stages of the lessons should be done before coming concrete conclusions about the impacts of teachers expressing personal standpoints on the development of students' independent thinking in Liberal Studies classrooms.

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## Chapter 1: Introduction

### 1.1 Research background

Hong Kong education system has long been criticized as “spoon feeding” and “exam-oriented”. Compared to other Asian countries like China and Japan, Hong Kong education put emphasis on examinations and competitions (Zhang, Biggs and Watkins, 2010). This learning atmosphere leads to prevalence of memorization of facts and transmission of knowledge in local schooling, failing to cater the diverse learning needs of students and respond to the global calling of whole person development.

To enhance the quality of local teaching and learning, the government restated the aims of education and has launched an educational reform. According to the School Education in Hong Kong: A Statement of Aims (1993), the fundamental aim of school education is

*“to develop the potential of every individual child, so that our students become independent-minded and socially-aware adults, equipped with the knowledge, skills and attitudes which help them lead a full life as individuals and play a positive role in the life of the community.”*

The aim not only advocates acquisition of knowledge, but also independent thinking development, personal consciousness towards social development and citizenship. As Liberal Studies (LS) being one of core subjects in New Senior Secondary schools since 2009, it has been regarded as a chance to enhance students' ownership of knowledge and develop meta-cognitive thinking skills.

In LS classroom, students have to discern and respect the views of others and develop own values system for personal judgments and reflections (Liberal Studies Curriculum and Assessment Guide, 2007). However, there are few literature and research investigating how LS facilitates the development of students' independent thinking. Moreover, some people doubt that if LS teachers will make use of the flexibility in the curriculum to promote their personal viewpoints in political issues, which causes brain-washing to students (Ip, 2013). The situation made me want to know more about if LS teachers' disclosure of personal viewpoints in classroom diminishes the development of students' independent thinking.



## **1.2 Research questions**

This research focuses on “The influences of teachers’ expression of personal viewpoints in LS classrooms on the development of students’ independent thinking”.

In the research, 3 research questions are set to explore students and LS teachers’ perceptions towards independent thinking, the situations of teachers’ expression of personal viewpoints as well as the influences of teacher’s explicit viewpoints in different modules on students’ independent thinking.

1. What is independent thinking from the perspectives of students and teachers?
2. How do LS teachers handle expression of personal viewpoints when teaching controversial issues in class?
3. What are the influences of teacher’s explicit viewpoints in different modules on students’ independent thinking?

It is hoped to explore the controversy about teacher’s neutrality in LS classrooms and the educational implications in developing students’ independent thinking in the subject.

### **1.3 Reasons and significance of research**

Liberal Studies Curriculum and Assessment Guide (2007) states that when teachers show positive values and attitudes towards life, students will regard it as appropriate and follow the values. However, in some controversial issues, it is difficult to judge whether some opinions are right or wrong. When teachers disclose their viewpoints in LS classroom, will the students follow the view of the authorities or make personal critical analysis? Therefore, the research aims at examining the effectiveness of teachers making personal viewpoints explicit in facilitating students to develop independent thinking in controversial issues and if it aligns with the spirit of LS which aims to develop students as critical and independent thinkers.

By evaluating the information collected from the students, teachers and personal in-class observation at local school, it is hoped the findings in the research could allow educators to better understand if LS teachers expressing opinions explicitly encourage or hinder students' independent thinking. Moreover, the findings may help identify places which should be noted and improve common practices when teachers express viewpoints in LS lessons.

## **Chapter 2: Literature review**

There are few research documents about the development of students' independent thinking in LS. Therefore, this literature review mainly outlines the conception of independent thinking and its comparisons with critical thinking, the process of how students develop thinking, as well as how teachers teach controversial issues in LS and other subjects. All information will serve as basis for practical classroom research in next chapter.

### **2.1 Nature of independent thinking**

There is no official definition of independent thinking, but based on different literature, we can understand the nature and conceptions of independent thinking in a holistic view. According to Collins English Dictionary, "independent" refers to "free from control in action and judgment", "not dependent on anything for function, validity, etc." (Independent, 2009, p.836). It stresses people's autonomy in thinking and freedom in making personal judgments without any intervention from outsiders.

There are literatures showing similar elaborations on independent thinking, but explaining higher level of independent thinking in practice. Presley (1996) states that independent thinker is the one who can make sense of the environment based on own

observations and experiences, rather than the words of other people. People who think independently can stand apart from the opinions of the majority, say what they think and act based on what they believe rather than what other people think (Daft, 2008). The two literatures show that independent thinkers are free from any control in their thinking and actions. They would believe in own judgments although it is inconsistent with others' opinions and act in accordance with personal beliefs in the reality.

Independent thinking means not relying on authorities or people who hold opinions contrasting to the beliefs of oneself. However, if students reject to what parents and teachers say, no matter in learning issues or not, does it mean they can think independently? Believing in the opposite of what authorities believe and acting contrary to parents and teachers are not evidence of independent thinking, but being reactive (Potter & Estren, 2012). Presley (1996) shows the same stance in the situation that rejecting to authorities without reasons and making sense, in psychology, is called "anti-conformity", rather than non-conformity. Therefore, independent thinkers, being different from reactors, can form personal beliefs based on own observations and experiences and determine their actions in the reality, no matter it is consistent with what the authorities say or not.

## **2.2 Relationship between independent thinking and critical thinking**

Developing students' critical and independent thinking is one of the aims of LS. How are they similar and different from each other in nature? According to Collins English Dictionary, "critical" means "containing or making severe or negative judgments" and "containing careful or analytical evaluations" (Critical, 2009, p.402). The first definition of the word have meanings of criticism while the second definition, which shows evaluation of objects in balanced way, will be more consistent with the meaning of "critical thinking" stated in LS Curriculum and Assessment Guide.

Referring to scholars' findings about critical thinking in 20<sup>th</sup> century, John Dewey (1909), who is always regarded as founder of critical thinking, defined critical thinking as "reflective thinking" which is

"active, persistent, and careful considerations of any belief or supposed form of knowledge in the light of the grounds that support it, and further conclusion to which it tends" (p. 9)

Fisher (2011) has further elaborations on Dewey's definitions of critical thinking. He explains that it is an activity in which people would think, question and search for

relevant information for themselves, having conclusions after careful analysis of information. The definition of critical thinking has been widely adopted and it has been advanced by Edward M. Glaser in 1941. He defines critical thinking as people's deposition, knowledge and skills in reflective thinking and logical reasoning (Fisher, 2011). Similar to critical thinking, independent thinking also means a process of people testing assumptions and analyzing data according to one's beliefs and thinking, rather than pre-established rules and words of others (Daft, 2008). To distinguish the differences between two types of thinking, NDT Resources Center pointed out that independent thinking is about people's desire to think for oneself while critical thinking refers to the process of people dealing with information.

The literature above reveals that both independent thinking and critical thinking require people to make sense of the information in logical and reflective manner before going to the personal judgments with evidence, belonging to meta-cognitive skills and high-order thinking. Moreover, both of them recognize people's attitude towards thinking and handling the messages they receive from outside world, which is one of the indicators to judge if someone exercise his or her critical and independent thinking. However, when literature mentions the relationship between one's independent thinking and action in the reality, it is quite different from critical

thinking. Independent thinking stresses people's action in accordance with what they believe while critical thinking focus on logical reasoning; both John Dewey and Edward M. Glaser do not mention consistency between one's beliefs and actions in critical thinking.

### **2.3 Model of intellectual thinking**

Model of thinking can help us better understand how independent thinking develops during learning, which may give directions in questionnaire setting in coming methodology.

Potter and Estren state how people's thinking system operates and the nature of thinking style. Thinking style cannot be identified either independent or conforming, since it is a continuous extent from absolutely conforming thinking to absolutely independent thinking (Potter & Estren, 2012). The fact that thinking system is a transitional process can be complemented by William Perry and his research which is very significant in educational research about students' understanding. Perry observed nine stages to describe students' intellectual and cognitive development after researching with the undergraduates at Harvard University during 1950s and 1960s.

The nine developmental positions are (1998):

- Position 1: Students perceive things in the world either “we-right-good” or “other-wrong-bad”. Answers are sought from the authority.
- Position 2: Students regard diverse opinions and uncertainty as unjustifiable confusions from authority with poor qualifications.
- Position 3: Students become open-minded towards the diversity of opinions and uncertainty but sometimes interpret it as authority’s limited knowledge.
- Position 4: Students’ beliefs move to dualism that everyone can have his/her own opinions.
- Position 5: Students think that the diversity of knowledge and values, including the authority’s, depends on contexts.
- Position 6: The students recognize the needs of directing themselves in multiple perspectives with some forms of commitment, rather than merely accepting people’s belief without thinking.
- Position 7: Students start committing personal thinking in some areas
- Position 8: Students examine the subjective and stylistic issues of responsibility
- Position 9: Students understand that personal commitment is persistent activity throughout one’s life time.



People go through the nine steps in sequences as they grow mature. At the beginning (Positions 1-3), students in this stage merely conform to the authorities as the truth of the world. As time goes by (Positions 4-6), people start to understand the multiplicity of the world in relativistic way and recognize that there is no either absolute right or wrong, preparing to form own beliefs. Later (Positions 7-9), students consider various perspectives and commit to what they believe in reality. Therefore, the higher the developmental stages, the better the development of independent thinking.

#### **2.4 Teaching controversial issues in Liberal Studies and other subjects**

Teacher's attitude towards controversial issues is one of the investigation areas in the research. Some literatures suggest different ways for teachers when they are handling personal opinions in controversial issues. The Humanities Curriculum Project emphasizes "procedural neutrality" in which teachers should remain neutral in controversial issues, rather than promoting personal ideas in authoritative stance (School Council and Nuffield Humanities, 1970). Conserva and Dewees (2003) suggests that teachers provide balanced views in order not to offend any students or indoctrinate personal views in controversial issues.

The literatures above advocate teachers' neutrality and balanced position in the issues, but some literatures point out the practical problems inside. It is unlikely for teachers not to convey personal opinions to students although they try to avoid this in the class (Ashton & Watson, 1998). Cotton's educational research re-affirms this claim. The result shows that in Geography lessons, teachers find difficult to maintain balanced and neutral when dealing with controversial environmental issues (Cotton, 2006). As for the subjects like Politics and Social Studies, Carrington and Troyna (1988) explain that handling bias is not exclusive to the teaching of politics; teachers have to notice the use of power and not to intervene young learners' thinking in all other subjects.

Reference to LS Curriculum and Assessment Guide (2007), it is obvious that the subject emphasizes the importance of developing students' independent thinking by repeating the words "independent thinker" for several times.

*"It (Liberal Studies) will help each student to respect pluralism of cultures and views, and be a critical, reflective and independent thinker."(pp.2-3)*

One of aims of LS is to *“to help students become independent thinkers to that they can construct knowledge appropriate to changing personal and social circumstances.”*(p.5) In other words, students should be able to understand the information and form their values system and judgments in the subject.

It is unavoidable for students to encounter controversial issues when learning the 6 modules of LS. However, the Curriculum and Assessment Guide seldom mentions the appropriate way for teachers to handle their personal stance in these issues while there is doubt of brain-washing through LS in the society. All these leave valuable place for further investigation.

Since the literatures reflect that the feasibility of teachers maintaining neutral in controversial issues is low and there is no official guideline in LS curriculum guide for teachers when handling controversial issues, this research will be designed to investigate the influences on students' independent thinking if teacher makes personal viewpoints explicit in LS classroom.

## **Chapter 3: Methodology**

This chapter is about the details of data collection, including the context of information, research methods as well as procedures. The choice of methodology will be justified for its creditability: validity and reliability.

### **3.1 Context of data collection**

The research focuses on the influences on students' independent thinking when LS teacher express her ideas in particular issues in the classrooms. The target students are from Form 4 and 5 classes in a local Band 2 secondary school which uses Chinese (Cantonese) as medium of instruction. 46 students in total, in which 25 and 17 are females and males respectively, were invited to join the research. To investigate the situation of how teachers' explicit standpoints affect students' independent thinking towards learning issues in a holistic view, teachers' factor is also taken into considerations. 2 LS teachers in the same forms (F.4 and F.5) were also invited to participate in the research. All data were collected at school during 8 weeks of Teaching Practicum in 2014.

## **3.2 Research methods and procedures**

Teaching and learning is dynamic, involving interactions between students and teachers in class. Due to its complexity, there are two stages in the process of data collection; **mixed method** is adopted to investigate the influences of teachers' expression of personal views on students' development of independent thinking. Mixed research method can provide a comprehensive picture to research questions which cannot be answered by either quantitative or qualitative research solely (Creswell & Plano Clark, 2011).

### **3.2.1 Stage I: Quantitative research**

At 1<sup>st</sup> stage of data collection, 46 students (26 from F.4 class and 20 from F.5 class) were invited to complete the questionnaire in the LS lesson at the beginning of Teaching Practicum. The purpose of the questionnaire is to gather information about students' opinions about independent thinking and teachers' explicit standpoints in class. The results are gathered to analyze three things: (1) Students' thinking habits and attitudes towards independent thinking, (2) teachers' expression of personal viewpoints in LS classroom and other subjects as well as (3) students' expression of personal views at school.

The questionnaire is consisted of 30 sentences in which Likert scales is adopted to show to what extent students agree or disagree with sentences. Likert scale is an effective method for researchers to gather participants' perceptions and attitudes towards the research subject in short period of time (Anderson &Arsenault, 1998). To avoid student leaning to neutral position, 4-point scale, which includes “strongly agree”, “agree”,” disagree” and “strongly disagree”, is designed for participants to show clear stance. The findings from quantitative research not only reflect students' opinions, but also serve as basis for further investigations in qualitative research. For the sample of the questionnaire, you may refer to appendix 1.

### **3.2.2 Stage II: Qualitative research**

At 2<sup>nd</sup> stage of data collection, there were classroom observations, group interviews and individual interviews with students and LS teachers respectively.

#### **3.2.2.1 In-depth study of classroom observation**

There were classroom observations for both F.4 and F.5 classes, which aims at observing students' participations and responses when discussing controversial questions in the lessons. F.4 students studied sense of belongings in Hong Kong Today while F.5 students studied the use of nuclear energy in Energy Technology and

Environment. Since F.4 and F.5 students were learning different issues in two modules, this setting is beneficial to investigate how teachers' expression of personal views in different modules of the subject would affect students' independent thinking.

At the beginning of each classroom observation, teacher gave basic information about the issues with open-ended question to students. The students were given 5 minutes to think about the question and their standpoints. Then, the teacher expressed her standpoints explicitly with reasons in front of the class and invited students to respond to the question. Both classes were observed students' activeness in doubting assumptions, frequency of raising questions, challenging authoritative viewpoints and defending for personal views, which match with the definitions of independent thinking in literature review.

#### 3.2.2.2 Group interviews with students

After the classroom observation, there were follow-up group interviews in the two classes. In each of the classes, 6 students in total (3 males and 3 females) were chosen for group interviews. They were asked their original standpoints and if there was any change in stance towards the issue after realizing teacher's opinions. The group interview aims at studying how teacher's explicit standpoints in LS classroom

affect the independent thinking of the students with various academic performances. Therefore, there was a selection of samples in this qualitative research method. In each target class, students were divided into 3 categories (higher, moderate and low achievers) in accordance with their results in last LS uniform test. To avoid the bias of gender on the study, one female and one male in each category, who were chosen by draw lots, were invited to participate in the group interviews. To allow students freely express their thoughts and ensure better communications with them, the interview was conducted in Cantonese which is the mother-tongue of the students.

#### 3.2.2.3 Individual interviews with LS teachers

There were also face-to-face individual interviews with 2 LS teachers. Since they are original LS teachers of two target classes, they are more familiar with the learning styles of the students. The purpose of interviews is to investigate teachers' opinions about the role of independent thinking in LS. The interview questions were designed based on the preliminary analysis of 1<sup>st</sup> stage of data collection.

In the interviews, interviewees could choose the places and timeslots they prefer to conduct the interviews which can allow them to share ideas comfortably and freely (Amos Hatch, 2002). Moreover, the set of interview questions was sent to



interviewees one day before the interviews, in order to enhance the smoothness of data collection. Semi-structured interview was adopted to allow interviewer to raise questions during the interviews for better understanding of the answers given (Mitchell & Jolley, 2012). Since different interviewees would give different answers to the questions which lead to difficulty in interpretation and analysis, it may reduce the credibility of the research. Ensuring the validity of this research, interviewer raised additional questions during interviews under the condition of asking for clarity and ensuring correct interpretations. The interviews were conducted in Cantonese which is the same as students' group interviews, to ensure the consistency during the analysis of findings.

### **3.3 Credibility of the research**

The methods and measurement of variables during data collection are considered seriously to ensure the consistency between research method and the information planned to gather for analysis.

#### 3.3.1 Validity

To ensure that the questionnaire distributed to the students is useful and relevant to the purposes of the data collection, a pilot testing was established. The sample of

the questionnaire had been sent to the school principal who is in-service for more than 10 years, for initial screening. He generally agreed that the level of wordings used in the questionnaire was appropriate. A F.4 student from local school with similar banding was invited to have pilot test and he said he understood most of the content except few vocabulary, like “discern” and “confine”. Therefore, to better match with the ability of target students, the teacher further explained each of the statements in two classes. Besides, some of statements in the questionnaire were reference to the literature *The Independent Leadership* written by Daft who provides a test for readers to check the level of independent thinking (P. 139).

### 3.3.2 Reliability

Although target students and LS teachers are from different forms and study different modules (Hong Kong Today and Energy Technology & the Environment), the level of maturation between two groups of students is similar and the research mainly identifies the influences of teachers’ expression of personal viewpoints in LS lessons on students’ independent thinking.

For the qualitative research, there was a selection of samples in group interviews with students. To avoid the bias of gender on the study, one female and one male,

chosen in each category by draw lots, were invited to have group interviews after classroom observations. It is hoped that the influences on students' change of stance are studied in reliable way. To ensure accurate reports of findings, all interviews were planned to be audio-recorded. However, some of participants (students and teachers) preferred not to record their voices, researcher respected their wills and took notes during interviews. To avoid any misunderstandings in communication, the transcripts were sent to the participants involved for reviewing. You may refer to appendices 2 to 5 for the completed transcripts.

## **Chapter 4: Research findings and analysis**

This chapter reports the findings collected during 8 weeks of teaching practicum.

The findings involve three parties, which are students, teachers as well as personal observation of the researcher. The analysis will show complete answers of the 3 research questions.

### **4.1 Teachers' and students' perceptions towards independent thinking**

Teachers and students' perceptions about independent thinking are compared and analyzed in order to show if there is any difference underlying. The findings reflect that two parties have agreement on its importance but different considerations in teaching and learning. More important, there are different perceptions among the students from different forms.

#### **4.1.1 Independent thinking is beneficial and important to all school subjects**

Both teachers and students recognize the importance of independent thinking in all school subjects, especially LS. According to the result of questionnaire distributed to F.4 and F.5 students (Table 1), 50% of all students (23 out of 46) strongly agree that independent thinking is essential to all school subjects (Q.5). 48% of that (22 out of 46) agree independent thinking is very important in LS (Q.6). In other words, students

believe that independent thinking does not only exist in particular subject, but also different learning experiences. Besides, there is nearly absolute agreement on the functions of independent thinking. 65 % and 30% of students agree and strongly agree that it helps people discern the things they encounter and question the values and assumptions (Q.12). Students generally believe independent thinking can promote higher cognitive thinking.

Although students' stance on independent thinking is clear and positive, teachers have other explanations about the role of independent thinking in LS. In individual interviews with 2 LS teachers, they generally recognized the important role of independent thinking in LS. However, both them doubted the extent that LS teachers should focus on students' independent thinking. Here is the extract of the transcript excerpted from the LS teacher.

***Interviewer:*** *To you, what is the role of independent thinking in LS lesson?*

***TI:*** *Independent thinking and critical thinking are important in this subject.*

*Independent thinking emphasizes students having personal judgments and values in the issues but I think it may be not as essential as critical thinking at this moment.*

**Interviewer:** “Not as essential as critical thinking at this moment”?

**T1:** *In New Senior Secondary LS, students are always asked to demonstrate critical thinking skills in public examinations, like thinking from multiple perspectives, giving relevant examples. Therefore, even though independent thinking is one of the learning aims, it haven't widely stressed by LS teachers.*

Another LS teacher raised similar opinions about how different the values of independent thinking were in learning and assessment.

**T2:** *I agree that independent thinking is important, because following what other said is not the goal of education. Therefore, it is important, but in learning only.*

**Interviewer:** *So it is not important in other aspects?*

**T2:** *It is true, especially in assessment. In examinations, students will only take the stance with most evidence available, even though it may be not their original thoughts.*

The 2 interviewees believe that independent thinking may be important in students' learning experiences in LS. However, critical thinking is more often assessed; examinations and score are important considerations for students expressing own

opinions, which may affect how teachers teach the subject in classroom.

#### 4.1.2 Senior form students more likely to believe in own judgments than authority

From the results of questionnaire, the variable of the form that the students are studying causes different reactions towards independent thinking. There is larger sample size in F.4, hence greater influences on total numbers.

According to the result of questionnaire, although most of the students (41% of total) agree seeking the answers from teachers is the most effective way for them to find out the truth (Q.1), there are totally different opinions among F.4 and F.5 students in this statement. There are 46% of F.4 students showing agreement while 40% of F.5 students show disagreement (refer to Table 2). In Q.4 of the questionnaire, both 50% of F.4 and F.5 students agree and disagree respectively with the statement “I usually conform to the opinions of my parents and teachers, regardless of my original viewpoints on controversial issues.” Such contradictory results explain that compared to F.5 students, F.4 students believe in the knowledge of authorities and usually conform to what the authorities say in controversial issues, which is in line with Position 1-3 in Perry’s intellectual thinking (1998). In Q.10, 70% of F.5 students (40% agree and 30% strongly agree) say they challenge people’s viewpoints when they have

opposite viewpoints in the issues, although the people are elder than them. However, 54% of F.4 students (38% disagree and 15% strongly disagree) disagree with the statement. It shows F.4 students do not see personal opinions as important as F.5 students do, trying not to have conflicts in viewpoints with others.

The results of Q.3, Q.4 and Q.10 show there is a discrepancy of beliefs between F.4 and F.5 students, revealing that senior form students are more willing to express personal viewpoints and interact with the authority, no matter it is consistent with them or not. This educational phenomenon is worth further investigation through interviews with teachers in stage II. Therefore, 2 interviewees were asked how they handle their viewpoints to different forms of students in LS classroom; the result is reported in the following.

#### **4.2 Teachers handling expression of personal viewpoints in controversial topics**

Students' opinions in the questionnaire and teachers' responses in individual interviews are used to reflect their preferences and how teachers handle personal viewpoints during teaching and learning LS.



#### 4.2.1 Students' preference on teachers' neutrality or implicit expression of opinions

Both students and teachers prefer teacher's neutrality and making opinions implicit in LS classroom in order not to confine students' thinking in the issues.

The result of questionnaire shows that there are 46% of students both supporting and opposing teachers' expression of personal ideas in class publicly (Q.13). Students are confused about the appropriateness of authority disclosing stance in the classroom. However, students (46% with agree and 24% with strongly agree) in general are favor of teachers' implicit expression of ideas in class (Q.14). 63% of the students agree teachers should remain neutral when discussing controversial issues (Q.15). Teachers' neutrality can ensure their authority as teachers will not direct students to accept the opinions as correct and absolute (Zeidler, 2003). This saying can be explanation of the findings in Q.17 too. 63% of students (50% with agree and 13% with strongly agree) believe that teachers' viewpoints will confine their thinking from opposite sides. Generally speaking, students believe that authorities' opinions in controversial ideas will negatively influence how they think, hindering them to think for themselves. It demonstrates the belief of LS teachers' influential power on students' thinking for themselves and expression in class as well.

#### 4.2.2 Teachers encourage students' multiple perspectives and logical presentation

Apart from the students, teachers consider the possible effects of personal values on students' independent judgment when encountering controversial issues in LS classroom. In the individual interviews, 2 interviewees stressed that they would conceal standpoints unless students form personal judgments, trying to maintain neutrality in order not to influence students' thinking. Here is part of the transcript extracted from the interview:

**Interviewer:** *At what stage of the lesson do you express personal viewpoints in controversial issues?*

**TI:** *I usually do not disclose my values and opinions at the beginning of the lesson since it may confine students' thinking of other possibilities. However, I may express my values implicitly especially in moral and religious issues. I will give more examples to consolidate my arguments.*

**Interviewer:** *According to the questionnaire, most of students think teachers should remain neutral in class. What do you think?*

**TI:** *I agree. I will not stress the values of any particular stakeholders in the issues, unless it involves moral issues, like school bullying and committing crimes.*

The responses from the other interviewee:

**Interviewer:** *At what stage of the lesson do you express personal viewpoints in controversial issues?*

**T2:** *I follow the pattern when teaching controversial issues. That is allowing my students to voice out their ideas. Usually, I will only show my standpoint after reflection on various materials with my students or at the end of the session.*

**Interviewer:** *According to the questionnaire, most of students think teachers should remain neutral in class. What do you think?*

**T2:** *To large extent, I agree with it. It is because I do not want to intervene students' thinking and they may have their own thoughts. However, it still depends on the level and prior knowledge of students. For senior form, I probably give less guidance and allow students to discuss from positive and negative sides.*

From the dialogue, teachers believe that the opinions of authorities will affect students' thinking, so they do not make personal opinions explicit at the beginning of discussion in class. According to Heilman and Gjerpen (2010), after teachers deciding to disclose their opinions with students or not, they design effective class setting and

ensure that they teach the issue itself. 2 interviewees suggest provide open-ended learning environment to allow the diversity of voices. Many research stress that an open and non-confrontational environment motivates students to engage when learning controversial issues (Hess, 2002; Hess & Posselt, 2002; Ratcliffe & Grace, 2003). Since 2 interviewees mentioned the difference in learning levels of the students would affect students' ability to think for themselves, it will be examined in the following classroom research for further investigation.

### **4.3 The influences of teachers' explicit standpoint in different modules of LS**

Students' responses in the questionnaire and group interviews are used to analyze how students feel they are influenced by teachers' disclosure of personal viewpoints in LS classroom. The findings in classroom observation will help explain students' formation and expression of personal ideas in reality.

#### **4.3.1 Students' willingness in expression of personal viewpoints**

Students, in general, are willing to express their points of view in the class and accept the diversity of opinions. According to the questionnaire, most of the students express their opinions in LS classroom. 88% of students (71% with agree and 17% with strongly agree) always express their ideas in the class even though it is different

from the majority of classmates (Q.24); 63% (52% with agree and 11% with strongly agree) always express their ideas although it is controversial (Q.25). These statistics reflects that the students are independent thinker who are willing to stand apart from others and follow own thoughts (Daft, 2008). Also, the result shows that 76% (59% with agree and 17% with strongly agree) will add their opinions beliefs and integrate with other opinions to consolidate their arguments despite of same stance with LS teachers (Q.28). The positive result reflects that students are making sense of the information they receive, rather than depends on the words of others (Presley, 1996), which aligns with the characteristics of independent thinkers.

Although the majority of the students are confident in sharing with colleagues in class, there are distinctive perceptions among F.4 and F.5 students. The results of Q.23 and Q.26 in the questionnaire reveal that most of F.5 students (65% with agree) insist in their viewpoints although it is opposite to the LS teachers while 38% of F.4 students do this in class. It is consistent with the findings in previous analysis that senior form students are more likely believing in personal thoughts than authorities' knowledge. The reasons of F.4 students seldom insisting in opinions when it is different form authority may be related to Chinese culture and their level of maturation. Chinese students are reliant on authorities' knowledge and seldom

challenge teachers' judgments which may cause embarrassments (Chan, 1999). One of LS teachers also claimed that F.4 students were relatively passive than F.5 students, it was because they lacked the practice of defending own arguments and possessed limited knowledge. The differences of maturation between F.4 and F.5 students cause different reactions to personal expression when they encounter authoritative viewpoints, which affects student' independent thinking.

#### 4.3.2 Students' development of independent thinking in Hong Kong Today

In this part, the possible effects on students' development of independent thinking after teacher's expression of viewpoints in Hong Kong Today are analyzed.

Firstly, the observation in LS classroom reflected that most of the students kept their original stance, but none of them challenged teacher's opinions. Before the start of classroom observation, students had basic understandings about the issue through textbooks and class activities in previous lesson. On the observation day, they were given a discussion question "To what extent do you agree that political factor is the most important factor affecting Hong Kong residents' sense of identity?" After 5 minutes of preparation, teacher disclosed her standpoints and it would be open for all students to share their ideas. Teacher would observe students' initiative in thinking for

themselves through their doubts in assumption, frequency of raising questions, challenging authoritative viewpoints and defense of personal views, which matches with the definition of independent thinker shown in the literature.

In classroom observation and group interview with students, most of the students did not change their stance after teachers' explanation of her opinions. They generally could provide relevant examples to support their viewpoints. However, no students raised questions or doubted the answers of the teacher, showing limited interactions with the authority. It is part of transcript in classroom observation:

**Teacher:** *To small extent, I agree with the statement. Most of Hong Kong people show least care towards political situation, especially the middle-aged people and elderly. On the contrary, collective memory and conservation are more important, like Queen Pier. Once the buildings were demolished or redeveloped by the government, many people would come out and fight for preservation, showing they have strong sense of belonging to the place and the society. What do you think?*

**Student 1:** *To large extent, I think political factor is the most important factor, for example, Hong Kong people go to June Fourth assembly every year and they*

*are concerned both national and local political situation. It shows they have strong feeling as Hong Kong people and participate into political activities.*

**Teacher:** *They join June Fourth assembly since they feel empathetic to victims, but not related to political situation.*

When the teacher defended her opinions, the student did not respond further. The analysis showed that student seldom shared their opinions actively in front of the class, no matter the opinions were consistent with authority or not. Although student 1 remained his stance and took initiative to respond to the teacher, he did not provide more elaborations on his views. The reaction of the class was generally passive until the teacher invited other students to respond.

**Student 2:** *To large extent, I agree with the statement. Apart from June Fourth assembly, when the government plans to implement national education in local education, there is strong opposition from Hong Kong people, making all students and parents united.*

**Student 3:** *Yes, there are demonstrations for universal suffrage in Hong Kong. It represents that Hong Kong people care about local political affairs very much.*



The dialogue showed that two students had better exercise of reasoning skills since they could further elaborate with what other classmates said to strengthen their personal standpoints. Three students held opposite stance to the authority and they could provide their examples which are not given by authority. However, they demonstrated limited level of independent thinking since none of students challenged or questioned the answers of authority suggesting “collective memory”. Learners with independent thinking and reasoning skills can question and compare the facts to locate any inconsistency (Tausch & Tausch,1998). Moreover, they were more willing to interact with classmates’ ideas, rather than the authority’s, showing the authority’s opinions may still have pressure on students’ free expression of viewpoints in class.

Secondly, higher achievers could further articulate personal viewpoints and defend personal stances, showing good exercise of independent thinking than low achievers in spite of different opinions with authority. It can be reflected by the dialogue in the group interviews with the students from the same class.

***Student B2:** To large extent, I agree with it. Many people nowadays gather and demonstrate on the street to express their discontent about HKSAR.*

***Student A1:** I agree with the statement. June Fourth assembly is good evidence*

*showing that people are more concerned about Chinese political situation. If they don't care, why they join it every year?*

**Student A2:** *To small extent, I agree with the statement. Just like what you said [facing to Student B2], there are many demonstrations. However, the major source of their discontent is related to social problem. What people care most is conservation, like Queen Pier and Li Tung Street, but not about political factor.*

From the dialogue above, student A2 who represents high achiever, were confident in expressing his idea by responding to another classmate who held different standpoint. Although he held as the same stance as the authority, he raised different explanations from the authority's. His willingness to stand apart and saying what he thinks is consistent with the explanation of independent thinking raised by Daft (2008).

When teacher asked if students change their standpoints after her disclosure of opinions in class, all interviewees kept their original stances.

**Student A1:** *I do not change my stance. I believe that people nowadays are keen to participate in political activities, like July First demonstration, and Occupy Central. On the contrary, the effect of historical and ethnic factors is not as*

*permanent as political one.*

***Student C1:*** *No. My stance is very clear; no one can affect my decision.*

*\*\*\*\* [All interviewees laughed] \*\*\*\**

***Teacher:*** *How about you?*

***Student B1:*** *No change. Other classmate said the reasons.*

This conversation reinforces previous findings that higher achiever discern and make sense with personal experience before coming to the conclusion of his stance. On the contrary, moderate and low achievers simply repeated the stance without any further elaboration. Student B1 even said other classmates mentioned out points, reflecting she was not active in thinking for herself. From the analysis above, limited interactions with authority reflect that teacher's perspective could fairly guide the students to consider other opinions in class.

#### 4.3.3 Development of independent thinking in Energy Technology and Environment

In this part, the possible effects on students' development of independent thinking after teacher's expression of viewpoints in Energy Technology and Environment are investigated in details. Compared to previous observation, the theme in this module is more related to social and global levels.

Students were learning the influences of energy technology in the module of Energy Technology and Environment. Under the same practice of previous one, students were given a question “To what extent do you agree that nuclear power should be supported in order to match with the development of modern China?”. After 5 minutes of preparation, teacher expressed her opinions to the class and observed students’ initiative in doubting assumptions, raising questions, challenging authoritative viewpoints and defending personal views.

Firstly, the result showed that students, in general, were active in responding teachers’ opinions and questions. Besides, they were willing to express controversial opinions in front of the class, demonstrating higher level of independent thinking even though the authority had different perspectives. There is a part of transcript in the classroom observation.

**Teacher:** *To large extent, I agree with the statement. China is 2nd greatest economy in the world; ever-growing demand for energy is unavoidable. Nuclear energy is clean and the most cost -efficient, compared to other energy sources. It will beneficial to China if the energy is developed.*

**Student A:** *I also agree with the statement. The major source of energy in China*

*is coal-burning, which is dirty and causes the death of miners.*

***Student B:*** *But nuclear energy is dangerous in case there is radiation leakage.*

Apart from their activeness in the class, they had more interactions with teachers when discussing the issue in class. From the dialogue, student A held the same point with the teacher, but he suggested the disadvantages of other energy to support his standpoints. Recognizing differences and comparing the facts are important characteristics of independent thinking (Tausch & Tausch, 1998). On the other hand, student B expressed her viewpoints with confidence, responding to others who held opposite opinions immediately. Obviously, she did not conform to the authority or the majority of opinions. According to Perry's model of thinking (1998), unlike relying on absolute answers from the authority, students with higher order of thinking were able to appreciate other people's beliefs and understand the multiplicity of knowledge.

Secondly, students shared controversial opinions with the teachers and classmates. Whether the disclosure of authority's opinions will generate any pressure to the learners is one of the investigation areas in this study.

***Teacher:*** *Do you know if there is any country using nuclear energy as major*

*source of energy?*

***Student C:*** *France.*

***Teacher:*** *French people are not afraid of radiation leakage?*

***Student C:*** *They have well-established regulations to manage the power plant.*

***Student D:*** *But I am afraid of radiation leakage.*

*[Many students laughed in the class.]*

***Student E:*** *If China can develop nuclear energy, she can invent nuclear weapon.*

From the interaction above, student D and E expressed their personal feelings in front of the class, without much concern on how the authority and other classmates perceived their opinions. Moreover, the suggestion of nuclear weapon invention is controversial. People possess independent thinking when they make conclusion in spite of others' thought (Daft, 2008). The openness of independent stage can reduce learners' anxiety on others' saying, allowing them to express freely (Baxter Magolda, 1992).

As for the group interview after the classroom observation, the findings are consistent with the one generated in previous observation. No student changed their original standpoints towards the issue. Teacher's disclosure of opinions facilitated

students, especially high academic achievers, to consider new insights in the issue which made the discussion more critical.

*Student A2: I do not change because we are holding the same stance. And I agree with what you (the teacher) said. "The development of modern China" is not confined to the demands of electricity, but also the other development, like international cooperation in environmental conservation.*

The quotation reflected that higher achiever did not conform to the authority. On the contrary, she made sense with the comments raised by the authority herself before making judgment on whether nuclear power should be supported to fit the development of modern China.

Last but not least, moderate and low achievers showed confirmation in their own original stances. Here is the transcript in group interview:

*Teacher: Do you change your stance?*

*Student B2: No. They (teacher and classmates) do not change my opinions. On the contrast, what they said strength my own stance. Considering ever-growing*

*demand for electricity, global commitment, environmental pollution that China has, nuclear power brings many positive effects to China.*

It is obvious that the moderate achiever could think independently by discerning other opinions and facts. Her interactions with what other beliefs did not confine her thinking. On the contrary, it facilitated her to reassert personal standpoints by recognizing other opinions. Baxter Magolda (1992) explains that the inter-individual interaction can make people's knowing more validate, which allows emergency of personal voice among colleagues.

Based on the two classroom observations, teachers' disclosures of personal viewpoints in 2 different modules of LS did not generate any negative impact on students' independent thinking. It is because the students could reassert their original stance with their initiative in thinking and reasoning. Also, senior form students could interact with the authority's opinions directly by expressing personal feelings and controversial opinions. In both classes, high achievers could better integrate what the authority said with their beliefs before coming to personal judgment, showing better development of independent thinking.



Table 1 Result of questionnaire (Number in total = 46)

	Strongly disagree	Disagree	Agree	Strongly agree
<b>Part I: Students' thinking habit and attitudes towards independent thinking</b>				
3. Seeking answers from teachers is the most effective way for me to find out the truth.	11% (5)	37% (17)	41% (19)	11% (5)
4. I usually conform to the opinions of my parents and teachers, regardless of my original viewpoints in controversial issues.	4% (2)	37% (17)	48% (22)	11% (5)
5. Independent thinking is essential to all school subjects.	0	22% (10)	28% (13)	50% (23)
6. Independent thinking is very important in Liberal Studies.	2% (1)	4% (2)	48% (22)	46% (21)
7. I always think of multiple perspectives and data available before coming to my own conclusion towards the issues.	2% (1)	15% (7)	61% (28)	22% (10)
8. Everyone has different opinions towards the same issue and there is no absolute right or wrong.	4% (2)	7% (3)	43% (20)	46% (21)
9. When the teachers show me much information about the issues, I seldom doubt the assumptions behind and validity of the information.	4% (2)	28% (13)	37% (17)	30% (14)
10. I challenge people's viewpoints when I have opposite viewpoints in the issues, even though they are elder than me.	11% (5)	33% (15)	39% (18)	17% (8)
11. Holding the same ideas as the authorities and teachers means lack of independent thinking.	7% (4)	39% (18)	35% (16)	17% (8)
12. Independent thinking helps people discern about the things I hear, see and believe and help me question values and assumptions.	0	4% (2)	65% (30)	30% (14)
<b>Part II: Teachers' experience of personal views in LS classroom and other subjects</b>				
13. LS teachers should express their viewpoints in class publicly.	4% (2)	46% (21)	46% (21)	4% (2)
14. LS teachers should express their viewpoints in hidden sense.	7% (4)	22% (10)	46% (21)	24% (11)
15. LS teachers remaining neutral in controversial issues can help me develop my opinions.	0	11% (5)	63% (29)	26% (12)
16. LS teachers should express their own viewpoints when they are teaching controversial issues in class.	0	17% (8)	57% (25)	28% (13)
17. LS teachers' expression of personal viewpoints will confine students to think from opposite sides.	4% (2)	33% (15)	50% (23)	13% (6)

18. In LS classroom, group discussion is better way for me to develop independent thinking than direct teaching.	2% (1)	17% (8)	63% (29)	17% (8)
19. Non-LS teachers always express their viewpoints towards controversial social issues in class publicly.	11% (5)	35% (16)	35% (16)	0
20. Non-LS teachers always express their viewpoints towards controversial social issues in hidden sense.	7% (4)	33% (15)	46% (21)	7% (4)
21. I think that following teachers' viewpoints can help me get better scores in the assessments.	2% (1)	17% (8)	37% (17)	35% (16)
22. Teachers' viewpoints give me multiple perspective thinking, but it will not change my personal thinking and attitudes towards the issues.	4% (2)	41% (19)	44% (20)	11% (5)
<b>Part III: Expression of personal views at school</b>				
23. I always insist in my standpoints despite the fact that it is opposite to my LS teachers.	9% (4)	37% (17)	50% (23)	4% (2)
24. I express my ideas in the class although it is different from the majority of my classmates.	2% (1)	9% (4)	71% (33)	17% (8)
25. I always express my ideas even though it is very controversial.	4% (2)	33% (15)	52% (24)	11% (5)
26. I always express my ideas in the class although it is different from my LS teacher.	9% (4)	33% (15)	40% (18)	20% (9)
27. I express my ideas in the class although it is different from mainstreams of social opinions.	7% (3)	20% (9)	50% (23)	24% (11)
28. Although I hold the same standpoint with my LS teachers, I will add my personal beliefs and integrate with other opinions to consolidate my arguments.	4% (2)	20% (9)	59% (27)	17% (8)
29. I always change my standpoint when it is different from teachers' point of views.	17% (8)	59% (27)	22% (10)	2% (1)
30. I always reflect on teachers' viewpoints and search more information when it is different from my teachers' point of view.	0	28% (13)	59% (27)	13% (6)
31. It is easier for me to express personal views in class when I hold the same stance with my teachers.	7% (3)	15% (7)	52% (24)	26% (12)
32. Even I hold different viewpoints, I will follow mainstream ideas when answering school examination paper.	7% (3)	13% (6)	59% (27)	22% (10)
33. I always act according to what I believe, no matter it is consistent with the opinions of teachers or not.	0	24% (11)	61% (28)	15% (7)

Table 2 Result of questionnaire by forms (N=46: F.4 =26, F.5=20)

	Strongly disagree		Disagree		Agree		Strongly agree	
	F. 4	F.5	F.4	F.5	F.4	F.5	F.4	F.5
<b>Part I: Students' thinking habit and attitudes towards independent thinking</b>								
3. Seeking answers from teachers is the most effective way for me to find out the truth.	8% (2)	15% (3)	35% (9)	40% (8)	46% (12)	35% (7)	11% (3)	10% (2)
4. I usually conform to the opinions of my parents and teachers, regardless of my original viewpoints in controversial issues.	8% (2)	0	27% (7)	50% (10)	50% (13)	45% (9)	15% (4)	5% (1)
5. Independent thinking is essential to all school subjects.	0	0	27% (7)	15% (3)	27% (7)	30% (6)	46% (12)	55% (11)
6. Independent thinking is very important in Liberal Studies.	0	5% (1)	4% (1)	5% (1)	50% (13)	45% (9)	46% (12)	45% (9)
7. I think of multiple perspectives and data available before coming to my own conclusion towards the issues.	0	5% (1)	8% (2)	25% (5)	65% (17)	55% (11)	27% (7)	15% (3)
8. Everyone has different opinions towards the same issue and there is no absolute right or wrong.	4% (1)	5% (1)	8% (2)	5% (1)	46% (12)	40% (8)	42% (11)	50% (10)
9. When the teachers show me much information about the issues, I seldom doubt the assumptions behind and validity of the information.	4% (1)	5% (1)	19% (5)	40% (8)	35% (9)	40% (8)	42% (11)	15% (3)
10. I challenge people's viewpoints when I have opposite viewpoints in the issues, even though they are elder than me.	15% (4)	5% (1)	38% (10)	25% (5)	38% (10)	40% (8)	8% (2)	30% (6)
11. Holding the same ideas as the authorities and teachers means lack of independent thinking.	8% (2)	10% (2)	38% (10)	40% (8)	38% (10)	30% (6)	15% (4)	20% (4)
12. Independent thinking helps people discern about the things I hear, see and believe and help me question values and assumptions.	0	0	4% (1)	5% (1)	77% (20)	50% (10)	19% (5)	45% (9)
<b>Part II: Teachers' experience of personal views in LS classroom and other subjects</b>								
13. LS teachers should express their viewpoints in class publicly.	4% (1)	5% (1)	42% (11)	50% (10)	50% (13)	40% (8)	4% (1)	5% (1)
14. LS teachers should express their viewpoints in hidden sense.	4% (1)	15% (3)	15% (4)	30% (6)	42% (11)	50% (10)	38% (10)	5% (1)
15. LS teachers remaining neutral in controversial issues can help me develop my opinions.	0	0	15% (4)	5% (1)	62% (16)	65% (13)	23% (6)	30% (6)
16. LS teachers should express their own viewpoints when they are teaching controversial issues in class.	0	0	15% (4)	20% (4)	62% (16)	45% (9)	23% (6)	35% (7)

17. LS teachers' expression of personal viewpoints will confine students to think from opposite sides.	4% (1)	5% (1)	38% (10)	25% (5)	46% (12)	55% (11)	12% (3)	15% (3)
18. In LS classroom, group discussion is better way for me to develop independent thinking than direct teaching.	4% (1)	0	8% (2)	30% (6)	65% (17)	60% (12)	23% (6)	10% (2)
19. Non-LS teachers always express their viewpoints towards controversial social issues in class publicly.	4% (1)	20% (4)	58% (15)	50% (10)	38% (10)	30% (6)	0	0
20. Non-LS teachers always express their viewpoints towards controversial social issues in hidden sense.	12% (3)	5% (1)	38% (10)	30% (6)	42% (11)	55% (11)	8% (2)	10% (2)
21. I think that following teachers' viewpoints can help me get better scores in the assessments.	4% (1)	0	12% (3)	25% (5)	46% (12)	45% (9)	38% (10)	30% (6)
22. Teachers' viewpoints give me multiple perspective thinking, but it will not change my personal thinking and attitudes towards the issues.	4% (1)	5% (1)	60% (12)	35% (7)	35% (9)	55% (11)	15% (4)	5% (1)
<b>Part III: Expression of personal views at school</b>								
23. I always insist in my standpoints despite the fact that it is opposite to my LS teachers.	8% (2)	10% (2)	50% (13)	20% (4)	38% (10)	65% (13)	4% (1)	5% (1)
24. I always express my ideas in the class although it is different from the majority of my classmates.	4% (1)	0	12% (3)	5% (1)	62% (16)	85% (17)	23% (6)	10% (2)
25. I express my ideas even though it is very controversial.	4% (1)	5% (1)	35% (9)	30% (6)	54% (14)	50% (10)	8% (2)	15% (3)
26. I always my ideas in the class although it is different from my LS teacher.	12% (3)	5% (1)	50% (13)	10% (2)	31% (8)	50% (10)	8% (2)	35% (7)
27. I express my ideas in the class although it is different from mainstreams of social opinions.	8% (2)	5% (1)	31% (8)	5% (1)	46% (12)	55% (11)	15% (4)	35% (7)
28. Although I hold the same standpoint with my LS teachers, I will add my personal beliefs and integrate with other opinions to consolidate my arguments.	8% (2)	0	27% (7)	10% (2)	58% (15)	60% (12)	8% (2)	30% (6)
29. I always change my standpoint when it is different from teachers' point of views.	12% (3)	25% (5)	58% (15)	60% (12)	27% (7)	15% (3)	4% (1)	0
30. I always reflect on teachers' viewpoints and search more information when it is different from my teachers' point of view.	0	0	35% (9)	20% (4)	50% (13)	70% (14)	15% (4)	10% (2)
31. It is easier for me to express personal views in class when I hold the same stance with my teachers.	4% (1)	10% (2)	12% (3)	20% (4)	60% (12)	60% (12)	38% (10)	10% (2)
32. Even I hold different viewpoints, I will follow mainstream ideas when answering school examination paper.	4% (1)	10% (2)	15% (4)	10% (2)	58% (15)	60% (12)	23% (6)	20% (4)
33. I always act according to what I believe, no matter it is consistent with the opinions of teachers or not.	0	0	27% (7)	20% (4)	54% (14)	70% (14)	19% (5)	10% (2)

## **Chapter 5: Conclusion**

### **5.1 Summary of findings**

According to the findings and analysis, there is no empirical evidence showing the negative influences of teacher's expression of personal opinions on students' development of independent thinking in LS classroom, although both teachers and students believe teachers disclosing standpoints will confine students' independent thinking.

In the perception towards independent thinking, the questionnaire and interviews with LS teachers show that both parties believe independent thinking play important role in all school subjects and it facilitates people to understand the information they receive. However, LS teachers doubt the attention that the teachers should put on independent thinking due to the requirements of public examination in LS. Moreover, there is slight difference in the beliefs held by two groups of students. Questionnaire shows that senior form students are more aware of personal judgments, rather than relying on the knowledge of authority.

In the ways how teachers handle personal viewpoints in controversial issues in LS, majority of the students prefer teachers' neutrality and implicit expression of

views in class. Since teachers consider the possible effects on limiting students' thinking for themselves, 2 LS teachers interviewed support teacher neutrality and encourage open-minded learning environment to foster students' independent thinking.

The empirical data collected from classroom research further suggests that authority's disclosure of viewpoints at the beginning of discussion did not impose any negative impact on students' independent judgments to the issues; no matter it is in the context of Hong Kong Today or Energy Technology and Environment. This finding is in line with other educational research. When people hold the belief of teacher indoctrinating student through expression of personal opinions, no evidence is found to prove the case (Levstik & Tyson, 2010). On the contrary, according to the analysis in the interviews with students, teachers' disclosure of viewpoints can facilitate students, especially the high achievers, to consider multiple perspectives before making own judgments, enhancing their independent thinking and critical thinking.

## **5.2 Implications of the study**

This research is an attempt to examine possible impacts of teachers' expression of personal viewpoints in controversial issues on students' development of

independent thinking in LS classroom. Apart from enriching the research gap about students' independent thinking in LS, the research also aims at facilitating LS teachers to have better understanding about handling explicit viewpoints in class and reflect on personal pedagogical content knowledge. It is hoped that an open-minded and respectful learning environment can be created for students so as to meet the aims of developing students' critical and independent thinking in LS.

### **5.3 Limitations**

Due to class setting and resources available, there are several limitations in the study. Firstly, sample size is not representative enough. Due to the constraints of time and class arrangement during teaching practicum, the size of sample is limited which reduces the power of generalization.

Secondly, no data can reflect the influences of teachers' explicit standpoints on students forming personal beliefs when studying other modules of LS. Since I was asked to teach Hong Kong Today and Energy Technology and Environment in two classes during 8 weeks, the data about Personal Growth and Interpersonal Relationship, Modern China, Globalization and Public Health cannot be collected and analyzed.

Thirdly, there is lack data from schools from different bandings. Although samples with various academic performances are considered during two group interviews with students, only one research school is involved and it is from Band 2. Therefore, the situation about teachers' disclosure of personal views in LS on Band 1 and Band 3 students needs further research.

Researchers who are interested in the similar topic can consider the limitations of the research and modify them to get more concrete findings in classroom.

#### **5.4 Room for further research**

To investigate the possible effects of teachers' disclosure of personal viewpoints on students' independent thinking in LS classroom comprehensively, more research and findings should be done and analyzed. There are some suggestions for further research.

##### **(1) Findings generated in other modules of LS**

Due to the settings and time available in teaching practicum school, this study considers the findings collected in Hong Kong Today and Energy Technology and Environment. Although they cover issues with both personal and social nature, the



effects on other modules like Public Health and Globalization cannot be shown clearly, which limits to see the comprehensive effects in LS subject.

(2) Possible relationship between students' independent thinking and teachers' explicit viewpoints at different stages of lesson

It will enhance the significance of the research if teachers making their viewpoints explicit at different stages of the lesson are examined. To control the variables in the research, two classroom research done only cover the findings about teachers' expression of opinions at the beginning of the lesson. Therefore, other researchers can compare the findings if research is done with the setting of teachers disclosing viewpoints at the end of lessons.

Other suggestion is the possible length of data collection. If the research is done in longer period of time and at different stages, it will be useful for LS teachers and educationalists to see the whole process of students forming personal opinions in issues.

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## Appendix 1: Sample of questionnaire

I am going to collect data for research project which is about the relationship between LS teachers' expression of personal viewpoints in lesson and students' development of independent thinking. The data collected will be kept confidential and be used for the research exclusively. Thank you for your help.

### Basic information about the target group

1. Are you Male or Female?            M / F
2. Which form are you studying? \_\_\_\_\_

### To what extent do you agree with the following statements?

		<b>Strongly disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly agree</b>
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>3</b>	Seeking answers from teachers is the most effective way for me to find out the truth.				
<b>4</b>	I usually conform to the opinions of my parents and teachers, regardless of my original viewpoints in controversial issues.				
<b>5</b>	Independent thinking is essential to all school subjects.				
<b>6</b>	Independent thinking is very important in LS.				
<b>7</b>	I always think of multiple perspectives and data available before coming to my own conclusion towards the issue.				
<b>8</b>	Everyone has different opinions towards the same issue and there is no absolute right or wrong.				
<b>9</b>	When the teachers show me much information about the issues, I seldom doubt the assumptions behind and validity of the information.				
<b>10</b>	I challenge people's viewpoints when I have opposite viewpoints in the issues, even though they are elder than me.				
<b>11</b>	Holding the same ideas as the authorities and teachers means lack of independent thinking.				

12	Independent thinking helps people discern about the things I hear, see and believe and help me question values and assumptions.				
13	LS teachers should express their viewpoints in class publicly.				
14	LS teachers should express their viewpoints in hidden sense.				
15	LS teachers remaining neutral in controversial issues can help me develop my opinions.				
16	LS teachers should express their own viewpoints when they are teaching controversial issues in class.				
17	LS teachers' expression of personal viewpoints will confine students to think from opposite sides.				
18	In LS classroom, group discussion is better way for me to develop independent thinking than direct teaching.				
19	Non-LS teachers always express their viewpoints towards controversial social issues in class publicly.				
20	Non-LS teachers always express their viewpoints towards controversial social issues in hidden sense.				
21	I think that following teachers' viewpoints can help me get better scores in the assessments.				
22	Teachers' viewpoints give me multiple perspective thinking, but it will not change my personal thinking and attitudes towards the issues.				
23	I always insist in my standpoints despite the fact that it is opposite to my LS teachers.				
24	I always express my ideas even though it is very controversial. I always express my ideas in the class although it is different from the majority of my classmates.				
25	I always express my ideas even though it is very controversial.				
26	I always express my ideas in the class although it is different from my LS teacher.				

<b>27</b>	I express my ideas in the class although it is different from mainstreams of social opinions.				
<b>28</b>	Although I hold the same standpoint with my LS teachers, I will add my personal beliefs and integrate with other opinions to consolidate my arguments.				
<b>29</b>	I always change my standpoint when it is different from teachers' point of views.				
<b>30</b>	I always reflect on teachers' viewpoints and search more information when it is different from my teachers' point of view.				
<b>31</b>	It is easier for me to express personal views in class when I hold the same stance with my teachers.				
<b>32</b>	Even I hold different viewpoints, I will follow mainstream ideas when answering school examination paper.				
<b>33</b>	I always act according to what I believe, no matter it is consistent with the opinions of teachers or not.				

-End-

## Appendix 2: Transcript of group interview in context of Hong Kong Today

**Learning issue:** To what extent do you agree that political factor is the most important factor affecting Hong Kong residents' sense of identity?

### **Combinations of interviewees:**

They are 6 students from F.4 class. In the interview, students A1 and A2 are high achievers; students B1 and B2 are moderate achievers; students C1 and C2 represent low achievers. There are one male and one female in each category.

### **Interview questions:**

1. What is your original stance towards the learning issue?
2. Are there any changes in your values/ opinions toward the issue after teacher's expression of her views in class? Why or why not?

\*There may be follow-up questions from the teacher for clarification.

### **Transcript of the group interview:**

**Teacher:** Based on the content of our last LS lesson, you are free to respond the following questions. What is your original stance towards the learning issue?

Student B2: To large extent, I agree with it. Many people nowadays gather and demonstrate on the street to express their discontent about HKSAR.

Student A1: I agree with the statement. June Fourth assembly is good evidence showing that people are more concerned about Chinese political situation. If they don't care, why they join it every year?

Student A2: To small extent, I agree with the statement. Just like what you said [facing to Student B2], there are many demonstrations. However, the major source of their discontent is related to social problems. What people care most is conservation, like Queen Pier and Li Tung Street, but not about political factor.

Student B1: In pervious lesson, there are some statistics showing that more and more HK residents joining June Fourth assembly.

**Teacher:** What is your original stance?

Student B1: To large extent, I agree. Political factor is the most important factor affecting HK residents' sense of belonging.

Student C1: I disagree with the statement.

**Teacher:** any reason?



Student C1: Important incidents are more influential [than political factor], e.g. SARS.  
It shows HK residents' team spirit.

**Teacher: What is your opinion? [Facing to Student C2]**

Student C2: I agree. [Pause for few seconds] HK residents are anti-Chinese Communist Party because it is conservative and undemocratic.

\*\*\*\*\*

**Teacher: In the lesson, I expressed my own stance that to small extent, I agree with the statement. Are there any changes in your values/ opinions towards the issue after the disclosure of my opinions? Why or why not?**

Student A2: No change. Although some students said people would join June Fourth assembly, it happens on one day only. On other days of years, apart from political activists, most of HK people are indifferent to political situation.

Student B2: I do not change it.

**Teacher: What make you keep the stance?**

Student B2: Hong Kong people are concerned about local political situation, so they would organize demonstration on Facebook.

Student A1: I do not change my stance. I believe that people nowadays are keen to participate in political activities, like July First demonstration, and Occupy Central. On the contrary, the effect of historical and ethnic factors is not as permanent as political one.

Student C1: No. My stance is very clear; no one can affect my decision.

[All interviewees laughed]

**Teacher: How about you?**

Student B1: No change. Other students said the reasons.

Student C2: No.

**Teacher: Why not? What makes you keep your stance?**

Student C2: Um...The PowerPoint slides and textbooks provide some information, showing that Chinese Communist Party is influencing Hong Kong. This makes HK people feel threatened. Therefore, political factor is the most influential.

### Appendix 3: Transcript of group interview in context of Energy Technology and Environment

**Learning issue:** To what extent do you agree that nuclear power should be supported in order to meet the development of modern China?

#### **Combination of interviewees:**

They are 6 students from F.5 class. In the interview, students A1 and A2 are high achievers; students B1 and B2 are moderate achievers; students C1 and C2 represent low achievers. There are one male (indicate as 1) and one female (indicate as 2) in each category.

#### **Interview questions:**

1. What is your original stance towards the learning issue?
2. Are there any changes in your values/ opinions toward the issue after teachers' expression of her views in class? Why or why not?

\*There may be follow-up questions from the teacher for clarification.

#### **Transcript of the group interview:**

**Teacher:** Based on the content of our last LS lesson, you are free to respond the following questions. What is your original stance towards the learning issue?

Student A2: To large extent, I agree with it. China is 2nd greatest economy in the world with average annual 8-9% GDP growth, ever-growing demand for energy is unavoidable. Nuclear energy can fit this situation.

Student C1: I do not agree. There are many cases of corruption in China; the government cannot manage nuclear power plants well.

Student A1: I understand your point [facing student C1] but it is not the problem of nuclear power itself. Corruption can exist in any power plant.

**Teacher:** So, your original stance is that you agree with the statement?

Student A1: Yes.

Student B2: To large extent, I agree with the statement. Nuclear power has many advantages, like generation of great energy with few inputs, which is suitable to China such a country with great population.

**Teacher:** What is your original stance?

Student C2: I don't think nuclear power should be supported. It is too risky. The radiation is very horrible.

Student B1: Yes, I share the same viewpoint. Nuclear power is dangerous. The radiation pollution would cause great loss to the country and people in case there is any leakage.

Student A2: But coal burning would cause serious pollution too, it leads to global warming which even threatens the whole world.

**Teacher: Anything to add?**

[No responses]

\*\*\*\*\*

**Teacher: In the lesson, I expressed my own stance that to large extent, I agree with the statement. Are there any changes in your values/ opinions towards the issue after the disclosure of my opinions? Why or why not?**

Student A2: I do not change because we are holding the same stance. And I agree with what you said. “The development of modern China” is not confined to the demands of electricity, but also the other development, like international cooperation in environmental conservation.

Student B1: No change. The possible consequences of radiation leakage cannot outweigh the benefits it brings to China.

Student A1: No change.

**Teacher: Why do you keep the stance?**

Student A1: Just like what classmates said, China has great demand for energy. Nuclear power is clear energy, why we do not develop it?

Student C1: I do not change my stance. I still think it is too dangerous.

Student A2: You have to consider the development of modern China.

Student C1: Ok. I think that existing regulations and legal system are not well-established enough. Therefore, due to the current development in China, nuclear power is not suitable.

Student C2: No change. Apart from corruption, there may be natural disasters which will make the nuclear power plant damaged, like nuclear leakage in Fukushima.

**Teacher: Do you change your stance?**

Student B2: No. They do not change my opinions, on the contrast, what they said strengthen my own stance. Considering ever-growing demand for electricity, global commitment, environmental pollution that China has, nuclear power brings many positive effects to China.

#### Appendix 4: Transcript of individual interviews with LS teacher (T1)

**Interviewer:** To you, what is the role of independent thinking in LS lessons?

**T1:** Independent thinking and critical thinking are important in this subject. Independent thinking emphasizes students having personal judgments and values in the issues but I think it may be not as essential as critical thinking at this moment.

**Interviewer:** “Not as essential as critical thinking at this moment”?

**T1:** In New Senior Secondary LS, students are always asked to demonstrate critical thinking skills in public examinations, like thinking from multiple perspectives, giving relevant examples. Therefore, even though independent thinking is one of the learning aims, it haven't widely stressed by LS teachers.

**Interviewer:** At what stage of the lesson do you express personal viewpoints on controversial issues?

**T1:** I usually do not disclose my values and opinions at the beginning of the lesson since it may confine students' thinking of other possibilities. However, I may express my values implicitly especially in moral and religious issues. I will give more examples to consolidate my arguments.

**Interviewer:** To what extent your students can develop independent thinking after you express your viewpoints?

**T1:** It depends on the levels of students. For example, F.4 and F.5 students have critical thinking training before, so most of them can express their viewpoints. When they gain critical thinking, I will give fewer examples to them.

**Interviewer:** According to the questionnaire, most of the students think teachers should remain neutral in class. What do you think?

**T1:** I agree. I will not stress the values of any particular stakeholders in the issues, unless it involves moral issues, like school bullying and committing crimes.

**Interviewer:** If students challenge your viewpoints, how would you usually handle?

**T1:** I usually let them voice out their opinions and relevant supporting evidence. When there are different ideas, I will guide them to use opposite opinions as counter arguments in the issues.

**Interviewer:** Liberal Studies teachers' expression of views in class is kind of brain-washing to students. Do you agree with the statement?

**T1:** I don't agree. It depends on students' ability to analyze issues and have enough background information about the issues. If they possess ability, it can distinguish the subject from brain-washing.

## Appendix 5: Transcript of individual interviews with LS teacher (T2)

**Interviewer:** To you, what is the role of independent thinking in LS lessons?

**T2:** I agree that independent thinking is important, because following what other said is not the goal of education. Therefore, it is important, but in learning only.

**Interviewer:** So it is not important in other aspects?

**T2:** It is true, especially in assessment. In examinations, students will only take the stance with most evidence available, even though it may be not their original thoughts.

**Interviewer:** At what stage of the lesson do you express personal viewpoints on controversial issues?

**T2:** I follow the pattern when teaching controversial issues. That is allowing my students to voice out their ideas. Usually, I will only show my standpoint after reflection on various materials with my students or at the end of the session.

**Interviewer:** According to the questionnaire, most of the students think teachers should remain neutral in class. What do you think?

**T2:** To large extent, I agree with it. It is because I do not want to intervene students' thinking and they may have their own thoughts. However, it still depends on the level and prior knowledge of students. For senior form, I probably give less guidance and allow students to discuss from positive and negative sides.

**Interviewer:** If students challenge your viewpoints, how would you usually handle?

**T2:** I don't mind there are different opinions in the class. But I think I will claim down the emotions of students. I may ask them to research more information and leave space for further discussion in next lesson.

**Interviewer:** Liberal Studies teachers' expression of views in class is kind of brain-washing to students. Do you agree with the statement?

**T2:** I don't agree. I think teachers cannot wash the brains of students. Um... maybe it is possible in junior form students, but it is impossible to senior form students. Liberal Studies stresses explanations with evidence. Therefore, compared to other subjects, it is even more difficult to be brain-washing.