

A Project entitled

Acquiring 21st-century skills through student unions in Hong Kong

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Declaration

I, Lee Ian Nicholas, declare that this research report represents my own work under the supervision of Dr. Briffett Aktas Carla Marie, and that it has not been submitted previously for examination to any tertiary institution.

Signed

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ABSTRACT

This essay aims to examine the effectiveness of Hong Kong students' acquisition and development of 21st-century skills, namely skills related to analytical thinking and innovation, active learning and learning strategies, creativity, originality, and initiative, through their participation in student unions. The main points of inquiry of this paper are what the students' main responsibilities and how being a part of the student union helped students acquire or develop the mentioned skills. This study was approached by conducting interviews with the teacher-affiliated of the student union at a Hong Kong local school and with the head student of the union, as well as surveys with the executive members of the student union at the same school. The results of the study suggest that being a part of the student union is an experience that enhanced students' 21st-century skills. Other than students' learning experientially, other factors that led to such a result include the democratic practices in education the teachers adopt when guiding the students in the union, teachers' reflection on experimentation in education, and the cultural influence of education. This paper concludes that learner-centeredness should be considered, not only in classroom contexts, but also in extra-curricular activities, in order to build the students' competence in 21st-century skills.

TABLE OF CONTENTS

<i>CHAPTER 1 – INTRODUCTION</i>	6
Research Questions.....	7
<i>CHAPTER 2 - LITERATURE REVIEW</i>	8
<i>CHAPTER 3 - METHODOLOGY</i>	11
Qualitative methodology.....	12
Quantitative methodology.....	13
Analysis of the data.....	15
<i>CHAPTER 4 - RESULTS AND FINDINGS</i>	17
Students’ key roles and responsibility in a student body.....	17
Developing 21 st century skills through being a student union member.....	19
Findings from the interviews.....	22
<i>CHAPTER 5 - DISCUSSION</i>	26
Responsibilities and the development of skills.....	26
Implications.....	27
<i>Democratic practices in education</i>	27
<i>Teacher’s reflection on experimentation and practices</i>	29
<i>The cultural influence</i>	30
<i>CHAPTER 6 - CONCLUSION</i>	31

LIST OF FIGURES

Figure	Page
Figure 4.1 - SA members' response to questions related to analytical thinking and innovation	19
Figure 4.2 - SA members' response to questions related to active learning and learning strategies	20
Figure 4.3 - SA members' response to questions related to creativity, originality and initiative	21

CHAPTER 1 – INTRODUCTION

In 2000, reformation in education policies has been pushed forward in Hong Kong to incorporate 21st-century skills as part of the generic learning outcomes in the Key Learning Areas (KLA) and part of the ‘Learning to Learn’ initiative (Education, 2000) since without the proactive reinvention and reflection upon the policies from the colonial times, the education system in Hong Kong will fail to meet the new challenges as mentioned in the 21st century (Chan, 2000). To achieve so, the Education Commission (2000) aims to reform the curricula, improve assessments, remove hurdles to learning, to name a few. This reflects how these skills are playing an important role in teaching and learning today. As the reformation proceeds, the need to change in pedagogical approaches was discussed. Sawant & Rizvi (2015) stated that a shift from didactic teacher talk to more students-centered and hands-on experience-focused teaching and learning helps improving students’ learning attitudes, ultimately leads to students’ ability to learn.

There is evidence showing that there is a growing interest in studying the field of 21st-century skills acquisition and approaches to learning in the classroom. This paper aims to discuss how students attain 21st-century skills. However, this paper wishes to discuss the acquisition of the said skills, such as “analytical and innovation skills” and “complex problem solving skills” (World Economic Forum, 2008) through the outside-classroom activities, namely through participating in student bodies in secondary schools in Hong Kong, where students operate a student union or association under the supervision of teachers. The intended goal of this paper was, also, to compare how a local-aided secondary school and an International Baccalaureate (IB) middle school may differ in terms of student autonomy in such bodies and the respective effectiveness in promoting 21st-century skills acquisition. However, due to a series of

challenges during the course of study, this goal was not met. Instead, this paper discusses the topic based on a local context.

Research Questions

In this study, the author would like to investigate how participating in key roles in student bodies may play a role in 21st-century skills acquisition or development. The study aimed to, primarily, respond to the following two questions:

- 1.) What are students' key roles and responsibilities in a student body in International Baccalaureate (MYP) schools and local public schools in Hong Kong?
- 2.) To what extent are students' 21st-century skills developed or acquired through participating in the executive committee of a student body?

However, despite effort being made to contact an International Baccalaureate school in Hong Kong, data was not collected from the said school due to the schools' availability. Hence, the research questions were amended, as demonstrated below:

- 1.) What are students' key roles and responsibilities in a student body in local public schools in Hong Kong?
- 2.) To what extent are students' 21st-century skills developed or acquired through participating in the executive committee of a student body?

Moreover, the study is interested to study the implications behind the answers of these primary questions, such as what factors contributed to the development or acquisition of the 21st-century skills.

CHAPTER 2 - LITERATURE REVIEW

Scholars in different fields have been a call for an emphasis on the development of 21st-century skills in education, since there are trends showing that there are going to be jobs that do not exist today (Trilling & Fadel, 2009) and students are required to begin training for these tasks that are not available to the market now. To meet such demands, frameworks have been developed (Dede, 2010), as there have been statements claiming the educational institutions have been developing in a much slower speed compared to other sectors in the society. Scholars also warned that if the students fail to acquire new skillsets that are required to help them adapt to the future and only build routine skills that were required before technology was present, the human workforce can be easily replaced by robots (Trilling & Fadel, 2009).

In light of this, some educators began to push forward a more project-based and experience-based learning approach to facilitate the development of such skills (Pearlman, 2010). According to a report by the World Economic Forum, trending skills demand in the year 2022 are:

Analytical thinking and innovation, active learning and learning strategies, creativity, originality, and initiative, technology design and programming, critical thinking and analysis, complex problem-solving, leadership and social influence, emotional intelligence, reasoning, problem-solving and ideation, and systems analysis and evaluation. (World Economic Forum, 2008, p.12)

According to Dede (2010), the 20th century is different from 21st century due to the development of information and communication technologies. In 21st century, unlike in the past, these new technologies can simply replace humans in various ways, especially in the labor market. Therefore, there is a need of a paradigm shift in terms of what skills are needed. It is

no longer the ability to memorize or complete labor-intensive tasks, but to be innovative, creative, and be able to handle complex issues technology can yet to solve.

At the same time, skills with declining significance include literacy, numeracy, and management of personnel, to name a few. This demonstrates that there is an apparent need to shift our paradigm from teaching reading and writing to equipping students with skills related to problem-solving and creativity for the growing demand in today's society. Dede (2010) and Yeung (2012) also argue that IT literacy is one of the core skills students should be acquiring in this digital era, such as the ability to use IT tools effectively, creatively and innovatively, as well as the ability to be critical about information offered in the virtual world.

Philosophers and educators have also been discussing and pushing forward different teaching and learning beliefs. Some believe the notion of student autonomy is important (Boud, 1988), while some believe a 21st-century education model is essential in order to prepare students for the ever-changing world. Trilling and Fadel (2009) believe that student-autonomy and learner-centeredness are essential in 21st century learning, while not diminishing the need of teacher-centeredness in the classroom. In other words, while traditional teacher-talk is crucial to cover content in the classroom, teachers are suggested to refrain from being “owner of knowledge”. Instead, part of the knowledge that used to be taught by the teacher should be discovered by the students under the guidance of the teachers.

In the Hong Kong classrooms, there is also evidence of a paradigm shift towards experiential learning, which inspired research into Task-based Language Learning (TBLT) (Nunan, 2006; Ellis, 2003), which emphasizes the authenticity of the use of language in classrooms. Under the inspiration of TBLT, students are expected to use language to solve real-life problems. That

is, their language competence is no longer required to complete routine manual or cognitive. Instead, they are trained to use language and other skills, such as problem-solving skills and creativity, to tackle problems that are unprecedented to the learners.

To further understand the pedagogical philosophy behind the education of 21st century skills, it is important to define what is 'student autonomy'. Boud (1998) believes that there are three aspects to understand such a notion. First, student autonomy is deemed as how students should behave in a learning process, with teachers' assistance. Second, it is deciphered as one of the pedagogical approaches, where teachers teach with a strong emphasis on students' independence and responsibility in learning. The last aspect aligns with the Education Bureau (EDB)'s Learning to Learn initiative (Curriculum Development Council, 2000). In other words, students are expected to decide the content of their learning and approaches to learning. With students being autonomous in their learning, students will be presented with different challenges that would require them to complete more complex, rather than routine, tasks.

Another theory that is closely related to this research is the experiential learning theory (ELT). It is referred to the learning process in which learners create knowledge through experiencing and transforming concrete experience into abstract conceptualization (Mainemelis, Beatrix & Kolb, 2002). Barrel (2010) also suggested that experiential learning is primarily rooted in real life, contextualized inquiry. Such a learning process should guide learners to find answers proactively and draw logical and reasonable conclusions through critical thinking and making decisions. Kolb (2010) illustrated the three models: Dewey's model and the Lewinian model is similar that they show the integration of personal experience, concepts, observations, and action, while Piaget focuses on experience, concept, reflection, and action. In all models, experience and action are essential in what they believe is successful experiential learning.

With the advantages of experiential learning, we can assume that such an approach can be a tool to promote 21st-century skills, an abstract concept. However, Joy and Kolb (2009) also noted that culture, such as gender egalitarianism and assertiveness of a culture, plays a significant role in students' learning styles, especially in experiential learning. Students' preference in active experimentation may vary, leading to different outcome from ELT. The hypothesis of this paper, hence, is that the concept of student autonomy, experiential learning, and 21st-century skills are intertwined.

The theories related to 21st-century skills acquisition, the practicality of ELT in classrooms, as well as the emphasis of student autonomy are widely studied. However, there is no prior research that focuses on how experiential learning may take place outside the classroom and how 21st-century skills can be acquired through student's active participation in student bodies. Therefore, I would like to investigate how students may grow and learn through playing a role in the school's student unions and how the environment cultivated by the school may affect their experience as well as the effectiveness in their skills acquisition.

CHAPTER 3 - METHODOLOGY

For this study, a mixed research design was implemented. That is, both qualitative and quantitative approaches were applied in order to yield objective and credible results and, thus, produce a thick data set (Cohen, Manion & Morrison, 2018). The research was conducted in a tier-1 local-aided secondary school in Hong Kong with approximately 700 students. Most of the students admitted are high achievers, academically and personally, during their primary schooling. There is one student association at the school, with 13 student members in the executive committee and 2 teachers-in-charge.

Qualitative methodology

Semi-structured interviews were conducted with 2 interviewees: the head student in the main student body and the teacher affiliated with the student body in a Hong Kong local aided secondary school. Semi-structured interview is conducted ‘with topics and questions are given, but the questions are open-ended’ (Cohen, Manion & Morrison, 2019, p.511). Moreover, the wordings and sequence of the questions may differ among different interviewees, based on their responses. Such type of interviews allows the interviewer to elicit as much information as possible and receive information that was not expected since new questions may emerge as the interview proceeds (Whiting, 2008).

The structured interview questions for the teacher affiliated and the head student of the student association with the student association were designed to elicit reflection from the different stakeholders of the student body regarding, primarily, the three key 21st-century skills being studied in this paper, which are the skill to analyze and innovate, to learn actively and adopt appropriate learning strategies, as well as the ability to create, be original and take initiative.

The rationale behind interviewing the head student (e.g. chairperson of the student union) is that he takes up a leading role in the organization. In other words, more valuable insight into the topic of interest, compared to other members of the affiliation can be assumed. On the other hand, the teacher affiliated is chosen, instead of the teacher-in-charge for the goal of the interview is to understand the insights from the supervisor or person who oversees the organization. Hence, whether the teacher is the main person-in-charge or a teacher who is related to the organization does not impose a negative impact on the credibility of the study.

Before the study was conducted, the school principal received an information sheet regarding the study and a consent form to interview members of the school from the student investigator (i.e. the author of this paper). Unfortunately, due to school policy, the school did not give consent to audio record the interview with the student interviewee. After the consent had been sought to proceed with the interview from the school, another set of information sheets about this project and consent forms were given to the two interviewees – the teacher-affiliated and the head of the student association. Once the consent forms from all the stakeholders were obtained, the interviews were arranged. The interviews took place within the school's premise at different times during regular school days. The interview with the head student lasted for approximately 15 minutes without audio recording. There were, however, substantial notes made during the interview. The head student was later invited to provide follow-up responses, if any, towards the topic through written means. At the end, no further comments or feedback was provided. The interview with the teacher-affiliated lasted for 28 minutes, which was audio-recorded and transcribed at a later stage of this study.

Quantitative methodology

In order to collect quantitative data, an information sheet and consent form were given to the principal of the school. Once it was approved to proceed, the student association members at the school were given another set of information sheets and consent forms, in order for them to understand the purpose of the study and their rights. All 13 students invited to the study gave their consent, which led to the internet surveys being conducted. However, one of the respondents did not meet the stipulated age requirement of this study, as the Ethic Review Committee approved this study to involve respondents above the age of 15 only. Therefore, the survey was conducted with 12 members of the student body at the Hong Kong local aided secondary school, with the head of the student association included.

The surveys serve the purpose of collecting data related to students' competence in three core 21st-century skills, namely skills related to 'analytical thinking and innovation, active learning and learning strategies, and creativity, originality, and initiative' (World Economic Forum, 2008, p.12). Since the goal of the study is to understand how taking up roles in student unions may contribute to the development of 21st-century skills, these three stated skills that are believed to be in high demand by 2022, are therefore chosen to be studied.

The survey was completed online via Google Forms. The questionnaire comprised of closed-ended questions, including rate-scale questions for such questions are less time-consuming to respond to and to analyze (Cohen, Manion, Morrison, 2018). One of the advantages of conducting the survey online is that the tool is accessible and convenient to the respondents (Cohen, Manion, Morrison, 2018). In this small-scale research, it is important to reach out to as many potential respondents as possible within a short period of time. Internet surveys can serve such a purpose.

However, it is important to note that the drawbacks of closed-ended questions include generating incomprehensible details, as the options are limited (Cohen, Manion, Morrison, 2018). Another issue that is unavoidable is that respondents may 'over-report' or 'under-report' in the surveys, which may also pose a negative influence on the credibility of the findings (Cohen, Manion, Morrison, 2018). Moreover, follow-up studies were impossible since the participants opted out of providing contact information in the survey (Cohen, Manion, Morrison, 2018). As the survey was developed, it was essential to consider the question designing so that the survey will not be overly lengthy, which would have led to a low response rate. Ethical consideration was also important so that the respondents will not see the need for

providing ‘correct’ or ‘biased’ answers.

There were three parts in the survey designed. Each part focuses on one of the three core skills concerned in this study. The respondents read different statements related to the respective skill and score from a scale of 1-5, 5 being they can totally identify themselves with the statement. The higher the score implies the better the respondent perceive him/herself in terms of possessing the skill concerned.

Analysis of the data

To analyze the data collected from the mixed method research, the qualitative and quantitative analysis were approached separately. Correlations between the data that were found and drawn. This will be further discussed in the discussion chapter.

For qualitative analysis, the constructivist grounded theory (CGT) was applied. That is, the interviews were transcribed after the data collection process and was theoretically coded (Schmidt, 2004). Since the interviews were semi-structured, there were themes that was anticipated in the findings, while there were also themes that exceeded expectation, yet relevant to the study.

The process consists of coding, categorizing and saturation, until a theory can be generated (Cohen, Manion & Morrison, 2008). CGT requires alignment of the data collected and the world view of the researchers (Lauridsen, & Higginbottom, 2014). That is, the researchers’ understanding towards the topic and world knowledge is required during the process. Charmaz & Belgrave (2007) defined that, instead of having a set of codes preconceived prior to the coding of the data, the codes generated through the grounded theory are created through data studying, which then leads to an emergent theory.

In this study, ‘focused coding’ was applied. In other words, the data was categorized focusing on the segments of data that the researcher found valuable and code through conceptualizing and framing the codes in specific terms (Charmaz & Belgrave, 2007)

On the other hand, for the quantitative analysis, charts were used to demonstrate data for easier and presentable analysis. Other methods, e.g. SPSS, was beyond accessible means in this project. Thus, after analyzing the data had been pre-generated by the Google Forms, consolidated charts were created to present the results of the surveys more clearly.

CHAPTER 4 - RESULTS AND FINDINGS

Students' key roles and responsibility in a student body

From the interview, the interviewees responded to the first research question “what are students' key roles and responsibilities in a student body in local public schools in Hong Kong?”. They stated that the students' main responsibilities are to organize activities for other student members of their own school, to design and produce souvenirs for other members of their own school, to plan and consult their teachers about their decisions, and to compile documents and present their proposals to the school's student council, where students of the council will question or offer further feedback upon their proposal.

The head of the student association, as well as the teacher, provided examples of activities the student association members had organized for other members of the school, such as the Christmas show in December, where the students were responsible to plan the rundown of the show, invite teachers to be part of the show, set up the stage, train the emcees, as well as cleaning up after the event. This responsibility required students involved in the student association to demonstrate their ability to analyze what other classmates would consider as entertaining.

Moreover, the head student also mentioned that some of the members aim to be original with the show, which demonstrates their ability to be innovative, as well as be original and creative. Since the ideas presented are new, the students also engaged in a substantial amount of self-learning, which also demonstrates active learning skills.

Another responsibility as a part of the student association in the school interviewed is to design products for their schoolmates. When asked what was being planned, the student interviewee

stated that they were planning to design reusable straws, which is an idea that, he claims, is new given the previous cabinets have not given out such souvenirs. Having such unprecedented ideas as a student association member reflects that they possess the skill of being innovative and creative.

While one of the students' responsibilities in the student body, as validated by both of the interviewees, is to plan and consult, the head student reflected that they were more dependent on the teachers at the beginning. In other words, the students would often overly rely on the teachers' responses instead of on their own critical thinking. As the students progressed through the term, they have learnt to become more dependent and less reliant on the teachers' views as the teachers seemed to be unwilling to directly instruct the students on how to proceed with a project or how to solve a problem. Such experiences, the head student reflects, helped him and his teammates to develop skills in analytical thinking, active learning and innovation, as well as becoming learning independently.

Other responsibilities members of the student association have to assume, such as preparing documents and presenting proposals to the school's student council, are not key to the present study. Therefore, these responsibilities are not discussed in detail.

Developing 21st century skills through being a student union member

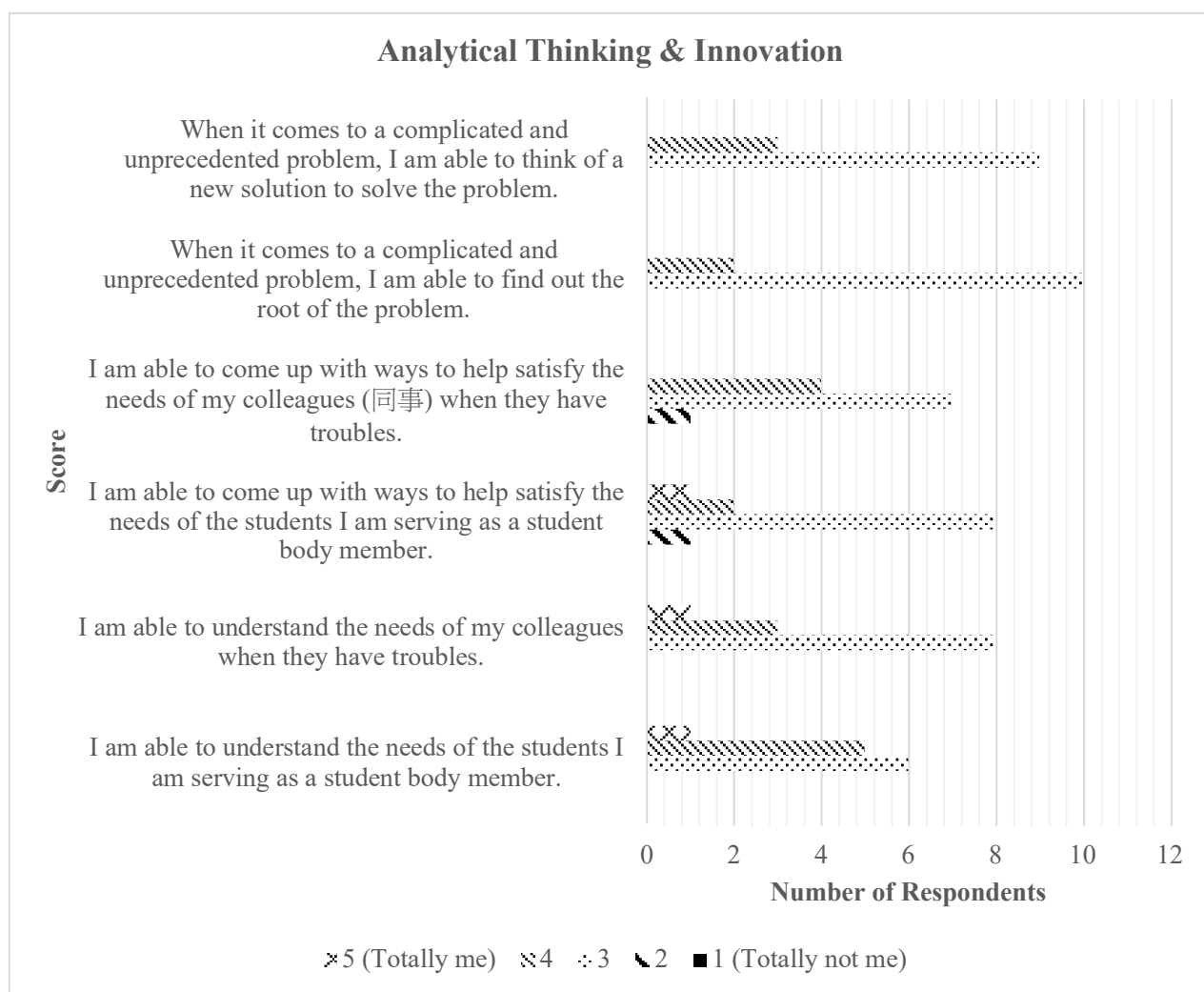


Figure 4.1 - SA members' response to questions related to analytical thinking and innovation

Figure 4.1 shows the responses after the 12 respondents were asked to reflect upon their ability to think analytically and to innovate from the perspective of a student union member. Among the 12 respondents, they mostly perceived their ability to analyze and innovate above average. While a majority of the respondents believe the statements in this part of the survey somewhat identifiable with who they are, a significant amount of them believed that they have a high ability in analyzing problems, understanding others' needs and thinking innovatively. From the results, it can be concluded that the respondents in this study are equipped, either before becoming a member of the student association or during their term of service, with an average

level of analytical thinking and skills to innovate, one of the most important 21st century skills according to the World Economic Forum (2008).

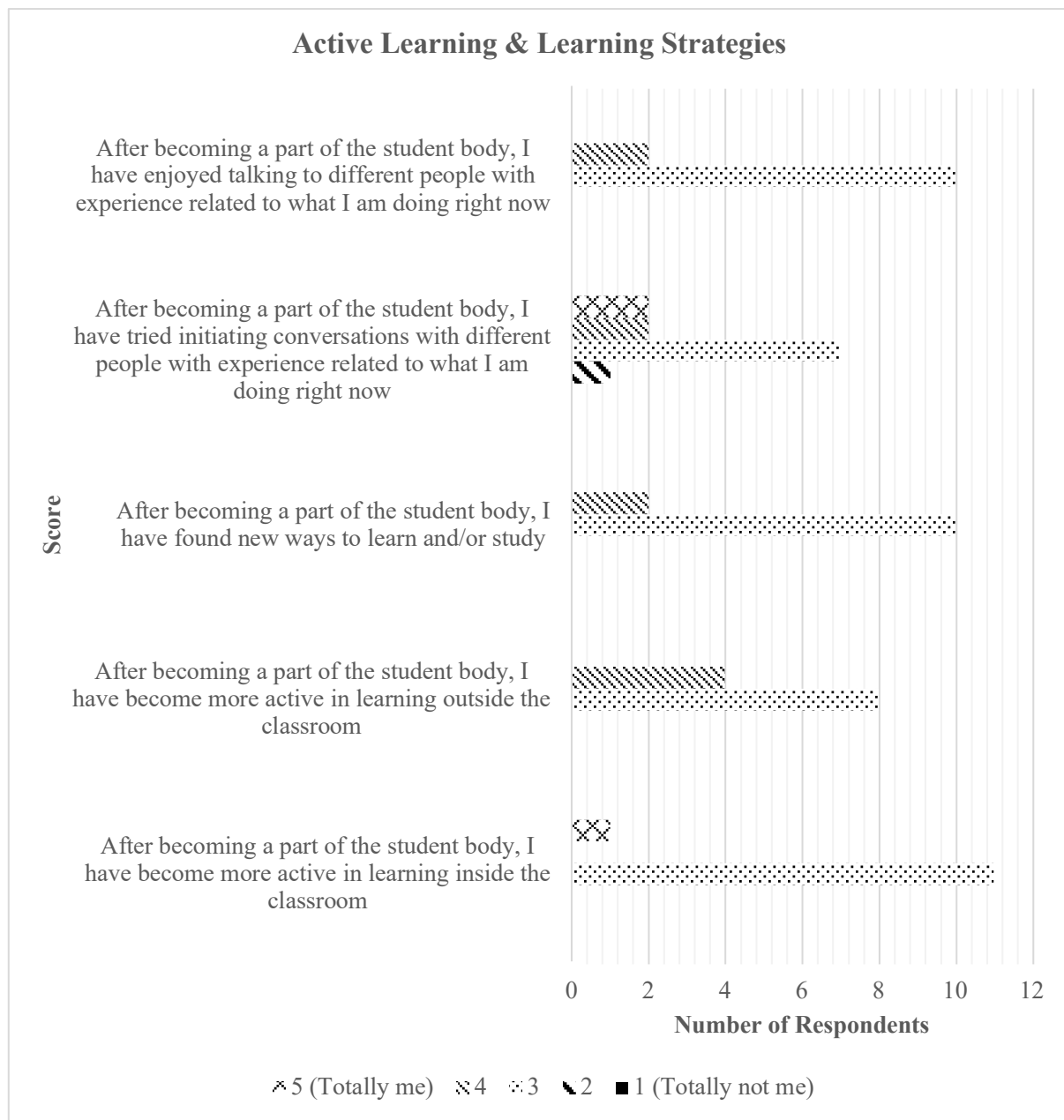


Figure 4.2 - SA members' response to questions related to active learning and learning strategies

Figure 4.2 presents the results in terms of the skills related to the active learning and learning strategies skills. Most of the respondents scored a “3”, meaning they perceive themselves average in scenarios where the active learning and learning strategies are required. It is,

however, also noteworthy that there is a small number of respondents in this survey who considered themselves active learners and possess strategies that are effective to their learning. This means students who are a part of the student association are well-equipped to acquire new knowledge actively and ability to apply different learning strategies, another skill among the other top 21st century skills, in a similar extent as the active learning and learning strategies skills.

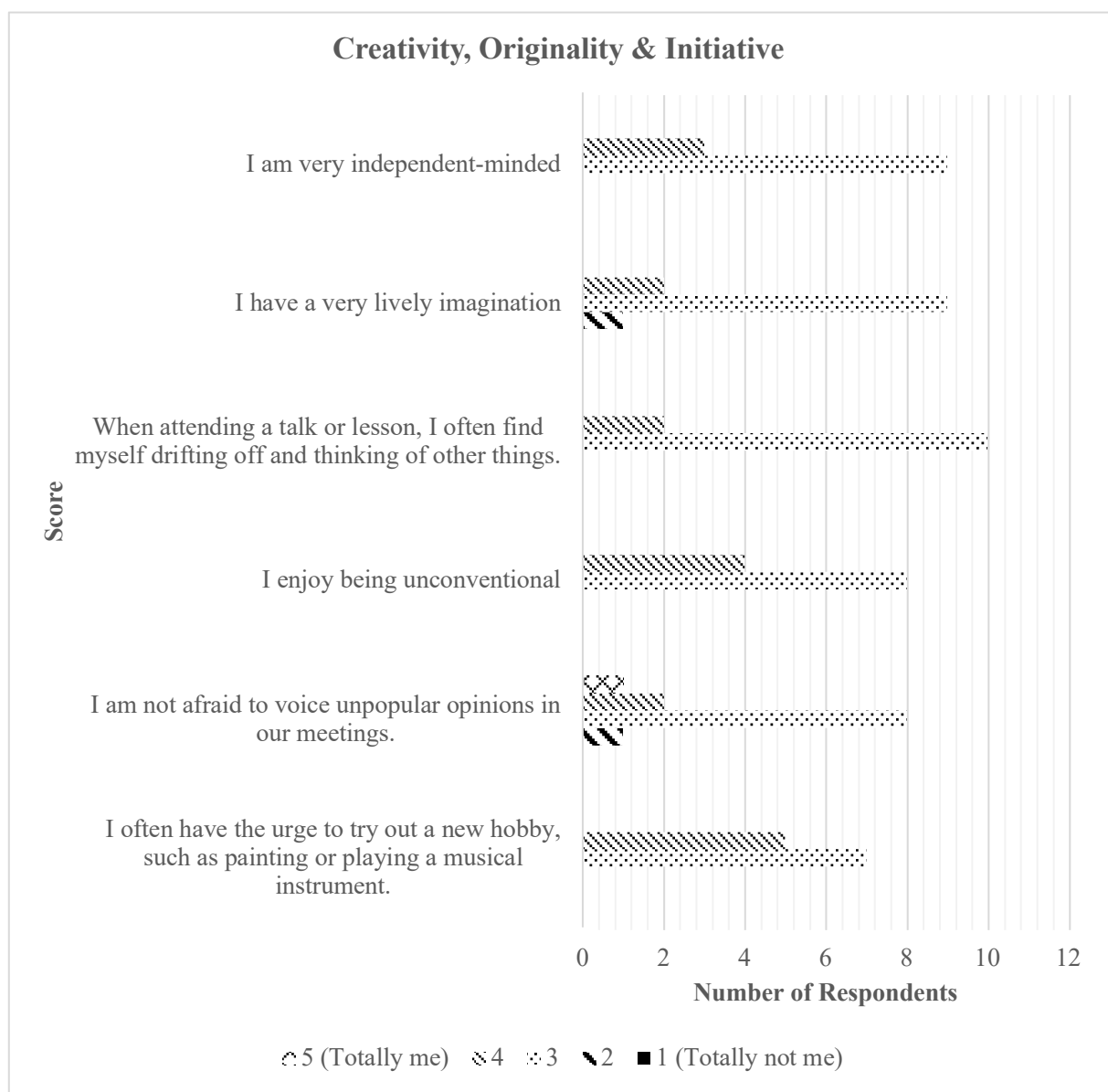


Figure 4.3 - SA members' response to questions related to creativity, originality and initiative

In the last segment of the survey, the students were asked to reflect upon their creativity, originality and initiative, which are the third most demanding skills by 2022 according to the World Economic Forum (2008). In Figure 4.3, the results regarding the ability to create, be original and take initiative is similar to the results on active learning and learning strategies shown in Figure 4.2 with most of the respondents being neutral about the statements, while there is a small number of whom believe that they can identify themselves as being a creative and original person that takes initiative. Which, again, implies that having the skill to create, be original and take initiative is an integral part of being a part of the student association.

Findings from the interviews

The interview with the teacher affiliate with the student association offered further insights to the reasons behind the results. With the use of grounded theory, a several codes were generated: democratic practices in teaching, analytical skills, teacher's reflection on experimentation in education, cultural influence on education in Hong Kong, and students' willingness to participate.

To begin with, the teacher interviewee also made some remarks regarding the student association members' analytical skills, one of the 21st-century skills concerned in this study. He shared his observation on the topic:

Nowadays, this year's cabinet and the previous year's cabinet, it's not like they have much analytical skills. [...] Maybe they can't see the whole picture [...] They seldom consider whether the boys or think about the problems they may face [...] So, perhaps, they are analytical but just a little bit. But it's been just a few months since they have become the SA [...]

In general, the teacher interviewed in this study did not agree that the students have mastered the skill of analyzing, which is an interesting finding as it somewhat contradicts the results from the survey completed by the students regarding their ability to analyze. The interview offered an insight from the overseer's point of view. Based on the observation; the improvement of analytical skills was not significant during the short period of time the students have become members of the student association. This finding supplements the survey findings in Figure 4.1, showing there is discrepancy between the perception of such skills from the students' own point of view and from the teacher's viewpoint. However, the reason behind the discrepancy is beyond the scope of this study. Therefore, this will not be further discussed in detail in the next chapter.

Moreover, students' willingness to participate was also mentioned in the interview, which is valuable to the understanding of students' ability to take initiative and active learning, as part of the 21st-century skills. The teacher mentioned that the students were willing to learn and take responsibilities when they became a member of the student association and significant improvement in terms of taking initiative during the Christmas Show:

When we ask them to do something about the activities, to learn something before they can actually perform or hold an activity, they usually are willing to do it. [...] we see some improvements in the Christmas Show and other activities, they tend to be more responsible, willing to take up responsibilities.

Based on what was shared by the interviewee, the students are competent at taking initiative at work and learning. Such results align closely to the survey results where students reflected

upon their own ability to take initiative and learn actively. This finding from the interview provides further insight and validates the findings presented in the survey related to active learning strategies (Figure 4.2). It shows that the teachers and the students share a common ground regarding the students' competence in active learning. Nonetheless, the occurrence of the code on "students' willingness to learn" was not common during the interview. Hence, this will not be discussed in detail in the upcoming chapter.

Furthermore, through the semi-structured interview, some insights were gained regarding the reasons behind the survey results and the observed acquisition and development of 21st-century skills mentioned earlier. First, for democratic practices in teaching, the teacher-interviewee shared that the teachers often provide the students with the freedom to make decisions. The teachers refrain from being the sole decision-maker in businesses even when they may have an answer in mind. In the interview, he has shared that:

Of course, in every teacher's mind, there is 'oh... it's a yes or no', but then we are not saying yes or no to them" [...] for teachers, we did not say 'yes' or 'no' for those events when they are proposing, because eventually we are not the one choosing but the other students [...] we always tell them they need to have something completed before showing to us, so they gradually learn something.

From these quotes, it is evident that the teachers adopt a more democratic approach as the teachers involve students in a less hierarchical, but instead a more inclusive, sense in teaching outside the classroom. The implications of how this approach assist the acquisition and development of these skills will be further discussed in the following chapter.

In terms of the teachers' reflection on experimentation, the teacher-interviewee shared that the teachers who are in charge of the student association constantly experiments and reflects upon the results of their experiments:

At first, we thought this activity requires some good emcees and the teachers needs to speak a lot, or else it would be more boring than a singing show. But then they tried it and the outcome was okay. I really appreciate it. [...] teachers may think that the outcome maybe... from a teacher's point of view, we may think sometimes maybe we shouldn't do this because the result may not be positive, but they tried, and it really worked.

It is evident that the teacher adopts an experimental approach when guiding the students in the student association. That is, the teachers would refrain from being fixated on their own beliefs. Rather, they approach new ideas from students with open-mindedness. Once the experiment is completed, they will reflect upon the experiment. The effect of the teachers' experimentation and reflection will be further discussed in the upcoming chapter.

Cultural influence on education in Hong Kong is another topic that the interviewee mentioned during the interview when he attempted to explain the cause of some phenomena, such as why some students may be more proactive as a member of the student association, and why some approaches do not work well when applied to these students, he noticed in the association:

After becoming the SA, I think they don't want to lose face, they do care about their SA title. [...] maybe since primary school or junior secondary, teachers tend to give

them a lot of guidelines to follow, we simply provided too much for them. [...] the people who chose them would feel unhappy and upset, like how come we chose you but not that cabinet, like they are trying not to lose face.

The cultural influence, such as losing face and the culture in school education which the students underwent, played a significant role in students' performance, according to the interviewee. Such influences on the acquisition of 21st century skills will be discussed in detail in the following chapter.

CHAPTER 5 - DISCUSSION

Responsibilities and the development of skills

The survey reflects that students who are a part of the student body consider that they have an adequate level of the 21st century skills that are concerned in this study. Generally speaking, most students who were, at the time of the study, a part of the student association perceived themselves as individuals that somewhat equipped with the 21st century skills. Based on the ELT models (Kolb, 2010), students being a part of experiential learning would lead to the conceptualization of abstract knowledge. The survey results suggest that the experiences contributed to the students' acquisition or development of the 21st-century skills studied in this paper as the respondents were asked to reflect upon their experience as members of the student association. Associating with the head students' claims about the responsibilities of the members within the student association, such as organizing activities and consulting teachers with plans, this indicates that participating in such an organization at school contributes positively to the acquisition and development of the 21st century skills.

Implications

Democratic practices in education

Such practices closely align with the social constructive pedagogy, which emphasizes the consideration of students as co-constructors of knowledge and meaning, as well as the guidance-based teacher-student relationship (Adams, 2006). From the interview, the teacher shared his approach to include students as owners and co-constructors of knowledge, instead of being the authority of meaning and knowledge. Gutmann and Ben-Porath (2014) emphasized that democratic pedagogy refers to students being given a right to decide what to do, how to achieve goals that they have set and participate in decision-making, while teachers plays the role of a stakeholder instead of the authority at most times.

In this study, the teacher's approach closely aligned with the definition of democratic pedagogy. He involved students in decision making by not giving explicit approval to students' proposals. Instead, he guides them or gave them the freedom to ponder the proposals by themselves. He also allowed the students freedom when they were interested in making certain decisions that were unprecedented. He stated clearly that he is a stakeholder in decision-making, which means he also has an equal right to raise concerns as the other student members. However, he does not play as an authority when it's not necessary.

Given that the teacher adopted a democratic approach to guiding students, students would, thus, be offered more chances to develop their analytical skills and creativity. In this case, without the teacher being overprotective or authoritative during the experience, students can make more mistakes without the teacher's protection, from which they can learn from by deploying their ability to analyze, and experiment with different ideas, from which they can be creative.

On the other hand, having a guidance-based teacher-student relationship, instead of instruction based is another feature of a democratic approach to education (Adams, 2006). There are different types of authority teachers can establish in the educational context. Macleod, MacAllister & Pirrie (2012) seconds Adams' (2006) belief that establishing a reference, personal authority where teacher acts as a mentor and guide has a positive effect on students' learning compared to the 'competent authority', where the teacher demonstrates sovereignty of his/her knowledge and establishes a hierarchical relationship in the classroom. Having a reference authority implies that the teacher and students are partners in learning, while simultaneously, the teacher plays the role of a mentor.

In this study, the teacher took up the role of a mentor as well as the partner in learning. He played the role of a mentor when there were issues that he had to intervene as an authority, such as when paperwork is required to be completed urgently by students and when there were flaws in students' work ethics. While other times, he acted as a stakeholder or, at times, a bystander to provide a space for students to experiment their ideas, and only stepped in whenever the intervention was considered mandatory, such as when the decision involves the school rules or the general benefit of the school community.

Similar to the idea of co-constructing knowledge, with the teacher taking such democratic approaches and offering freedom for students to experiment, they feel safer to make mistakes during the process, from which they will learn to solve different problems and fix their mistakes. The students are, therefore, given the opportunity to train and acquire problem-solving and other related 21st century skills, such as innovation and active learning. This closely align with the ELT models, where there is a process of transforming concrete experiences (being involved in the student body) into abstract conceptualization (skills). The teacher

adopting democratic experiences allows students to be autonomous, which further enriches the concrete experiences. Consequently, students can transform into valuable and purposefully abstract conceptualization.

Teacher's reflection on experimentation and practices

Reflection on pedagogy is significant in teacher's professional development and, in result, students' learning and development (Lowery, 2003). From this study, it is evident that the teacher's reflection upon his experimentation and practices generated new experiences for the students to learn from.

From the findings, the result of the teachers experiment in the Christmas Show was positive, which would, thus, lead to more similar experiments. Through these reflection upon these experiments would generate new experiences for students to learn from. For instance, the teacher would become more confident when students propose new ideas. Hence, opens up more opportunities for students to be innovative and learn from different experiences.

Moreover, it is worth-noting that from the interview, the interviewee also identified that a teacher's decision or perception may not always be accurate. Reflection helps the teacher to identify the flaw and enrich his/her experience as a mentor to the students. Referring to the idea of teachers being a part of learning, instead of owning the knowledge, the ELT model can, again, be applied to further prove that teachers' reflection plays a vital role. In all ELT models, observation and reflection are important steps to be taken in order to transform concrete experiences into abstract conceptualization effectively. With the teachers being a part of the learning process, their reflection plays a role in the learning among all the stakeholders. As a result, valuable learning and acquisition of abstract concepts (skills) can be achieved.

The cultural influence

On the other hand, the culture within the school context and society also contributes to the acquisition of the 21st century skills. Burton, Farh, & Hegarty (2000) and Tang (2010) stated that high power distance, ‘losing face’ is not desirable and considering others as part of a group instead of separate individuals are common features of the Hong Kong local culture. From the interviews, it was also validated that the culture plays a vital role when students behave in the student body.

From the findings, it is evident that the source of motivation may not only be intrinsic, but also extrinsic. With the culture values the concept of ‘face’ or ‘ego’, students in the student body demonstrated a good level of skills in their work not simply due to the skills being needed. Instead, it is required and expected from them perform adequately in front of the group of people whom they consider they belong to in order not to ‘lose face’. With the culture of the Hong Kong society, students may develop an identity within the cultural stereotypes. Hence, they will develop skills that are deemed necessary to achieve the identity properly. To be specific in this case, the students are more willing to learn actively to show that they are competent leaders and not to lose face.

At times, the high-power distance, meaning the stronger sense of hierarchy compared to other countries, can hinder the development of the skills concerned in this study as well. From the findings, it is interesting that even when the teacher’s intention was to be non-discrete with his answer, the students would still attempt to guess the underlying implication from paralinguistic cues when the teacher responses:

[...] the words ‘yes’ or ‘no’ did not come out from my mouth but they can still see our facial expressions, whether it was a yes or a no, they can sense it.

This reflects that no matter how the teacher may or may not demonstrate a strong authoritative figure, the students’ decisions may still rely on the ‘authority’s’ perceptions, instead of trusting their own discernment. The culture of high-power distance may hinder students’ willingness to make a decision without approval from authority, which may, in result, affect the students’ ability to develop skills, such as creativity and innovation, as they could be limited by the perception of the authority should be the ones to decide what to do and what is needed.

In addition to that, he reflected that teachers may have provided too much guidelines for students to follow when they were younger. Consequently, led to their inability to be independent. In other words, the teachers may be too overprotective during students’ schooling. Being overly dependent presents issues such as students not being able to make decisions on their own, analyze their problems, and learn without a person sitting next to them and guiding them through. This cultural feature puts the acquisition and development of 21st skills in jeopardy as students are not given the opportunity to practice the skills from a young age.

CHAPTER 6 - CONCLUSION

This study aimed to investigate how 21st century skills are acquired and developed through students’ participation in outside-classroom contexts in Hong Kong. The goal of this paper was to respond to the two questions: “What are students’ key roles and responsibilities in a student body in local public schools in Hong Kong?” and “To what extent are students’ 21st-century skills developed or acquired through participating in the executive committee of a student body?”. Both qualitative and quantitative measures were adopted in the study. Insights beyond the initial research goal were also offered through the use of grounded theory.

The survey findings in this paper suggests that students' being a part of the student union at school can help them develop 21st-century skills through experience. While the interview findings suggest that democratic approach in education, teachers' reflection on experimentation in education, as well as cultural influence contribute to the acquisition and development of the 21st-century skills. These findings offered valuable insight to how democratic approaches and the teachers' reflection on experimentation contributes positively to students' acquisition of the skills interested in this study, while culture can be a detrimental factor in, specifically, the Hong Kong context.

It is noteworthy that learner-centeredness and student autonomy, where students are an active part of learning and co-constructor of knowledge in the experience, contribute significantly to the acquisition of the skills studied in this research project. Moreover, it is crucial that the ELT is applied in the process of learning, as skills cannot be solely acquired in teacher-centered contexts. Last but not least, it is important for educators to understand the value of the combination of these two pedagogical philosophies when designing a learning experience for students that aims at developing 21st century skills, and the significance of nurturing a culture that does not serve as an extrinsic motivation or hinder the development of these skills within the education context. This may be valuable to further studies regarding 21st century skill development within school contexts, as it may be difficult to achieve in classrooms (Yeung, 2012), schools can attempt to nurture skills through outside classroom contexts, such as extra-curricular activities.

On top of that, I believe this research can be further extended in the future research. It would be valuable if data can be collected from an international school, which was proposed at the

initial stage of this research, as I believe an international perspective can offer valuable insights to how different approaches in different cultures and educational settings may contribute to the 21st century skills. The two codes generated from the interview – “analytical skills” and “students’ willingness to participate” in the student union context can be further investigated as well. In order to have a more reliable set of data, a longitudinal research can also be done, since the study at this stage does not consider variables outside the student association context. Being able to understand how other variables, such as inside classroom and outside school activities may contribute to the acquisition and development of 21st century skills would also be valuable.

References:

- Adams, P. (2006). Exploring social constructivism: theories and practicalities. *Education 3-13*, 34(3), 243-257. <https://doi.org/10.1080/03004270600898893>
- Barrell, J. (2010). Problem-based Learning: The foundation for 21st century skills. In J. Bellanca & R. Brandt (Eds), *21st century skills: Rethinking how students learn* (pp. 175-199). Bloomington, USA: Solution Tree Press.
- Boud, D. (1988). Moving towards autonomy. In D. Boud (Eds.). *Developing student autonomy in learning* (2nd ed.) (pp. 17-39). New York, USA: Nichols Publishing Company.
- Burton, B. K., Farh, J. L., & Hegarty, W. H. (2000). A cross-cultural comparison of corporate social responsibility orientation: Hong Kong vs. United States students. *Teaching business ethics*, 4(2), 151-167.
- Chan, D. W. (2000). Vision, task, and hope: The Hong Kong education reform movement in the 21st century. *Educational research journal*, 15(1), 1-18.
- Charmaz, K., & Belgrave, L. L. (2007). Grounded theory. *The Blackwell encyclopedia of sociology*.
- Cohen, L., Manion, L., Morrison, K. (2018). *Research methods in Education*. (8th ed.)
- Curriculum Development Council (2000). *Learning to learn - The way forward in curriculum development: Consultation Document*. Hong Kong: The Printing Department
- Dede, C. (2010). Comparing frameworks for 21st century skills. In J. Bellanca & R. Brandt (Eds), *21st century skills: Rethinking how students learn* (pp. 175-199). Bloomington, USA: Solution Tree Press.
- Education Commission, H.K.S.A.R. (2000). Review of education system: Reform proposals. *Hong Kong Special Administrative Region: Education Commission*.
- Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.

- Garraway J, Volbrecht T. Theorising experiential learning. *South African Journal of Higher Education*. 2011;25(6):1091-1102.
- <http://search.ebscohost.com.ezproxy.eduhk.hk/login.aspx?direct=true&db=ehh&AN=87469882&site=ehost-live&scope=site>. Accessed January 23, 2019.
- Gutmann, A., & Ben-Porath, S. (2014). Democratic education. *The encyclopedia of political thought*, 863-875.
- Joy, S., & Kolb, D. A. (2009). Are there cultural differences in learning style?. *International Journal of intercultural relations*, 33(1), 69-85.
- Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*. FT Press.
- Lauridsen, E. I., & Higginbottom, G. (2014). The roots and development of constructivist grounded theory. *Nurse Researcher*, 21(5).
- Lowery, N. V. (2003). The fourth "R": reflection. *The Mathematics Educator*, 13(2).
- Macleod, G., MacAllister, J., & Pirrie, A. (2012). Towards a broader understanding of authority in student–teacher relationships. *Oxford Review of Education*, 38(4), 493-508. doi:10.1080/03054985.2012.716006
- Mainemelis, C., Boyatzis, R. E., & Kolb, D. A. (2002). Learning styles and adaptive flexibility: Testing experiential learning theory. *Management learning*, 33(1), 5-33.
- Miettinen, R. (2000). The concept of experiential learning and John Dewey's theory of reflective thought and action. *International Journal of Lifelong Education*, 19(1), 54-72.
- Nunan, D. (2006). *Task-based language teaching*. Ernst Klett Sprachen.
- Pearlman, B. (2010). Designing new learning environments to support 21st century skills. In J. Bellanca & R. Brandt (Eds), *21st century skills: Rethinking how students learn* (pp. 175-199). Bloomington, USA: Solution Tree Press.

- Tang, Y. (2010). A comparison between Chinese and western interpersonal communication patterns: An intercultural perspective. *US-China Foreign Language*, 8(9), 14-19+
- Trilling, B., & Fadel, C. (2009). *21st century skills: Learning for life in our times*. John Wiley & Sons.
- Schmidt, C. (2004). The analysis of semi-structured interviews. *A companion to qualitative research*. 253-258.
- Sweeting, A. (2004). *Education in Hong Kong, 1941 to 2001: Visions and revisions*. Hong Kong: Hong Kong University Press.
- Whiting, L. S. (2008). Semi-structured interviews: guidance for novice researchers. *Nursing Standard*, 22(23), 35-41.
- World Economic Forum (2008). *The Future of Jobs Report*. Geneva: Switzerland. World Economic Forum.
- Yeung, S. (2012). Critical problems of contemporary society and their influence on the curriculum. In Yeung, S. S., Lam, J. T., Leung, A. W., & Lo, Y. C. (Eds), *Curriculum change and innovation* (pp. 1-25). Hong Kong, China: Hong Kong University Press.