The Craze and Crack of Content and Language Integrated Learning in Hong Kong: The Role of Self-regulation in Secondary Education



Alfred W.T. Lo 羅詠達

Department of Education

Linacre College

University of Oxford

Candidate Number: 1059239

Word Count: 19939

Supervisor: Dr Heath Rose

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Acknowledgement

"I wonder anybody does anything at Oxford but dream and remember, the place is so beautiful. One almost expects the people to sing instead of speaking. It is all like an opera."
– WB Yeats

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Table of Contents

Acknowledgement *2*
List of Tables *6*
List of Figures *7*
List of Appendices *8*
List of Abbreviations *9*
Plain Research Summary *10*
Abstract *11*
Chapter 1 Introduction *12*
1.1 Bilingual Education: The Hong Kong CLIL Craze **12**
1.2 Fantasy and Reality: The CLIL Crack in Hong Kong **12**
1.3 Self-regulation: Understanding the Craze and Crack **13**
1.4 Overview **14**
1.5 COVID-19 statement **14**
Chapter 2 Literature Review *15*
2.1 Content and Language Integrated Learning (CLIL) **15**
2.1.1 Defining CLIL 15
2.1.2 CLIL in Hong Kong 17
2.1.3 Examining Content and Language Integrated Learning in Hong Kong 18
2.1.4 Participant-Orientation: An Overlooked Perspective in CLIL Investigations 21
2.2 Self-Regulation **23**
2.2.1 What is Self-regulation? 23
2.2.2 Role of Self-Regulation in Secondary School Learning 24
2.3 Research Questions **27**
Chapter 3 Methodology *28*
3.1 Research Design **28**
3.2 Sampling Frame **29**
3.2.1 School Selection 29
3.2.2 Participants 30
3.3 Materials **33**
3.3.1 CLIL Challenges Scale. 33
3.3.2 CLIL Self-Regulation Inventory 34
3.3.3 Academic Vocabulary Test 36
3.3.4 Scenario-Based Self-Regulatory Assessment 37
3.3.5 Self-Regulation Interview 38
3.3.6 Achievement and Demographic Variables 39
3.4 Procedure **39**
3.4.1 First Phase: Pilot Study 39
3.4.2 Second Phase: Classroom Data Collection 39
3.4.3 Third Phase: Self-Regulated Interview 40
3.5 Data Analysis **41**
3.6 Ethics **42**
3.6.1 Ethics considerations for research with children. 42
3.6.2 Data protection and confidentiality. 42

Chapter 4 Results *43*

4.1 Students' Self-Regulation Processes in CLIL **43**

4.1.1 Quantitative Results 43

4.1.2 Qualitative Results 45

4.2 Language Challenges in CLIL **50**

4.2.1 CLIL language challenges by school band. 50

4.2.2 CLIL language-related challenges and students' self-regulation level 52

4.3 Predicting Language Proficiency and Academic Performance by Self-Regulation Level **54**

4.3.1 Self-Regulation as a Predictor of L1 Proficiency 55

4.3.2 Self-Regulation as a Predictor of L2 Proficiency 56

4.3.3 Self-Regulation as a Predictor of Academic English Proficiency 56

4.3.4 Self-Regulation as Predictors of Content Subject Achievement 57

Chapter 5 Discussion and Implications *58*

5.1 Methodological Contributions **58**

5.2 Self-regulatory Process in CLIL **59**

5.3 Comparison of Challenges Across CLIL Contexts: Differences in Ability Grouping and Level of Self-regulation **61**

5.4 Role of Self-Regulation in 'Killing the Two Birds' of CLIL: Language Proficiency and Content Knowledge **62**

5.5 Limitations **63**

5.6 Pedagogical Implications **65**

5.7 Future Research **66**

References *67*

Appendices *77*

Table

List of Tables

Table 1. Participants' Demographic Data 30

Table 2. Means and Standard Deviations of Students' Language Proficiency and Content Subject Performance 32

Table 3. Means and Standard Deviations for Self-Regulation by School Band 43

Table 4. Post Hoc Results for Level of Self-Regulation by School Band..... 44

Table 5. Goal Setting in Studying CLIL Among Students in Hong Kong..... 45

Table 6. Sources of Self-Motivation Among CLIL Students in Hong Kong..... 46

Table 7. Means and Standard Deviations for Learning Challenges According to School Band 50

Table 8. Correlations Between the Self-Regulation Constructs and CLIL Language Challenges.... 54

Table 9. Multiple Regression Output: Self-Regulation Constructs and L1 Proficiency 55

Table 10. Multiple Regression Output: Self-Regulation Constructs and L2 Proficiency 56

Table 11. Multiple Regression Output: Self-Regulation Constructs and Academic English. 57

Table 12. Multiple Regression Output: Self-Regulation Constructs and Content Subject Scores.... 57

List of Figures

Figure 1. The continuum of additive bilingual programmes integrating content and language learning (adopted from Thompson and McKinley, 2018) 16

Figure 2. CLIL Iceberg 22

Figure 3. Zimmerman's Self-Regulation Model (2000) 23

Figure 4. The Sequential Explanatory Design of this Study 28

Figure 5. Proportions of Students Receiving Private Tutoring 31

Figure 6. Boxplot of Students' Language Proficiency and Content Subject Performance 32

Figure 7. CLIL Scale CFA Results 34

Figure 8. CLIL Self-regulation Inventory: CFA Results 36

Figure 9. Sample Vocabulary Test Item 37

Figure 10. Sample Attention Check Question 40

Figure 11. Self-regulation Scores by School Performance Tier 44

Figure 12. The Students' Goals for CLIL 46

Figure 13. Sources of Self-motivation in CLIL 47

Figure 14. The Self-regulation Thematic Framework for the CLIL Context 48

Figure 15. Mean Frequency of Challenges by Category and School Band 52

Figure 16. The Positive Monotonic Relationship Between Students' Self-regulation Level and Their Self-Perceived Receptive Skill Challenges 53

List of Appendices

Appendix 1. CLIL Demographic Information Questionnaire 78

Appendix 2. CLIL Language Challenges Scale 80

Appendix 3. CLIL Self-Regulation Inventory 82

Appendix 4. Scenario-based Self-Regulatory Assessment 85

Appendix 5. Academic Vocabulary Test (adopted from Schmitt, Schmitt, & Clapham, 2001).. 87

Appendix 6. Self-Regulation Interview Guide (Semi-structured Interview) 88

Appendix 7. Oxford University Central University Research Ethics Committee (CUREC) Form89

Appendix 8. Information Sheet for Schools 90

Appendix 9. Information Sheets for Parents/Guardians 94

Appendix 10. Information Sheets for Participants 96

Appendix 11. Promotion Materials 101

Appendix 12. Consent Form for Schools 103

Appendix 13. Consent Form for Parents 104

Appendix 14. Consent Form for Teachers 105

Appendix 15. Consent Form for Participants 106

Appendix 16. Opt-out Form 107

Appendix 17. Confidential Agreement (Research Assistant) 108

Appendix 18. CLIL Language Challenges Scale: Explanatory Factor Analysis (EFA) and Confirmation Factor Analysis (CFA) 110

Appendix 19. CLIL Self-Regulation Inventory: Explanatory Factor Analysis (EFA) and Confirmation Factor Analysis (CFA) 114

Appendix 20. Post Hoc Tests 117

Appendix 21. Preliminary Assumptions 120

Appendix 22. Semi-structured Interview Transcripts 131

Appendix 23. Exemplar of Coding for Scenario-based Microanalytic Assessment (NVivo) ... 151

Appendix 24. School Information 152

List of Abbreviations

ANOVA	Analysis of Variance
AWL	Academic Word List
CBI	Content-based Instruction
COVID-19	Coronavirus disease
CLIL	Content and Language Integrated Learning
CFA	Confirmatory Factor Analysis
CMI	Chinese Medium Instruction
EFA	Explanatory Factor Analysis
EFL	English as a Foreign Language
EMI	English Medium Instruction
IPA	Interpretative Phenomenon Analysis
L1	First Language
L2	Second Language
LaC	Language across the Curriculum
MANOVA	Multivariate Analysis of Variance
MoI	Medium of Instruction
MSLQ	Motivated Strategies for Learning Questionnaire
RQ	Research Question
SLA	Second Language Acquisition
VLT	Vocabulary Levels Test
WTC	Willingness to Communicate

Plain Research Summary

Background

Content and Language Integrated Learning, which was first developed and coined in Europe, changed content subject learning from employing a monolingual approach to that of a bilingual approach. In Hong Kong, Although many parents have preferred that their children learn through the medium of English rather than Chinese, in many instances, although children have mastered English, their grasp of the content of subjects has been lacking.

Objectives

In Hong Kong, two main approaches have been employed to explore the effectiveness of CLIL: product-oriented and process-oriented approaches. However, recently, the importance of self-regulation in CLIL has been emphasised. A study of the role of self-regulation in CLIL can potentially afford researchers and teachers the opportunity to understand how students with different levels of language ability and academic performance prepare, monitor and reflect when learning. In this study, an investigation into how students from high-tier, mid-tier, and low-tier schools employed self-regulation in CLIL was conducted.

Methods

The study involved 167 participants who were junior secondary students from three secondary schools who were receiving CLIL at the time of research. Quantitative data was collected through a questionnaire and an Academic Vocabulary Test, while qualitative data was collected through a newly developed Scenario-based Assessment and semi-structured interviews.

Results

Findings demonstrated a holistic cyclical self-regulatory process of CLIL that fits into Zimmerman's self-regulation model and found a positive monotonic relationship between students' self-perceived language challenges and their self-regulatory level. Self-regulation predictors of CLIL outcomes in junior secondary education were also explored and found that CLIL students' success in L2, academic English and content subject performance increases as their level of self-regulation skills increases and their motivation strengthens. Another notable finding was the non-significant relationship between students' level of self-regulation and L1 Chinese proficiency, meaning that this relationship cannot predict the success in L1 proficiency of students with a high level of self-regulation.

Implications

This study provides methodological contributions to investigate secondary school students' language challenges in CLIL Additionally, we fill a gap in the literature on the self-regulation research of CLIL/EMI by demonst. ating a holistic cyclical self-regulatory process of CLIL that fits into Zimmerman's self-regulation model and find a positive monotonic relationship between students' self-perceived language challenges and their self-regulatory level.

Abstract

The practice of learning content subjects in a second language (L2) has been common around the world, and Content and Language Integrated Learning (CLIL), a pedagogical approach developed and coined in Europe, has been effectively employed in Hong Kong. Both product-oriented and process-oriented approaches have shown that CLIL's perceived dual achievement of 'content' and 'language' is underwhelming, and the reasons for this appear to be largely inconclusive. Researchers (e.g. Pun & Macaro, 2019) highlight the emerging need to understand the underlying issues within CLIL-based junior secondary education. However, recently, the importance of self-regulation in CLIL has been emphasised. A study of the role of self-regulation in CLIL can potentially afford researchers and teachers the opportunity to understand how students with different levels of language ability and academic performance prepare, monitor and reflect when learning, but it has not yet been examined in the secondary school context. Therefore, the aim of the study was to explore how junior secondary students from high-tier (Band 1) and mid-tier (Band 2, this school), and low-tier schools (Band 3) in Hong Kong employed self-regulation in their Content and Language Integrated Learning. The study involved 167 participants who were junior secondary students from three secondary schools who were receiving CLIL at the time of research. Quantitative data was collected through a questionnaire and an Academic Vocabulary Test, while qualitative data was collected through a newly developed Scenario-based Assessment and semi-structured interviews. Findings demonstrated a holistic cyclical self-regulatory process of CLIL that fits into Zimmerman's self-regulation model and found a positive monotonic relationship between students' self-perceived language challenges and their self-regulatory level. In addition, self-regulation predictors of CLIL outcomes in junior secondary education were also explored and found that CLIL students' success in L2, academic English and content subject performance increases as their level of self-regulation skills increases and their motivation strengthens. Another notable finding was the non-significant relationship between students' level of self-regulation and First Language (L1) Chinese proficiency, meaning that this relationship cannot predict the success in L1 proficiency of students with a high level of self-regulation. Such findings highlight the importance of self-regulation in understanding the learning process in CLIL by placing students as the focus of both education and research.

Chapter 1 Introduction

A brief overview of the popularity of Content and Language Integrated Learning (CLIL) throughout the world, particularly in Hong Kong, is presented. Product-oriented and process-oriented studies to reveal how and why CLIL may be ineffective in Hong Kong are reviewed. Focused research on students' learning processes to understand the effectiveness of CLIL has not been conducted in Hong Kong. Thus, self-regulation has been explored.

1.1 Bilingual Education: The Hong Kong CLIL Craze

Teaching content subjects such as mathematics in a foreign language (FL), mainly English, has been ubiquitous globally. Content and Language Integrated Learning (CLIL), initially developed in Europe, has been conceived as a catalyst of agent change by transforming traditional monolingual learning contexts to bilingual experiences. While the CLIL was developed in Europe for promoting a plurilingual and pluricultural union (Coyle et al., 2010), the content–language hybridity of CLIL as a pedagogical approach has no fixed models. However, its organic growth in different contexts with various theoretical boundaries has stimulated debates about the effectiveness of its outcomes and classroom practices in relation to content, language and intercultural competence.

Hong Kong, where Chinese-English bilingual education has been controversial for decades (Tsui, 2004), is a notable non-European context to implement CLIL. Specifically, Hong Kong as a former British colony, which developed into an international business and financial centre, has been implementing CLIL in the form of English as a Medium Instruction (EMI) for teaching content subjects in secondary schools prior to and since China's return to sovereignty in 1997. It was believed this would consolidate students' second language (L2) learning and cognitive development in content learning while providing constant exposure to English. Furthermore, stakeholders such as parents deemed EMI education was more effective and prestigious (Choi, 2003; Lin & Man, 2009). Since the fine-tune of Medium of Instruction (MoI) came into effect from 2010/11, secondary schools have been afforded more autonomy and flexibility in adopting CLIL's different models and practices. In *Curriculum Guide* (Curriculum Development Council, 2017), the Education Bureau emphasised promoting Language across the Curriculum (LaC) by encouraging schools to adopt content–language integrated learning in schools to develop students' bilingual development and expose them to English through content learning, thus enabling them to become global citizens. The implementation of CLIL in promoting content and language achievement simultaneously has been a *craze* in Hong Kong for decades.

1.2 Fantasy and Reality: The CLIL Crack in Hong Kong

Although CLIL has been implemented with government officials and different stakeholders' support, the ideal effectiveness of content and language integration has been doubtful. Several studies (e.g., Marsh et al., 2000; Fung & Yip, 2014; Yip et al., 2003) have revealed that although students' L2 English proficiency in EMI outperformed that in Chinese Medium Instruction (CMI), content learning was sacrificed. This *product-oriented CLIL* research focuses on CLIL's effectiveness and outcomes. Accordingly, various researchers (e.g. Dalton-Puffer, 2007) have studied CLIL classroom discourse to illuminate students' learning processes. Studies in Hong Kong (Lo & Macaro, 2012; Pun & Macaro, 2019) have employed *process-oriented CLIL research* to reveal that ideal content–language integration appears to be lacking because of inadequate support for cognitive and linguistic learning simultaneously and students and teachers' unreadiness (Lo & Lin, 2019).

While product-oriented and process-oriented studies have been conducted frequently in Hong Kong, CLIL scholars elsewhere have emphasised the importance of focusing on successful learning and encouraging students' greater ownership in classrooms (e.g. Coyle, 2013). Another aim is a student-centred approach to cater for students' individual needs by allowing flexibility and diversification in their implementation of CLIL (Education Bureau, 2009). However, a *participant-oriented* approach in studying CLIL learning processes has been absent in Hong Kong.

1.3 Self-regulation: Understanding the Craze and Crack

Self-regulation has been ubiquitous in both content learning and language learning research on how students identify their learning needs, formulate goals, choose resources and strategies for learning and reflect on their own learning. Research has shown that a high level of self-regulation can be beneficial for motivating and facilitating learning and performance in content learning and language learning. In the *Curriculum Guide* (Curriculum Development Council, 2017), schools are also encouraged to promote self-regulated learning to enable learners to employ initiative and responsibility for learning to ultimately become independent and autonomous learners. While schools in Hong Kong have been actively promoting CLIL and self-regulated learning simultaneously, how *more* and *less successful* students self-regulate their learning and whether self-regulation enables greater success in language proficiency and academic performance in CLIL has yet been considered.

Although only a paucity of research has been conducted on the role of self-regulation in CLIL, such research may afford an understanding of how students with different levels of language ability and academic performance prepare, monitor and reflect in order to achieve a desirable performance in CLIL. Accordingly, how students from high-tier, middle-tier, and low-tier schools employ self-regulation in CLIL to realise academic success and language enhancement in their learning was

examined in this study by employing a *participant-oriented* approach in order to introduce a new CLIL research approach.

1.4 Overview

This dissertation is organised into six chapters to provide a thorough understanding of the role of self-regulation in CLIL. In Chapter 1, the study is contextualised and objectives to address the current weaknesses in CLIL research are provided. In Chapter 2, the CLIL's typology is presented. Furthermore, research on CLIL and self-regulation is reviewed. In Chapter 3, the mixed approach research design is outlined. The findings are presented in Chapter 4. In Chapter 5, results, the limitations, and pedagogical and research implications to encourage the implementation of self-regulation in CLIL classrooms are discussed.

1.5 COVID-19 statement

Due to travel restrictions imposed by the Hong Kong Special Administrative Region government because of the COVID-19 pandemic, the researcher was unable to return to Hong Kong and thus, the study was conducted remotely. In addition, the Education Bureau's special arrangement for *summer holidays* had a considerable impact on the data collection period. Thus, there were fewer participants. The research design may have also been affected.

Chapter 2 Literature Review

The chapter reviews the literature addressing the definitions of CLIL. Hong Kong has conducted two types of CLIL studies: product-oriented and process-oriented, indicating its inadequacy due to a lack of participant-oriented studies. Subsequently, this chapter introduces the concept of self-regulation and examines self-regulation studies of content learning and language acquisition, emphasizing its potential for CLIL research.

2.1 Content and Language Integrated Learning (CLIL)

2.1.1 Defining CLIL

CLIL is defined as 'any type of pedagogical approach that integrates the teaching and learning of content and second/foreign languages' (Morton & Llinares, 2017, p.1). The term CLIL was officially coined in Europe in 1994 when the region apprehended the need to enhance multilingualism and multicultural citizenship and sensed the necessity of improving FL learning and teaching methodologies (Coyle et al., 2010, Morton & Llinares, 2017). It is postulated that CLIL enables students to acquire a L2 by increasing their exposure and engagement. The content themes offer learners a context and thus motivate authentic and purposeful communication (Lyster & Ruiz de Zarobe, 2018). The inextricable relationship between content and language allows the belief that content learning contributes to language learning; in turn, the mastery of a language accords learners easier access to content (Stoller, 2008).

2.1.1.1 ***Revisiting the CLIL Typology***. The ubiquitous problem of inconsistencies in using theoretical terminology related to the integration of content and language learning must be addressed before reviewing the extant literature on CLIL. It is increasingly common for L2 to be used as an instructional medium because of discrete types of bilingual programs integrating content and language learning. This trend is particularly applicable to L2 English. Such programs may be differentially conceived and labelled, for instance, immersion, content-based instruction (CBI), and CLIL (Thompson & McKinley, 2018, see also Figure 1). The programmes could evince similarities or differences apropos their target languages, instructional goals, the prescribed balance between language and content instruction, and pedagogical approaches.

Nonetheless, the multiplicity of terms signifying the instructional approach of integrating content and language learning share the objective of *additive bilingualism* or developing a L2 within the cognitive repertoire of learners without sacrificing the first language (L1) (Baker, 2021). CLIL is defined as an educational approach in which a L2 serves as the medium of instruction of academic content as well as the concerned language. Some scholars (e.g., Cenoz et al., 2014) have argued that this description can apply equally to any type of bilingual education programme. Thus, the umbrella

term CLIL can replace other terminologies such as immersion or CBI. Other researchers (e.g., Dalton-Puffer et al., 2014; Lasagabaster & Sierra, 2010) have contended that such a substitution could be problematic. For instance, CLIL, is primarily content-oriented in its approach (i.e., L2 learning is integrated into content-based courses), while immersion is associated with time-intensive learning via an L2. Thompson and McKinley (2018) make a fairly objective and convincing point: the demarcation lines between approaches become more unclear as they are transported to different countries and contextualised to satisfy discrete learning situations. Thus, terminology use differs based on educational contexts, pragmatic factors, and cultural influences. For example, CLIL is widely used in Europe, but the framework can also be developed in distinct ways and applied to non-European circumstances (e.g., Yamano, 2013 in Japan). No fixed models pre-determine how CLIL should evolve (Coyle, 2013; Lin, 2016), so consensus on whether all bilingual education programs should be coined CLIL is difficult to achieve. However, researchers must more clearly define the terms used in their studies.

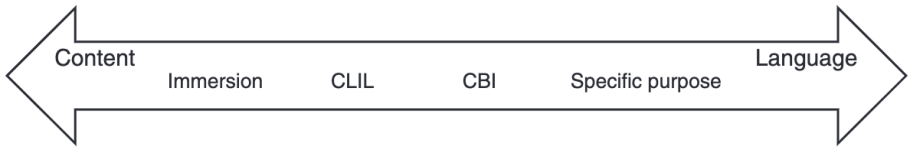


Figure 1. *The continuum of additive bilingual programmes integrating content and language learning (adopted from Thompson and McKinley, 2018)*

2.1.1.2 ***CLIL: The Umbrella Term for Bilingual Education in Hong Kong***. The present context concerns Hong Kong, where local researchers also apply diverse terms to describe bilingual education, for instance, CLIL, EMI, and immersion. Such labels are often used in the literature without explaining why a particular label is selected. The present study justifies its usage of the term CLIL in the following manner.

First, Hong Kong can implement English as an MoI in numerous ways that comply with the core defining characteristics of CLIL. Schools or teachers can decide whether CLIL should be deemed a content-driven or language-directed pedagogy (Coyle et al., 2010). Since 2009, the Education Bureau has discarded the use of terms such as CMI or EMI to designate schools and streams. Secondary schools can now decide whether to teach all content subjects through English or partially (please see section 2.1.2 on fine-tuning the MoI policy).

Second, CLIL reflects Hong Kong's emphasis on educational development. The most recent *Curriculum Guide* (Curriculum Development Council, 2017) highlight LaC as a focal aspect of curriculum development. This directive advocates ‘integrating language learning and content learning...[as] an approach through which schools can enhance students' language proficiency and understanding of the academic content’ (p.7). Hence, primary schools and secondary schools should

promote English as a medium for learning subject-related content. The mandate is thus linked to concepts underlying CLIL.

Third, CLIL is more appropriate because students share the L1. CLIL is generally conducted in a lingua franca (e.g., English) in contexts in which teachers and students share an L1, which is often also the majority language of the concerned country (Ball et al., 2016; Dalton-Puffer, 2011; Richards & Pun, 2020). Most students in secondary schools in Hong Kong share their L1 (Chinese), making CLIL a natural fit for their content-based classes.

Fourth, CLIL can explicitly distinguish secondary schools from universities through its dual focus on content and language. Studies on Hong Kong's secondary and tertiary students often utilise the term EMI in addition to CLIL. However, EMI is often associated with tertiary education, and CLIL is usually applied in elementary and secondary schools (Ball et al., 2016; Brinton & Snow, 2017). EMI is expected to deliver the same dual benefits as CLIL, but the terms are not explicitly defined to reflect such commonalities (Rose et al., 2019). According to Macaro (2018b), EMI-related research is often labelled *CLIL* in the secondary education context (p. 20). The content and language duality specifically applied to the secondary education level are crucial for the present study.

2.1.2 CLIL in Hong Kong

The MoI policies and practices of primary (in Chinese) and tertiary (in English) education levels generally appear to be fixed, but those at the secondary level have undergone significant changes in recent decades. The government's MoI language policies reflect the changes that have occurred vis-à-vis integrating L2 English as the MoI for subject-related content. Such administrative policies may be categorised into three phases: the colonial government's *laissez-faire* strategy (1946–1997), the post-colonial directive of a mandatory mother-tongue-based stream of education (1998–2009), and a subsequent 'fine-tuned' MoI plan (2010) (Chan, 2014; Poon 2013).

Before Britain handed sovereignty of Hong Kong to China in 1997, schools enjoyed the benefits of *laissez-faire* or non-interventionist government policy and could make their own MoI choices. Most stakeholders believed that EMI would translate to better job prospects and social mobility. Hence, more than 90% of the secondary schools claimed EMI status even though Chinese-English code-mixing was prevalent (Lin, 2006) in actual classroom practices. Soon after the handover, a streaming policy was introduced in 1998, mandating secondary schools to be classified as EMI or CMI so that the standard of English would not be diluted for students. An aggregate of 114 secondary schools received the exception of adopting EMI for subject-related content and 307 schools were designated to the CMI stream (Tsui, 2004). However, the general public strongly favoured reinstating EMI in all secondary schools to effectively improve the English proficiency of students. Subsequently, the government announced a 'fine-tuned' MoI policy in 2010, offering schools the autonomy of

choosing EMI for subject content if they met certain criteria such as student abilities, teacher capabilities, and school-based support (Education Bureau, 2009). This policy resulted in the application of diversified CLIL models in schools. For instance, CLIL could be used for all curricular subjects or a single subject, creating diverse modes of integrating content and language instruction (see Appendix 24 for a summary of CLIL models in Hong Kong). The way schools can implement CLIL depends on certain criteria, as mentioned above. Nonetheless, such a diverse CLIL implementation is not exceptional or limited to Hong Kong. Similar diversities have been reported in other environments because CLIL characteristics are so broadly defined (see Coyle et al., 2010, for a review of discrete European CLIL models).

2.1.3 Examining Content and Language Integrated Learning in Hong Kong

CLIL-based scholarship has generally been categorised into the two orientations of *process* and *product* (Cenoz & Ruiz de Zarobe, 2015; Nikula et al., 2013; Llinares et al., 2012; Lo, 2020). Given the institutional and pedagogical differences in CLIL between Hong Kong and other contexts (e.g., Europe), this section presents a synthesis of the two CLIL research orientations in the Hong Kong context.

2.1.3.1. ***Product-oriented Research: Effectiveness of CLIL in Hong Kong***. Research has consistently found that English proficiency can be effectively enhanced through the integration of content and language instruction in Hong Kong. However, content learning is compromised, especially for underachievers, by using English as the MoI.

Lo and Lo (2014) reviewed 24 studies in their meta-analysis to investigate the effectiveness of CLIL (labelled EMI) in Hong Kong. These investigations were directed toward differences observed between students of the EMI and CMI streams in aspects such as language-related and content-based academic outcomes, affective variables (i.e., self-concept, motivation, learning strategies, and interest), and moderating variables (i.e., research design features or participant characteristics). The meta-analysis found that students receiving EMI in secondary schools were more proficient in L2 English and performed better in measures of affective variables. However, their subject-related content learning suffered. However, the meta-analysis admitted certain limitations, indicating the application of caution in interpreting its outcomes. For example, the authors claimed that the self-selection effect and parental support could not be controlled; hence, their results could favour high-achieving students enrolled in EMI programmes. Similarly in Europe, CLIL attracts or is primarily selected by high-achieving learners. Additional research is required to ensure that the benefits of CLIL apropos L2 performance are justified by the CLIL interventions and are not attributed to favourable learner characteristics (Graham et al., 2018; Goris et al., 2019). Further, the internal validity of the meta-analysis is strongly questioned. The sample sizes of studies encompassed by the

meta-analysis varied from a relatively small number of students to thousands. The EMI durations were also inconsistent across the studies. Five reports and four articles were published and supported by the Education Bureau, accounting for one-third of the 24 considered studies, making the possibility of favouring the government policies. Some highly reliable longitudinal studies with larger sample sizes must be critically analysed to truly determine the effectiveness of CLIL in Hong Kong.

For example, Yip et al. (2003) subsequently evaluated the science-related achievements of students over three years to determine the effects of EMI on content learning after the compulsory mother tongue policy was instituted in 1997 and resulted in a more stringent application of the mandate to prohibit mixed-code teaching. CMI students were administered the Chinese version of a self-designed science achievement test, and English-only and English-Chinese bilingual versions were randomly distributed to EMI schools. Despite registering superior academic performances and abilities, junior EMI students performed far worse than their CMI counterparts in comprehending abstract concepts, discriminating between scientific terms, and applying scientific knowledge. The study exhibited the drawback of potential confounding effects among the three versions of the test. Some EMI students could have known about the test and could have used Chinese for their answers because they were unsure whether their subject-specific language skills were appropriate. The effectiveness of L2-based CLIL vis-à-vis content learning was not necessarily evaluated by Yip et al.'s investigation because the students usually learned and assessed content knowledge in English. Cronbach's coefficient of.63 was computed for the test, indicating marginally satisfactory reliability. Hence, Yip et al.'s results should be cautiously interpreted.

Fung and Yip (2014) compared the academic achievements and motivations of students by studying the same physics module delivered over three academic years in a school via EMI (CLIL) and CMI. This study was omitted from the abovementioned meta-analysis, but it is crucial to the apprehension of the relevant circumstances after the recent fine-tuned policy was implemented. A total of 199 Band 2 (i.e., medium academic ability) tenth-grade students were classified as low, medium, or high achievers based on their ninth-grade scores. The results demonstrated that the use of L1 Chinese enabled low-ability and high-achieving students to attain higher levels of proficiency in physics than the use of L2 English as the MoI. However, scant conclusive evidence was accrued vis-à-vis medium-ability students. A questionnaire-based survey revealed that students expressed a higher motivation to learn physics in L1 than in L2. That study, however, did not mention whether the physics teacher had undergone any pedagogical training in language instruction, eliciting questions on the efficacy of teaching subject-related content through L2 English. Further, participation by a single (mid-tier, Band 2) school precluded a comprehensive overview of the effectiveness of EMI across abilities. Future research must compare mid-tier schools with their top-tier and low-tier counterparts. Additionally, the study contained no information about how it

evaluated answers to open-ended questions. The mid-tier students would have just begun CLIL. It is thus unclear whether using subject specific L2 terminology posed challenges for them. Additionally, this study represented a cross-sectional study of different years rather than a longitudinal investigation. Cummins (1979) asserted that it could take students three to five years to reach proficiency levels at which bilingual programs can be effective. It is uncertain whether it is too early to determine the (in)effectiveness of CLIL in the form of EMI or to judge the time and effort required to transition from CMI to CLIL.

The body of CLIL research from Hong Kong indicates that CLIL programs can be effective in L2 learning but can negatively affect content learning. Numerous researchers in Hong Kong have coincidentally agreed that CLIL may not be effective, scholars worldwide (e.g., Cenoz, Genesee & Gorter, 2014; Morton, 2012; Llinares, Morton, & Whittaker, 2012) advise against focusing solely on product-oriented research. Instead, they recommend *process-oriented* investigations that examine classroom episodes to uncover why CLIL is (in)effective and how students and teachers interact in the classroom. The next section examines how classroom interactions affect CLIL effectiveness in Hong Kong.

2.1.3.2. ***Process-oriented research: CLIL Classroom Interactions in Hong Kong***. A gradual shift away from product-oriented approaches is noted in CLIL research. Process-oriented approaches investigating classroom interactions to ascertain language and content learning opportunities are becoming popular. Several researchers have studied CLIL classrooms in Hong Kong and contended aspects that help CLIL succeed or fail.

Lo and Macaro's (2015) CLIL study investigated teacher-student interactions in two CLIL classrooms. Lo and Macaro transcribed all utterances observed during 15 tenth-grade lessons and categorised them into discrete functions (e.g., elicit, inform). They further scrutinised turn-taking, questioning by teachers, and patterns of discourse. Their results indicated monologic teacher-student communication in CLIL classrooms: teachers dominated discussions, and students found self-expression difficult in the L2 environment. Pun and Macaro (2019) also investigated the effects of L1 and L2 use on the types of questions asked by teachers and interaction patterns in senior secondary science lessons. To this end, they compared schools in Hong Kong that began CLIL (labelled EMI) earlier to schools that instituted it later. Their findings demonstrated that teachers used higher-order questions when L1 was more used and were more interactive with later CLIL students. Their findings apropos CLIL students with four years of additional English instruction were similar to the results obtained by Lo and Macaro (2015): the questions teachers asked were more basic and classroom discourses tended toward the monological. Pun and Macaro (2019) included relatively limited lesson-related observations and the schools they investigated were 'reasonably representative and comparable'. However, they offered no selection criteria or brief demographic information about the

participating schools, making it impossible to generalise all CLIL students in Hong Kong or ascertain whether the pedagogy favours high achievers. In addition, the researchers confirmed the existence of CLIL difficulties in early grades but neglected to examine the factors underlying classroom discourses, such as the learning process.

To at least some extent, the abovementioned researchers have analysed classroom discourses between teachers and students to apprehend why CLIL may or may not effectively promote educational outcomes. Classroom interactions can pivotally elucidate actual CLIL practices and can help improve pedagogy and teacher education. However, students could benefit from short exposure to language through CLIL classes on a normal school day (Fung and Yip, 2014). We should also learn from participant perspectives how students can control their learning or determine the success or failure of CLIL. However, this aspect of CLIL has been overlooked in the extant research because it neglects the agency of students during the learning process. Learning does not always occur in the classroom; hence, I propose *participant-oriented* research to complement studies attuned to products or processes.

2.1.4 Participant-Orientation: An Overlooked Perspective in CLIL Investigations

Despite the popularity and the perceived dual outcomes of CLIL, the extant process-oriented and product-focused investigations offer inconclusive evidence of the pedagogy's effectiveness in Hong Kong, precluding generalized inferences. Consolidating research efforts is thus required. Bonnet (2012) has also recommended research initiatives incorporating *process*, *product*, and *participant* perspectives and applying both qualitative and quantitative approaches in ways that account for individual, social, and cultural concerns relevant to CLIL.

The participant perspective has received relatively scant attention from CLIL researchers as is evidenced by the burgeoning literature on process- and product-oriented CLIL worldwide and in Hong Kong. However, the participant perspective in CLIL is not new. However, most studies investigating the participant perspectives of CLIL or other bilingual education contexts have focused on the perceptions of teachers, the CLIL teacher identity (e.g., Dafouz, et al., 2016; Skinnari & Bovellan, 2016), and the beliefs of teachers on the function of language in their disciplines (Morton 2012). Conversely, relatively fewer studies have addressed learner perceptions, particularly how students can ensure the success of content-language integreated learning processes.

A European study by an acclaimed CLIL scholar (Coyle, 2013) may be cited as an exception: it contended that the quality and nature of learning experiences must be understood from the perspectives of learners to ensure that secondary school students succeed in their language learning endeavours. The study adopted a learner-oriented approach by synergising the outcomes of a questionnaire with the narratives obtained from learner discussions and reflections, as well as

classroom observations. The findings revealed that learners aged between 12 and 15 years could perceive the need for changes to pedagogic practices through their CLIL experiences. Students could also detail their overwhelming need to communicate, develop ways of using the learned language, and engage in the integrated content-language learning process. Moreover, students could identify how literacy practices should change and how achievement-related expectations should be developed to ensure sustained motivation levels. The study evidenced robustly that such data could assist learners in grasping how they could successfully acquire the targeted learning. It also offered pedagogical implications for improving curricula, initiating pedagogical changes, and ameliorating teacher education.

CLIL has consistently been found to be ineffective in Hong Kong. Therefore, highlighting the participant-oriented perspective by centring investigations on classroom practices with learners as mediators of the process would facilitate comprehension of how and why CLIL is effective or ineffective. A CLIL Iceberg is proposed for this dissertation (see Figure 2). Product and process positionings have been amply studied, but participant-oriented studies revealing learning processes applied by students are still needed. Coyle's (2013) study evidenced that young people could articulate their ways of knowing, and can express their knowledge about how and under which conditions they learn (Lewis & Porter, 2007). This outcome corroborates Pun and Macaro's (2019) indication that research is required in Hong Kong to 'establish where the actual problem lies in the early years of middle school (lower secondary)' (p.15). One way to investigate how students articulate and reflect on their role in learning would be to adopt the concept of *self-regulation*, which is ubiquitous in researching content and L2 learning intended to understand the internal learning processes of students.

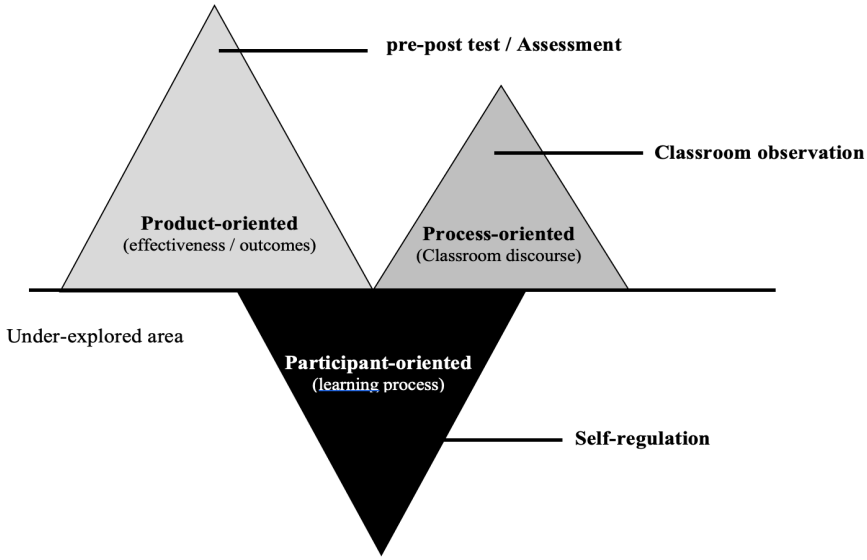


Figure 2. *CLIL Iceberg*

2.2 Self-Regulation

2.2.1 What is Self-regulation?

The concept of *self-regulation* originated in educational psychology in the 1970s and is studied in numerous research disciplines such as psychology, sociology, and science. In the educational domain, theories, research, and practices on the self-regulation (or interchangeably *self-regulated learning*) of academic functions have been increasingly advanced in recent years (Zimmerman & Schunk, 2011). The construct of self-regulation is defined as 'the ways that learners systematically activate and sustain their cognitions, motivations, behaviors, and affects, toward the attainment of their goals' (Schunk & Greene, 2018, p.1).

2.2.1.1 ***The Self-regulation Model in Education***. Numerous theoretical perspectives on self-regulation that are relevant to educational settings have been mooted in recent decades to consolidate theoretical and empirical contexts (see Panadero, 2017, for a comprehensive review). Zimmerman (2000)'s model appears to be the most empirically supported among such exemplars, both in terms of the strength of empirical evidence and the number of studies focusing on secondary school students. Zimmerman's self-regulation model (2000) is guided by Bandura's (1986) triadic social-cognitive theory, which posits that reciprocal and dynamic interactions in a social context between the individual, the environment, and actions or behaviours, which cause learning to occur. The cyclical phases of self-regulation explain the interrelation of metacognitive and motivational processes at the individual level. The motivational beliefs inherent in student efforts to achieve personal goals are deemed to represent primary sources from a social-cognitive perspective and academic success is often determined by the metacognition or strategic skills of students.

The model is organised in three phases: forethought, performance or volitional control, and self-reflection (Figure 3). Students analyse the task, set goals, and plan how to reach them during the *forethought* phase. Several motivational beliefs energise the process and influence the activation of learning strategies. Students actualise the task in the *performance* phase, as they monitor their progress and use some self-control strategies to sustain their cognitive engagement and motivation to complete the task. Finally, students assess their task-related performance during the *self-reflection* phase, attributing their successes or failures to certain factors. Such ascriptions generate self-reactions that can positively or negatively influence how they approach the performance of subsequent tasks.

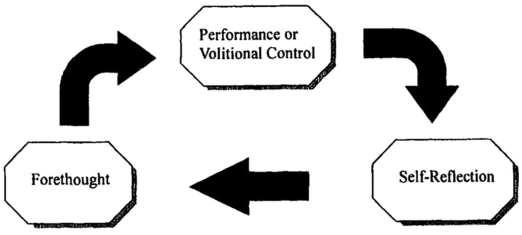


Figure 3. Zimmerman's Self-Regulation Model (2000)

2.2.2 Role of Self-Regulation in Secondary School Learning

2.2.2.1 ***Content Learning and Language Acquisition***. Previous studies on both content and language learning have evinced similarities and differences in research paradigms. For example, Cleary and Chen's (2009) study on content learning examined differences in self-regulation and motivation across grade levels, achievement groups, and mathematics course types in a sample of 880 suburban middle school students. In three weeks, participants were administered four questionnaires encompassing inventories on self-regulation strategies, task interest, perceived instrumentality, and self-standards. Results showed that 7th-grade students used self-regulation less frequently and demonstrated reduced interest in maths activities, perceiving maths as less valuable to their future academic pursuits than 6th graders.Students enrolled in advanced maths classes tended to use more regulatory strategies and exhibited increased positive motivational beliefs than their peers in regular maths courses. Also in the secondary school context, DiBenedetto and Zimmerman's (2010) study engaged students to respond concurrently to context-specific questions as they applied self-regulatory processes to tasks. This study assessed the thoughts, feelings, and behaviours of 51 11th-grade students apropos science learning during the forethought, performance, and self-reflection phases. The results revealed 12 positive linear relations between the levels of achievement and the levels of self-regulation, study times, and science-related performance of students. Hence, students described as high achievers in science learning tended to use more of the subprocesses described in Zimmerman's three-phase model than their average and low achieving counterparts, regardless of gender. However, the quasi-experimental study required students to complete the set tasks in 60 minutes. Thus, its ecological validity is questionable: in a natural context, students would complete such tasks at their pace. Measurements of achievement outcomes should also ideally be collected contemporaneously with measures of self-regulation processes to enable researchers to track self-regulatory changes and ascertain how they relate to the outcomes.

Dörnyei (2005) and Tseng et al. (2006) are credited with the initial introduction of self-regulation to SLA. They proposed replacing the concept of a learning strategy with the idea of self-regulation to reveal a paradigm shift from what is learned to how an L2 is acquired (Dörnyei, 2005). In the secondary school context, Tsuda and Nakata (2013) investigated factors and patterns related to self-regulation in Japanese high school English as the Foreign Language (EFL) students. They found five factors comprising self-regulated language learning in Japanese high school students: metacognition, cognitive strategies, self-efficacy, self-motivation and Willingness to Communicate (WTC), and intrinsic value. The qualitative data further elucidated that, individual contexts and varied external factors exerted substantial influence on the cognitive, behavioural, and affective aspects of students. The findings suggested that students could self-regulate EFL learning by creating personal virtuous cycles of self-monitored stages. This study appeared to be innovative as it disrupted *a priori*

classifications of self-regulation based on the extant literature and attempted to create another context-specific classification system. Ardasheva (2016) conducted another L2 study aligned with content learning and situated in the secondary school context, investigating the associations between language learning strategies and achievements in reading and mathematics. This study also contemplated moderating factors (motivation, age, and proficiency in L1 and English) and intervening elements (age and length of residence). It further examined the relationships between these variables and educational success in elementary and middle school ESL learners in the United States (n = 1485). Six evaluated models explained a significant portion (54%) of the variations in academic success, suggesting that the language learning strategies of students could exert a significant impact on their academic performance. However, both the cited studies used self-reported questionnaires which were not administered concurrently with engagement in the stipulated tasks. Thus, the self-reporting instrument could cause academically stronger students to use strategies more frequently to satisfy the research outcomes. Teng and Zhang (2022) have also indicated that no studies have yet explored the dynamic nature of self-regulatory processes in L2 learning using measures authentically engaged with a given task (i.e., micro-analytic assessments). Researchers (e.g., Ranalli, 2011; Rose et al., 2018) have also noted that L2 research projects have adopted self-regulation as a measure, but the existing literature on the topic entails only the monitoring or volitional phase, which merely represents one stage of Zimmerman's (2000) model. The apprehension of all three cyclical phases would be useful for the explication of the dynamic self-regulatory processes of language learners.

2.2.2.2 ***Integrated Content and Language Learning***. As an innovative pedagogical approach that amalgamates content and language learning, a reconceptualisation of self-regulation is required for CLIL. Learners must monitor and manage the apprehension of both subject-specific content and an L2 as a cohesive construct (CLIL self-regulation). Scant research has yet investigated the self-regulatory processes of CLIL learners to determine whether self-regulation is a determinant of successful CLIL. A related study from Hong Kong cannot be classified as content or language learning: Salili and Lai (2003) scrutinized the effects of the medium of instruction and ability grouping of schools (school banding) on the achievement orientation of students. They administered measures of self-regulated learning strategies to 1807 seventh graders at both CMI and EMI schools over three years. Their results revealed that CMI students applied more learning strategies than EMI students. Moreover, schools placed in the upper band (low-ability schools) used fewer strategies and exhibited lower computations of self-efficacy, positive attitude, motivation, and anxiety. However, the mentioned study was limited in several ways. It did not discuss how students adopted the said strategies. Hence, it could not offer an insight into the ways in which self-regulatory processes were applied by students and could not pinpoint the differences between CMI and EMI students in such applications toward successful learning. Second, the said study was conducted when CMI and EMI

were stringently classified and controlled. The means of instruction and assessment requirements could thus differ from the post-policy-refinement circumstances that now prevail. For example, the stated study designated a considerable number of CMI enrollees as 'top students'. However, most students evincing academic excellence are usually placed in EMI schools and CMI students tend to be considered less intelligent (Lin & Lo, 2019). The cited study demonstrated how self-regulation differs according to the MoI, but future studies should aim to reveal the self-regulatory processes from the perspectives of participants instead of merely elucidating the effectiveness of the MoI. Hu and Gao's (2017) subsequent study shared this understanding and investigated self-regulation in CLIL. It explored how bilingual first-year secondary school students in Hong Kong manipulated resources to tackle the linguistic challenges of learning science through L2 English. Hu and Gao collected qualitative data from 12 bilingual students and demonstrated that students used discrete strategies such as dictionary use and other evaluation criteria to negotiate their identities as CLIL learners. However, the authors also indicated that their findings related to a small sample and could not be generalised. Additionally, the study focused only on the *monitoring/performance* phase of self-regulated learning, invalidating the possibility of holistically comprehending the three-phase cyclical self-regulation processes of science-related learning.

Recent studies on EMI targeted at university students have also recognised the significance of self-regulation for investigations of content-related instructions in L2. However, these studies have reported mixed results vis-à-vis self-regulation and EMI achievement. Soruç et al. (2022) conducted the first study exploring the relationship between self-regulation and content-related knowledge performance (referred to as EMI success) in the Turkish higher education context. They investigated the impact of both linguistic (general English proficiency) and non-linguistic (self-regulation, motivation, and self-efficacy) factors on the academic success of students receiving EMI. They collected data from 459 university students enrolled in the social sciences and engineering departments. Their results disclosed that the self-regulation skills and self-efficacy of EMI learners predicted their success. However, their motivation levels did not forecast their achievements; rather, their motivation levels directly impacted their English proficiency. Thompson et al. (2022) also reported a similar finding in the Japanese context of 139 students enrolled as business majors at a university in Japan: they discovered a positive relationship between self-efficacy and EMI achievement (mid-term and final test scores). In the socio-politically and educationally different Chinese context, Xie and Curle (2022) found that motivation and perceived EMI success did not predict the actual success in 100 university students, contradicting the findings of the other two cited studies. Subsequent scrutiny revealed that the instrument used in that study to assess perceived success was problematic: only three items were included. The authors reported an acceptable level of the instrument's reliability ($\alpha = .77$) but did not report the construct validity. It is hence unclear

whether the three items are theoretically tethered to the concept of perceived success. The motivation scale is also questionable: it adopted items focusing on general English usage from Iwaniec's (2014) 'Ideal L2 self' but focused its investigations on the EMI context requiring content-oriented motivation in students. Nonetheless, all the studies cited above evince a paradigm shift toward a more participant-oriented perspective for the evaluation of successful L2-based content learning.

Given the limited research thus far conducted on self-regulation in CLIL, the present study initially probes the self-regulatory processes applied by students at different levels and queries the language-related challenges that confront students in CLIL. It also investigates how self-regulation functions to elucidate language proficiency and academic performance.

2.3 Research Questions

In conjunction with the literature set out below, this study devises the following research questions (RQs):

1. What are the self-regulation processes of CLIL students?
2. Do CLIL students experience their perceived language challenges differently depending on their ability and self-regulation level?
3. To what extent does CLIL students' self-regulation predict their language proficiency (L1, L2 and academic English) and academic performance (science and mathematics)?

Chapter 3 Methodology

This chapter outlines and justifies the methodology adopted in this study. The overarching design of this study is presented first, followed by the sampling frame, participants, research instruments, research procedure and data analysis. Ethical issues related to research with children are discussed as well.

3.1 Research Design

For this study, I utilised a mixed-method approach, which enables researchers to elucidate complex phenomena by identifying numeric trends in quantitative data and specific details in qualitative data (Dörnyei, 2007). High-quality mixed-methods research should specify the nature of the integration that will take place to serve the dual purposes of generalisation and in-depth understanding (Yin, 2006). For this study, I used a sequential explanatory design, quantitative followed by qualitative (Creswell et al., 2003; see Figure 4); I collected and analysed the quantitative data first and then gathered the qualitative data, which elaborated on the quantitative data collected in the first stage.

The quantitative design incorporated a questionnaire and an academic vocabulary test to collect numerical data from different schools. Owing to the dynamic and complex nature of self-regulation, a standard quantitative method such as tabulating strategy frequency might not have been able to capture the details of the students' skills, perceptions and outcomes in the ebb and flow of their everyday learning. Therefore, I selected and administered a series of scales and a study questionnaire to gather more accurate data. The strategy of standard qualitative research is to subsequently elicit participants' more elaborate thoughts on the quantitative findings. The qualitative strategy for this study incorporated assessing on a scenario-based task and semi-structured interviews, both of which were intended to reveal the self-regulation processes of a group of students in an advance academic programme at junior secondary schools in Hong Kong. I used these multiple data sources to be able to triangulate the data, which reduces the inherent weaknesses of questionnaires and maximises both internal and external validity.

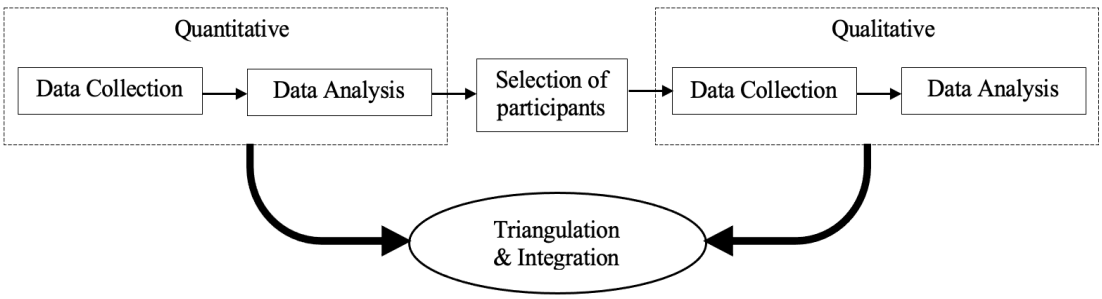


Figure 4. *The Sequential Explanatory Design of this Study*

3.2 Sampling Frame

3.2.1 School Selection

As mentioned, the Education Bureau has abandoned the traditional categorisation of EMI or CMI schools and has given schools their choices of modes for administering instruction for each subject; some grey literature (i.e. "Secondary School Profile") from the official government website displays the schools' self-reported content and language integrated learning (CLIL) subjects. I found no studies or grey literature that included a comprehensive overview of different schools' chosen instruction modes for different CLIL subjects. As such, I systematically collected all the information from the grey literature using stratified sampling; specifically, for each school, I recorded in a table the school's district, whether the school offered any CLIL subjects, and if so, what teaching modes instructors used. Subsequently I compared those against the data from all the schools' websites to check for consistency (see Appendix 24).

After I sampled all the schools, because there were time limitations, I only selected schools that I had connections with; I sent invitations to the schools through their English teachers, who were my undergraduate classmates. In contrast with previous researchers in the Hong Kong context and worldwide who have studied CLIL as an elite method for high-achieving students and only recruited students in top-tier (Band 1) school (e.g. Lo & Murphy, 2010; Lo & Macaro, 2015; Pun & Macaro, 2019), all the schools from all three tiers, namely Band 1 (top-tier), Band 2 (middle-tier), and Band 3 (low-tier) were invited. I selected 15 schools and 3 agreed to participate: one school from each band (see participants). Both Bands 2 and 3 schools were closely matched in terms of socioeconomic status within their district. However, it should be note that students from the two schools received CLIL in all subjects on the basis of their high achievement in English, whereas all students in Band 1 received CLIL without any intra-school selection. Therefore, although this study attempted to recruit different tiers of school, the results could still be biased by students' high motivation and higher ability in English.

For the semi-structured interviews, I used purposive sampling to identify and select information-rich cases for the most effective use of limited resources (Patton, 2002). Students voluntarily took part by leaving their personal information at the end of the questionnaire. Once the online data collection was complete, I selected a total of nine students to participate in follow-up interviews: one student from each band and one each with high, moderate and low academic English proficiency; the interviews were also conducted online. With them, I intended to gain an in-depth understanding of how students from different bands of academic performance self-regulate their CLIL.

3.2.2 Participants

The target population of this study was junior secondary school students who were receiving CLIL instruction in Hong Kong. A total of 191 students completed the questionnaire, which I downloaded from Qualtrics on 20 June 2022. I excluded 19 participants because their questionnaires were incomplete and 5 because they appeared to have completed the questionnaire incorrectly. The final quantitative data sample included 167 participants (n = 52 from School A; n = 84 from School B; n = 31 from School C [hereinafter Bands 1, 2 and 3 respectively]).

There were 82 boys and 85 girls across all 15 original schools, and all participants' native language was Chinese, 6 Mandarin and the remainder Cantonese; the students' ages ranged from 11 to 16 years (M = 13.5, SD = 1.0). By student body, School A included students from Secondary 1 and 2, School B included all junior forms and School C included Secondary 1 and 3. The selection of forms were based on schools' convenience. The average after-school study time was 2.7 hours (SD = 1.6). More students in Band 1 than in Band 2 were receiving private tutoring, primarily in English and math (see Figure 5). A breakdown of all the demographic information from each school is shown in Table 1.

Table 1. *Participants' Demographic Data*

	School A (Band 1) (n = 52)	School B (Band 2) (n = 84)	School C (Band 3) (n = 31)
Gender	Boys: 53.8% (N = 28) Girls: 46.2% (N = 24)	Boys: 44% (N = 37) Girls: 56% (N = 47)	Boys: 54.8% (N = 17) Girls: 45.2% (N = 14)
Age	$\bar{x}$ = 13.31 (σ = .58)	$\bar{x}$ = 13.69 (σ = 1.08)	$\bar{x}$ = 13.53 (σ = 1.29)
L1	Cantonese (N = 52)	Cantonese (N = 80) Mandarin (N = 4)	Cantonese (N = 28) Mandarin (N = 2)
Year	Secondary 1 (N = 26) Secondary 2 (N = 26)	Secondary 1 (N = 30) Secondary 2 (N = 28) Secondary 3 (N = 26)	Secondary 1 (N = 18) Secondary 3 (N = 13)
After-school Study Time (Hours)	$\bar{x}$ = 2.6 (σ = 1.51)	$\bar{x}$ = 2.81 (σ = 1.60)	$\bar{x}$ = 1.92 (σ = 1.92)
Receiving Private Tutoring	Yes: 61% (N = 32) No: 38% (N = 20)	Yes: 44% (N = 37) No: 56% (N = 47)	Yes: 51.6% (N = 16) No: 48.4% (N = 15)

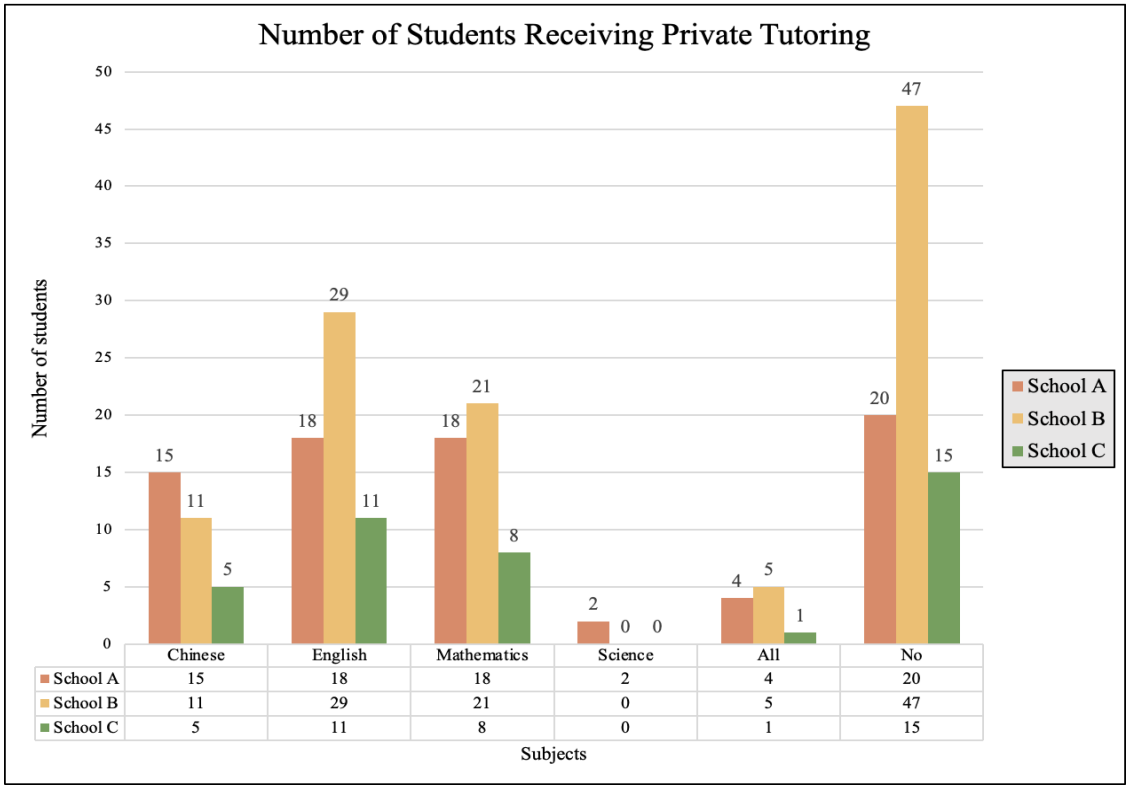


Figure 5. *Proportions of Students Receiving Private Tutoring*

For language proficiency and academic performance, I collected school-based average Chinese and English language proficiency, mathematics and science scores to rate content subject achievement for the 3 participating schools (see Table 2 and Figure 6). All schools followed the same curriculum designed by the Education Bureau, but the results were individual to each school, with different syllabus designs and student evaluation formats; therefore, inter-school comparison was not possible. Nonetheless, the study provides variables that researchers can use for intra-school comparisons of students' self-regulation skills and other variables.

For L1 Chinese proficiency, all schools reported similar performance averages, in the range of 60–64 points. For L2 English proficiency, Band 1 and Band 2 schools reported scores of 64.1 and 64.2, respectively, although Band 3, even though it had fewer students, reported a higher score of 69.4 (*SD* = 20.2). Concerning content subject achievement, Bands 1 and 2 had similar math scores, approximately 62, whereas Band 3 had a slightly lower score of 59. The science scores revealed a different picture: Band 1 had the highest score of 77.5 points (*SD* = 16.2), followed by Band 2 with 72.6 (*SD* = 14.0) and Band 3 with a significantly lower average of 52.2 (*SD* = 23.4).

I could not compare the students' self-reported results because different schools had different regulations. However, because students in CLIL settings should have high academic English proficiency that supports learning the content, I was able to measure and compare all the students' English proficiency with an academic vocabulary test (see 3.3.2). Unsurprisingly, the Band 1 school

excelled with an average score of 70.4 (*SD* = 21.6), compared with Bands 2 and 3 (50 marks, *SD* = 30.1 and 51.2 marks, *SD* = 27.9, respectively).

Table 2. *Means and Standard Deviations of Students' Language Proficiency and Content Subject Performance*

	School A (Band 1)	School B (Band 2)	School C (Band 3)
L1 Chinese Proficiency (/100)	**$\bar{x}$ = 62.1** (σ = 11.8)	**$\bar{x}$ = 60.5** (σ = 11.5)	**$\bar{x}$ = 63.8** (σ = 16.2)
L2 English Proficiency (/100)	**$\bar{x}$ = 64.1** (σ = 13.3)	**$\bar{x}$ = 64.23** (σ = 14.47)	**$\bar{x}$ = 69.42** (σ = 20.2)
Mathematics (content subject) (/100)	**$\bar{x}$ = 62.35** (σ = 16.2)	**$\bar{x}$ = 61.06** (σ = 16.87)	**$\bar{x}$ = 58.47** (σ = 21.6)
Science (content subject) (/100)	**$\bar{x}$ = 77.54** (σ = 16.2)	**$\bar{x}$ = 72.61** (σ = 14.0)	**$\bar{x}$ = 52.22** (σ = 23.4)
Academic English Vocabulary (/100)	**$\bar{x}$ = 70.42** (σ = 21.6)	**$\bar{x}$ = 50.0** (σ = 30.1)	**$\bar{x}$ = 51.83** (σ = 27.9)

Note. Figures in boldface indicate mean value (**$\bar{x}$**)

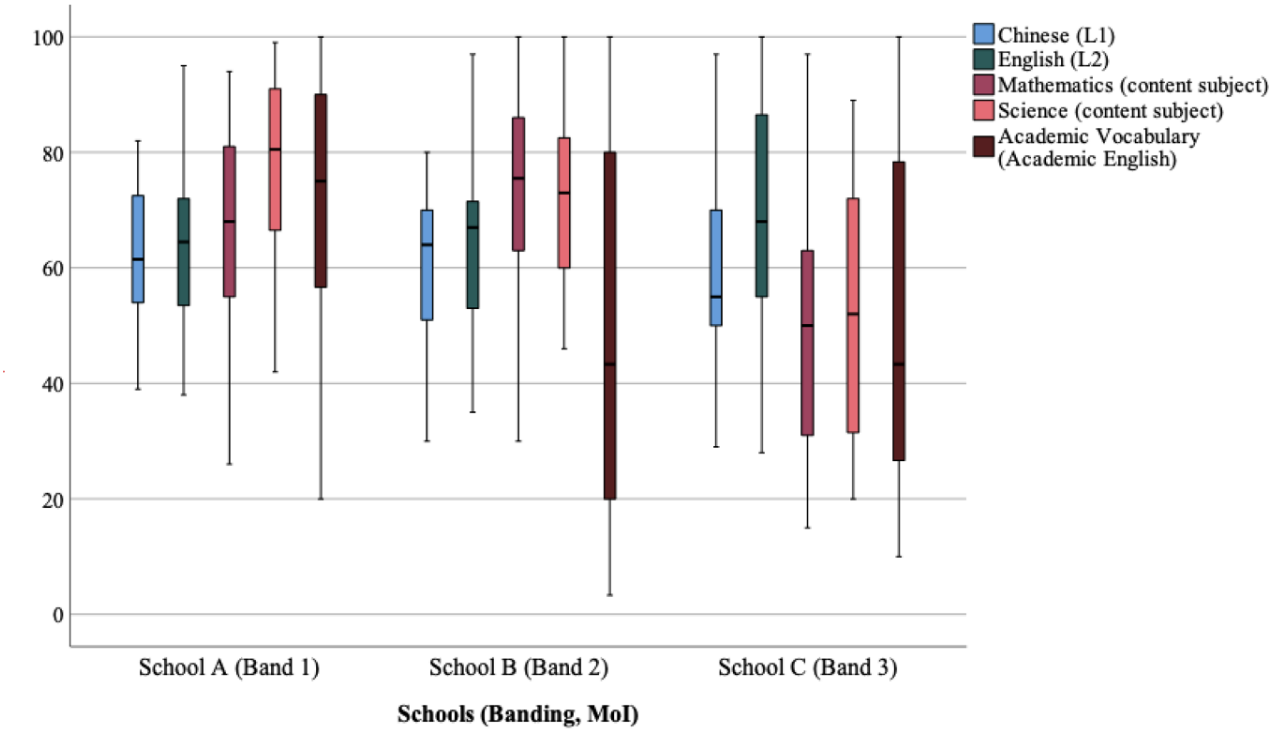


Figure 6. *Boxplot of Students' Language Proficiency and Content Subject Performance*

3.3 Materials

To collect the initial data for the study, I administered a set of three questionnaires: the CLIL Challenges Scale, a CLIL Self-regulation Inventory and a questionnaire on demographic data and the achievement variables. To ensure that students' understanding was not hindered by their English skills, I presented all questionnaires in both traditional Chinese and English, and respondents could respond to all open-ended questions in their preferred language. Two Chinese–English master's students in the Faculty of Linguistics at Oxford University double-checked all the translations. Below I discuss each measurement instrument in detail along with other measured variables.

3.3.1 CLIL Challenges Scale.

To measure the students' language challenges in their CLIL courses, I referred to Evans and Morrison's (2011) EMI Challenges Scale, which they originally used to investigate first-year university students' perceptions of EMI (i.e. teaching content subjects in English) tasks regarding the four language skills: academic writing, speaking, reading and listening. The CLIL scale items were rated on scales from 1 (*very difficult*) to 5 (*very easy*). Researchers have adopted this questionnaire in different EMI contexts (e.g., Aizawa & Rose, 2020; Aizawa et al., 2020 in Japan) and validated it for the four language challenges using confirmatory factor analysis (CFA) to examine the causal relationships between the item constructs and the observed indicator variables (Kamaak, Sahan & Rose, 2021).

However, all the studies above were conducted in university settings, whereas with this study, I focused on CLIL in a secondary school context. Given that Hong Kong's school system generally incorporates content-driven CLIL (Lin & Lo, 2019), which is similar to EMI, the CLIL scale was still appropriate for assessing the language challenges among students in Hong Kong junior schools. After I discussed the scale with the three science and math (content) teachers and the three language teachers from the participating schools, I removed four items that did not apply to junior secondary school.

Additionally, because Lo and Fung (2020) found that junior secondary CLIL students predominately showed low-level cognitive (i.e. recall of knowledge) and linguistic (i.e., limited or no word-level production) capacities, I also removed four items related to writing composition from the academic writing section of the scale. I then adapted the remaining Evans and Morrison (2011) scale items to CLIL settings so that students would not respond to questions based on their L2 English learning.

After the pilot study, I deleted another 10 items because students found them confusing in a CLIL context. The final scale contained 27 items covering the four language skills. I calculated Cronbach's alpha coefficients to test the reliability and internal consistency of the questionnaire and

found high reliability for the overall scale (α = .974) and for each of the four language constructs (writing: α = 0.886; reading: α = .921; speaking: α = .941; listening: α = .923); I also checked validity with Confirmatory Factor Analysis (CFA). These indices indicated good model fit, which confirmed that the scale was a valid measure of overall language challenges in a CLIL context and that each of the four constructs could be used as independent measures of language challenges in CLIL (see Appendix 18 for detailed analysis).

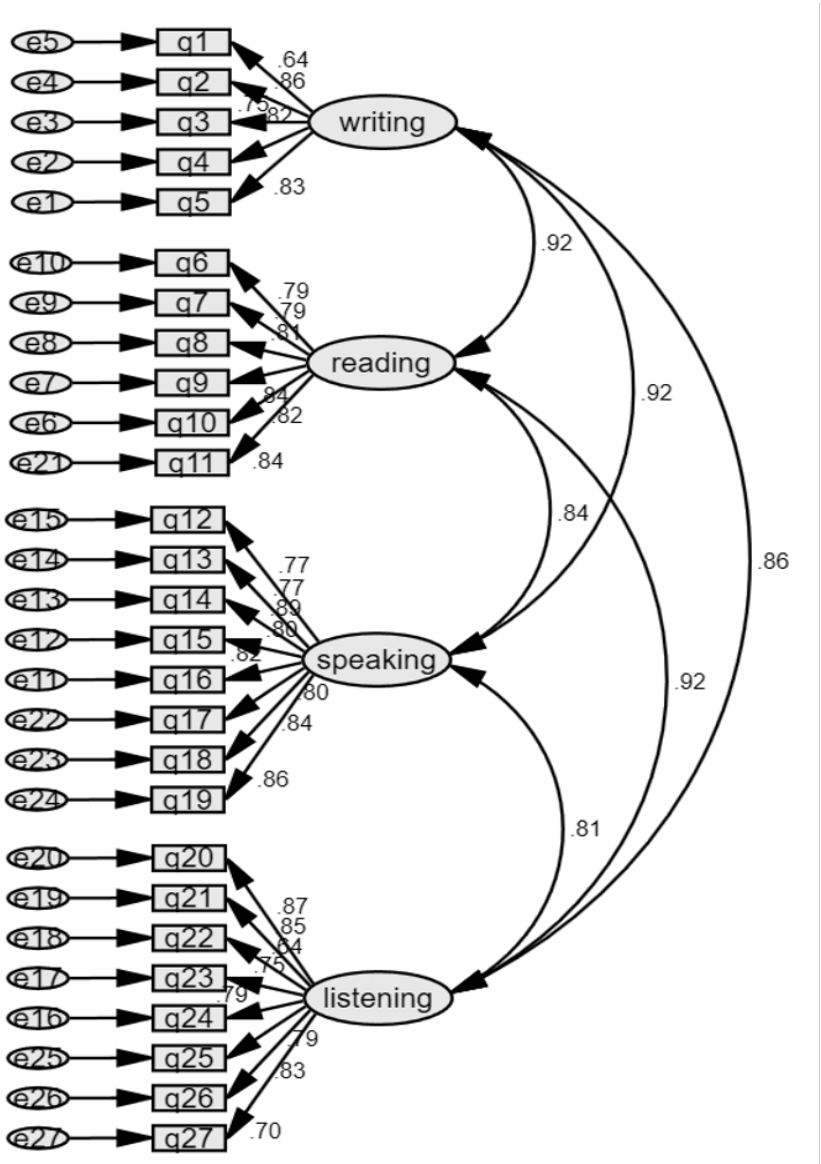


Figure 7. *CLIL Challenges Scale: CFA Results*

3.3.2 CLIL Self-Regulation Inventory

Because there was no existing questionnaire specific to self-regulation in CLIL, I developed the inventory for this purpose. I did not create the inventory from scratch, however; it is common practice for researchers to borrow quality questionnaire items from existing tools (Macaro, 2018a; Rose, McKinley & Baffoe-Djan, 2020). It should be noted that although there are now multiple

validated measures for assessing self-regulation in L2 Acquisition (SLA; see, e.g., Tseng, Dörnyei & Schmitt, 2006 on vocabulary; Teng & Zhang, 2016 on writing), it would be unwise if a CLIL self-regulation instrument followed a language-oriented SLA instrument rather than focusing on content–language integration. Given this, this study's inventory is guided by Zimmerman's (2000) theoretical framework on self-regulation as the intersection of *metacognition* and *motivation*, with the former measuring an individual's willingness and persistence and the latter measuring the individual's awareness of strategies.

The dimension of *metacognition* was based on Schraw and Dennison's (1994) Metacognitive Awareness Inventory for participants to choose whether the items truly or falsely describe their learning process. The inventory was highly reliable ($\alpha = .9$), and items were intercorrelated ($r = .54$). It has also been tested in a considerable number of studies with high validation (e.g., Akin, Abaci & Cetin, 2007; Harrison & Vallin, 2017), making it a highly reliable and valid instrument for use.

I extracted the subcomponents of *planning* (five items), *monitoring* (six items) and *evaluation* (five items) from the original inventory to serve as the equivalent of the three-step cyclical process of self-regulation (Zimmerman, 2002; Zimmerman & Moylan, 2009). This inventory was also the basis for a physics metacognition inventory (Taasoobshirazi and Farley, 2013), although that study's authors did not acknowledge that they had adapted Schraw and Dennison (1994) to construct their scale. Nonetheless, it proved to be reliable for measuring students' physics motivation and grades and was found to be valid; the items were effective at measuring the underlying construct (Taasoobshirazi & Farley, 2015).

I measured the second dimension, *motivation*, by adapting the self-efficacy component from Pintrich, Smith, Garcia and McKeachie's (1993) Motivated Strategies for Learning Questionnaire (MSLQ), which is the most frequently used instrument for measuring self-regulation. The eight-item *self-efficacy* scale is the most reliable component ($\alpha = .93$) of the MSLQ and measures participants' self-judgements about their ability and their confidence in performing a task. I deleted two items that the teacher I discussed and found ambiguous and repetitious.

Specifically for this study, I developed this inventory with the theoretical framing of Zimmerman's (2000) self-regulation model. Participants were required to score the accuracy of the items from 0 (*not accurate at all*) to 100 (*very accurate*) to evaluate their perceptions of personal competence in relation to specific behaviours and skills in the CLIL setting.

I calculated reliability tests (Cronbach's alpha) for each of the four self-regulation subscales and found high reliability ($\alpha = .972$): Cronbach's alpha for each of the four subscales was much higher than the benchmark of.70 (Dörnyei, 2007), indicating robust internal reliability for each scale (planning: $\alpha = .884$; monitoring: $\alpha = .933$; reflection: $\alpha = .89$; motivation: $\alpha = .936$). To ensure validity, I conducted a CFA to ensure that the observed variables (items in the questionnaire) interrelated with

the underlying latent constructs in the inventory. The fitness indices required in the model were achieved, and the model was confirmed for use as a valid measure of self-regulation in a CLIL setting; each of the four constructs could be used as independent measures of self-regulation in CLIL (see Appendix 18 for detailed analysis).

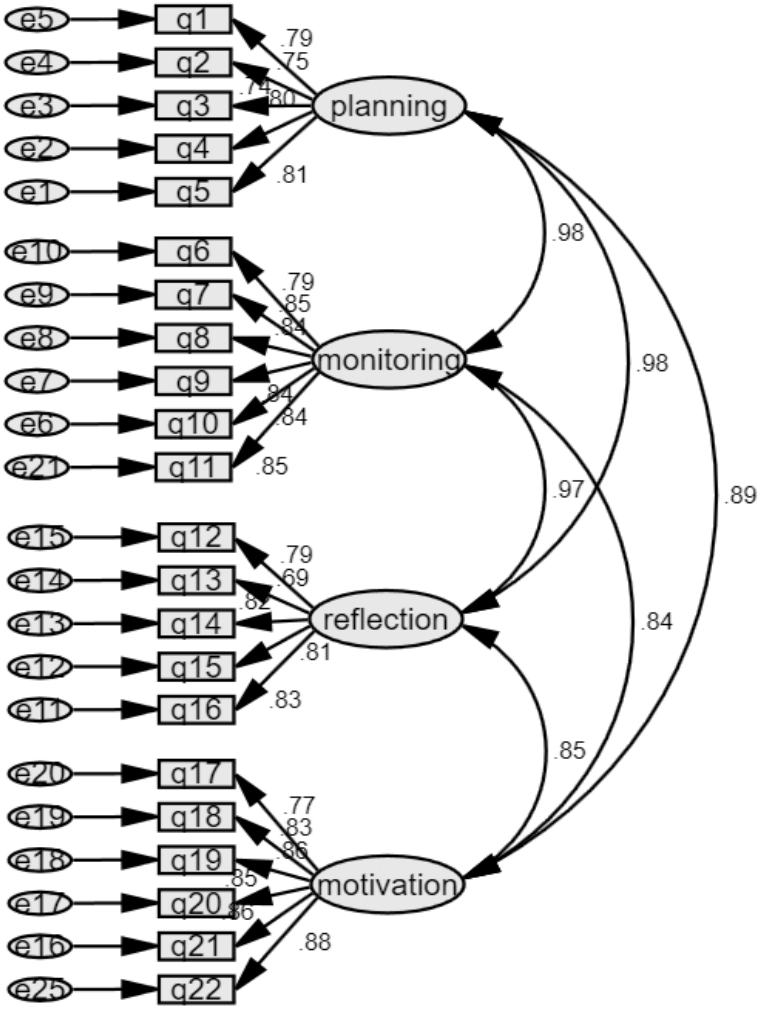


Figure 8. *CLIL Self-regulation Inventory: CFA Results*

3.3.3 Academic Vocabulary Test

I administered to students an academic vocabulary test to determine the average vocabulary knowledge in each school band and to triangulate these scores with students' self-reported L2 proficiency and other data sources. Research has shown that vocabulary knowledge is a good predictor of academic English proficiency in EMI (Harrington & Roche, 2014; Roche & Harrington, 2013).

I adopted the test from the academic vocabulary section of Schmitt's vocabulary levels test (VLT) (Schmitt, Schmitt & Clapham, 2001), which they selected from the Academic Word List (AWL) (Coxhead, 2000). The VLT has been used as a proxy for language proficiency (Alderson,

2005; Fairclough, 2011). This test consisted of 30 word–definition matching tasks on which students were required to match vocabulary items with the meanings provided (see Figure 3.5). A total of ten sections comprised the test, each containing six vocabulary items for participants to match with three definitions.

1. area 2. contract 3. definition 4. evidence 5. method 6. role	___ written agreement ___ way of doing something ___ reason for believing something is or is not true

Figure 9. *Sample Vocabulary Test Item*

Previous researchers (e.g. Lo & Murphy, 2010) on measuring vocabulary knowledge in Hong Kong secondary school students have also used VLT to compare students in immersion (EMI) and regular language learning (non-EMI) classes. However, Lo and Murphy (2010) adopted the instrument to measure the levels of general English (e.g. the first 2000 words), whilst I aimed with this study to measure students' skills with academic English in their CLIL courses. Kremmel and Schmitt (2018) argued that the item sampling of the AWL section should not be interpreted together with the frequency-based levels. In addition, Lo and Fung (2020) argued that CLIL assessments of junior secondary students mainly tested receptive vocabulary. Therefore, for this study, I only administered the receptive vocabulary test from the AWL because it assesses 'separate slices of a learner's vocabulary' (Nation & Begalar, 2007, p.10).

3.3.4 Scenario-Based Self-Regulatory Assessment

This study's Scenario-Based Assessment aimed to capture the authentic fluidity of self-regulation in action. It requires acknowledging complexity by using relevant methods to account for it. Scenarios, or vignettes, are a common social science methodology that involve presenting a vivid scenario to participants and asking study subjects to imagine participating in or observing it (Rashotte, 2003). They are an 'efficient and effective way of collecting data about how people would act in situations that are outside of the purview of other methods because of their sensitive nature, prohibitive cost or infrequent occurrence' (Collett & Childs, 2011, p. 513), and based on that, I determined that a scenario was a suitable tool for my research.

Attempting to capture the whole process of self-regulation (forethought, performance, reflection) as students were unaware in their learning would have been time-consuming and costly.

Moreover, the students were in junior secondary school and might have felt nervous if teachers or researchers intervened closely. Designing a well-crafted, succinct and realistic scenario allowed for efficient, cost-effective data collection to circumvent the restrictions amid the COVID-19 pandemic.

To date, this methodology has rarely been found in L2 learning research (e.g. Hernández, 2018; Gkonou & Oxford, 2016; Shively & Cohen, 2008). However, Gkonou and Oxford (2016, 2019) did create a questionnaire that assesses emotion management strategies in L2 learning by presenting students with a hypothetical scenario and asking them to answer a number of questions. However, 56% of the questions involved multiple-choice answers, which require selecting the most appropriate response from a short list, and 44% required short, narrative answers (for example, naming emotions). This would not be an effective tool for measuring self-regulation as the close-ended nature fails to capture the dynamic nature of phenomena. Instead, I incorporated the *microanalytic assessment* from self-regulation research.

This microanalytic assessment, which has had wide application in the field of self-regulation, involves a strategic, coordinated plan of context-specific questions targeting multiple cyclical phase subprocesses as students engage in authentic activities. However, instead of authentic activities, I provided a scenario that focused on science, the subject that was mostly taught in CLIL: The students were told that they had failed their final science exam, which had been taught in English, with a grade of 50 and that they would have to retake the exam in the next term. This scenario represented a hypothetical but realistic and recognisable situation. Students would first display their strategies for regulating their learning at each phase, and they would also need answers to situations they might face.

By presenting a scenario, I aimed to capture the *quality* and *flexibility* of the students' self-regulation strategies, but not their *frequency* (Cohen, 2014; Cohen & Wang, 2018), which can be suitable for prompting participants' subjective experiences with phenomena and their interpretations (Oxford, 2016). As research shows (Shoemaker, Eichholz & Skewes, 2002; Tourangeau, Rips & Rasinki, 2000), excessive open-ended items can be cognitively demanding, which results in higher non-response rates. I included some closed-ended questions alongside the open-ended questions to reduce the students' cognitive burden and avoid overwhelming them.

3.3.5 Self-Regulation Interview

For the student interviews, I presented the students with an academic situation and coded their responses into Zimmerman's (2000) self-regulation cyclical model. The aim was for the students to make judgements about their prospective behaviours in given situation, which served as a third data source for triangulation.

3.3.6 Achievement and Demographic Variables

The students' academic achievement was reflected in their Chinese, English, mathematics, science and academic English scores; scores ranged from 0 to 100. The demographic information I collected from the participants related to their gender, grade level, medium of instruction in primary schools, receiving of private tutoring and the time they spent studying after school. These were intended to help me understand the demographic information for selection criteria for use as independent variables in the analysis. As the survey was distributed remotely, this section was placed at the end of the questionnaire to avoid the fatigue effect, meaning the factual items in this section were answered after the primary research questions were still fresh in participants' minds (Rose, McKinley & Baffoe-Djan, 2019).

3.4 Procedure

3.4.1 First Phase: Pilot Study

After receiving ethical approval from the University of Oxford, I piloted the study with 10 students from Secondary 1 and Secondary 3 with a range of English proficiency levels who were attending my previous school, which did not participate in the study. Based on the comments on the difficulty, I refined some items before the main study. For instance, I initially asked the students 'What is your average household income monthly?' to use students' socioeconomic status as a controlling variable. However, all teachers agreed that that could be a sensitive topic and that it might need review for compliance with school regulations. After considering that I could account for socioeconomic status with school and government report data, I decided to remove the item.

After all the instruments had been finalised, I sent invitation letters to the criteria-matching schools (see 3.2) and held online meetings with the principals of each school. After each principal agreed to take part in the research, I forwarded the information sheet, consent form and opt-out form to the subject panel chairperson for email distribution to parents and students (Appendices 8-16). The English teacher at each school returned all the consent and opt-out forms, at which time I sent out the link to the instruments.

3.4.2 Second Phase: Classroom Data Collection

Considering the ethical issues of the sampling, all participants received the link access to Qualtrics and responded to the questionnaires and the vocabulary test in one English class based on the teacher's schedule. The items were presented in random order to eliminate the order bias of participants choosing the same responses rather than in groups that could artificially be inflated when questions are placed adjacent to each other and labelled (Goodhue & Loiacono, 2002). To further ensure the reliability of the data, I embedded five Attention Check Questions to screen out participants

whose responses were in some way unusable prior to conducting analysis (Maniaci & Rogge, 2014). Figure 10 gives an example of one of the attention check items; if a student did not select 'Very Easy', he or she was redirected to fill in the form again.

	Very Difficult	Difficult	Neutral	Easy	Very Easy
It's important for you to pay attention to this study. Please choose Very Easy for this item.					

Figure 10. *Sample Attention Check Question*

For the scenario assessments, teachers were advised to conduct them in a different classroom session to avoid burdening students with three instruments in one sitting. Schools B and C conducted two different lessons of 40 minutes each, but the teacher at School A reported that the period of data collection was close to the examination period, and therefore, all the data were collected at once in an 80-minute session.

3.4.3 Third Phase: Self-Regulated Interview

On a volunteer basis, the students were invited to participate in an interview. After I analysed the data across the high, medium and low levels of academic English proficiency and self-regulation, I selected nine students who matched the interview sampling frame. However, as the sampling was selected purposefully, the bias could occur as I might have given simpler questions to low-achieving students; there was also the constraint of the time zone difference between the United Kingdom and Hong Kong. A research helper (and friend) who was a full-time postgraduate student majoring in applied English linguistics at the Chinese University of Hong Kong was asked to help to conduct the interviews. The helper was unaware of the students' achievement levels to avoid the above possible bias. The interviews were conducted on the Microsoft Teams online meeting platform, and I supervised and audio-recorded each full interview.

3.5 Data Analysis

I downloaded the quantitative data, i.e. the questionnaire and academic vocabulary scores from Qualtrics, and analysed them using SPSS v27. I also downloaded the qualitative data from Qualtrics and used NVivo for a deductive content analysis based on the self-regulation literature. Themes emerged from repeated reviewing of the data and were supported by inter-coder reliability procedures. Due to the large volume of qualitative data, a Cantonese–English bilingual classmate only coded 30% of the assessments and interview responses. The helper's coding reached 88% agreement with my scores, indicating a reliable coding system (Ryan & Bernard, 2003). Next, I describe how I analysed the qualitative and quantitative data to answer the research questions.

RQ1: What are the self-regulation processes of CLIL students?

To investigate the CLIL students' self-regulation processes, I transcribed all of the data from the assessments and coded them into Zimmerman's (2000) three-phase self-regulation cyclical model. I coded the data cumulatively from all schools to reveal the whole self-regulatory process, and respectively from each school to reveal differences in self-regulation process between the top-tier, middle-tier and low-tier students. The findings were triangulated with the interview responses.

RQ2: Do CLIL students experience their perceived language challenges differently depending on their ability and self-regulation level?

I calculated descriptive statistics for the Hong Kong CLIL students' perceived language challenges by school. The statistics include the results from multivariate analysis of variance (MANOVA) to show any differences of the four language skills between the three schools. In addition, I calculated Spearman's rho correlation to investigate the relationships between self-regulation level and their language-related challenges.

RQ3: To what extent does CLIL students' self-regulation predict their language proficiency (L1, L2 and academic English) and academic performance (science and mathematics)?

To answer this question, I conducted a simultaneous multiple regression because this question involved one predictor (self-regulation) with multiple response variables: L1 Chinese; L2 English and academic English, science and math proficiency.

3.6 Ethics

3.6.1 Ethics considerations for research with children.

This study received ethical approval two months before data collection (see Appendix 7). The University of Oxford Central University Research Ethics Committee (2022) considers that below age 16, young people's 'ability to give informed consent is in doubt', and thus, I required a parent or guardian's consent for a student to participant. Once I had explained the research to the principal and chairperson of the English panel at each school in three separate Microsoft Teams meetings and received agreement, the chairpersons would email all parents information sheets and a briefing video I had recorded (see Appendix 11). I required a consent form from parents who wanted their children to take part, and an opt-out form offered the alternative option. Participants and parents were informed that participation was voluntary and anonymous, and that data would be deleted if they resigned from the study without explanation.

3.6.2 Data protection and confidentiality.

I conducted this study's data collection, transfer and storage in accordance with the University of Oxford Policy on Data Protection (University of Oxford Central University Research Ethics Committee, 2022). Concerning collecting data online remotely, I used the Qualtrics online survey and Microsoft Teams online meeting platforms to collect the written data because these had been approved by the university's information security team as protecting confidentiality during sensitive discussions. The helper was also asked to sign the confidentiality form (see Apppendix 17) to guarantee that no interview questions or responses would be released. All data were stored in password-encrypted cloud-based folders on the university-approved Microsoft OneDrive platform. Only I have access to the folders, and they will be kept for a minimum of three years after the submission of this dissertation for any future replication research.

Chapter 4 Results

This chapter presents the quantitative and qualitative results from the present study. The study goals were to (1) investigate CLIL students' self-regulation processes, (2) investigate their language-related challenges in CLIL and their relationship with self-regulation and (3) predict the influences of self-regulation on the dual outcomes of CLIL language proficiency and academic performance.

4.1 Students' Self-Regulation Processes in CLIL

4.1.1 Quantitative Results

The first research question explored the students' self-regulation levels at the different school levels. The independent variable was school tier by academic performance: top tier (Band 1), middle tier (Band 2), low tier (Band 3). The dependent variable was the students' average self-regulation score on a scale from 0 (*not accurate at all*) to 100 (*very accurate*). Table 4.1 presents the means and standard deviations for self-regulation by school academic performance band.

Table 3. *Means and Standard Deviations for Self-Regulation by School Band*

School Band	n	M	SD
Band 1 (top tier)	52	59.48	18.22
Band 2 (middle)	84	60.79	19.16
Band 3 (bottom)	31	46.29	25.18
Total	167	57.69	20.74

The test for normality and the standardised skewness and kurtosis tests indicated that the data were statistically normal. However, Levene's test revealed no homogeneity of the variance assumption (p = .033). As such, I used Welch's F-test when the assumption of the homogeneity of variance on one-way ANOVA was violated (Field, 2018). The ANOVA of students' self-regulation by their ability revealed a statistically significant main effect, Welch's $F(2, 72.14) = 4.27$, $p < .05$, that self-regulation varied by school band. The estimated omega squared ($\omega^2 = .058$) indicated that 5.8% of the total variation in student self-regulation was attributable to differences by school band. The scores for the subconstructs of self-regulation, preparation, monitoring, reflection and motivation also showed statistically significant differences by school band (see Appendix 21 for detailed analysis).

I conducted Games–Howell post hoc comparisons of equal variances that were not assumed to determine if any two schools' means differed significantly. These results are given in Table 4 and

Figure 11 and indicate that students at the Band 3 school (M = 46.29, SD = 25.18) had significantly lower self-regulation than students at the Band 1 (M = 59.48, SD = 18.22) and Band 2 (M = 60.79, SD = 19.16) schools. The effect sizes for these two significant effects were d = .600 and d = .065, respectively. Additionally, students at the Band 2 school showed fewer differences in self-regulation than students at the Band 1 schools, with an effect size of .070.

Table 4. *Post Hoc Results for Level of Self-Regulation by School Band*

School Type	Mean	Mean Differences $(\overline{X}_i - \overline{X}_j)$		
		1	**2**	**3**
Band 1 (top tier)	59.48	—		
Band 2 (middle tier)	60.79	1.30 (.070)	—	
Band 3 (bottom tier)	46.29	13.19* (.600)	14.49* (.648)	—

Note. Effect sizes are indicated in parentheses. *p < .05.

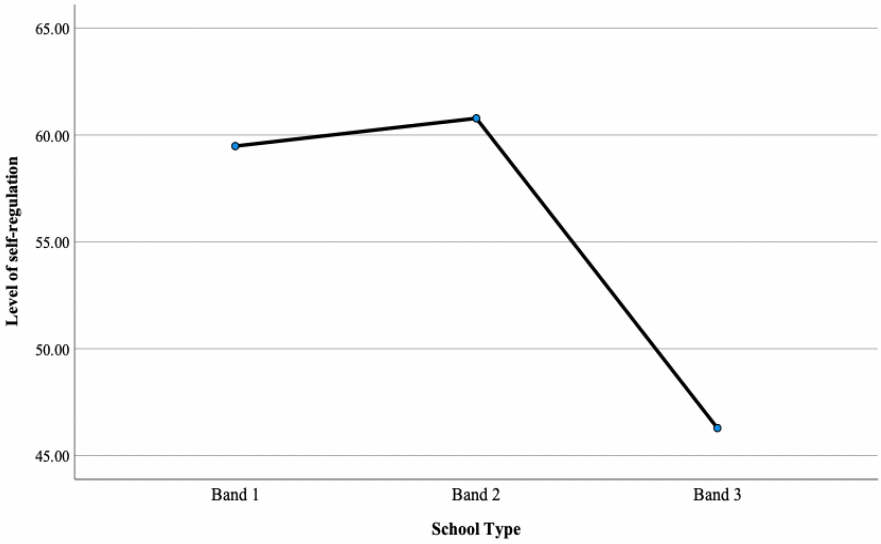


Figure 11. *Self-regulation Scores by School Performance Tier*

These results indicate that the students' levels of self-regulation were significantly mediated by school band. Nevertheless, quantitative questionnaires on their own have limited capacity to fully capture the complex and dynamic nature of self-regulation in students' learning given the significant differences amongst the bands. Therefore, I present more extensive data on my assessments of the CLIL students' self-regulation processes in response to the scenario in the context of Zimmerman's (2000) three-phase self-regulation model (planning, performance, motivation). These data could be triangulated with the questionnaire and interview responses to confirm data validity.

4.1.2 Qualitative Results

I conducted the scenario-based assessments of the students' processes seeking additional insights into how CLIL students self-regulate their learning, particularly how their behaviour fits into Zimmerman's (2000) 3-phase cyclical model. I compiled 108 responses for thematic content analysis in NVivo.

4.1.2.1 **Goal Setting and Self-Motivation**. The forethought in the self-regulation process is composed of goal setting, self-motivation and strategic planning. The findings are presented in Table 6 and Figure 12. For goal setting, 36 students cited achieving satisfactory results as their main CLIL learning goal, and 23 aimed to reach basic attainment, which reveals that CLIL students in Hong Kong placed the most emphasis on their grades. For the expected dual goals of content and language improvement, only eight CLIL students named it as their primary goal, with comments such as, 'I will understand the content well and memorise the vocabulary'. In contrast, more students, 21, reported aiming for improving content knowledge only. This indicates that these students appear to perceive CLIL as merely content-driven learning.

Table 5. *Goal Setting in Studying CLIL Among Students in Hong Kong*

Learning Goal	Band 1 (*n* = 36)	Band 2 (n = 56)	Band 3 (*n* = 16)	Total (*n* = 108)
Achieving satisfactory results	12	22	2	36 (33%)
Reaching basic attainment (pass rate)	7	11	5	23 (21%)
Improving subject content knowledge	7	12	2	21 (19%)
No learning goal at all	8	3	1	12 (11%)
Improving L2 proficiency	1	3	4	8 (7%)
Improving subject content knowledge and L2 proficiency	1	5	2	8 (7%)

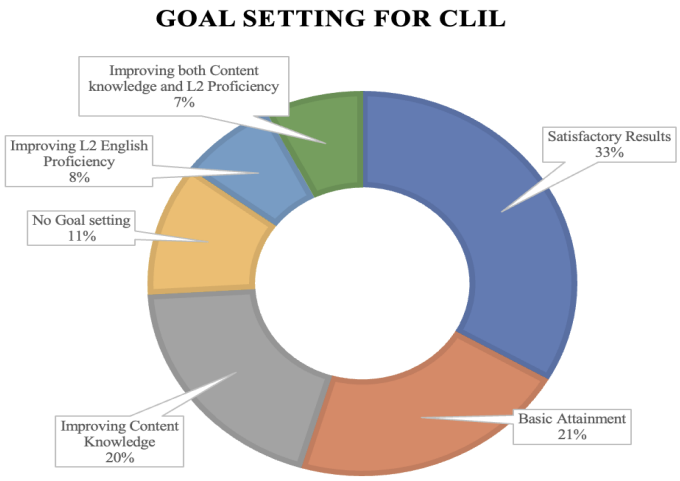


Figure 12. *The Students' Goals for CLIL*

I also measured the students' self-regulation in each of the three phases of the model (Zimmerman 2000) In the domain of forethought, Table 7 and Figure 13 present the students' self-reported motivations for participating in CLIL. The desire to personally improve was a significant motivator for these students, but most of their responses were linked to their academic performance in the CLIL content subjects: 'I just want to improve myself because the tests in science need to be answered in English, and I find it very difficult'.

A total of 20% of the students were motivated by the goal of improving in science, particularly their ability to read and learn the content in English, whereas 12% were just interested in learning more about the topics. A small proportion of students valued the prospects associated with CLIL, such as the improved likelihood of university admission and a better associated quality of life. Slightly more students were motivated by pressure from peers, family and even themselves (i.e. perfectionism).

Table 6. *Sources of Self-Motivation Among CLIL Students in Hong Kong*

	Total (n = 108)	%
Self-improvement	30	28%
CLIL subject content improvement	22	20%
CLIL subject content improvement	13	12%
Pressure (peer/family/self)	13	12%
Grade promotion	12	11%
No expectation	11	10%
Class/grade ranking	10	9%
Improved prospects (e.g., university admission; better future)	4	4%
Rewards (e.g. scholarships)	3	3%

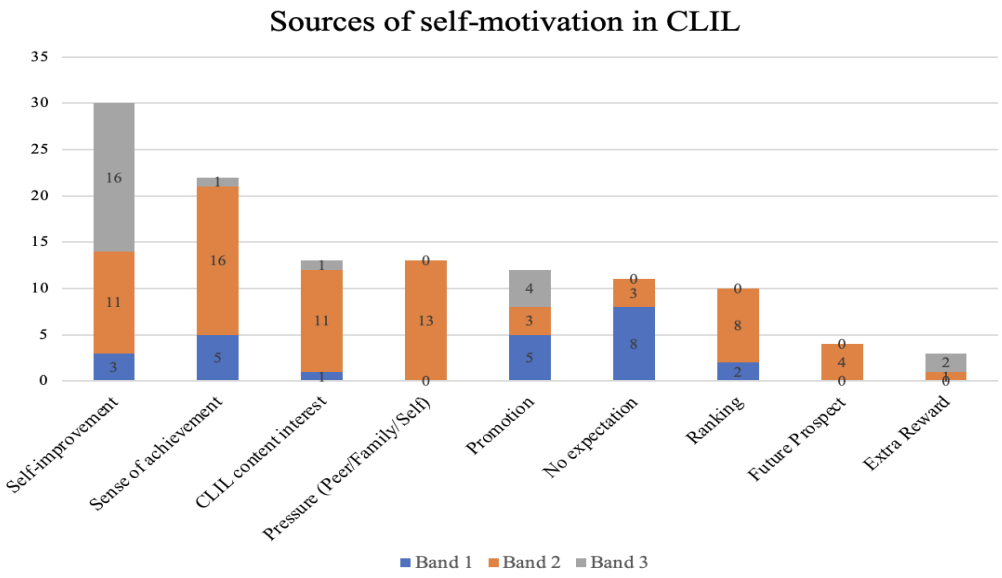


Figure 13. *Sources of Self-motivation in CLIL*

Contradicting the popular conception that CLIL is only offered to highly motivated students, the semi-structured interviews revealed that students could show low motivation regardless of school band. Some articulated that it was useless for them to set CLIL goals because they were unlikely to achieve them:

> I don't have any goal to be honest because I know that I cannot finish my goal, because when I set the goal each time, I always set it too high, and I do not want to set it too low either. (Band 1, moderate achiever, low self-regulation)

> I just want to be in the same class with my friends … I don't expect myself to be successful, like I don't really know how to arrange stuff actually. (Band 2, low achiever, low self-regulation)

> No, I don't really set anything before studying … I didn't expect anything because my brain is like a jelly in a bowl. (Band 3, high achiever, low self-regulation)

In contrast, during the interviews, students with high self-regulation, even when they were not high achievers, had clear goals and plans including to-do lists for achieving their desired outcomes: 'To make a clear goal or a target, just like (I have) something to follow … Having clear plans will at least allow me to be disciplined and be able to study properly' (Band 1, moderate achiever, high level of self-regulation).

Participants were also asked to indicate whether they expected to achieve their goals. More than three quarters, 79%, of the CLIL students indicated that they did expect to achieve their goals after the forethought phase: 'I think I put time into planning it, I expect I can achieve it'. Around 11% did not, and the remaining 9% of students were unsure or doubtful.

4.1.2.2 ***The Three CLIL Self-Regulation Phases: Forethought, Performance, Reflection.*** Zimmerman and Moylan's (2009) three-phase cyclical model (Figure 4.4) posits self-regulation as reflecting the interrelationships between motivation and metacognition. I have explored the students' self-regulation motivations, and now I present their self-regulation metacognitive processes in the context of forethought, performance and self-reflection.

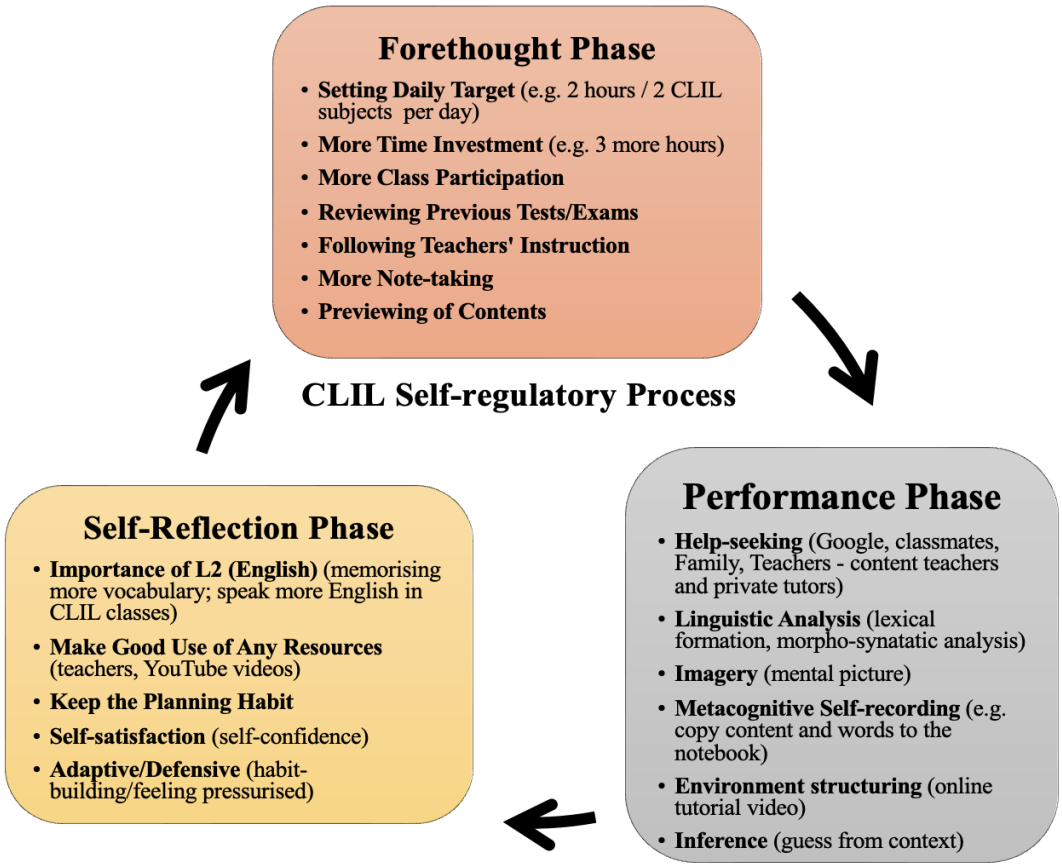


Figure 14. *The Self-regulation Thematic Framework for the CLIL Context*

Regarding the forethought phase, most of the students reported setting daily targets towards achieving their goals, followed by investing more time in CLIL subjects, participating in CLIL classes, reviewing their previous CLIL assessments, following their CLIL teachers' instructions, taking more notes and previewing CLIL contents. One student described his process for working towards achieving his goals:

> Yes, I will first set a goal to revise all the units and I will make clear notes of all units by my (from my) own understanding. I also set exercises for myself or find online exercises and get as many scores as I can. Then I will do all the questions in the past papers. (Band 1, high achiever, high self-regulation)

In contrast, a less self-regulated learner from the same school showed resistance to the forethought phase as he thought learning should be flexible: 'I don't want to pressure myself. Something unexpected may affect my plan and I wanna be flexible with my studies' (Band 1, moderate achiever, moderate self-regulation).

In the *performance* phase, more than half of the students said they sought help from different sources, most frequently Google, for example, 'Google is my friend. I search for anything I don't know on Google'. Another student used Google for translating texts in his content subjects:

> It [Google] is very useful…because I can translate the words I don't know from Science, especially the texts, in Google translate and it immediately shows the Chinese meaning. It's very convenient and I don't have to spend a lot of time to understand the whole text in English. (Band 3, low achiever, low self-regulation).

The students cited their content teachers as another important source of help. I asked the students during both the scenario assessment and the interviews where they turned when they encountered language challenges, and no students cited their language teachers. Instead, they turned to their content teachers for help with both content and language difficulties. Some students remarked that when they could not understand their CLIL content, they checked each lexical item for its part of speech or formation; they also attempted to analyse the syntactic structures of what they were reading to help them better understand the language and thereby better comprehend the subject matter.

Some students used inference to make determinations about unknown words based on their contexts. For imagery, some students said they attempted to read the texts aloud and mentally convert the textual information into a mental picture. This text-assisted self-regulation metacognitive strategy assisted these students in their CLIL work through their storing images as well as the textual information. For self-recording, the students reported creating formal records of their learning processes and outcomes that enabled them to track their learning, enhance retention and avoid exceeding their mental capacities. A few students also used environmental structuring to facilitate their CLIL, such as watching online tutorial videos to enhance both their content and language.

In the *self-reflection* phase, students recognised the important role of L2 English in CLIL. Some reflected that they attempted to improve their lexical range by memorising more subject-specific vocabulary and reading more subject-specific reading, but none of them mentioned efforts with content knowledge or higher-level language demands (e.g., generating productive language). Student also reported planning and making good use of CLIL. For example, one learner remarked that online resources facilitated her English integration, the 'I' in CLIL: 'I will try my best to memorise my vocabulary for my science learning in English. Maybe I can read more newspapers about science from my computer'. (Band 1, middle achiever, moderate self-regulation).

Some students felt a sense of self-satisfaction and self-confidence from following the three-phase cyclical model, but others thought following the process imposed too much pressure on them, for example, 'It may not work for me … because I always feel tired, and I don't have time to sleep. I just don't want to plan or make anything' (Band 3, moderate achiever, low self-regulation).

In short, the students overall followed the model cycle and planned, performed and reflected on their CLIL work. They recognised the importance of L2 English and acknowledged difficulties understanding the course content knowledge in L2. Nonetheless, it remains unclear whether CLIL students experience language challenges differently according to their school performance tiers as well as whether higher self-regulation decreases language challenges. The next section presents the comprehensive picture of self-regulation and language challenges in the CLIL students.

4.2 Language Challenges in CLIL

With RQ2, I aimed to explore these students' specific language challenges and identify any differences between their school's academic ranking (Band 1 and Band 3 schools) and their self-regulation levels. I calculate the mean scores for each of the four language challenges, and I combined the score averages to form a composite mean for the academic English skills in CLIL (see Table 8).

Table 7. *Means and Standard Deviations for Learning Challenges According to School Band*

Variable	Band 1 (n = 52)		Band 2 (n = 84)		Band 3 (n = 31)		Total (n = 167)	
	$\bar{x}$	σ	$\bar{x}$	σ	$\bar{x}$	σ	$\bar{x}$	σ
Reading Challenges	3.52	.84	3.40	.69	3.08	.93	3.38	.80
Listening Challenges	3.70	.81	.60	.63	3.36	.87	3.59	.74
Writing Challenges	3.26	.84	3.46	.66	3.23	.95	3.36	.78
Speaking Challenges	3.29	.87	3.21	.76	3.12	.96	3.22	.83

Note. The scores of the four English skills ranged from 1 (very difficult) to 5 (very easy).

4.2.1 CLIL language challenges by school band.

I conducted a three (Bands 1, 2, 3) by four (reading, listening, writing, speaking) between-participant multivariate analysis of variance (MANOVA) to test for any significant differences in the language challenge scores according to school performance tier. I conducted preliminary assumption testing (see Appendix 21), and all dependent variables were normally distributed with low skewness and kurtosis, and the Levene's F-test results were all nonsignificant ($p > .05$). However, the sample sizes were disparate, and the covariance matrices were not equal (Box's M test = 48.72, $p < .001$),

which violated the MANOVA assumption. Therefore, I used Pillai's trace test when Box's M was significant to provide more robust results from the violations of assumptions (Tabachnick et al., 2007). The MANOVA yielded statistically significant effects of school bands on each of the four language challenges: the means among them differed significantly (Pillai's trace = F(8, 324) = 4.423, p = < .001***, η_p^2 = .098, observed power = .996).

I note that the samples sizes were unequal (n_{band1} = 52; n_{band2} = 84, n_{band3} = 31), and this could have affected statistical power and resulted in Type I error rates (Rusticus & Lovato, 2014); this increases the chances for false positive that inappropriately reject the null hypothesis. To address this potential, I ran a post hoc ANOVA and the Tukey–Kramer test to explore differences by school bands for each challenge. With the Tukey–Kramer test, I made pairwise comparisons to create equal sample sizes in each group (Field, 2018), with Bonferroni correction that adjusted the alpha by 0.013 per test (0.05/4) to control for the overall Type I error rate (Tabachnick & Fidell, 2013).

After I controlled for the Type I errors, the results revealed no overall significant effect of school band on CLIL reading challenges, (F(4,161) = 3.121, p > .0125, η_p^2 = .037). The challenge scores were significant at p = .047 and at p < .0125 under the Type I control, but the variable was insignificant at the original 95% confidence interval (CI) (p < .05), which made it necessary to be cautious in interpreting the identified Type II errors of (false insignificance). Nonetheless, the Tukey–Kramer post hoc test revealed a greater difference between the Band 3 and Band 1schools (mean difference = −.4418, p = .038) than with the Band 2 school (mean difference = −.3221, p = .129).

There were no statistically significant overall effects of school band on CLIL listening challenges (F(4,161) = 2.162, p > .0125, η_p^2 = .118). The Tukey–Kramer test again revealed a greater difference between the Band 3 and Band 1 schools (mean difference = −.3455, p = .099) than that with the Band 2 school (mean difference = −.3779, p = .275).

Similarly, CLIL writing challenges showed no statistically significant effect by school band (F(4,161) = 1.612, p > .0125, η_p^2 = .019). The post hoc test showed statistically insignificant pairwise comparison results for all three school pairs: Band 1 and Band 2: mean difference = −.2004, p = 309; Band 1 and Band 3: mean difference = .0357, p = .977; Band 2 and Band 3: mean difference = .2361, p = 317.

Finally, CLIL speaking challenges showed no overall statistically significant effect (F(4,161) = .416, p > .0125, η_p^2 = .006). The post hoc pairwise comparison results were statistically insignificant for all three school pairs: Band 1 and Band 2: mean difference = .0840, p = 836; Band 1 and Band 3: mean difference = .1699, p = .642; Band 2 and Band 3: mean difference = .0859, p = .876.

In short, these CLIL students experienced similar challenges irrespective of their schools' academic performance tier, with only slightly significant differences in the receptive skills, reading and listening, the core skills in the junior secondary CLIL programme (Lo & Fung, 2020). Figure 15

summarises these patterns in a visual display of mean differences according to each language challenge. As might be expected, the Band 1 students generally perceived the language requirements as less burdensome than did the students in the other bands except for writing: The students from the Band 2 school were the most comfortable with this skill.

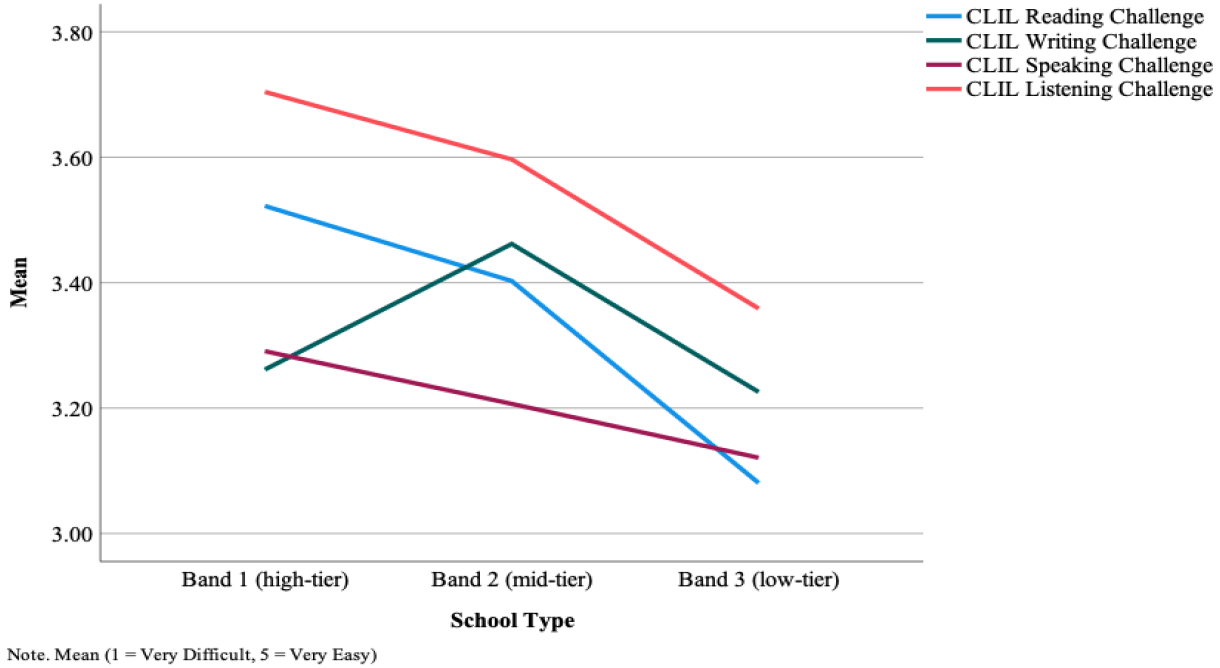


Figure 15. *Mean Frequency of Challenges by Category and School Band*

4.2.2 CLIL language-related challenges and students' self-regulation level.

I conducted a correlation analysis to explore the relationships between self-regulation level and the four CLIL language challenges. Because this is an ordinal variable, I chose Spearman's rho correlation (r_s) as the appropriate correlation coefficient; rho is a statistical measure of the strength of a monotonic relationship between paired data (Field, 2018). No normality assumption was required before the statistical analysis.

With reference to Prion and Haerling's (2014) interpretation guideline, the results showed a moderate, positive monotonic relationship between students' self-regulation level and their CLIL language challenges. Self-regulation level was most closely associated with the two receptive skills, which the students were most called upon to perform in their CLIL instruction (r_s = .569, 95% BCa CI [.437, 660], p < .001) (see Figure 16); their productive skills were less important (r_s = .570, 95% BCa CI [.429, 669], p < .001). CLIL students who were more self-regulated experienced more challenges with reading and listening and fewer with writing and speaking.

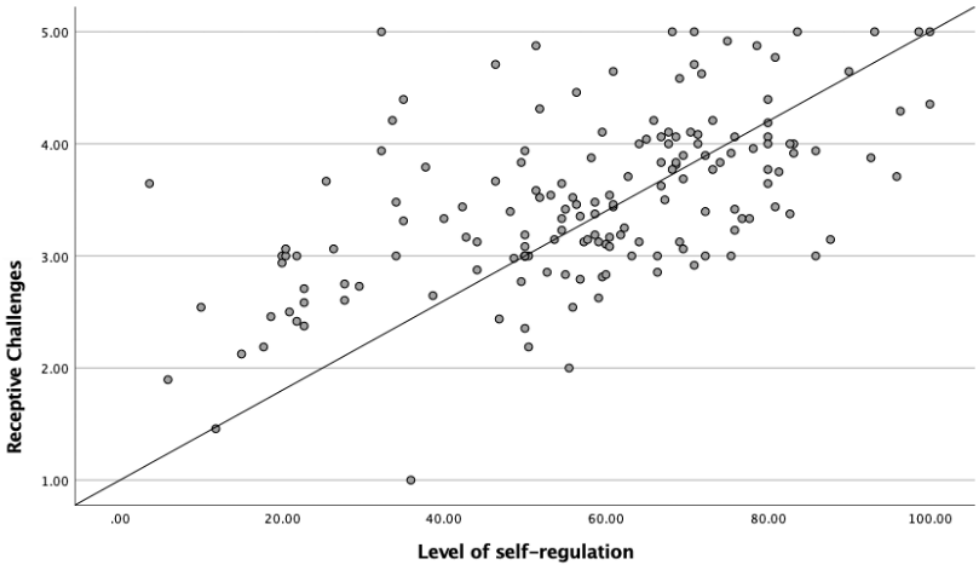


Figure 16. *The Positive Monotonic Relationship Between Students' Self-regulation Level and Their Self-Perceived Receptive Skill Challenges*

For deeper investigation into how different constructs of self-regulation related to students' CLIL, I compared their levels of planning, performance, reflection and motivation with their scores on the four language challenges. Generally, the results were similar to those for overall self-regulation level: There was a moderate, positive monotonic relationship between students' levels of planning, performance, reflection and motivation and their self-perceived language challenges.

Amongst all the self-regulation constructs, *motivation* had strong positive relationships with both the CLIL receptive skills (r_s = .619, 95% BCa CI [.461, .703], p < .001) and productive skills (r_s = .611, 95% BCa CI [.491, .720], p < .001) challenges. In this study, motivated students experienced fewer language challenges, and less motivated students struggled more. The students' performance had weak positive relationships with the challenge for both receptive skills: listening (r_s = .466, 95% BCa CI [.326, .576], p < .001); reading (r_s = .471, 95% BCa CI [.347, .594], p < .001). In contrast, the associations were weak and positive between self-reflection and the students' productive skills: writing (r_s = .482, 95% BCa CI [.342, .614], p < .001); speaking (r_s = .412, 95% BCa CI [.248, .560], p < .001). Simply put, the CLIL students' motivation levels substantially affected how they perceived their language challenges in studying CLIL. How well the students monitored and reflected on their learning had weaker effects on what they perceived as challenging in their language learning.

In Hong Kong junior secondary CLIL settings, there is heavy emphasis on students' receptive language skills, considered the 'core' skills they need (Lo & Fung, 2020). Both listening and reading challenges had strong associations with reflection (r_s = .471, 95% BCa CI [.338, .580], p < .001; r_s = .520, 95% BCa CI [.407, .649], p < .001). Students who experience reading and listening challenging might find their work less challenging if they engaged in more self-reflection.

The CLIL students' challenges with language production, that is, writing and speaking, despite production's not being the focus in the junior secondary setting, showed stronger associations with students' levels of planning (r_s = .512, 95% BCa CI [.370, .622], p < .001; r_s = .508, 95% BCa CI [.355, . 623], p < .001). That is, students who are having trouble might find writing and speaking in CLIL classes less challenging if they planned more. Table 4.6 presents the details.

Table 8. *Correlations Between the Self-Regulation Constructs and CLIL Language Challenges*

Variables	Level of self-regulation				
	Planning	Monitoring	Reflection	Motivation	Overall
CLIL Receptive Skills - Overall	.514	.492	.517	.619	.569
Listening Challenges	.475	.466	.471	.571	.528
Reading Challenges	.499	.471	.520	.590	.552
CLIL Productive Skills - Overall	.544	.506	.476	.611	.570
Writing Challenges	.512	.500	.482	.603	.557
Speaking Challenges	.508	.449	.412	.551	.512

Note. Bias-corrected and accelerated (BCa) bootstrap 95% Confidence Intervals (CIs), which were based in 167 bootstrap samples All p < .01 (2-tailed).

4.3 Predicting Language Proficiency and Academic Performance by Self-Regulation Level

The results from a simultaneous multiple regression analysis provided insights into the relationship between students' self-regulation and their CLIL performance. A considerable number of researchers have compared the performance between CLIL and non-CLIL students in numerous settings, but there is very little literature on predicting students' academic performance by self-regulation level. Some researchers (e.g., Thompson, Aizawa, Curle & Rose, 2022) recognised the importance of focusing on the student perspective in EMI settings by exploring the relationships between students' self-efficacy beliefs and their EMI success, but these are, again, not the same explicit CLIL dual focus on both content and language proficiency; additionally, most of the research has focused on university students.

This study closes the literature gap by presenting evidence of whether the four constructs of self-regulation (i.e. forethought, performance, self-reflection, motivation) could predict students' performance on the dual CLIL outcomes. The predictor variable was students' self-regulation, and the outcome variable was the students' L1 (Chinese), L2 (English) and academic English and content

performance. I performed simultaneous multiple regression because it is often used when there is one focal independent variable and the effects of other known variables are controlled for (Field, 2018).

I entered all predictor variables (the self-regulation constructs) into one statistical model to explore the variance explained in the outcome variable. I calculated four multiple linear regression models to predict success in the CLIL outcomes; before the start of the analysis, I checked all the assumptions and diagnostics and found normal distribution of errors, linearity, homoscedasticity and multicollinearity (Keith, 2015). Descriptive statistics shows that no variables were significantly skewed or kurtotic and there were no residuals in either the histogram or the P-P plot, indicating a close to normal distribution. The homoscedasticity was accepted with the scatterplot of the predicted values and the standardised residuals revealing no funnel or curve shapes. The multicollinearity was met by having no tolerance values below 0.2; additionally, each variance inflation factor was well below 10, and no averages were substantially above 1.0 (Field, 2018). Based on these findings, the regression analysis results were valid and reliable (see Appendix 21 for detailed analysis).

4.3.1 Self-Regulation as a Predictor of L1 Proficiency

I ran individual multiple regression models to investigate whether the constructs of self-regulation could significantly predict the participants' academic proficiency. Table 10 gives the regression results for L1, Chinese. The model explained 11.8% of the variance and was a significant predictor of L1 proficiency, $F(4,163) = 5.300$, $p < .001$. With regard to individual predictors, Table 4.8 shows that there were no significant prediction relationships between students' L1 proficiency and their preparation, performance, reflection or motivation scores.

Table 9. *Multiple Regression Output: Self-Regulation Constructs and L1 Proficiency*

	R	R^2	ΔR^2	Std. Error of the Estimate	Unstandardised Coefficients		Standardised Coefficient	*t* value	*p* value
					B	Std. Error	β		
(Constant)	.344	.118	.096	11.847	49.920	2.831		17.632	<.001
CLIL Preparation					−.046	.104	−.080	−.442	.659
CLIL Monitoring					.155	.105	.282	1.480	.141
CLIL Reflection					−.005	.100	−.010	−.054	.957
CLIL Motivation					.092	.072	.165	1.279	.203

Note. Dependent variable: L1 Chinese score.

4.3.2 Self-Regulation as a Predictor of L2 Proficiency

Table 11 presents the multiple linear regression results for the self-regulation constructs' predictive power for L2 English proficiency based on the CLIL students' forethought, performance, self-reflection and motivation scores. The regression equation was significant ($F(4,163) = 4.663$, $p = .001$), with an R^2 of.107: The self-regulation construct scores could explain 10.7% of the variance in the students' L2 proficiency.

Table 11 further indicates that L2 proficiency increased by.327 for every one percentage point increase in motivation score; decreased by.055 for every point increase in preparation; decreased by.115 for every point increase in monitoring and increased by.013 for every one percentage point increase in reflection, although this association was not significant. To conclude, the CLIL students' motivation score was the only statistically significant predictor of L2 proficiency.

Table 10. *Multiple Regression Output: Self-Regulation Constructs and L2 Proficiency*

	R	R^2	ΔR^2	Std. Error of the Estimate	Unstandardised Coefficients		Standardised Coefficient	*t* value	*p* value
					B	Std. Error	β		
(Constant)	.328	.107	.084	14.474	54.439	3.671		14.831	<.001
CLIL Preparation					−.055	.131	−.076	−.424	.672
CLIL Monitoring					−.115	.131	−.166	−.871	.385
CLIL Reflection					.013	.129	.018	.098	.922
CLIL Motivation					.327	.088	.469	3.696	<.001

Note. Dependent variable: Academic English score.

4.3.3 Self-Regulation as a Predictor of Academic English Proficiency

The CLIL programme aims to enrich students' English proficiency through using it to teach academic content subject matter, and to achieve that purpose, students must demonstrate proficiency in English. It is therefore valuable to measure and better understand any relationships between academic English proficiency and students' self-regulation. The multiple linear regression results indicated that there was a significant collective predictive effect between the combined self-regulation constructs and the students' academic English proficiency ($F(4, 163) = 3.742$, $p = .006$), with an R^2 of.094. In other words, only 9.4% of the variance in the students' academic English vocabulary was explained by their collective self-regulation score. Table 12 also shows that whereas motivation had statistically significant prediction power ($B = .381$, $p < .05$), the other three constructs did not.

Table 11. *Multiple Regression Output: Self-Regulation Constructs and Academic English.*

	R	R^2	ΔR^2	Std. Error of the Estimate	Unstandardised Coefficients		Standardised Coefficient	*t* value	*p* value
					B	Std. Error	β		
(Constant)	.306	.094	.069	27.564	33.752	6.764		4.990	<.001
CLIL Preparation					.093	.246	.072	.379	.705
CLIL Monitoring					−.151	.262	−.121	−.576	.565
CLIL Reflection					.068	.242	.053	.279	.780
CLIL Motivation					.381	.173	.299	2.204	.029

Note. Dependent variable: Academic English score.

4.3.4 Self-Regulation as Predictors of Content Subject Achievement

To explore the relationship between self-regulation and content subject achievement, all self-regulation constructs were put into multiple regression to explore the variance explained in the outcome variable (content scores). A significant regression equation was found ($F(4, 163) = 9.77$, $p < .001$), achieving an R^2 value of.200: 20% of the variance in the content subject achievement could be explained by the predictor variables.

Table 13 further illustrates that the participants' content subject scores increased by.455 for every one percentage point increase in motivation, decreased by.008 for every point increase in preparation, decreased by.071 for every point increase in performance, and decreased by.078 for every point increase in reflection scale. In other words, again, only motivation was a statistically significant predictor of the students' content subject achievement.

Table 12. *Multiple Regression Output: Self-Regulation Constructs and Content Subject Scores***.**

	R	R^2	ΔR^2	Std. Error of the Estimate	Unstandardised Coefficients		Standardised Coefficient	*t* value	*p* value
					B	Std. Error	β		
(Constant)	.448	.200	.180	15.39	51.404	3.833		13.41	<.001
CLIL Preparation					−.008	.138	−.009	−.055	.956
CLIL Monitoring					−.071	.137	−.095	−.521	.603
CLIL Reflection					−.078	.132	−.099	−.590	.556
CLIL Motivation					.455	.095	.587	4.807	<.001

Note. Dependent variable: Content subject score.

Chapter 5 Discussion and Implications

This chapter discusses the results presented in Chapter 4 in response to the three research questions. First, discussion points based on the findings of this study are organised while considering the following themes: the methodological contribution of the CLIL self-regulatory process, the comparison of language-related challenges in CLIL, and the role of self-regulation in CLIL students' language proficiency and content knowledge. Next, pedagogical implications and topics for further research that are based on the findings are explored.

5.1 Methodological Contributions

This study provided methodological contributions to investigate secondary school students' language challenges in CLIL by being the first study to adapt the questionnaires of Evans and Morrison (2011), which originally focused on university students in EMI settings. Macaro (2018a) proposed that CLIL/EMI researchers should not 'reinvent the wheel', because the confirmation of assumed factors surrounding the four language skills in their original questionnaire is additional evidence that the operationalisation of EMI linguistics challenges in the university setting can apply to CLIL in a secondary school setting. However, this questionnaire was modified for this study's sample from Hong Kong, namely, items deemed inappropriate in the CLIL context in Hong Kong junior secondary education were deleted (e.g. writing a text). Thus, CLIL researchers in other contexts should be cautious of the curricular differences when adopting the questionnaire. Nonetheless, the validation adds to the evidence that supports the comparability of the CLIL experience in secondary school and higher education and of the language-related challenges by assessing the four skills in different CLIL contexts.

The mixed method of exploring CLIL students' self-regulatory process by integrating methodological tools from both content learning and L2 acquisition also facilitates the research of CLIL. The newly developed questionnaire provided statistical results of students' level of self-regulation, complemented by the qualitative results collected from the innovative Scenario-based Micro-analytical Assessment adopting the widely used methodology from social science but infrequently used in L2 research (i.e. vignette methodology). Research on self-regulation in CLIL/EMI settings has been scant, regardless of secondary and tertiary education. For example, Zhou and Rose (2021) also attempted to investigate the self-regulated listening of students who transited from high school to an EMI transnational university in China. They claimed that using a battery of measures of listening strategies and a semi-structured interview could explain a holistic self-regulatory cycle. However, they did not engage students in a (semi-)authentic situation in which students performed a task and reflected on their self-regulatory process, which should be enhanced by using a think-aloud protocol or a vignette methodology to elicit students' mental process in real time. The innovative mixed method in this study further enhances the methodological consideration

for the in-depth understanding of the self-regulatory cycle of how content learning was taught in an L2, particularly in an EMI setting in the field.

5.2 Self-regulatory Process in CLIL

This study analysed the level of self-regulation of CLIL students in high-tier, mid-tier and low-tier schools. The low-tier students had a significantly lower level of self-regulation than the other two school tiers, and this finding corroborates those of other studies' that junior secondary students who are low achievers tend to have a significantly lower level of self-regulation than those who are high achievers (Hong et al., 2009; Salili & Lai, 2003). An explanation for this result is that low achievers could be reluctant to prepare their learning and seek advice from others, possibly due to their doubts regarding their strategies to plan, monitor and reflect on their learning. While CLIL learners would perceive their dual roles as both language learners and content subject learners (Hu & Gao, 2020), low-tier students would have difficulty mediating their strategy for the self-regulation of content knowledge in L2. Although the reason of a higher level of self-regulation in Bands 1 and 2 schools than in Band 3 could not be determined in this study, an argument has been that Band 1 (top-tier) and Band 2 (middle-tier) schools would provide better learning environments and more resources than Band 3(low-tier) schools (Salili & Lai, 2003) where it provides less opportunities to develop students' self-regulatory skills. Nonetheless, this CLIL study empowers students in low-tier schools and academically weak students of CLIL, which has been criticised for favouring 'bright students' and largely neglecting weak achievers in both education and research.

This study also fills a gap in the literature on the self-regulation research of CLIL/EMI by demonstrating a holistic cyclical self-regulatory process of CLIL that fits into Zimmerman's (2000) self-regulation model designated for Hong Kong junior secondary education. First, in the forethought phase, regarding goal setting, in the literature, half the EMI students in university settings aimed to improve their English (Galloway et al., 2017), and in this study, half the CLIL students described their goal for CLIL as *score-oriented*—improving their scores and achieving the passing score. Students focusing only on scores and neglecting the perceived dual outcomes of CLIL could reveal that the CLIL policy and practice is a top-down approach in which students have shown little interest in improving their English and subject knowledge. They might consider CLIL as something they ought to receive and achieve for a satisfactory result in their secondary education. Students' passivity towards CLIL may be reflected in the ineffectiveness of achieving the dual outcomes in CLIL in Hong Kong (Lo & Lo, 2014), under which students studied content subjects in L2 but did not have learners' autonomy.

In the *performance* phase, L2 English was a barrier for students to access the content knowledge, thus involving soliciting assistance from different channels. Google was reported to be

the most frequently used means of help, which can be viewed as a social form of information seeking (Zimmerman & Moylan, 2009). However, the semi-structured interview reveals that for low achievers, the use of Google is mainly for translating from L2 to L1, rather than exploring the content knowledge through L2. The convenience of Google Translate has led to their reluctance to seek advice from teachers, language teachers and content teachers, a conclusion based on findings that have also shown that poor achievers normally have doubts regarding what to ask for, when to ask for it, and who to approach (Newman, 2007). Some learners, mostly those in Band 1 and Band 2 schools, also attempted to comprehend the concepts of content knowledge written in L2 by analysing the word formation and morphosyntactic structures in the texts. Thus, the *performance* phase shows that despite the CLIL in Hong Kong being content-driven, students also attempted to learn content knowledge and language proficiency simultaneously to achieve the dual focus in CLIL via multiple strategies.

For the *self-reflection* phase, the practice of *self-reflection* mainly 'reflects' on research in CLIL teacher education (e.g. De Fraaff et al., 2007; He & Lin, 2018; Segui, 2020), whereas students, who are the core of the education, have been largely neglected. This study showed a stark contrast: students did not show an initial interest in improving their English by studying CLIL but recognised the importance of improving their English after the performance phase. Particularly notable is that they recognised their need to memorise additional *vocabulary* to improve their integrated learning of content and language, which might support Lo and Fung's (2020) finding that junior secondary CLIL assessments were dominated by low-level linguistic demands (i.e. word-level production). As a result, students would reflect on their learning and recognise that vocabulary memorisation would be the key factor necessary to achieve their initial goal—satisfactory results. The *self-reflection* phase also displays the 'dark side' of CLIL by giving voice to low-achieving students. Although CLIL aims to promote the integral goals of content and language, it does not benefit all students, because some students, particularly low achievers, feel pressured by its simultaneous learning approach; thus, their self-regulated practice is disrupted and motivation decreases. As Darvin et al. (2020) argued, individuals engaging in CLIL are not only autonomous, but also are subject to the negotiation of power and the positioning of key players. Overall, because Hong Kong students have a low hegemonic control in CLIL practice, this study demonstrates how their learning would be beneficially or detrimentally affected by internal and external factors by the understanding of cyclical process of self-regulation. However, one limitation would be that differences among the three tiers of schools could not be generalised owing to the timely nature of this research and the large amount of L1 Chinese qualitative data collected from the self-regulatory assessment for translation. Nonetheless, the responses in semi-structured interviews complement the quantitative results and supplement the self-regulatory assessment for building a thematic framework of CLIL self-regulation.

5.3 Comparison of Challenges Across CLIL Contexts: Differences in Ability Grouping and Level of Self-regulation

This study also reveals the language difficulties junior secondary students perceive in their CLIL learning and whether any differences were observed in the ability grouping and their level of self-regulation. Statistical results reveal that although students in the three types of school would generally perceive language challenges in the four skills similarly, listening is the most challenging skill in studying CLIL. This result was expected because it supports the finding of the monitoring phase in previous question: students would seek help outside of class time, such as that for using Google Translate or analysing the syntactic structure of CLIL text for comprehension. However, listening in CLIL classroom would be ephemeral, that is, not under students' control during class time and not allow sufficient time for students to dwell on words and consolidate on the concept after listening to teachers. Specifically, studies have also shown that teachers dominated the talk in CLIL classrooms (e.g. Lo & Macaro, 2012, who identified 87%–96% teacher talk). The crux of the CLIL listening challenge would be that learning content subjects in L2 is not only an equivalence of translating what teachers would have done in L1 to L2 but also listening to teachers' L2 and comprehending the content subject concepts simultaneously. Therefore, it could be extremely challenging for junior secondary students to listen the intertwining demands of content and L2, particularly for low achievers. However, Fung and Lo (2020) revealed that senior secondary students could deploy novel listening strategies in CLIL classrooms such as decoding subject-specific terminology by breaking down 'biodiversity' to 'bio-diversity'. Such strategies were also found in the junior students' *performance phase* of this study, but it was mainly used for decoding the lexical word formation of the words in reading CLIL text. Thus, longitudinal research is necessary to determine whether this strategy would be transferable to listening and whether the ease of the listening-related challenge would increase as junior secondary students developed additional listening strategies in their CLIL performance phase in senior secondary education.

This study also yielded a positive monotonic relationship between students' self-perceived language challenges and their self-regulatory level. When learning unfamiliar, complex subject knowledge in an L2, student cognitive capacity is challenged simultaneously by the content and the language (Jiang et al., 2019). Nonetheless, the correlation analysis suggests that if students' motivation regarding CLIL increase, their perceived language challenges would significantly decrease. The result supports those of other studies (Aizawa et al., 2020; Evans & Morrison, 2011) that difficulties from L2 proficiency can be overcome through the motivated behaviours of learners and increased efforts in out-of-class learning in EMI settings. Evans and Morrison (2011) also argued that 'students are able to overcome these and other problems through a combination of strong motivation, hard work, effective learning strategies', which further supports the finding of this study

that students' self-regulatory behaviour diminishes students' perceived challenges. However, some EMI studies of university students would find other skills challenging (e.g. writing in Evans & Morrison, 2011; writing and speaking in Kamasak et al., 2021). Because a CLIL/EMI programme is context-specific, with various goals and implementations among schools and countries, the finding may not be generalisable to all CLIL/EMI education. Nonetheless, this study is the first to provide insights into CLIL language-related challenges in secondary education.

5.4 Role of Self-Regulation in 'Killing the Two Birds' of CLIL: Language Proficiency and Content Knowledge

This study investigated self-regulation predictors of CLIL outcomes in junior secondary education. The results showed that students' self-regulation level was a significant factor influencing students' L2 English proficiency, academic English proficiency and content knowledge, with the motivation variable being the strongest factor in all three outcomes when all variables were considered. In other words, CLIL students' success in L2, academic English and content subject performance increases as their level of self-regulation skills increases and their motivation strengthens. The findings corroborate with Soruç et al. (2022)'s finding that non-linguistic factors (self-regulation and self-efficacy) explained 26% of the variance in EMI success, whereas this study found that self-regulation explained 20% of the variance in content subject performance and approximately 10% in L2 proficiency and academic English proficiency. Thompson et al. (2022) also found a significant relationship between self-efficacy beliefs and EMI success in the Japanese university setting, indicating students' motivation predicted improved performance in EMI. Therefore, this study substantiates their findings that when students' levels of self-regulation skills and motivation increase, their success in both L2 proficiency (including academic English) and content knowledge achievement increase when studying CLIL, or in broad definition, studying content subjects in L2. However, this study's finding contradicts those of Rose et al. (2019) and Xie and Curle (2022) that motivation is a non-significant factor in students' academic success in EMI. However, as mentioned in the literature review, both studies only attempted to transplant SLA theories to EMI contexts that target content acquisition (Macaro, 2019). Because this CLIL study focused on both content and language acquisition, its aim was not to compare and support the two studies.

The statistical results in this study also support the qualitative finding of Hu and Gao (2020), who found that high achievers among six secondary schools in Hong Kong used higher number of strategic processes to self-regulate their academic *writing*. In other words, self-regulation strategies moderate secondary school students' CLIL achievement. Despite the similar finding, the instrument for assessing academic English proficiency in this study was a *receptive* test. Thus, we would argue

that our result complements with their results, revealing better academic English proficiency in both receptive and productive skills.

A notable finding was the non-significant relationship between students' level of self-regulation and L1 Chinese proficiency, meaning that even if students have a higher level of self-regulation, it cannot predict their success in L1 proficiency. A plausible explanation of the non-significance is that the goal of improving language proficiency in CLIL would emphasise L2 development while neglecting L1 development. Despite findings in the literature that teachers' use L1 in CLIL classrooms (e.g. Tavares, 2015), CLIL assessment in Hong Kong would be conducted in L2 English only. Because Hong Kong students' initial goal in CLIL was to achieve satisfactory results, the washback effect (i.e. studying based on the assessment) might discourage students from improving their L1 in CLIL. Another reason for the non-significance could be the short exposure to L1 in CLIL. As shown in students' self-regulated process, instances of L1 Chinese did occur in students' CLIL learning only during their use of Google Translate or dictionaries. However, such a short span of L1 exposure would not facilitate students' lexical-semantic knowledge or morphosyntactic knowledge to further develop their L1 proficiency, and this conclusion corroborates with those of other studies of no difference in L1 proficiency between CLIL and non-CLIL groups (e.g. Bulté et al., 2021).

5.5 Limitations

This study has provided new insights into self-regulation as it relates to CLIL. However, its results should be interpreted while considering its limitations that may have affected the outcomes and its generalisability.

Sampling. This study's sample of participating schools was small, despite efforts to establish a selection criterion that would provide a representative sample. Moreover, each school may not be generalisable to each banding owing to differences between the socioeconomic status (SES), school-based curriculum, number of CLIL subjects. Additionally, only junior secondary students could be recruited as senior secondary students were unable to participate in the study owing to their busy schedule as decided by the schools. Another methodological limitation of sampling was the small sample size for the qualitative interviews (n=6), which might reveal only individual preferences of self-regulatory strategies. With additional time for transcription and analysis, further research could capture more participants than were assessed in this study to further enhance the triangulation and possibly collect additional numbers of insightful self-regulatory strategies to inform CLIL learning.

Short-term psychological process. Another methodological limitation was the short-term fluctuations of self-regulation. This study adopted a cross-sectional (i.e. 3 types of school) approach

to collect data from participants to gain insights into their differences. Due to the COVID-19 travel restriction, students did not engage in an authentic task during which they had to perform the whole self-regulation process; instead, the cost-effective vignette methodology, commonly used in social science research to elicit students' mental process, was adopted. It could potentially cause difference from students' behaviour in authentic moment-to-moment contexts, and such an approach is considered inadequate to demonstrate dynamic changes in students' self-regulatory process. Lazarus (2003) also criticised positive psychology (e.g. self-efficacy)'s over-reliance on cross-sectional research designs, which are not well-suited for studying causality in the process. This study's result indicate that additional longitudinal research is necessary on Hong Kong students' self-regulation.

Control of confounding variables. The reviewed CLIL research also revealed that the outcomes of CLIL programmes should be interpreted with caution because of confounding variables such as students' prior ability and SES. However, collecting SES information was prohibited by schools because of its high sensitivity. The data for receiving private tutoring were collected as a high proportion of secondary school students have had private tutoring in addition to regular classes in Hong Kong(e.g. Bray et al., 2014). That phenomenon could create an extraneous determinant—whether students could individually plan, monitor and reflect on their CLIL study to achieve language and academic success or their success was mainly due to their private tutors. However, controlling the confounding variable(s) of private tutoring and others required a complex statistical method that required a longer time than allowed by this dissertation. Thus, further research would benefit a more robust result of self-regulation in CLIL by controlling any lurking variable such as SES and the private tutoring effect.

Individual Differences. Because this study aimed to explore the self-regulatory process of Hong Kong students, the findings and arguments are presented based on group differences (high-, middle-, and low-tier) in self-regulation. Nonetheless, because of the notion of 'self' regulation, this study may have overstated the importance of sample differences while placing insufficient emphasis on exploring the in-depth self-regulation differences among students. Thus, multiple case studies should be used to explore in-depth and conduct longitudinal students' self-regulatory process in studying CLIL.

5.6 Pedagogical Implications

After discussing the findings and potential limitations of this study, pedagogical implications on improving CLIL instruction in Hong Kong and in other contexts are presented.

Education Equality: CLIL for all. First, the educational equity of CLIL should be enhanced by providing additional explicit instruction and materials for less self-regulated learners and low-tier students. CLIL has been criticised for being an elite approach that favours more-able students. This study revealed the self-regulatory CLIL practice of students from low-tier schools: students had much lower self-regulation and motivation than students from high-tier schools. The reason for this result might be because the school-based curriculum provided insufficient explicit teaching of strategies to help them manage integrated learning. Therefore, teachers should provide explicit instruction and practice in the form of booklets or workbooks to help students become self-regulated learners and require them to set daily goals, record their practice, and reflect on their strengths and weaknesses in CLIL education. The use of additional materials has been shown to be useful in promoting self-regulation practice in content learning and language acquisition (e.g. Bloom, 2013; Pilegard & Fiorella, 2016).

Task-based learning for enhancing self-regulation. This study also demonstrated that self-regulation, namely, motivation and metacognition, is important for students to perceive the language in CLIL as less challenging and predict a higher success in the dual outcomes. In other words, students' *self-efficacy* and self-regulatory practice are the 'dynamic duo in school performance' (Gaskill & Hoy, 2002). One approach to improve the duo would be to adopt task-based learning in CLIL. Task-based learning is a desirable approach for the integrated teaching of content and language (Pérez, 2012) because task-based learning has the same initiative as CLIL, and tasks involve focusing on meaning, using real-world language, using the four language skills and activating cognitive processes (Ellis, 2003). Learners can then be provided opportunities to perform self-regulated learning by preparing the CLIL task beforehand (pre-task), working on the task (on-task) and improving the task (post-task). Adopting task-based learning in CLIL not only motivates junior secondary students, who are young learners, by using authentic situations in learning to improve their communication and content knowledge but also develops self-regulated practice and enhances their motivation in learning CLIL more proactively than the traditional direct lecturing does.

Catering to learners' diversity: from co-regulation to self-regulation. Less self-regulated students can engage in *co-regulation* for transitional and flexible support. Regulation is a multifaceted construct because it involves the control of motivation, emotion, behaviour and cognition. Co-

regulation refers to the transitional, flexible stimulation of regulation, often through interpersonal interactions and exchanges (Hadwin et al., 2018). Co-regulation would then enable less self-regulated learners' future regulatory uptake of 'self-regulation' through the temporary and shifting support. For example, teachers can organise group activities in which less self-regulated learners (and possibly weak academic achievers) can receive mutual support from peers and teachers during groups' coordination of learning, as supporting (Panadero & Järvelä, 2015), by providing them the responsibility of task completion. After repeated exposures to co-regulation, less self-regulated learners develop self-regulatory process in their out-of-class CLIL learning.

5.7 Future Research

Researchers have started to recognise the importance of self-regulation in understanding content learning through L2. These studies signal the high potential of instrumental value in this area. Some new directions for further research have been exposed. First, engaging students in authentic tasks is urgently necessary to triangulate the self-reported data from this study by means of other qualitative methods. One recommendation is the use of Interpretative phenomenological analysis (IPA), also an 'participant-oriented approach' used in psychology research (Alase, 2017). IPA provides researchers with the innermost deliberation of the 'lived experiences of participants (Smith et al.,2013). Because secondary school students may not be able to express their thoughts freely, researchers in IPA may act as a scaffolder to attempt to get close to the participant's personal world from an 'insider perspective' (but not directly or completely) through a process of interpretative and interactive activity. By asking critical questions, participants attempt to make sense of their world while researchers attempt to make sense of other personal worlds. Second, self-regulation as a non-linguistic factor was found to predict students' L2 proficiency and content knowledge performance. Further research is necessary to provide insights into the interplay of different constellations of individual differences variables, such as anxiety and aptitude, to provide a comprehensive understanding of CLIL outcomes in Hong Kong and advance the interdisciplinary field.

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Appendices

Appendix 1. *CLIL Demographic Information Questionnaire*

英國牛津大學 The University of Oxford
Questionnaire 問卷

同學，您好！
Dear student,

感謝您幫助完成一份有關香港學生在學習**以英文**學習**術科**（如數學、科學、地理）方面的國際**研**究項目。
Thank you for participating in a pilot study of research that investigates Hong Kong students' learning content subjects (such as Mathematics, Science, and Geography).

國際間目前十分缺乏 學生在以上學習的方式和挑戰，而您的參與可以為國際研究作出重要的貢獻！
There is little research conducted to investigate how students help themselves learn content subjects taught in English and its challenges. Your participation can contribute to the current unknown area in international research.

本問卷分**為**五部分：
This questionnaire is divided into five parts
:

一、 以英文學習術科的語言挑戰 Your language challenges in content subjects
二、 以英語學習術科的自身了解 Understanding your own content subject learning
三、 **生字測試** Vocabulary Test
四、 您的背景 Your background

您可以以 中文 或 英文 回答所有問題（請選擇最能表達您自己的語言）。
You can answer in either *CHINESE* or *ENGLISH* (Choose the language that you can best expressyourself).

*** 重要 Important ***
請您在開始前，準備**計時工具**（手機 / 電腦等），以作計算在每部分所需時間。
Please prepare **a timer** before you start to calculate how much time you need in

完成問卷後，你可以選擇在七月獲得：牛津大學記念品（價值港幣 100 元） / 哈利波特周邊（價值港幣 100 元） / 書券（價港幣 50 元 ）（三選一）。
After finishing the questionnaire, you can choose an Oxford University souvenir (worth HKD$100)/ a Harry Potter souvenir (worth HKD$100) / a book coupon (worth HKD$50).

如有任何疑問，請聯絡研究員 羅詠達先生（+852 5613 6477）。

If you have any questions or concerns, please do not hesitate to contact the researcher Mr Alfred Lo (+852 5613 6477).

您的背景 Your background

學校 School：_____

年齡 Age： _____

性別 Gender: _____

年級 Year: _____

您的平均成績 Your results：

中文科Chinese： 英文科English： 數學科Mathematics:
科學科Science：

您目前有接受私人補習嗎？如有，有哪些科目需要補習呢？
Have you received private tutoring? If yes, which subject are you receiving?
（請在合適的空格中打 x）(please give a "x")

中文科 Chinese：（ ）
英文科 English：（ ）
數學科 Mathematics：（ ）
科學科 Science：（ ）
全科 All: ( )
沒有 No ：

您在課後，平均的學習時間有多少？
How many hours do you usually spend on studying after school?
小時 Hours

Remarks:

- Please note that this questionnaire was placed after the completion of the CLIL Language Challenges Scale and CLIL Self-Regulation Inventory.

- After the pilot study, the items including parents' occupation and monthly household income were removed in alignment with the schools' regulation in protecting students' privacy and in the consideration of being highly sensitive.

Appendix 2. *CLIL Language Challenges Scale*

您在用英文學習術科的語言挑戰 Your language challenges in learning content subjects

請回想一下您在術科學習時的情況（如以英文學習數學），並在每句合適的空格中打 "X"。
Please try to rethink your own learning when learning content subjects in English (e.g. learning Mathematics in English), and put a "X" in the appropriate box for each sentence that best describes you.

	1 Very difficult 非常難	2 Difficult 難	3 Neutral 中等	4 Easy 簡單	5 Very Easy 非常簡單
Planning written English assignments of content subjects 安排好自己要寫英文的功課					
Expressing ideas in correct English in content subjects 寫術科功課時，能用正確的英文表達自己想法					
Revising written work in English of in content subject assignments 改正自己要用英文寫的術科功課					
Expressing ideas clearly and logically in content subject assignments 寫術科功課時，清晰、合乎邏輯地表達想法					
Linking sentences smoothly in content subject assignments 寫術科功課時，流暢地連接不同的句子					
Understanding specific vocabulary in content subjects 明白術科的特定單詞					
Working out the meaning of difficult words in content subjects 找出術科困難單詞的意思					
Reading carefully to understand a text of content subjects 仔細閱讀以理解術科文章					
Reading quickly to find specific information in a text of context subjects 快速閱讀以找到術科文章中具體信息					
Identifying the key ideas of a text of content subjects 找出術科文章的關鍵信息					
Understanding the organisation of a text of content subjects 了解術科文章的組織結構					
Speaking accurately (grammar) in English in content classes 在上術科課時，說英文文法能準確					
Speaking clearly (pronunciation) in English in content classes					

在上術科課時，說英文發音清晰					
Presenting information/ ideas in English in content classes 在上術科課時，用英文展示信息/想法					
Participating actively in discussion in content classes 在上術科課時，用英文積極參與討論					
Communicating ideas fluently in English 在上術科課時，用英文流利地交流想法					
Asking questions in English in content classes 在上術科課時，以英文提問問題					
Answering questions in English 在上術科課時，以英文回答問題					
Communicating ideas confidently with teachers and classmates in English in content classes 在上術科課時，用英文自信地和同學老師交流想法					
Understanding the main ideas told by teachers in English in content classes 在上術科課時，聽懂術科老師用英文說的重點					
Understanding key vocabulary in content classes 在上術科課時，聽懂科課上的關鍵單詞					
Taking brief, clear notes in content classes 在上術科課時，做簡短、清晰的筆記					
Understanding teacher(s)' accents in content classes 在上術科課時，聽懂老師的口音					
Following the pace of a discussion in content classes 在上術科課時，能跟隨課上的討論節奏					
Identifying different views and ideas in content classes 在上術科課時，能分辨出老師和同學不同的觀點和想法					
Understanding teachers' and classmates' questions in content classes 在上術科課時，理解課上老師和同學的問題					

Appendix 3. *CLIL Self-Regulation Inventory*

以英語學習術科的自身了解 Understanding your own content subject learning

請回想一下您在術科學習時的情況（如以英文學習數學），並在每句合適的空格中打 “X”。
Please try to rethink your own learning when learning content subjects in English (e.g. learning Mathematics in English), and put a “X” in the appropriate box for each sentence.

	Not Accurate at all 完全不準確	Slightly accurate 稍微準確	Moderatel yaccurate 中等準確	Very accurate 非常準確	Extremely accurate 完全準確
我安排好時間，以最佳實現我設立給術科的學習目標。 I organize my time to best accomplish my goals for content subject learning.					
當我在完成術科的任務前，我會仔細閱讀好指示／指引 I read instructions carefully before I begin a task in the content subject learning.					
在解答術科問題之前，我先刪除問題中不需要的內容。 Before solving a content subject problem, I eliminate information in the problem that I do not need.					
在解答術科問題之前，我會考慮不同方法，然後選擇最好的一個。 Before solving a content subject question, I think about what a several ways to solve a problem and solve the best one.					
在解答術科的問題之前，我會先計劃好。 Before I start solving a content subject problem, I plan out how I am going to solve it.					
在解決術科的問題時，我會問自己 “我現在做得如何” 的問題。 While learning content subjects, I					

ask myself questions about “how well I am doing.”					
在解決內容主題問題時，我會問自己是否達到了我的目標。 While learning content subjects, I ask myself if I am meeting my goals.					
在回答術科問題之前，我會考慮好幾個的替代方法。 I consider several alternatives to a content subject problem before I answer.					
我問自己在解決術科的問題時，是否考慮了所有選擇。 I ask myself if I have considered all options when solving a problem.					
我發現自己在學習術科時，會分析我用的策略的有用性。 I find myself analyzing the usefulness of strategies while I study content subjects.					
我發現自己會經常停下來，檢查自己的對目前術科的理解。 I find myself pausing regularly to check my comprehension of content subjects					
完成術科的問題後，我仔細檢查了我的答案。 After solving a content subject problem, I double check my answer.					
在完成術科的任務後，我會問自己有沒有更容易的方法去做。 I ask myself if there was an easier way to do things after I finish a task in content subjects.					
我會在學習完術科後，總結一下自己的學習成果。 I summarize what I’ve learned in content subjects after I finish.					

我會在完成複習術科後問自己是否已經達到自己的目標。 I ask myself how well I accomplish my goals once I'm finished learning content subjects.					
在回答完術科的問題後，我會回頭看我的步驟是否正確。 After solving a content subject problem, I look back to see if I did the correct procedures.					
我相信我會在術科中獲得優異的成績。 I believe I will receive an excellent grade in content subject classes.					
我有信心我能理解術科中的基本概念。 I'm confident I can understand the basic concepts taught in content subjects.					
我有信心我能理解術科中最複雜的概念。 I'm confident I can understand the most complex concepts in content subject classes.					
我相信我可以在術科的作業和測驗上做得很好。 I'm confident I can do an excellent job on the assignments and tests in content subjectlearning.					
我確信我可以掌握術科中教授的技能。 I'm certain I can master the skills being taught in content subject classes.					
考慮到內容科目的難度、老師和我的能力，我想我會在班上做得很好。 Considering the difficulty of content subjects, the teacher, and my ability, I think I will do wellin the class.					

Appendix 4. *Scenario-based Self-Regulatory Assessment*

情景題 Scenario

在這個部分，您將遇到與您的學習（可能會發生）的場景。
仔細閱讀情景並回答下列問題。
In this section, you will encounter a scenario (descriptions of what could possibly happen) related toyour learning.Read the scenario carefully and answer the questions that follow.

您取回期末術科的結果（例如科學科）。你在這次考試只考得 50 分。
直到學年結束還有兩個學期，在每個學期結束時，您將再次參加類似的考試。
You received your end-of-term content subject test results (e.g. Science). You scored 50% on this test.There are two more terms to go until the end of the academic year, and at the end of each term you will take a similar test again.

請用中文/英文回答。
Please answer in Chinese or English.

學習前 Before study

1. 在學習之前，你會為自己設定什麼學習目標？
   What learning goals will you set for yourself before studying?

2. 您為什麼設定這些？
   Why do you make these?

3. 您期望達到什麼樣的結果？
   What kind of outcome(s) do you expect to achieve?

4. 制定明確的計劃後，您是否期望自己會取得成功？
   Do you expect yourself to be successful after making clear plans to study?

學習中 While Studying

1. 您以前遇到過這種情況嗎？那是什麼時候？
   Have you encountered this situation before? When was it?

如果答案是有遇過，請**圈出**以下適當的一項。
If the answer is yes (that is, you encountered this situation or something like it before), and if you did not have help from a teacher, choose the appropriate one below.

a. 我有意識地嘗試在這種情況下管理我的學習，並且成功了。
I consciously tried to manage my learning in this situation, and it was successful.

b. 在這種情況下，我有意識地嘗試管理我的學習，但沒有成功。
I consciously tried to manage my learning in this situation, but it was not successful.

c. 我對自己在這種情況下的學習沒有足夠的意識，因此無法管理我的學習。
I was not conscious enough of my learning in the situation and therefore could not manage my learning.

2. 如果您遇到英文的語言困難，您會怎麼做？
If you encounter language difficulties in English, what will you do?

3. 如果您在理解術科中的概念時遇到困難，您會怎麼做？
If you encounter difficulties understanding the concepts in the content subjects, what will you do?

學習後 After studying

1. 在計劃和管理自己的學習後，您對自己的體驗有何感想？
How do you feel about your experience after planning and monitoring your own learning?

2. 您想做什麼（改變）來改善你未來的術科學習？
What would you like to do (change) to improve your content subject learning?

Appendix 5. *Academic Vocabulary Test (adopted from Schmitt, Schmitt, & Clapham, 2001)*

單詞小測試 Vocabulary Levels Test

請在空格中選擇合適的答案。Please match with the correct answer for each box.

1. area			1. debate		
2. contract	☐	written agreement	2. exposure	☐	plan
3. definition	☐	way of doing something	3. integration	☐	choice
4. evidence	☐	reason for believing something is or is not true	4. option	☐	joining something into a whole
5. method			5. scheme		
6. role			6. stability		

1. access			1. accumulation		
2. gender	☐	male or female	2. edition	☐	collecting things over time
3. implementation	☐	study of the mind	3. guarantee	☐	promise to repair a broken product
4. license	☐	entrance or way in	4. media	☐	feeling a strong reason or need to do something
5. orientation			5. motivation		
6. psychology			6. phenomenon		

1. adult			1. alter		
2. exploitation	☐	end	2. coincide	☐	change
3. infrastructure	☐	machine used to move people or goods	3. deny	☐	say something is not true
4. schedule	☐	list of things to do at certain times	4. devote	☐	describe clearly and exactly
5. termination			5. release		
6. vehicle			6. specify		

1. correspond			1. bond		
2. diminish	☐	keep	2. channel	☐	make smaller
3. emerge	☐	match or be in agreement with	3. estimate	☐	guess the number or size of something
4. highlight	☐	give special attention to something	4. identify	☐	recognizing and naming a person or thing
5. invoke			5. mediate		
6. retain			6. minimize		

1. explicit			1. abstract		
2. final	☐	last	2. adjacent	☐	next to
3. negative	☐	stiff	3. controversial	☐	added to
4. professional	☐	meaning 'no' or 'not'	4. global	☐	concerning the whole world
5. rigid			5. neutral		
6. sole			6. supplementary		

Score: _____/30

Appendix 6. *Self-Regulation Interview Guide (Semi-structured Interview)*

英國牛津大學 The University of Oxford

Self-Regulation Interview Guide

Forethought Phase

- ◊ [Goal Setting] What expectations or goals, if any, will you set for yourself before studying CLIL?
- ◊ [Strategic Planning] What plans, if any, will you make for achieving the expectations (goals)?

Monitoring/Performance Phase

- ◊ What will you do when you encounter some difficulties or problems of content and language in your learning?
- ◊ How did you feel about your attention while learning CLIL?

Self-reflection Phase

- ◊ [Self-judgement] How did you feel/think about your experience after studying CLIL?
- ◊ [Self-reaction] What actions would you like to do (change) after planning, monitoring and reflecting on your learning?

Appendix 7. *Oxford University Central University Research Ethics Committee (CUREC) Form*

CUREC

Liam Gearon <liam.gearon@education.ox.ac.uk>
Fri 11/03/2022 14:18

To: alfred.lo@education.ox.ac.uk <alfred.lo@education.ox.ac.uk>

Cc: Heath Rose <heath.rose@education.ox.ac.uk>;Student CUREC <student.curec@education.ox.ac.uk>

Dear Alfred

Self-regulation in the face of Content and Language Integrated Learning: How can students cope with the intertwining linguistics and cognitive demands in secondary education? [CIA-22HT-027]

The above application has been considered on behalf of the Departmental Research Ethics Committee (DREC) in accordance with the procedures laid down by the University for ethical approval of all research involving human participants.

Our prior discussion on this was very useful – an impressive team as ever, and project, vastly experienced, and a model of genuine care in relation to research ethics.

I am pleased to inform you, then, that, on the basis of the information provided to DREC, the proposed research has been judged as meeting appropriate ethical standards, and accordingly, approval has been granted.

Please continue to follow all current guidance issued by CUREC during the pandemic, notably COVID-19: CUREC guidance on research involving human participants, https://researchsupport.admin.ox.ac.uk/governance/ethics/coronavirus

If relevant please also check the CUREC website for their best practice research guides, these can be very useful in refining the writing up of ethical considerations in your research – see https://researchsupport.admin.ox.ac.uk/governance/ethics/resources/bpg

Good luck with your research study,

Keep well and safe,

Yours sincerely,

All good wishes,

Liam

Chair, DREC

Liam Francis Gearon, PhD, FHEA, FRSA, Docent

Senior Research Fellow, Harris Manchester College, University of Oxford
Associate Professor, Department of Education, University of Oxford
Conjoint Full Professor, Newcastle University, Australia
Docent, University of Helsinki, Finland
Extraordinary Professor, North-West University, South Africa
Visiting Professor, Irish Institute for Catholic Studies, MIC, Limerick, Ireland
Honorary Senior Research Fellow, School of Education, University of Birmingham

Appendix 8. *Information Sheet for Schools*

英國牛津大學 教育學院
羅詠達 先生
英國牛津大學 教育學院
應用語言學及第二語言習得
理學碩士 候選人
(+852) 5613 6477
alfred.lo@education.ox.ac.uk

英國牛津大學 研究項目
【語言和內容整合式學習：香港學生自主學習模式及挑戰】

[倫理審批編號：CIA-22HT-027]

尊敬的校長及英文科科主任：

本人是羅詠達，就讀於英國牛津大學，主修應用語言學及第二語言習得的碩士課程。本人正在探究香港學生在銜接到中學後，語言和內容整合式學習（CLIL）的自主學習模式及挑戰。本項目是由牛津大學教育學院副教授兼牛津英語教學媒介語（EMI）研究小組統籌總監 Heath Rose 博士指導。

研究目的

本研究之對象為正在接受語言和內容整合式學習（CLIL）教學之初中學生，即以英文學習術科。通過參與這項研究，貴校將有助於為國際教育界研究香港學生在語言和內容整合式學習中的自主學習策略及挑戰，並為國內外地區推廣跨學科語言提供重要參考。

研究步驟

（1） 在不影響正常教學前提下，讓初中學生在課上（如 iPad 或電腦）/家中完成匿名在線問卷（如學校打印供家長／監護人和學生參考的通告－見附件，及給予各初中學生一份）

（2） 在徵得家長和學生同意的情況下，部分學生會被邀請參加使用 Microsoft Teams 的線上訪談和小組討論，並了解更多關於他們對跨學科語言學習的看法。
我們會為對話錄音，以便準確記錄學生的想法。學生答案將被轉錄為文字作分析用途。學生所有信息會絕對保密，錄音內容會儲存在牛津大學的保安伺服器中，並不會被公佈。

研究數據

牛津大學對教師和學生進行倫理研究方面有嚴格的倫理程序，需符合當前英國教育研究協會的指導方針。在開始研究之前，本人會告知家長／監護人有關研究的情況，並為學生和家長／監護人提供拒絕參與的機會。在整個研究過程中，學生家長／監護人可以隨時拒絕參與。

所有參與者，包括學生、教師和學校，將在所有研究報告中匿名。收集的數據將嚴格保密，僅供本人導師和本人使用，未經所有相關人員的進一步同意，不得在未指定的情況下使用。所有錄音將保存在加密文檔中，並在研究結束時銷毀。

研究結果

本研究項目預計在八月中完成，並可能放置在牛津大學學術庫及在國際期刊中發表。

參與者及學校得益

學生（匿名問卷）：

（1）反思自己目前的學習成效並作出改善

（2）自動獲得抽獎機會，共會抽出 5 位學生獲得（三選一）

- 牛津大學紀念品乙份（價值港幣 100 元）
- 哈利波特周邊禮品（如書本、文具，價值港幣 100 元）

- 商務印書館書卷（價值港幣 100 元）
- 神秘禮品（即英文書籍）（價值港幣 100 元）

學生（自願參與訪談）：

（1）三選一：

- 牛津大學紀念品乙份（價值港幣 100 元）
- 哈利波特周邊禮品（如書本、文具，價值港幣 100 元）
- 商務印書館書卷（價值港幣 100 元）
- 神秘禮品（即英文書籍）（價值港幣 100 元）

參與學校

為幫助參與學校優化目前的的教學效能，可提供：

（1）本項目結果之概要

（2）（若參與人數有 3 班／約 50 人以上）將提供專屬貴校：

- 跨學科學習(LaC)學習效能之分析報告
- 針對貴校學生，提供以文獻支持的跨學科語言的教與學建議

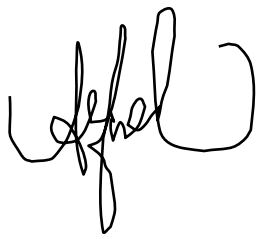
（3）其他按學校需求

若貴校同意參加這項研究，或者您需要有關所涉及內容的更多信息，請與本人 羅詠達（+852 5613 6477，alfredloresearch@gmail.com）或 導師 Heath Rose 博士（+44 1865 274 033）聯繫。

若貴校有意參加研究項目，煩請填寫附上之回執，本人將不勝感激！

敬祝

教安！



羅詠達 謹上

二零二二年五月二十四日

本規定英文譯本與中文原文不一致時，以英文文本為準。

DEPARTMENT OF EDUCATION
THE UNIVERSITY OF OXFORD
Mr Weng Tat (Alfred) Lo
Master of Science candidate
Applied Linguistics and Second Language Acquisition
Department of Education, University of Oxford
Tel: +852 5613 6477
alfred.lo@education.ox.ac.uk

The University of Oxford
Department of Education
Research Project
Content and Language Integrated Learning in Hong Kong: Students' Self-regulation and Challenges

(Ethics Approval Reference: CIA-22HT-027)

Dear Principal and English panel chairperson,

I am Alfred Lo, a Master of Science student studying Applied Linguistics and Second Language Acquisition at the Department of Education, the University of Oxford. I am exploring how Hong Kong secondary school students self-regulate their Content and Language Integrated Learning (CLIL) and the challenges they are facing. Your school is cordially invited to take part in this study which will be conducted in May to June 2022. This research is supervised by Dr Heath Rose, the Associate Professor of the Department of Education and the Director of English Medium Instruction Research Group.

Research Aim
The research will take place with junior secondary students who are receiving CLIL in schools, in other words, students who are currently learning content subjects using English. By participating in the research, your school would be contributing to research that explore how secondary school students self-regulate their CLIL, while also providing pedagogical implications that can be applied in other educational settings.

Research Method
The commitment from the school would be to allow me asking:

(1) students to complete an online anonymous questionnaire in class (e.g. with an iPad)/ after school (e.g. providing a printed research notice). It will not affect the regular teaching and learning .
(2) With the consent from the parents and students, some students may be invited to an individual interview and a group discussion to investigate how the students learn subjects using English and the strategies they use.
For both the interviews and discussions, with your and your students' consent, we would like to audio record the conversation so that we can have an accurate record of your students' thoughts. Your students' answers will be transcribed, and the audio recordings will not be published.

Research data
Oxford University has strict ethical procedures on conducting ethical research with teachers and students, consistent with current British Educational Research Association guidelines. Before beginning the research, I would inform parents/guardians about the research and offer the students and parents/guardians the opportunity to refuse to participate. Throughout the research, students and parents/guardians will be able to refuse to participate at any time.

All participants, including students, teachers and the school, would be made anonymous in all research reports. The data collected would be kept strictly confidential, available only to my supervisor and myself and not used other than specified without the further consent of all involved being obtained. All recordings would be saved in the server at Oxford University and would be destroyed at the end of the research period, and kept in locked conditions until then. I have enclosed copies of the information for parents/guardians and students with this letter.

Research outcomes

The research is expected to be completed in Mid-August, and may be placed at the Oxford Research Archive or may be published in international journals and conferences.

Participatory Benefits

Students (Questionnaire)

(1) Understanding and reflecting on their current learning

(2) Lucky draw, 5 students will be picked and choose one gift out of the three:

- Oxford University souvenir (worth HKD $100)
- Harry Potter souvenir (worth HKD $100)
- A book coupon from the Commercial Press (worth HKD $100)
- A special gift (i.e., an English book) (worth HKD $100)

Students (Online interviews)

- Oxford University souvenir (worth HKD $100)
- Harry Potter souvenir (worth HKD $100)
- A book coupon from the Commercial Press (worth HKD $100)
- A special gift (i.e., an English book) (worth HKD $100)

Schools

- a summary of the research
- (if >3 classes or >50 students participating): a designated report will be provided to indicate the current learning efficacy of junior secondary students and pedagogical implications.

If your school would like to take part in the study, or you need more information about what is involved, please contact me or my supervisor. Whether or not you feel it would be appropriate for your school to participate, I would be grateful if you would complete the pro-forma below. Thank you for your time and attention. I look forward to hearing from you.

Yours Sincerely,



Weng Tat Alfred Lo
Master of Science Candidate in Applied Linguistics
Department of Education, the University of Oxford
Address: 15 Norham Gardens, Oxford, OX2 6PY, United Kingdom

[In the event of any discrepancy between the two aforesaid versions, the English version shall prevail.]

Appendix 9. *Information Sheets for Parents/Guardians*

DEPARTMENT OF EDUCATION
THE UNIVERSITY OF OXFORD
Mr Weng Tat (Alfred) Lo
Master of Science candidate
Applied Linguistics and Second Language Acquisition
Department of Education, University of Oxford
+852 5613 6477
alfred.lo@education.ox.ac.uk

英國牛津大學 研究項目
Research Project, University of Oxford

【語言和內容整合式學習：香港學生自主學習模式及挑戰】
"Content and Language Integrated Learning in Hong Kong: Students' Self-regulation and Challenges"

研究需知（家長/監護人）
INFORMATION SHEET FOR PARENTS/GARGUDIANS
[CIA-22HT-027]

貴子弟的學校與英國牛津大學的研究人員合作，同意參與一項研究，了解香港中學生如何安排自己以英語授課科目的自主學習。我們想邀請您的孩子參與這項研究。 我們非常希望您的孩子參與。但在做出決定之前，家長須了解為什麼要進行這項研究以及它將涉及什麼。
In partnership with researchers at the University of Oxford, your school has agreed to take part in a study investigating how secondary school students regulate their learning in subjects that are taught in English. We would like to invite your child to be part of this study. We very much hope you would like your child to take part, but before you decide, it is important that you understand why the study is being done and what it will involve.

研究目的 Research Aim:
了解在語言和內容整合式學習中，香港中學生如何自主學習和面對的挑戰。
Explore how secondary school students in Hong Kong regulate their Language across the Curriculum learning and its challenges.

研究步驟 Research Procedure：
1. 課上填寫線上問卷（10-15分鐘） Fill in an online questionnaire in class (30 minutes)
2. （自願）線上訪談 (不需鏡頭）(Voluntary) an online interview (camera not required)

研究參與 Research Participation
你可以在表格中自願選擇參與與否。參與這個研究，孩子可以更了解自己目前自主學習的強弱項，及針對性作出改善。同為感謝同學的參與，完成問卷後，同學將會自動參與抽獎。參與這項研究沒有任何潛在的風險/不利因素。
We will ask you to sign a form to say that you agree to take part (an assent form). We will give you a copy of this information sheet to keep. You are free to stop taking part at any time during the research without giving a reason, by telling the researcher. If you decide to stop, we will not use the information we have already collected from you. There are NO potential risks/ disadvantages of taking part in this research.

誰審查了這項研究？Who has reviewed the study?

在任何涉及人類的研究開始之前，必須經過研究倫理委員會的檢查，以確保研究可以繼續進行。 本研究已獲得牛津大學中央研究倫理委員會的批准（CIA-22HT-027）。

Before any research involving people can start, it has to be checked by a Research Ethics Committee to make sure that it is OK for the research to go ahead. This study has been approved by the University of Oxford Central University Research Ethics Committee.

研究結果 Results of the research

任何可以識別學生身份的研究數據（例如學號、出生日期、錄音）將在加密文件夾中儲存。只有研究人員可以獲取個人數據，並將嚴格保密。該研究會將數據匿名，並作為研究報告（論文）一部分，同時會在科學期刊上發表。

Any research data from which you can be identified (e.g. student number, date of birth, audio recording) will be stored in an encrypted folder on OneDrive Business for three years. Only the researcher has the access to the personal data and will be kept in strict confidentiality. The research will be written up as part of a research report (dissertation). We also aim to publish our findings in scientific journals.

疑問 Enquiries

如果家長／監護人擔心本研究的任何部分，請聯絡研究人員 羅詠達先生 (alfred.lo@education.ox.ac.uk) 或導師 Heath Rose 博士 (heath.rose@education.ox.ac.uk)。

Please tell us if you are worried about any part of this study, by contacting the researcher or his supervisor, Dr Heath Rose.

如果家長／監護人不滿意或投訴，並可以聯繫牛津大學研究倫理委員會主席：If you are still unhappy or wish to make a complaint, either you or your teacher/parent/guardian can contact the chair of the Research Ethics Committee at the University of Oxford:

電郵 Email: student.curec@education.ox.ac.uk;

地址 Address: Department of Education, University of Oxford, 15 Norham Gardens, Oxford

數據保護 Data Protection

牛津大學是個人數據的管理者，因此將決定您的個人數據在研究中的使用方式。大學將出於上述研究的目的處理您的個人數據。研究是我們為了公共利益而執行的一項任務。有關您對您的個人數據的權利的更多信息，請參考：https://compliance.web.ox.ac.uk/individual-rights。

The University of Oxford is the data controller with respect to your personal data and, as such, will determine how your personal data is used in the study. The University will process your personal data for the purpose of the research outlined above. Research is a task that we perform in the public interest. Further information about your rights with respect to your personal data is available from https://compliance.web.ox.ac.uk/individual-rights.

Appendix 10. *Information Sheets for Participants*

DEPARTMENT OF EDUCATION
Mr Weng Tat (Alfred) Lo
Master of Science candidate
Applied Linguistics and Second Language Acquisition
Department of Education, University of Oxford
15 Norham Gardens Oxford, OX2 6PY
United Kingdom
alfred.lo@education.ox.ac.uk

[Self-regulation in Content and Language Integrated Learning]

INFORMATION SHEET FOR YOUNG PEOPLE AGED 11 TO 15 YEARS

Ethics Approval Reference: [CIA-22HT-027]



We are inviting you to join in a research study. My name is Weng Tat Alfred Lo and we work at the University of Oxford in the Department of Education.

Before you decide if you would like to join in, it's important to understand what the study is about, why we're doing it and what it would involve for you. Please read and think about this leaflet carefully. Please feel free to talk to your family, friends, or the researchers about it if you want.

If anything isn't clear or you have more questions you can ask your parent/guardian to give us a call and we can discuss it with you and your parent/guardian.

Why are we doing this research?

We want to know how secondary school students in Hong Kong help themselves in learning subjects that are taught in English.

Why have I been invited to take part?

We are inviting you to take part because you are secondary school students, aged between 11-15 years old.

Do I have to take part?

Not at all! We will ask you to sign a form to say that you agree to take part (an assent form). We will give you a copy of this information sheet and your signed form to keep. You are free to stop taking part at any time during the research without giving a reason, by telling the researcher. If you decide to stop, we will not use the information we have already collected from you. ☺

What will happen to me if I take part?

The research only takes place in one month, with two stages and two optional stages.

You will need to complete two questionnaires in two lessons. If you take part in the study, your teacher or the researcher will explain to you before you work on any steps. You will have a chance to ask any questions regarding to the test/questionnaire. Your responsibility will be finishing the test / questionnaire, and you can complete based on your own speed. Both the test and the questionnaire will approximately take 30 minutes to be completed.

Two optional stages will be an individual interview. If you are also happy to participate in the individual interview, the researcher may invite you to join an online meeting using Microsoft Teams for 20 minutes. The interview is just to ask you more about how you learn subjects using English and the strategies you use when learning those. For the learners' conference, you may be invited to a group meeting on Microsoft Teams for 30 minutes. Your name will NOT be revealed, and you will share your thoughts of learning contents using English with students from your school and other schools. For both the interview and conference, with your consent, we would like to audio record the conversation so that we can have an accurate record of your thoughts. Your answers will be transcribed, and the audio recordings will not be published.

What happens to the results of the study?

The information you provide during the study is the research data. Any research data from which you can be identified (e.g. student number, date of birth, audio recording), is known as personal data.

Personal data will be stored in an encrypted folder on OneDrive Business for three years. Each document containing personal data will have a separate password. Only the researcher has the access to the personal data. Other research data will be stored for 3 years after publication or public release of the work of the research.

The research will be written up as part of a student's work. We also aim to publish our findings in scientific journals, but this may be two to three years from the end of the study. We will ask all participants for their permission to use direct quotes.

What are the advantages / disadvantages of taking part?

Participants completing the tests and questionnaires will receive no immediate benefit. However, you will gain an awareness of how you are using different ways to learn subjects taught in English. For participants who are invited to the interviews and Content and Language Integrated Learning (CLIL) learners' conferences on a voluntary basis, he/she will get a HKD $100 book coupon as a token. Whilst there are immediate benefits for those people participating in the interviews, it is hoped that this work will have a beneficial impact on understanding how self-regulation informs the practice of Content and Language Integrated Learning.

There are NO potential risks/ disadvantages of taking part in this research.

Will anyone else know I'm doing this?

We will keep your information private. This means we will only tell those who have a need or right to know, such as the research team and your parent/guardian. We will only share information that has your name and address removed.

What if I don't want to take part in the research anymore?

Just tell your parent/guardian and the people carrying out the research that you don't want to take part. You don't have to give a reason and no one will be annoyed with you. It is YOUR choice.

Who is organising and funding the research?

The research is organised by Mr. Weng Tat Alfred Lo of Oxford University, who is a Master of Science candidate. The study is not funded nor being paid for by any sponsorship.

Who has reviewed the study?

Before any research involving people can start, it has to be checked by a Research Ethics Committee to make sure that it is OK for the research to go ahead. This study has been approved by the University of Oxford Central University Research Ethics Committee.

What if there is a problem or something goes wrong?

Please tell us if you are worried about any part of this study, by contacting the researcher alfred.lo@education.ox.ac.uk. You may also talk to your teacher/parent/guardian who will let the researcher know. If you are still unhappy or wish to make a complaint, either you or your teacher/parent/guardian can contact the chair of the Research Ethics Committee at the University of Oxford:

Chair, **Social Sciences & Humanities Inter-Divisional Research Ethics Committee**; Email: ethics@socsci.ox.ac.uk; Address: Research Services, University of Oxford, Wellington Square, Oxford OX1 2JD

OR

Chair, **Education Departmental research Ethics Committee**, Email: student.curec@education.ox.ac.uk; Address: Department of Education, University of Oxford, 15 Norham Gardens, Oxford OX2 6PY

Data Protection

The University of Oxford is the data controller with respect to your personal data and, as such, will determine how your personal data is used in the study. The University will

process your personal data for the purpose of the research outlined above. Research is a task that we perform in the public interest.Further information about your rights with respect to your personal data is available from https://compliance.web.ox.ac.uk/individual-rights.

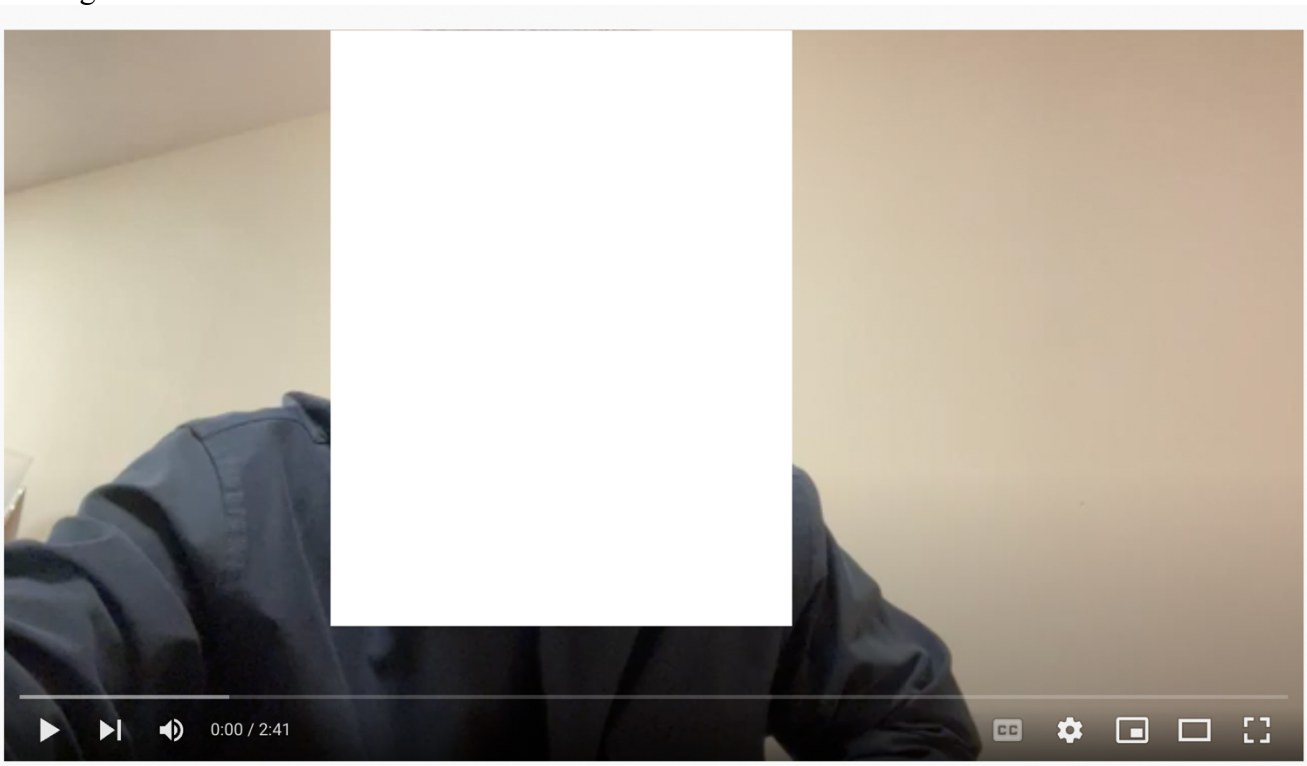
Thank you for reading this – please ask any questions if you need to.

Appendix 11. *Promotion Materials*

Remarks:
This was used for the easy distribution of questionnaire to students via poster including the QR code and relevant information.



Briefing Videos of the research



Research Briefing Video

Private

• Jun 2, 2022

0 DISLIKE SHARE CLIP SAVE ...

Appendix 12. *Consent Form for Schools*

University of Oxford
Department of Education
Research Project

"Content and Language Integrated Learning in Hong Kong: Students' self-regulated learning and Challenges"

_____School
Principal and English Panel Chairperson

☐ We do not wish to participate in this project.

☐ We would like to find out more about this project.

☐ We would like to take part in this project.

If you would like further information, or are interested in taking part, please give the name of a contact person for your school, and details of the best way to contact him or her.

Contact name: _____

Contact email: _____

Contact telephone number: _____

Thank you for your help!

Appendix 13. *Consent Form for Parents*



"Content and Language Integrated Learning in Hong Kong: Students' Self-regulation and Challenges"

[CIA-22HT-027]

PARENT/GUARDIAN CONSENT FORM

- Your child's school has agreed to take part in a study run by Oxford University looking at how secondary school students regulate their content and language integrated learning.
- If your child takes part, they will complete a test and a questionnaire. They may also take part in an individual interview and a group sharing to talk about how they learn it.
- If you are happy for your child to take part, please fill in the form below and return it to your child's class teacher as soon as possible.
- To find out more about the study, please read the attached information sheet. You can also e-mail us at alfred.lo@education.ox.ac.uk if you have any questions.

- -

Name of child: _____ _____
Forename Surname

I have read and understood the details of the above study, and have had the opportunity to ask questions and discuss the study with others. I have received satisfactory answers to my questions. I understand that the project has received ethics clearance through the University of Oxford's ethical approval process for research involving human participants, and I understand who will have access to the data, how it will be stored and what will happen to the data at the end of the study. I understand that participation is voluntary and that my child and I are free to withdraw at any time, without giving any reason and without my child's education being affected in any way. I understand how to raise a concern or make a complaint.

If my child takes part in the online interview,

I agree for my child to be audio recorded (no camera required)	Yes	☐	No	☐
I agree for the work of my child to be scanned (no name indicated)	Yes	☐	No	☐
I understand how audio recordings will be used in research outputs	Yes	☐	No	☐

I give permission for my child to take part in the above study.

Name of parent/guardian: _____

Signature: _____ **Date:** _____

Name of researcher: Mr Alfred Weng Tat Lo

If you would like to receive an annual newsletter summarising our research, please fill in your email address:

_____

Appendix 14. *Consent Form for Teachers*



"Content and Language Integrated Learning in Hong Kong: Students' Self-regulation and Challenges"

[CIA-22HT-027]

CONSENT FORM FOR TEACHERS

		Please initial each box
1	I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	☐
2	I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and without any adverse consequences or penalty.	☐
3	I understand that research data collected during the study may be looked at by authorised people outside the research team. I give permission for these individuals to access my data.	☐
4	I understand that this project has been reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee.	☐
5	I understand who will have access to personal data provided, how the data will be stored and what will happen to the data at the end of the project.	☐
6	I understand how this research may be written up and published.	☐
7	I understand how to raise a concern or make a complaint.	☐
8	I understand that researchers will observe lessons and other aspects of my teaching, as detailed on the information sheet, and discussed and agreed with the researchers.	☐
9	I understand how audio recordings / videos / photos will be used in research outputs.	☐
10	I agree to take part in the study	☐

_____	dd / mm / yyyy	_____
Name of the teacher taking consent	Date	Signature

Appendix 15. *Consent Form for Participants*

University of Oxford

"Content and Language Integrated Learning in Hong Kong: Students' Self-regulation and Challenges"
[CIA-22HT-027]

ASSENT FORM FOR CHILDREN UNDER 16

Please circle all you agree with:

- Has somebody else explained this project to you? Yes/No
- Do you understand what this project is about? Yes/No
- Have you asked all the questions you want? Yes/No
- Have you had your questions answered in a way you understand? Yes/No
- Do you understand it's OK to stop taking part at any time? Yes/No
- Are you happy to take part? Yes/No
- Are you happy for your voice to be recorded? Yes/No
- Are you happy to have your work taken? Yes/No

If <u>any</u> answers are "no" or you don't want to take part, that's OK! No one will be cross with you.

If you <u>do</u> want to take part, please write your name below.

Your name _____

Date _____

The researcher who explained this project to you needs to sign too:

Print Name Weng Tat Alfred Lo

Sign _____

Date _____

Thank you!

Appendix 16. *Opt-out Form*



University of Oxford

Self-regulation in Content and Language Integrated Learning

OPT-OUT FORM

If you **DO NOT** want your child to participate in the above-named research study please fill out the form below and return it to the school by 01 May 2022.

If we do not receive an opt-out form from you by this date, your child may be invited to take part in this study, as described in the accompanying information sheet.

I, the undersigned, hereby DO NOT give permission for my child to take part in the study titled Self-regulation in Content and Language Integrated Learning.

Name of child: _____

Name of parent/guardian: _____

Signature: _____ Date: _____

Name of researcher: _____

Appendix 17. *Confidential Agreement (Research Assistant)*

DEPARTMENT OF EDUCATION
15 Norham Gardens, Oxford, OX2 6PY

Mr Weng Tat (Alfred) Lo
Master of Science candidate
Applied Linguistics and Second Language Acquisition
Department of Education
University of Oxford
15 Norham Gardens
Oxford, OX2 6PY
United Kingdom
Tel: +44 (0) 1865 274024
alfred.lo@education.ox.ac.uk

I, _____, being appointed a Research Assistant for the purposes of a research project in Hong Kong, China "The Craze and Crack of Content and Language Integrated Learning in Hong Kong: The role of Self-Regulation in Secondary Education" (the "Research Project") on behalf of the University of Oxford (the "University") agree:

(1) that all information (whether or not recorded in documentary form, or stored on any magnetic or optical disk or memory) about the Research Project including and in particular personal information regarding the participants of the Research Project coming into my possession or of which I am made aware in the course of my involvement in the Research Project will remain confidential ("Confidential Information").

(2) not to disclose any Confidential Information to any person, company or other organisation whatsoever at any time other than to the Responsible Researcher named below or persons nominated in writing by this Researcher, and to use my best endeavours to prevent the publication of or disclosure of any Confidential Information. that I shall only use the Confidential Information for the purposes of conducting research activity for the Research Project and not for any other purpose.

(3) that all the documents and recordings (including but not limited to forms, notes, voice recordings and electronic documents) regarding the Research Project given to me for the duration of the Research Project will remain the property of the University and that I will handle with care and protect all such documents and recordings.

(4) at the conclusion of the Research Project or on termination of my appointment, whichever is earlier, to return all documents and recordings provided to me or produced by me for the purposes of discharging my duties as a Research Assistant during the Research Project to the University, and to delete irretrievably any Confidential Information (including any copies) stored on any magnetic or optical disk or memory, including personal computer networks, personal e-mail

accounts or personal accounts on websites, and all matter derived from such sources which is in my possession or under my control outside of the University's premises

(5) Inform the Responsible Researcher immediately if I become aware or suspect that any Confidential Information has been disclosed to any person, company or organisation other than the Responsible Researcher or any person nominated in writing to receive that Confidential Information by the Responsible Researcher.

Responsible Researcher: **Weng Tat Alfred Lo**

Signed as a deed on [DATE] by

[_____] ……
[signature of party]

in the presence of:

……
[signature of witness]

Name: _____
Address: _____
Occupation: _____

Appendix 18. *CLIL Language Challenges Scale: Explanatory Factor Analysis (EFA) and Confirmation Factor Analysis (CFA)*

Remarks:

Explanatory Factor Analysis

- Explanatory Factor Analysis includes analysis of realiability and validity, which is the first step of measuring a questionnaire instrument.
- *Reliability* refers to the stability and consistency of questionnaire results when the same method is used to investigate the same object. Founded by Cronbach in 1951, it is the most commonly used reliability analysis method in social science research. Dörnyei (2007) notes that a well-developed scale with a high reliability ought to be .80. For short scales (e.g., 3-4 items), the reliability coefficients ought to be in excess of .70. If the values do not reach .60, the reliability should be interpreted with caution.
- *Validity* is to measure whether the comprehensive evaluation system can accurately reflect the evaluation purpose and requirements. A commonly used method for analysing questionnaire validity is construct validity. Construct validity refers to the degree of correspondence between a certain structure reflected in the measurement results and the measured value. In construct validity, the KMO value is first analysed: Kaiser and Rice (1974) provide explicit guideline on the interpretation of KMO value: if values are below .50s, the validity is unacceptable. If values are in the .50s, the validity is miserable. If values are in the .60s, the validity is mediocre. If the values are in the .70s, the validity is middling. If the values are in the .80s, the validity is meritorious. If the values are in the .90s, the validity is marvelous. Subsequently, researchers should analyse the correspondence between the items and the factors: if the correspondence is related to the expectations of the research, meaning an excellent validity.

Reliability Analysis

Reliability analysis was carried out on the received questionnaires, and the results showed that the overall Cronbach's Alpha value of the questionnaire was 0974, which was greater than .8, indicating that the reliability of the questionnaire was high. Among them, in each variable, the Cronbach's Alpha values of writing, reading, speaking, and listening are .886, .921, .941, and .923, respectively, all of which are greater than .8; indicating that the reliability is high, which indicates that the reliability of this study is up to the standard, and further analysis can be carried out.

CLIL Language Challenges Scale

Variables	Cronbach's Alpha	N of Items
writing	0.886	5
reading	0.921	6
speaking	0.941	8
listening	0.923	8
Variables	0.974	27

Validity Analysis

By conducting KMO and Bartlett tests on the returned questionnaires, it can be seen from the table below that kmo=0.954 is greater than 0.8, indicating high validity; the approximate chi-square value of the Bartlett sphericity test is 3503.183. In degrees of freedom (df), nder the condition of 167, the significance probability (s) is 0.000, indicating that the questionnaire has good validity and can be further analysed.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.954
Bartlett's Test of Sphericity	Approx. Chi-Square	3503.183
	df	167
	Sig.	0.000

By using the principal component analysis method to extract factors and the maximum variance method to estimate the load of the factors. Factor analysis was performed, and a total of 4 main factors were extracted, namely writing, reading, speaking, listening. The 4 factors were divided in equivalence to our pre-divided ones. The factor loading coefficients after rotation are all greater than 0.5, thus indicating good construct validity.

Rotated Component Matrix

	Component			
	1	2	3	4
q1				0.806
q2				0.576
q3				0.749
q4				0.549
q5				0.572
q6		0.516		
q7		0.691		
q8		0.587		
q9		0.611		
q10		0.503		
q11		0.659		
q12			0.576	
q13			0.776	
q14			0.514	
q15			0.77	
q16			0.588	
q17	0.814			
q18	0.666			
q19	0.746			
q20	0.733			
q21	0.706			
q22	0.755			

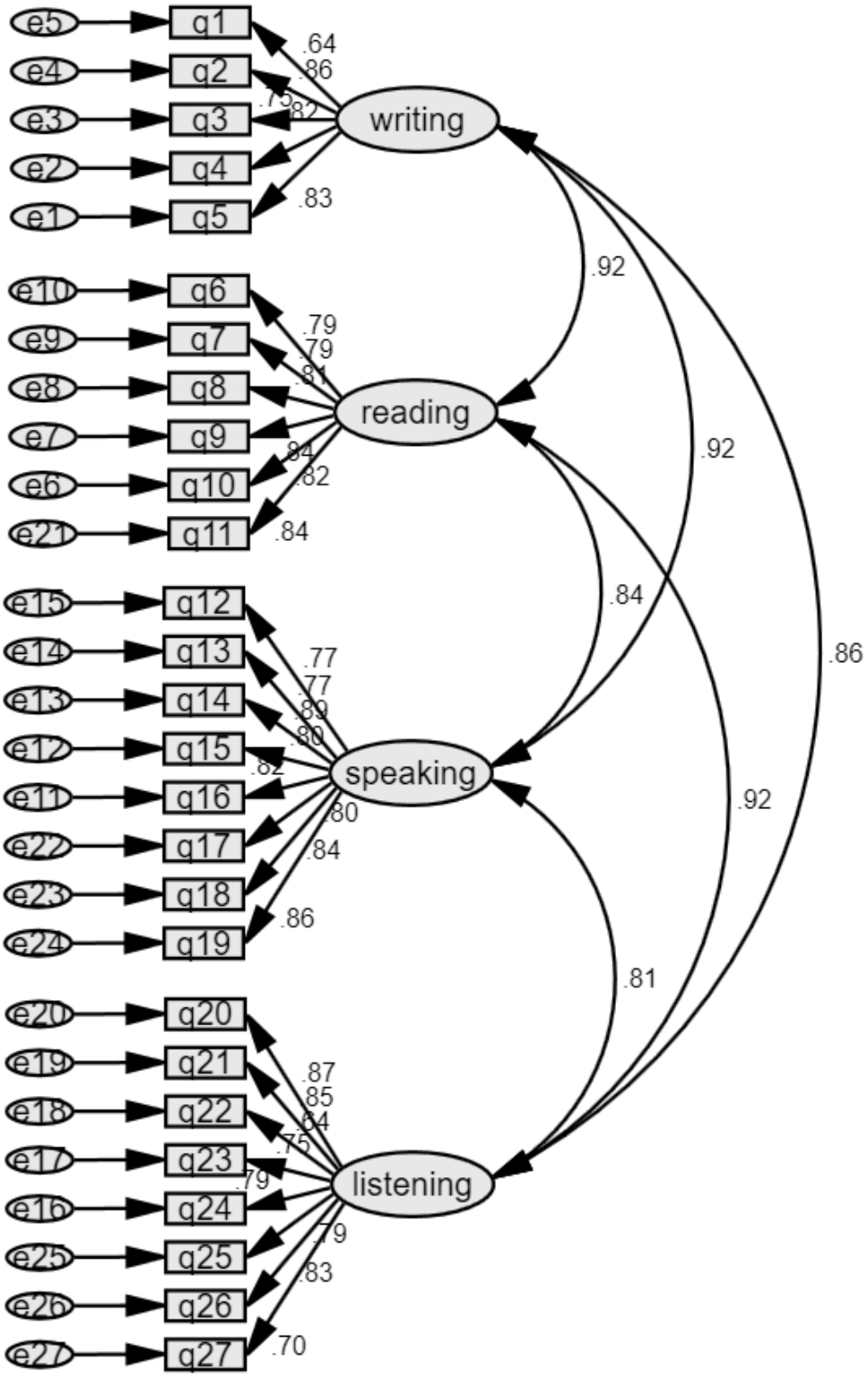
Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Confirmation Factor Analysis

- Structural Equation Structural Equation Modeling (SEM) is to use certain statistical methods to process complex theoretical models, and to properly evaluate the theoretical model according to the consistency of the relationship between the model and the data, so as to achieve the purpose of confirming or falsifying the researcher's prior theoretical hypothesis. There are many measures of the overall fit of the model, including absolute index and relative index.
- *Absolute Index* mainly compares the observed and expected variance and covariance. The indices including Chi-square p value (CMIN), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), and Root Mean Squared Approximation Error (RMSEA).
- *Relative Index* is to compare the relative fit of one model with another model. Commonly used indices include Comparative fit index (CFI), Normed fit index (NFI), Non-normed fit index (NNFI). Generally speaking, as long as there are 3 fitting indices above .9, it means that the questionnaire fitting indices are acceptable, and the fitting degree also meets the requirement.

It can be seen from the table that the model fitting index data all meet the requirements. Among them, CMIN/DF=2.039<5, RMSEA=0.072<0.08; GFI=0.865, AGFI=0.844, NFI=0.908, CFI=0.916, IFI=0.917 are all greater than 0.9, indicating that the model fit is excellent. Therefore, on the whole, the fitting index of this questionnaire is ideal with an excellent fitting degree.

Model fitness indexes	Suggested rate		Final Model
	Acceptable	Good	
CMIN/DF	<5.00	<3	2.039
RMESA	<0.08	<0.05	0.072
GFI	[0.7, 0.9]	>0.9	0.865
AGFI	[0.7, 0.9]	>0.9	0.844
TLI	[0.7, 0.9]	>0.9	0.908
CFI	[0.7, 0.9]	>0.9	0.916
IFI	[0.7, 0.9]	>0.9	0.917


e5
e4
e3
e2
e1
q1
q2
q3
q4
q5
.64
.86
.75
.82
.83
writing
e10
e9
e8
e7
e6
e21
q6
q7
q8
q9
q10
q11
.79
.79
.81
.84
.82
.84
reading
e15
e14
e13
e12
e11
e22
e23
e24
q12
q13
q14
q15
q16
q17
q18
q19
.77
.77
.89
.80
.82
.80
.84
.86
speaking
e20
e19
e18
e17
e16
e25
e26
e27
q20
q21
q22
q23
q24
q25
q26
q27
.87
.85
.64
.75
.79
.79
.83
.70
listening
.92
.92
.84
.86
.92
.81

Appendix 19. *CLIL Self-Regulation Inventory: Explanatory Factor Analysis (EFA) and Confirmation Factor Analysis (CFA)*

Reliability Analysis

Reliability analysis was carried out on the received questionnaires, and the results showed that the overall Cronbach's Alpha value of the questionnaire was .972, which was greater than 0.8, indicating that the reliability of the questionnaire was high. Among them, in each variable, the Cronbach's Alpha values of writing, reading, speaking, and listening are .884, .933, .89, .936, respectively, all of which are greater than 0.8; indicating that the reliability is high, which indicates that the reliability of this study is up to the standard, and further analysis can be carried out.

Variables	Cronbach's Alpha	N of Items
planning	0.884	5
Monitoring	0.933	6
Reflection	0.89	5
motivation	0.936	6
Total	0.972	22

Validity Analysis

By conducting KMO and Bartlett tests on the returned questionnaires, it can be seen from the table below that kmo=0.96 is greater than 0.8, indicating high validity; the approximate chi-square value of the Bartlett sphericity test is 4052.059. In degrees of freedom (df), nder the condition of 167, the significance probability (s) is 0.000, indicating that the questionnaire has good validity and can be further analysed.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.960
Bartlett's Test of Sphericity	Approx. Chi-Square	4052.059
	df	351
	Sig.	0.000

By using the principal component analysis method to extract factors and the maximum variance method to estimate the load of the factors. Factor analysis was performed, and a total of 4 main factors were extracted, namely planning, monitoring, reflection, and motivation. The 4 factors were divided in equivalence to our pre-divided ones. The factor loading coefficients after rotation are all greater than 0.5, thus indicating good construct validity.

Rotated Component Matrix

	Component			
	1	2	3	4
q1				0.726
q2				0.688
q3				0.548
q4				0.594

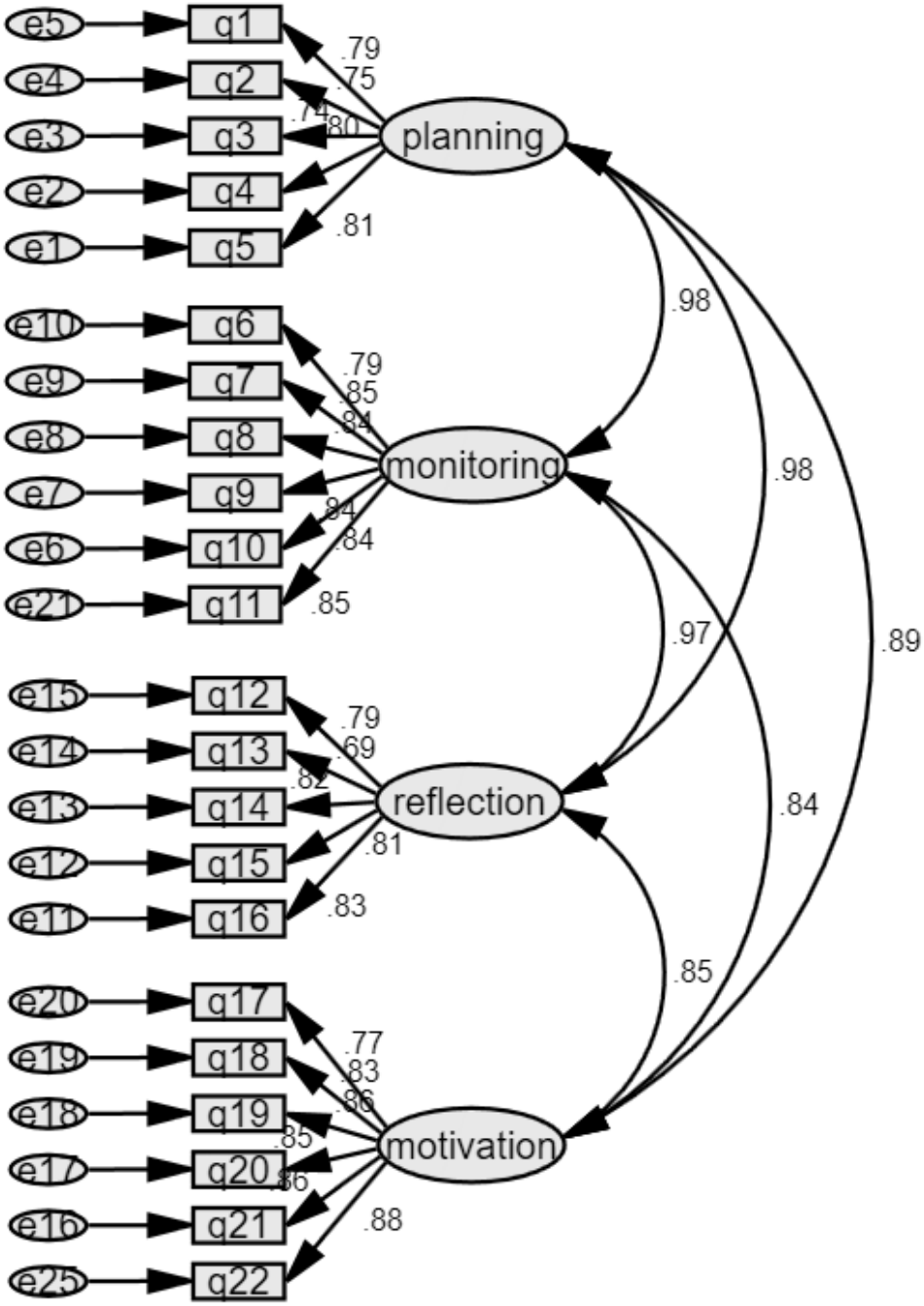
q5				0.537
q6			0.454	
q7			0.721	
q8			0.64	
q9			0.656	
q10			0.665	
q11			0.726	
q12		0.703		
q13		0.604		
q14		0.801		
q15		0.653		
q16		0.757		
q17		0.707		
q18		0.703		
q19		0.763		
q20	0.695			
q21	0.651			
q22	0.733			
q23	0.563			
q24	0.561			
q25	0.574			
q26	0.695			
q27	0.714			

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 9 iterations.

Confirmation Factor Analysis

It can be seen from the table that the model fitting index data all meet the requirements. Among them,
CMIN/DF=2.561<5, RMSEA=0.077<0.08；GFI=0.85, AGFI=0.925, TLI=0.906、CFI=0.908、IFI=0.909 are all greater than 0.9, indicating that the model fit is excellent. Therefore, on the whole, the fitting index of this questionnaire is ideal with an excellent fitting degree.

Model fitness indexes	Suggested rate		Final Model
	Acceptable	Good	
CMIN/DF	<5.00	<3	2.561
RMESA	<0.08	<0.05	0.077
GFI	[0.7, 0.9]	>0.9	0.85
AGFI	[0.7, 0.9]	>0.9	0.825
TLI	[0.7, 0.9]	>0.9	0.906
CFI	[0.7, 0.9]	>0.9	0.908
IFI	[0.7, 0.9]	>0.9	0.909


e5
e4
e3
e2
e1
q1
q2
q3
q4
q5
.79
.75
.74
.80
.81
planning
e10
e9
e8
e7
e6
e21
q6
q7
q8
q9
q10
q11
.79
.85
.84
.84
.84
.85
monitoring
e15
e14
e13
e12
e11
q12
q13
q14
q15
q16
.79
.69
.82
.81
.83
reflection
e20
e19
e18
e17
e16
e25
q17
q18
q19
q20
q21
q22
.77
.83
.86
.85
.86
.88
motivation
.98
.98
.97
.89
.84
.85

Appendix 20. *Post Hoc Tests*

Multiple Comparisons

Games-Howell

Dependent Variable	(I) School Type	(J) School Type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Whole CLIL	1	2	-1.300	3.279	.9	-9.09	6.49
		3	13.194*	5.180	.0	.67	25.71
	2	1	1.300	3.279	.9	-6.49	9.09
		3	14.494*	4.982	.0	2.41	26.58
	3	1	-13.194*	5.180	.0	-25.71	-.67
		2	-14.494*	4.982	.0	-26.58	-2.41
CLIL Preparation	1	2	1.152	3.384	.9	-6.89	9.19
		3	15.074*	5.560	.0	1.62	28.53
	2	1	-1.152	3.384	.9	-9.19	6.89
		3	13.922*	5.371	.0	.88	26.97
	3	1	-15.074*	5.560	.0	-28.53	-1.62
		2	-13.922*	5.371	.0	-26.97	-.88
CLIL Monitoring	1	2	-.035	3.590	1.0	-8.56	8.49
		3	14.258*	5.591	.0	.74	27.78
	2	1	.035	3.590	1.0	-8.49	8.56
		3	14.293*	5.433	.0	1.12	27.46
	3	1	-14.258*	5.591	.0	-27.78	-.74
		2	-14.293*	5.433	.0	-27.46	-1.12
CLIL Reflection	1	2	-1.835	3.433	.9	-9.98	6.31
		3	12.711	5.304	.1	-.12	25.54
	2	1	1.835	3.433	.9	-6.31	9.98
		3	14.546*	5.213	.0	1.92	27.17
	3	1	-12.711	5.304	.1	-25.54	.12
		2	-14.546*	5.213	.0	-27.17	-1.92
CLIL Motivation	1	2	-4.164	3.708	.5	-12.99	4.66
		3	10.966	5.694	.1	-2.76	24.69
	2	1	4.164	3.708	.5	-4.66	12.99
		3	15.129*	5.278	.0	2.31	27.95
	3	1	-10.966	5.694	.1	-24.69	2.76
		2	-15.129*	5.278	.0	-27.95	-2.31

*. The mean difference is significant at the 0.05 level.

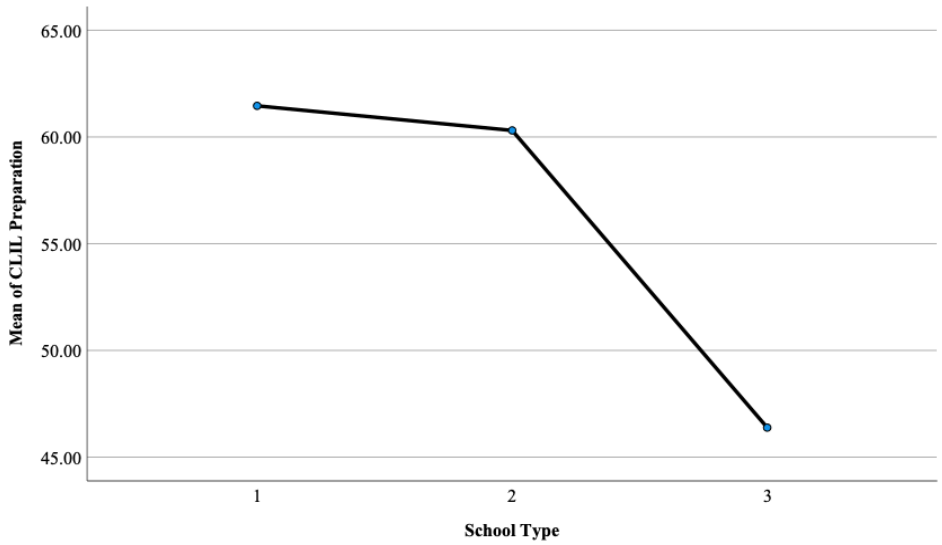


Figure 20.1 Mean plot of CLIL preparation

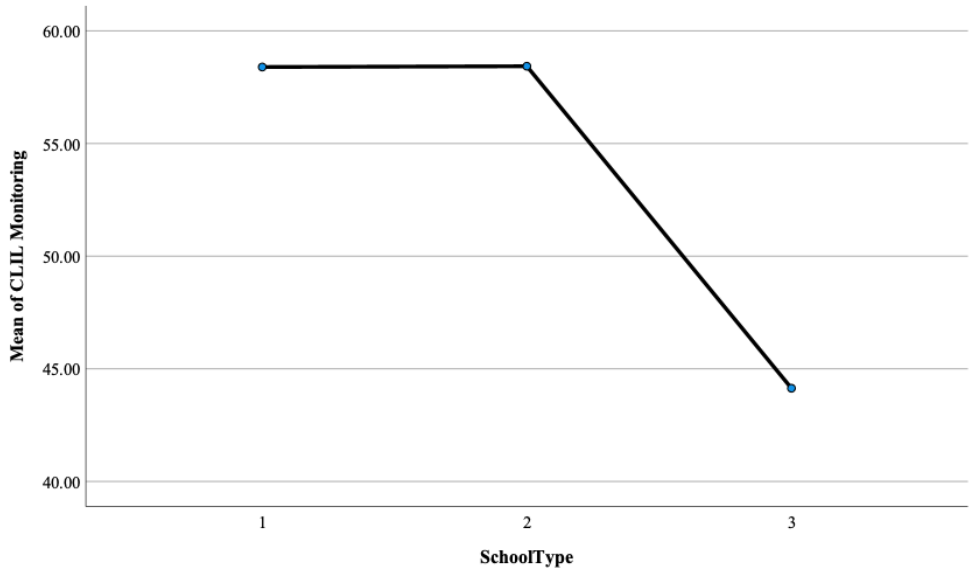


Figure 20.2 Mean plot of CLIL Monitoring

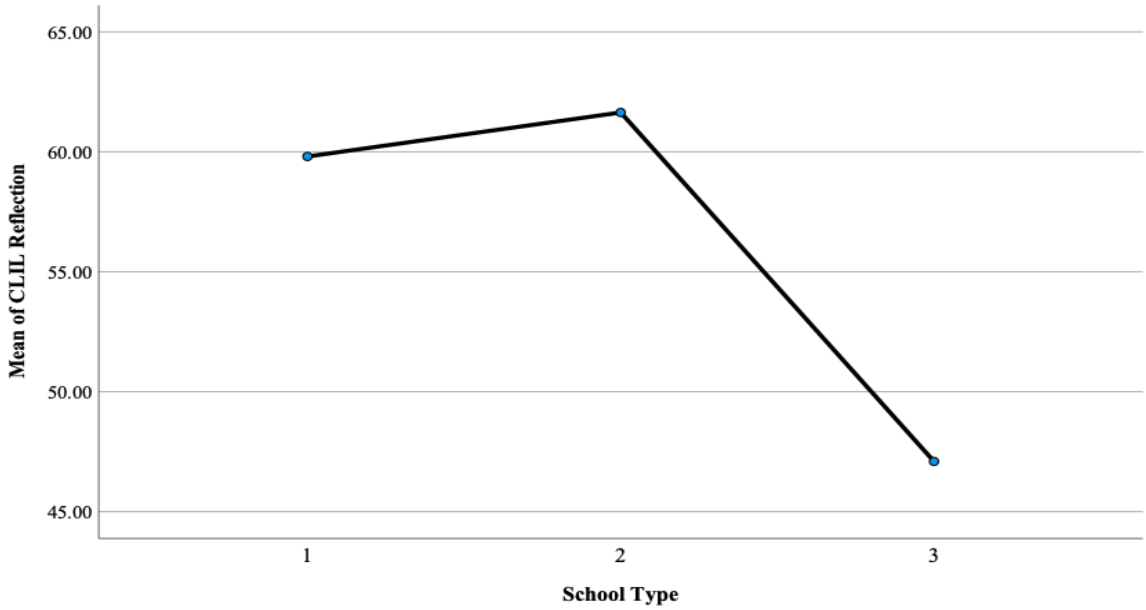


Figure 20.3 Mean plot of CLIL Reflection

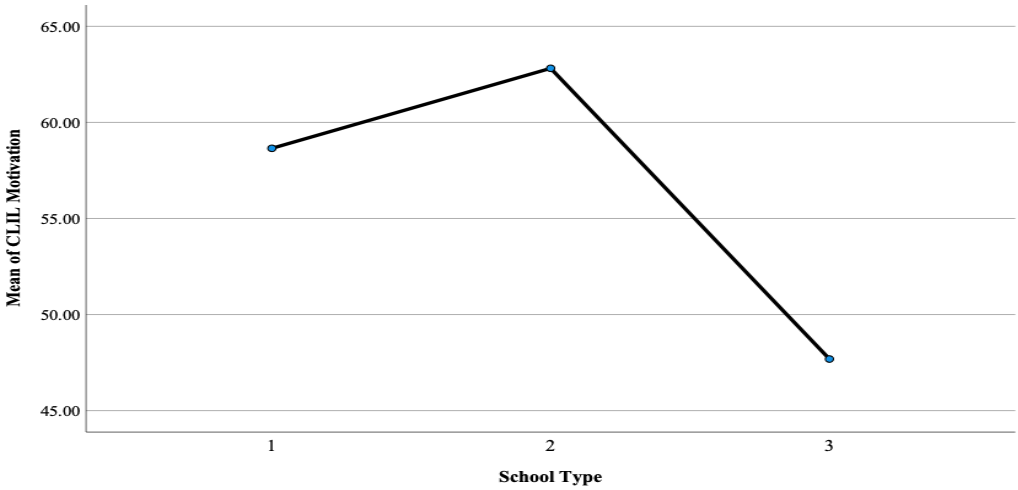


Figure 20.4 Mean plot of CLIL Motivation

Appendix 21. *Preliminary Assumptions*

21.1 Research Question 2: CLIL Language Challenges x types of schools

For Research Question 2, preliminary assumption testing was conducted before conducting the analysis of language-related Challenges in CLIL. All dependent variables were all normally distributed with no high skewness or kurtosis. Data is considered to be normal if skewness is between -1 to +1 and kurtosis is between -3 to +3 (Hair et al., 2010). The Levene's F tests were all non-significant (p >.05).

	N	Range	Min	Max	Mean	Std. Deviation	Skewness		Kurtosis	
							Statistic	Std. Error	Statistic	Std. Error
Writing Challenge	167	4.00	1.00	5.00	3.3557	.77690	**.036**	.188	**.031**	.374
Reading Challenge	167	3.83	1.17	5.00	3.3946	.77856	**.086**	.188	**-.015**	.375
Speaking Challenge	167	3.75	1.25	5.00	3.2304	.81463	**.203**	.188	**-.060**	.375
Listening Challenge	167	3.25	1.75	5.00	3.6017	.71451	**.041**	.188	**-.465**	.375
Valid N (listwise)	167									

Levene's Test of Equality of Error Variances[a]

		Levene Statistic	df1	df2	Sig.
Reading Challenge	Based on Mean	1.632	2	164	.199
	Based on Median	1.388	2	164	.253
	Based on Median and with adjusted df	1.388	2	150.466	.253
	Based on trimmed mean	1.677	2	164	.190
Listening Challenge	Based on Mean	2.646	2	164	.074
	Based on Median	2.201	2	164	.114

	Based on Median and with adjusted df	2.201	2	144.223	.114
	Based on trimmed mean	2.596	2	164	.078
Writing Challenge	Based on Mean	2.985	2	164	.053
	Based on Median	1.996	2	164	.139
	Based on Median and with adjusted df	1.996	2	140.149	.140
	Based on trimmed mean	2.845	2	164	.061
Speaking Challenge	Based on Mean	1.375	2	164	.256
	Based on Median	1.231	2	164	.295
	Based on Median and with adjusted df	1.231	2	159.194	.295
	Based on trimmed mean	1.380	2	164	.255

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + School Type

21.2 Multiple Regression Assumptions

Before the start of the analysis, all the assumptions and diagnostics were checked for analysing multiple regression: normal distribution of errors, linearity, homoscedasticity, multicollinearity (Keith, 2015). Descriptive statistics are presented in Table 21.1, which show that no variables were significantly skewed or kurtotic, and no residuals were found in both the histogram and P-P plot, thus indicating a close to normal distribution. The homoscedasticity was accepted with the scatterplot of the predicted values and the standardised residuals revealing no funnel-shaped or curved-shaped. The multicollinearity was met by having no values of tolerance below 0.2 and each individual values of VIF were well-below 10 and the average of all values were not substantially above 1.0 (Field, 2018). As a result, the values and results in the regression analysis were valid and reliable (see also Appendix X for detailed analysis).

Table 21.1. Descriptive Statistics

	mean	**SD**	**median**	**min**	**max**	**range**	**skewness**	**kurtosis**	**SE**
L1 Chinese Proficiency	60.99	12.46	61	29	97	68	**-.13**	**.05**	.98
L2 English Proficiency	64.96	15.13	65.5	28	100	72	**.14**	**-.49**	1.20
Academic English Proficiency	56.91	28.56	61.67	3.33	100	96.67	**-.22**	**-1.40**	2.33
Content Subjects Results	69.39	17.00	71.00	25	100	75	**-.67**	**.08**	1.34
CLIL Self-Regulation - Overall	*57.69*	*20.74*	*59.55*	*3.64*	*100*	*96.36*	***-.43***	***-.19***	*1.60*
CLIL Preparation	58.08	21.73	60	0	100	100	**-.49**	**-.13**	1.68
CLIL Monitoring	55.77	22.72	56.67	0	100	100	**-.35**	**-.35**	1.76
CLIL Reflection	58.37	21.93	60	0	100	100	**-.41**	**-.31**	1.70
CLIL Motivation	58.71	22.38	61.67	0	100	100	**-.48**	**-.27**	1.73

Note: $n = 167$

21.2.1 Content Subject

Coefficients[a]

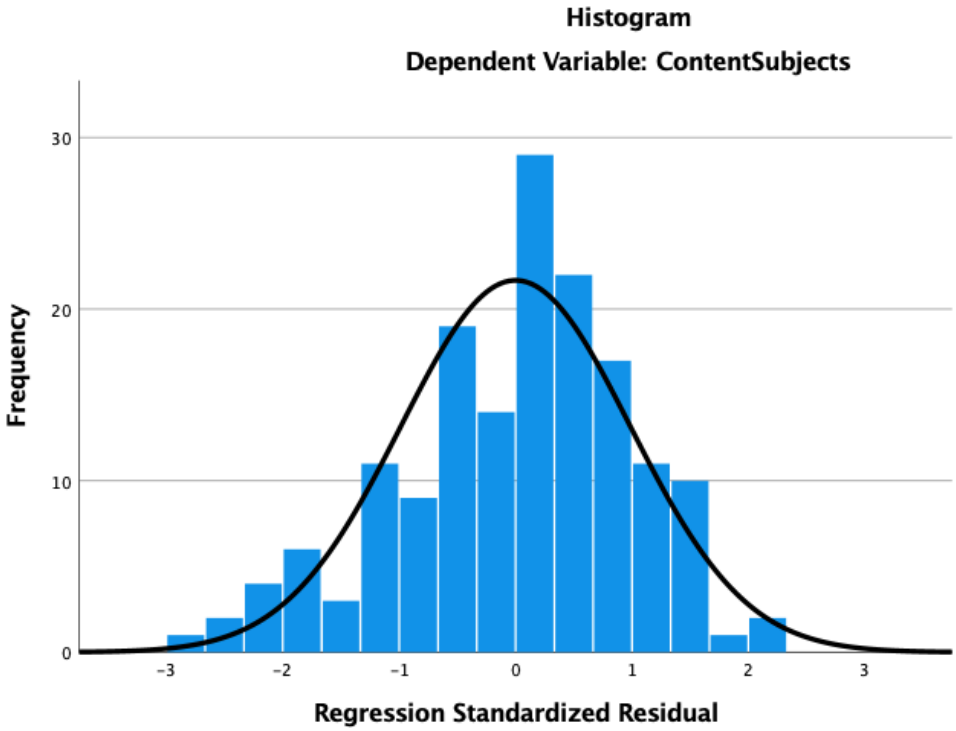
Model		95.0% Confidence Interval for B Upper Bound	Correlations Zero-order	Partial	Part	Collinearity Statistics Tolerance	VIF
1	(Constant)	58.975					
	CLIL Preparation	.264	.285	-.004	-.004	.177	5.661
	CLIL Monitoring	.199	.258	-.042	-.037	.156	6.427
	CLIL Reflection	.184	.257	-.047	-.042	.182	5.497
	CLIL Motivation	.643	.431	.359	.344	.344	2.905

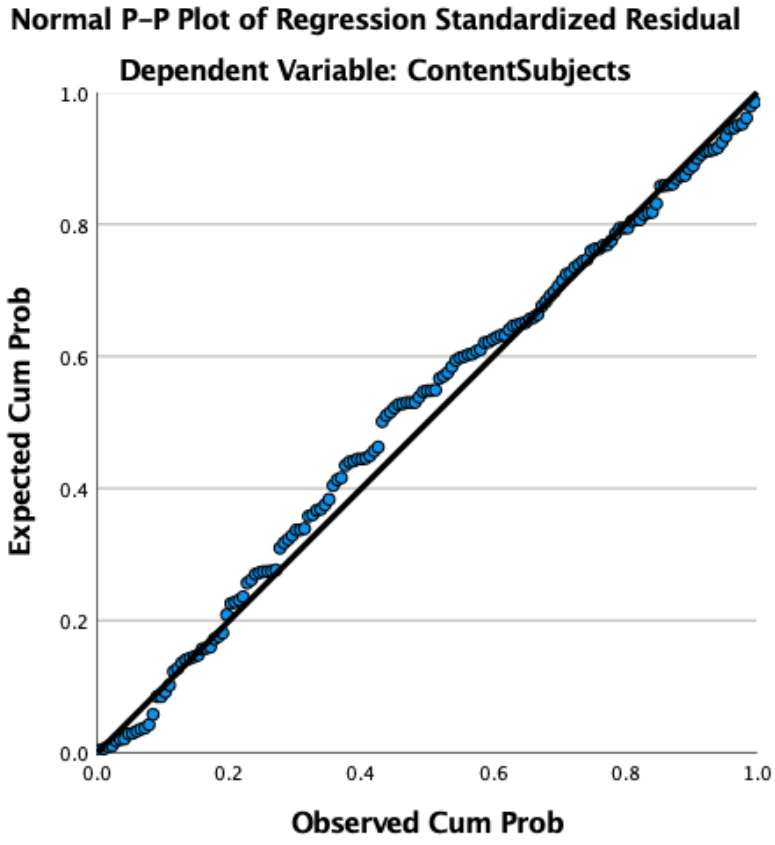
a. Dependent Variable: Content Subjects

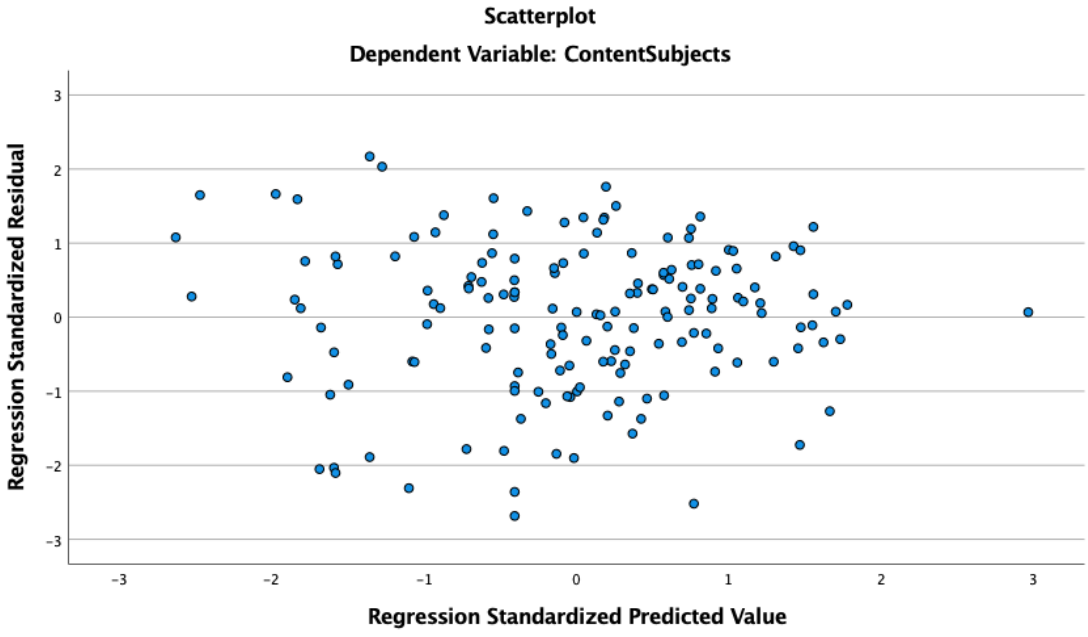
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	49.3951	91.9432	69.3944	7.60631	167
Residual	-41.31046	33.42501	.00000	15.20038	167
Std. Predicted Value	-2.629	2.964	.000	1.000	167
Std. Residual	-2.684	2.171	.000	.987	167

a. Dependent Variable: Content Subjects




Normal P-P Plot of Regression Standardized Residual
Dependent Variable: ContentSubjects
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Scatterplot
Dependent Variable: ContentSubjects
Regression Standardized Residual
Regression Standardized Predicted Value
3
2
1
0
-1
-2
-3

21.2.2 L2 English

Coefficients[a]

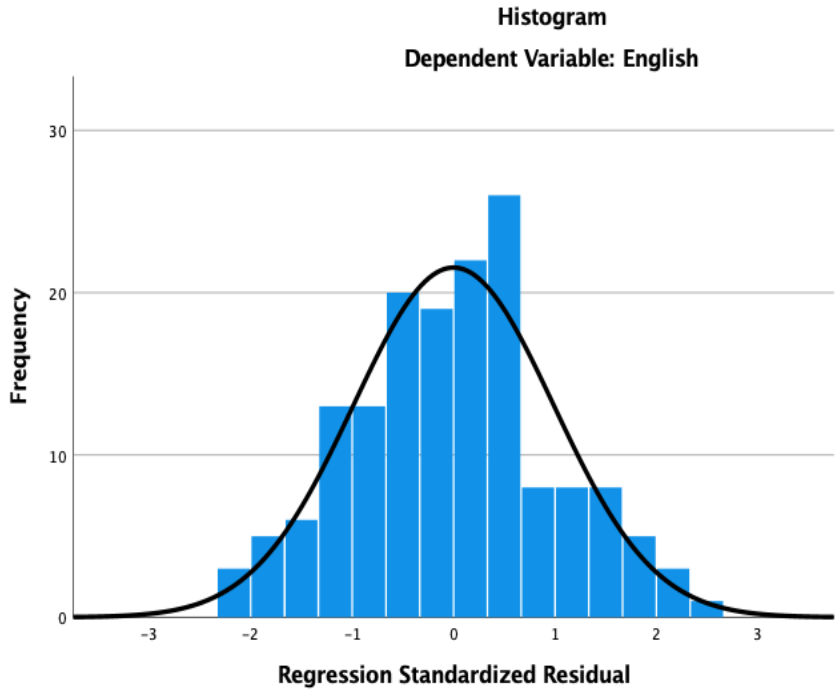
Model		95.0% Confidence Interval for B Upper Bound	Correlations Zero-order	Partial	Part	Collinearity Statistics Tolerance	VIF
1	(Constant)	61.690					
	CLILPrep	.203	.162	-.034	-.032	.181	5.538
	CLILMon	.145	.137	-.070	-.066	.158	6.341
	CLILRef	.267	.158	.008	.007	.174	5.734
	CLILMotivation	.501	.298	.285	.280	.357	2.799

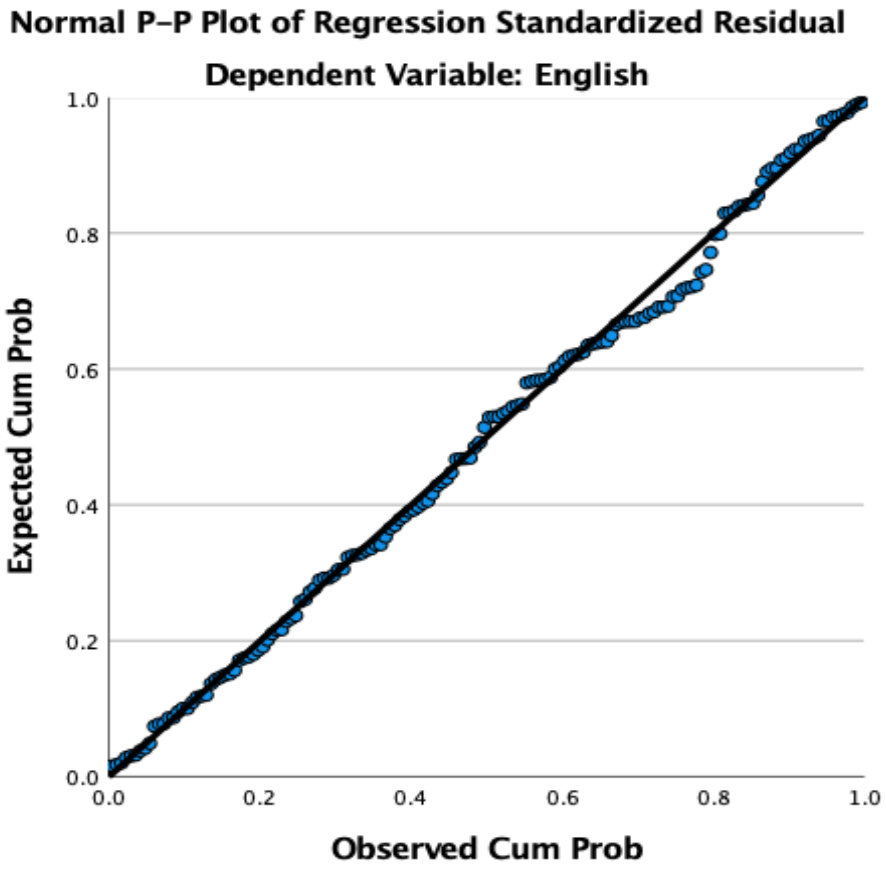
a. Dependent Variable: English

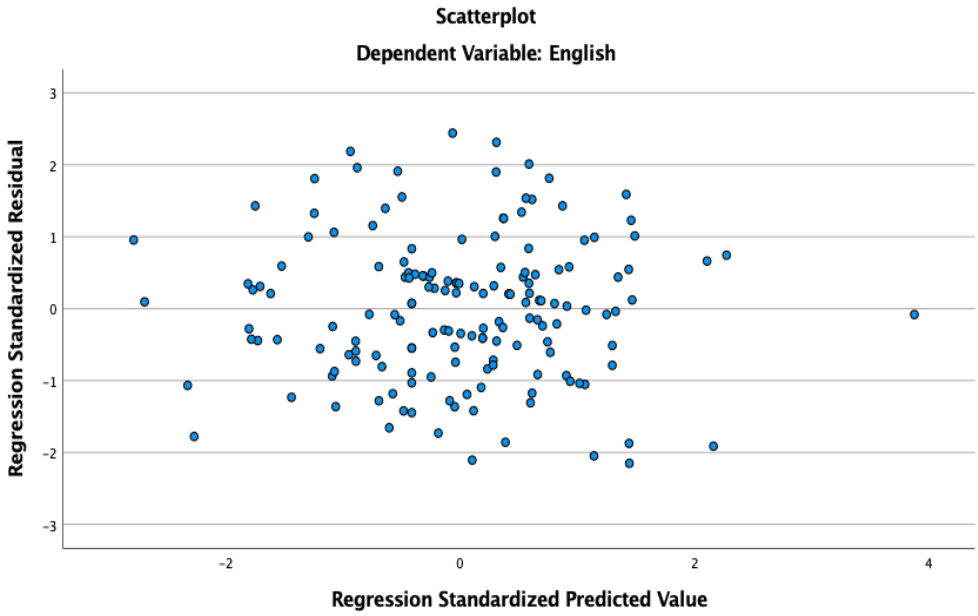
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	51.16	84.17	64.96	4.958	160
Residual	-31.117	35.356	.000	14.291	160
Std. Predicted Value	-2.785	3.874	.000	1.000	160
Std. Residual	-2.150	2.443	.000	.987	160

a. Dependent Variable: English




Normal P-P Plot of Regression Standardized Residual
Dependent Variable: English
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Scatterplot
Dependent Variable: English
Regression Standardized Residual
Regression Standardized Predicted Value
3
2
1
0
-1
-2
-3
-2
0
2
4

21.2.3 Academic Vocabulary

Coefficients[a]

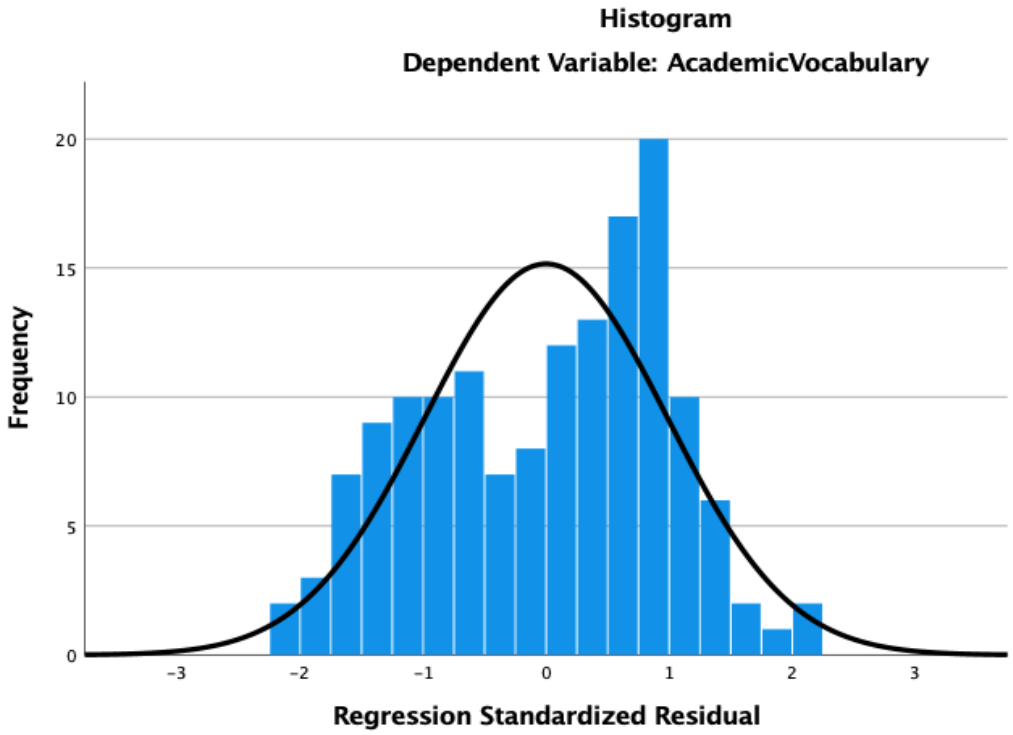
Model		95.0% Confidence Interval for B Upper Bound	Correlations Zero-order	Partial	Part	Collinearity Statistics Tolerance	VIF
1	(Constant)	47.121					
	CLIL Preparation	.579	.248	.031	.030	.172	5.806
	CLIL Monitoring	.367	.223	-.048	-.046	.141	7.073
	CLIL Reflection	.547	.231	.023	.022	.176	5.685
	CLIL Motivation	.722	.302	.180	.174	.339	2.949

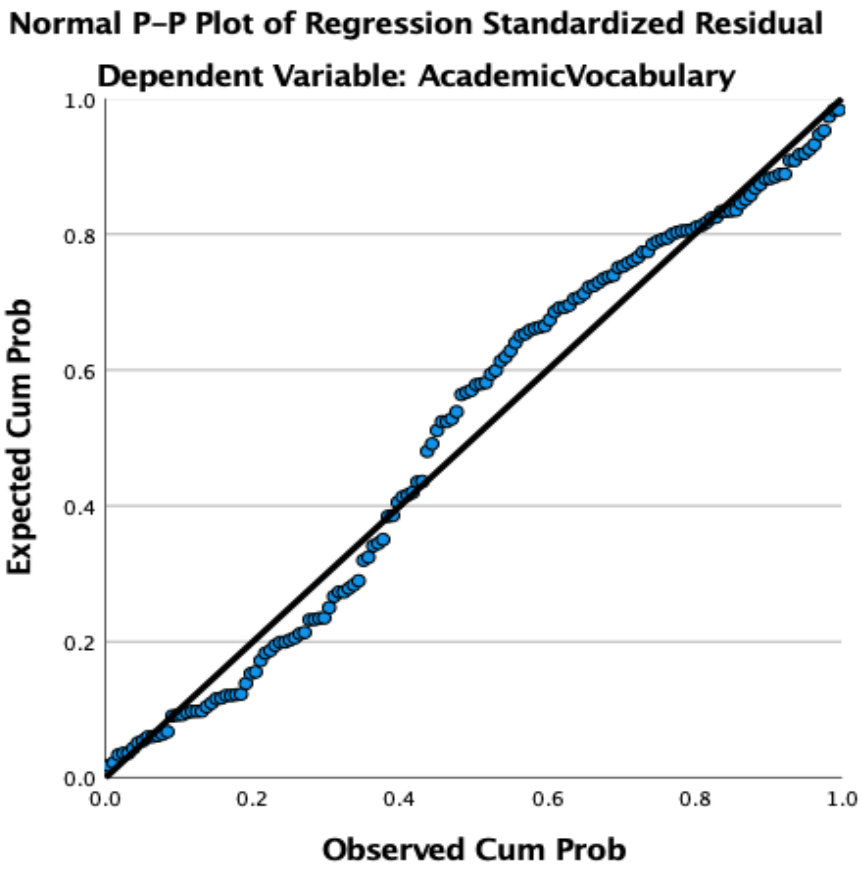
a. Dependent Variable: Academic Vocabulary

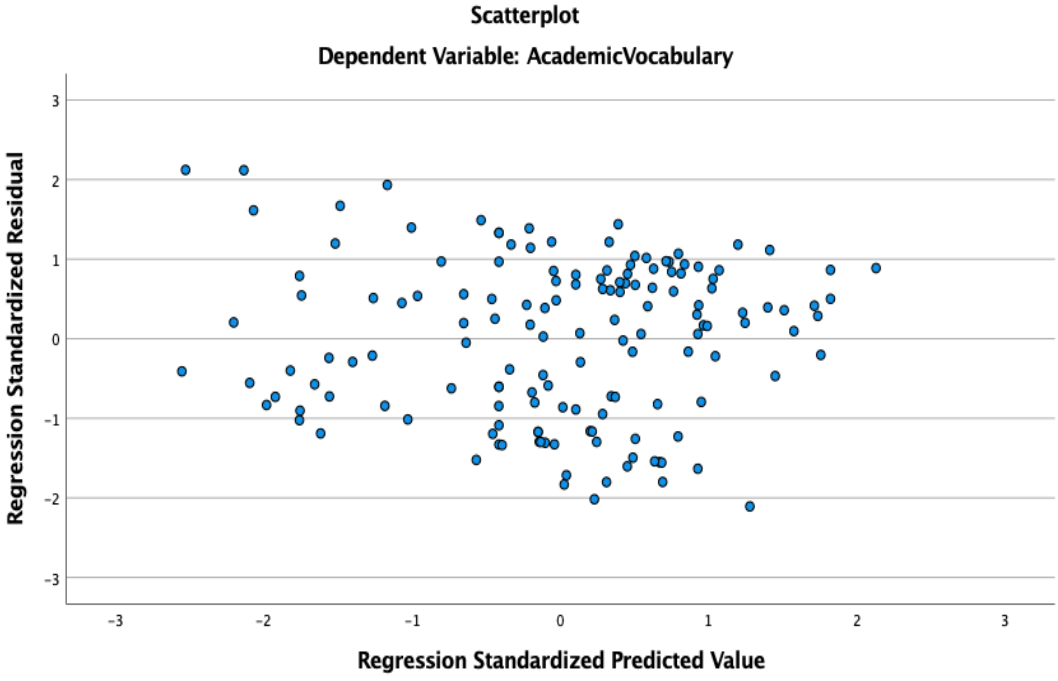
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	34.6063	75.5003	56.9111	8.73629	167
Residual	-58.06740	58.50861	.00000	27.19102	167
Std. Predicted Value	-2.553	2.128	.000	1.000	167
Std. Residual	-2.107	2.123	.000	.986	167

a. Dependent Variable: Academic Vocabulary







21.2.4 L1 Chinese

Coefficients[a]

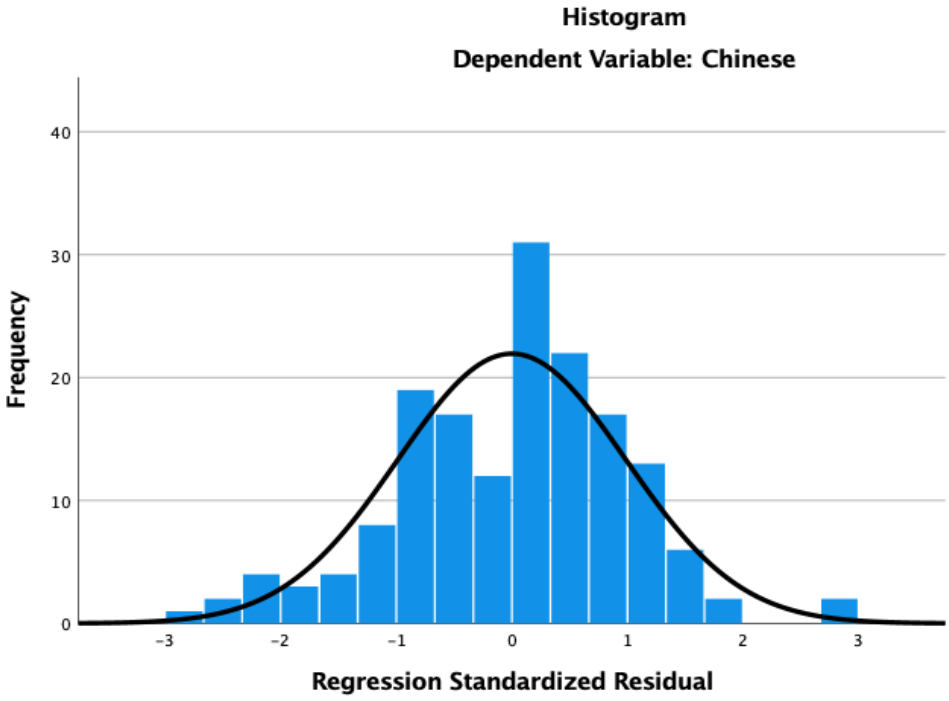
Model		95.0% Confidence Interval for B Upper Bound	Correlations Zero-order	Partial	Part	Collinearity Statistics Tolerance	VIF
1	(Constant)	55.512					
	CLILPrep	.160	.293	-.035	-.033	.170	5.867
	CLILMon	.361	.330	.117	.111	.154	6.508
	CLILRef	.192	.298	-.004	-.004	.181	5.529
	CLILMotivation	.233	.312	.101	.096	.335	2.984

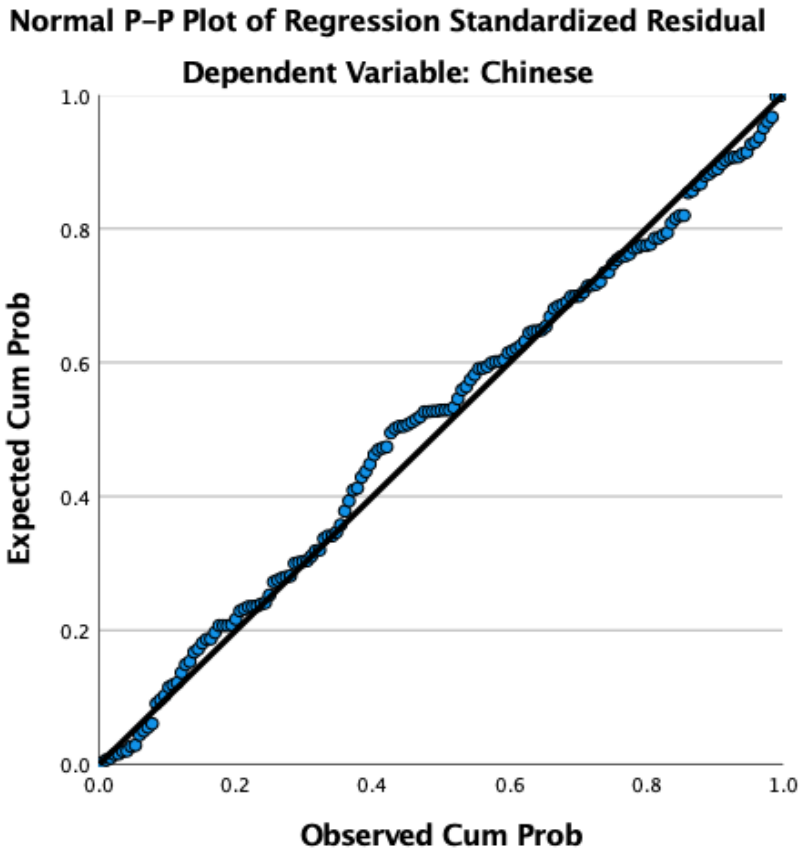
a. Dependent Variable: Chinese

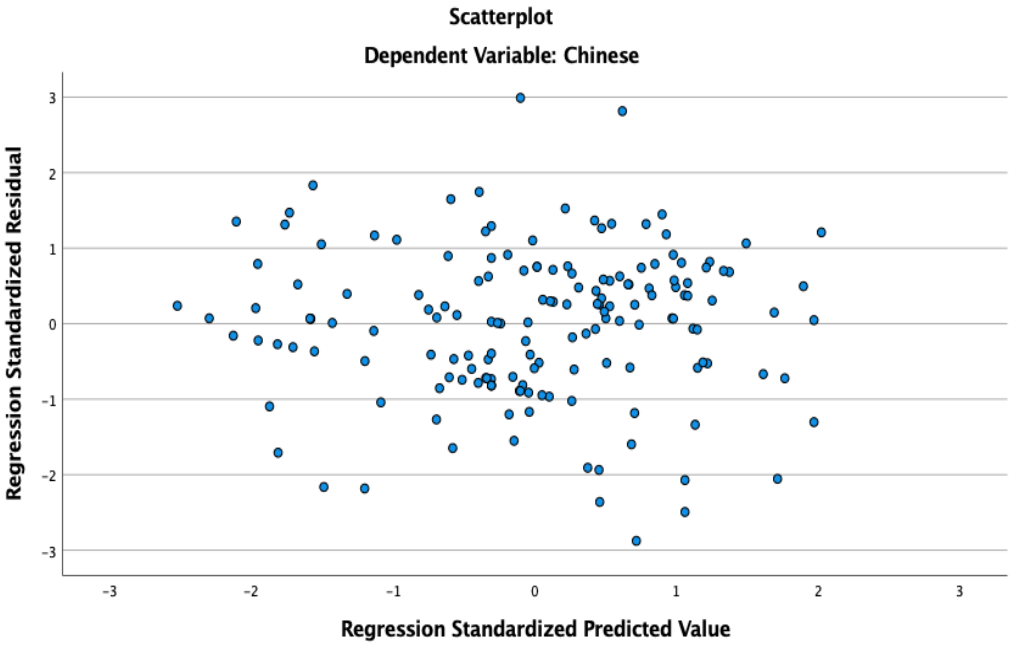
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	50.18	69.66	60.99	4.286	167
Residual	-34.060	35.445	.000	11.700	167
Std. Predicted Value	-2.523	2.021	.000	1.000	167
Std. Residual	-2.875	2.992	.000	.988	167

a. Dependent Variable: Chinese




Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Chinese
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Scatterplot
Dependent Variable: Chinese
Regression Standardized Residual
Regression Standardized Predicted Value
-3
-2
-1
0
1
2
3

Appendix 22. *Semi-structured Interview Transcripts*

Remarks:

- The Cantonese version was checked by each interviewee to ensure the transcription accurately reveals their response.

- The English version was checked by two Cantonese-English bilingual students at the University of Oxford, both of whom were native Cantonese speakers and had a high proficiency in English (IELTS 8.0 and 8.5 respectively). Minor revisions were made with reference to their suggestions.

- Please also note that this transcription is not used for Conversation Analysis, so no detailed transcription including pauses, tones, intonation were transcribed. Only the verbal (word) responses were transcribed.

- In the event of any inconsistency between the two versions in this transcription, the Chinese version shall prevail.

- Abbreviation: I = Interviewer, S(number) = Interviewee

Interview #1

Pseudo Name: Peter
School: Band 1
Language and Content Results: High achiever (English: 73; Academic English: 28/30; Mathematics: 83; Science: 85)
Level of self-regulation: High (75%)

	Cantonese Chinese version (original)	English version (translated)
I	首先好多謝你參與呢個 research project 先，呢個研究呢其實最主要都係想了解你用英文學術科例如 science 呀 history 呀嘅一啲方式。呢個 interview 係會絕對保密嘅。唔知你有冇咩問題呢？	First of all, thank you so much for participating in this research project. This project is to understand how you study subjects that are taught in English, such as Science and History. This interview will be strictly confidential. Do you have any questions?
S1	暫時都冇。	No at the moment.
I	好嘅，咁首先想下，如果有一個咁嘅情況，就係如果你係一啲英文學術科嘅科目例如 maths, science 咁，可能最近學習你唔太滿意，你會點去做咩去幫自己呢？	Ok, so first of all, if there is a situation like this – there are some content subjects such as Maths and Science, you feel that you are not satisfied with the learning recently. What would you do to help yourself?
S1	Er…姐係我要定目標咁？	Um…Should I need to set goals or something?
I	係呀，想知道你會點訂一啲目標去幫助自己改善學習咁。	Yes, like what kind of goals you will set to improve your own learning.
S1	咁首先我會定個目標就係溫番所有嘅 units，同埋所有 units 都會做好啲筆記囉。我都會自己去 set 啲題去幫我自己或者上網搵啲資源去盡量攞多啲分咁。我都會做下啲 past paper 嘅題目咁。	Um, I think I will revise all the units first, and I will also make good notes for all the units. I will also try to set some questions for myself and to find some resources online to gain more marks (in my tests). I will also do the questions from the past papers.
I	嘩，你都好有目標喎。同埋你都已經答埋我下一題想問咩。咁點解你會咁安排嘅？	Wow, you are very target oriented. You have also responded to my next question. So why did you organise your plan like that?
S1	因為呢個係我嘅習慣黎架。	Because it's my habit.
I	咁除左呢啲之後，你有咩目標你係想達到架？	Apart from that, what is the target that you would like to achieve?
S1	全部科都有 75-85 分左右啦！同埋可以全班頭十就好啦。	75-85 marks in all subjects, and it will also be the best to be the top 10 in our class.
I	咁你覺得自己咁樣安排完會唔會有進步呢？	So do you think after this planning, you will get improved?
S1	會呀！我都會努力嘅。	Of course! I will also try my best.

I	好好喎。咁好啦，下一步就係如果你係學習嘅時候如果遇到有啲語言同學術嘅問題，你會點幫自己呢？	That's great. Ok right, so the next step is, if you encounter any difficulties in content and language problems, how would you help yourself?
S1	語言呀。。。咁我會首先去網查下啲字點解先，然後寫係自己本筆記到囉。咁我得閒嗰陣我可以睇到，然後可以同黎溫下習咁。不過有啲內容同英文寫真係睇唔明，咁我可能會先睇番本書講乜，然後我會寫下筆記去幫自己去理解個 concept 係講乜。不過如果，再唔知我就會去問下老師同同學去幫下我咯。	Language…I think I will search the meaning of the words (that I don't know), then I will write them down on my notebook, so I can see and revise them when I am free. However, there are some contents and English that I don't really understand, so I will refer back to the book, and make some notes to try to understand what the concept is about. But, if I still don't understand, I think I will consult the teachers and ask my classmates to help me.
I	好呀，咁你安排好同埋調節好自己嘅學習之後呢，你會點去反思呀？	I see, so after you have monitored and adjusted your own (CLIL) study, what would you reflect on it?
S1	Er……可能睇番學校成績，然後去睇下有啲可以再溫下咁囉。	Um, I think I will firstly take reference of my school results, and I will do more revision (for the subjects that I don't do well).
I	好嘅。。。咁最後就想問下啦，你成個過程，包括安排，調節，同反思之後呢，你嘅心情如何呀？	Ok…so finally, throughout the whole process, including planning, monitoring and reflecting, how do you feel about your learning? What's your feeling?
S1	我覺得呀。。都 OK 嘅，會期待自己會更優秀咯。	I think…it's fine. I expect myself to be a more successful person.
I	咁你會唔會堅持呢個習慣呢？	So will you continue with this habit?
S1	會呀，我諗我都會幾有毅力嘅，因為我會知道自己嘅目標係咩。同埋點樣自己幫自己。都 OK 嘅。	Yes, I think I have the grit to continue because I know what my targets are, and I also know how I can help myself. I think it's fine.
I	好嘅。咁呢個就係嗰成個 interview 拿，好多謝你嘅參與！	Good. That's the end of the whole interview. Thank you for your participation!

Interview #2

Pseudo Name: Mary
School: Band 1
Language and Content Results: Middle achiever (English: 68; Academic English: 20/30; Mathematics: 70; Science: 76)
Level of self-regulation: Middle (67%)

	Cantonese Chinese version (original)	English version (translated)
I	首先好多謝你參與呢個 research project 先，呢個研究呢其實最主要都係想了解你用英文學術科例如 science 呀 history 呀嘅一啲方式。呢個 interview 係會絕對保密嘅。唔知你有冇咩問題呢？	First of all, thank you so much for participating in this research project. This project is to understand how you study subjects that are taught in English, such as Science and History. This interview will be strictly confidential. Do you have any questions?
S2	OKOK。	Okay.
I	好嘅，咁首先想下，如果有一個咁嘅情況，就係如果你係一啲英文學術科嘅科目例如 maths, science 咁，可能最近學習你唔太滿意，你會點去訂一個咩目標去幫自己呢？	Ok, so first of all, if there is a situation like this – there are some content subjects such as Maths and Science, you feel that you are not satisfied with the learning recently. What would you do to help yourself?
S2	我會 set 左目標囉。。。就好似有啲野可以 follow 咁。如果有啲清楚嘅計劃咁我都會比心機啲自律啲去溫書嘅。	To make a clear goal or a target, just like (I have) something to follow… Having clear plans will at least allow me to be disciplined and be able to study properly.
I	明白。咁…	I see. How about…
S2	不過呢，其實我都唔想太過比壓力自己。有啲野好突發咁其實都會會影響我嘅計劃，同埋我都想我溫習呀嗰啲都 flexible 啲咁。	I don't want to pressure myself. Something unexpected may affect my plan and I wanna be flexible with my studies.
I	好呀，的確係嘅。好，咁下一步就係如果你係學習嘅時候如果遇到有啲語言同學術嘅問題，你會點幫自己呢？	Yes, indeed. So the next step is, if you encounter any difficulties in language and content, how would you help yourself?
S2	可能查下 google 囉。再唔係去問下呀 sir miss 咁都有嘅。	Maybe I will look them up in Google. If not, I will ask the sir and miss (teachers).
I	哦，你講起老師啦，咁如果你有問題，你會去問英文老師呀，定係問術科老師呀？	Oh, so you talk about teachers, if you have any problems, will you ask your English teachers, or content subject teachers?

S2	術科老師呀。如果英文老師唔知佢識唔識啲內容，問下 science 呀 sir 咁佢都會同中文去解釋下嘅。	Content subject teachers. If I ask the English teachers, I am not sure whether they understand the content or not. If I ask the Science sir (teacher), he will explain to me in Chinese.
I	咁你會唔會仲有其他方法呢？	Are there any other ways?
S2	都冇咩 lu。都係主要上網問多啲。	Not much. Usually I will consult on the Internet.
I	咁到最後嘅部分啦，咁你安排好同埋調節好自己嘅學習之後呢，你會點去反思呀？	At last, so, you have planned and monitored your own learning, how will reflect on it?
S2	我會盡力去背多啲生字，因為科學都係用英文去教。或者可以我都會係電腦睇多啲有關 Science 嘅報紙囉。	I will try my best to memorise my vocabulary for my Science learning in English. Maybe I can read more newspapers about Science from my computer.
I	咁最後就想問下啦，你成個過程，包括安排，調節，同反思之後呢，你嘅心情如何呀？	So finally I just want to ask, throughout the whole process, including planning, monitoring, and reflecting, what do you feel?
S2	一般啦。可能都會 keep 住做嘅。因為我都想自己成績好啲。	Just so-so. I think I will keep it up because I also want to achieve a better result.
I	好嘅，咁今日嘅 Interview 就去到呢到，多謝你嘅參與。	Ok, so this is the end of the interview. Thank you so much for your participation.

Interview #3

Pseudo Name: Ben
School: Band 1
Language and Content Results: Middle achiever (English: 64; Academic English: 18/30; Mathematics: 63; Science: 65)
Level of self-regulation: Low (42%)

	Cantonese Chinese version (original)	English version (translated)
I	首先好多謝你參與呢個 research project 先，呢個研究呢其實最主要都係想了解你用英文學術科例如 science 呀 history 呀嘅一啲方式。呢個 interview 係會絕對保密嘅。唔知你有冇咩問題呢？	First of all, thank you so much for participating in this research project. This project is to understand how you study subjects that are taught in English, such as Science and History. This interview will be strictly confidential. Do you have any questions?
S3	冇。	No.
I	好嘅，咁首先想下，如果有一個咁嘅情況，就係如果你係一啲英文學術科嘅科目例如 maths, science 咁，可能最近學習你唔太滿意，你會點去訂一個咩目標去幫自己呢？	Ok, so first of all, if there is a situation like this – there are some content subjects such as Maths and Science, you feel that you are not satisfy with the learning recently. What would you do to help yourself?
S3	冇喎。。。	Nope...
I	例如你會點比啲目標自己。。。去幫自己去溫習呢？	For example, any targets you will set for yourself? Like to improve your learning?
S3	冇呀，無咩目標，因為我知道自己每次 set 先目標我都做唔到。可能有時 set 得太高，同埋太高或者太低我又唔想做 lu。	*No….I don't have any goal to be honest, because I know that I cannot finish my goal because when I set the goal each time. I always set it too high and I do not want to set it too low either."*
I	或者有冇咩方法去幫自己呀？	*Or are there any ways?*
S3	我諗做功課應該都可以當係溫習，去提高自己嘅學習水平嘅。	*I think doing homework is also a way of learning, to improve my level of learning.*
I	好嘅。咁下一步就係如果你係學習嘅時候如果遇到有啲語言同學術嘅問題，你會點幫自己呢？	*Ok, so the next step is, if you encounter any difficulties in language and content, how would you help yourself?*
S3	我都唔知喎。	*I don't know.*
I	你會唔會有咩方式去幫自己溫習呀？	*Is there any way to help yourself for learning?*
S3	如果唔明咪 Google translate 下囉，直接 scan 就可以睇到中文。其他唔識就算 lu。	*If there is anything I don't understand, I will Google translate. I can just scan it and I can see the Chines. For others, I just ignore them.*

I	好嘅。仲有冇其他方式呢？	*Ok, any other ways?*
S3	冇 lu。	*Nope.*
I	咁到最後嘅部分啦，咁你安排好同埋調節好自己嘅學習之後呢，你會點去反思呀？	*So this is the end of the last section. So after you have planned and monitored your learning, how would you reflect on your learning?*
S3	唔知呀，唔知有咩反思呀，主要都睇成績做人囉。可能差啲咁咪比多啲時間去溫下書囉。廢事又要呀媽鬧。	*I don't know. I don't have any reflection. I will mainly take reference of my results. For those I get lower marks, I will then spend more time to do the reivison. Otherwise, I will be scolded by my mum again.*
I	明白。咁最後就想問下啦，你成個過程，包括安排，調節，同反思之後呢，你嘅心情如何呀？	*I see. So finally, I would like to ask, throughout the whole process, including planning, monitoring and reflecting, how do you feel?*
S3	冇乜希望架啦。Not available 呀。	*Not hopeful at all. Not available.*
I	哈哈，好呀。咁好多謝你今次嘅參與。	*Haha, okay. So, thank you for your participation.*

Interview #4

Pseudo Name: Vincent
School: Band 2
Language and Content Results: Middle achiever (English: 68; Academic English: 18/30; Mathematics: 73; Science: 73)
Level of self-regulation: High (79%)

	Cantonese Chinese version (original)	English version (translated)
I	首先好多謝你參與呢個 research project 先，呢個研究呢其實最主要都係想了解你用英文學術科例如 science 呀 history 呀嘅一啲方式。呢個 interview 係會絕對保密嘅。唔知你有冇咩問題呢？	First of all, thank you so much for participating in this research project. This project is to understand how you study subjects that are taught in English, such as Science and History. This interview will be strictly confidential. Do you have any questions?
S4	冇。	No.
I	好嘅，咁首先想下，如果有一個咁嘅情況，就係如果你係一啲英文學術科嘅科目例如 maths, science 咁，可能最近學習你唔太滿意，你會點去訂一個咩目標去幫自己呢？	Ok, so first of all, if there is a situation like this – there are some content subjects such as Maths and Science, you feel that you are not satisfy with the learning recently. What would you do to help yourself?
S4	可能睇多啲英文書去幫自己識多啲英文嘅知識囉。因為科科都要用英文，所以英文一定要好啲。	Maybe I will read more English books to acquire more knowledge in English, because all subjects used English as the medium, so I think I need to have a better English.
I	明白，咁點解你會咁樣 set 嘅？背後有冇啲咩原因呀？	I understand. So why would you set that? What is the reason behind?
S4	考試要攞到好成績囉，要明曬啲內容先得。因為下年就要選課啦，我驚如果考試唔好，去選課會有好大影響。	(Because) I need to get a good result for my exam, so I have to understand all the contents. I need to choose for the elective subjects next year. I am afraid it will be highly affected by I don't get good results in the exams.
I	好嘅，咁你會定咩目標比自己呢？	I see. So what is your target?
S4	全班頭 10 名囉，科科都有 80 分以上。	Top 10 in the class, and 80 marks in each subject.
I	好嘅，明白。咁你期唔期望自己會成功呀？	I see. Do you expect yourself to be successful?
S4	會呀，比心機都會有收獲嘅。	Yes, I think I will receive the reward if the effort is paid off.
I	好嘅。咁下一步就係如果你係學習嘅時候如果遇到有啲語言同學術嘅問題，你會點幫自己呢？	OK. The next stpe is: if you have language and content problems when studying, how will you help yourself?

S4	查字典，了解下唔識嘅字中文意思係咩。然後有啲 concepts 呀嗰啲唔明就會請教老師，佢地都好樂意幫嘅。	I will check up the dictionary, and understand what the meaning it is in Chinese. Then, I will also ask teachers if I don't understand some of the concepts, and they are also willing to help.
I	好好喎。咁好啦，最後想問下你有關你….咁你安排好同埋調節好自己嘅學習之後呢，你會點去反思呀？	Good. So.. at last, I would like to ask you about… how would you reflect on your learning after planning and monitoring your study?
S4	Er…我都會 keep 住睇多啲英文嘅野囉，可能睇下啲外國雜誌都可能有用嘅。得閒就聽下啲英文歌都會 OK。	Um… I think I will keep reading more English books. It may also be useful to read some English magazine. If I am free, I think I will also listen to some English songs.
I	咦，點解你會去做呢啲嘅？	Oh, why will you do this?
S4	因為我覺得英文點都要進步先得。	Because I think I really need to get my English improved.
I	好嘅，咁最後就想問下啦，你成個過程，包括安排，調節，同反思之後呢，你嘅心情如何呀？	Ok, so at last, throughout the whole process, including planning, monitoring, and reflecting, how do you feel?
S4	都好滿足嘅，因為我學到一啲新嘅知識，咁我都希望自己都可以變得更加優秀，未來可以去到一間好嘅大學讀書就好啦。	I think I feel quite satisfied, because I can learn something new. I hope I can be more outstanding, so I can study in a good university in the future.
I	OK，好，咁呢個 interview 就完結啦，好多謝你嘅參與，Thank you。	OK, good. So this is the end of this interview. Thank you so much for your participation. Thank you.

Interview #5

Pseudo Name: Susan
School: Band 2
Language and Content Results: Mid achiever (English: 68; Academic English: 16/30; Mathematics: 70; Science: 73)
Level of self-regulation: Middle (55%)

	Cantonese Chinese version (original)	English version (translated)
I	首先好多謝你參與呢個 research project 先，呢個研究呢其實最主要都係想了解你用英文學術科例如 science 呀 history 呀嘅一啲方式。呢個 interview 係會絕對保密嘅。唔知你有冇咩問題呢？	First of all, thank you so much for participating in this research project. This project is to understand how you study subjects that are taught in English, such as Science and History. This interview will be strictly confidential. Do you have any questions?
S5	冇問題。	No problem.
I	好嘅，咁首先想下，如果有一個咁嘅情況，就係如果你係一啲英文學術科嘅科目例如 maths, science 咁，可能最近學習你唔太滿意，你會點去訂一個咩目標去幫自己呢？	Ok, so first of all, if there is a situation like this – there are some content subjects such as Maths and Science, you feel that you are not satisfy with the learning recently. What would you do to help yourself?
S5	盡可能一致記住每個單元嘅重點內容囉。	I will try to remember all the important contents of each chapter.
I	明白，咁點解你會咁樣 set 嘅？背後有冇啲咩原因呀？	I see. Why do you do that? What is the reason behind that?
S5	唔知呀。可能咁樣會對我嘅成績會有幫助都唔定。	I don't know. Maybe it will be helpful for my result.
I	好嘅，咁你會定咩目標比自己呢？	Ok. So what target will you set for yourself?
S5	自己要了解唔同科目嘅問題，一次取得更好嘅成績咁就最好啦。	I need to understand all the questions in each subject. It would be the best to achieve a better result by once.
I	好嘅，明白。咁你期唔期望自己會成功呀？	Got it. Do you expect yourself to be successful?
S5	會嘅，因為我唔希望自己嘅付出會冇用。	Yes, because I don't want my effort to become valueless.
I	好嘅。咁下一步就係如果你係學習嘅時候如果遇到有啲語言同學術嘅問題，你會點幫自己呢？	I se. So the next step is: if you encounter any difficulties in language and content, how will you help yourself?
S5	可能我會根據前文後理推理單詞嘅意思，實在係估唔到我會去問下 Google 先。有咩唔明就再問下老師。	Maybe I will try to infer the meaning of the words by context. If I really can't get it, I think I will ask Google girl. If I still don't get it, I will go to ask my teachers.

I	好，咁你講起 Google 啦，點解你會用 Google 嘅？你會點樣去用 Google 呀？	Good. You talked about Google. Why will you use Google, and how?
S5	Google translate 呀，因為你打入去佢就會自己有中文，咁唔洗一粒一粒字 search。	Google Translate. It is because the Chinese meaning will pop up when you input it. You don't have to search word by word.
I	好，咁你仲會唔會用 Google 去幫自己溫習呀？	Will you use other functions in Google to help you learn?
S5	Er….好似都冇啦。Google translate 已經好萬能了。	Um, seems no. Google translate is all-powerful.
I	好好喎。咁好啦，最後想問下你有關你….咁你安排好同埋調節好自己嘅學習之後呢，你會點去反思呀？	Good. So at last, I would like to ask…so how will you reflect on your learning after you have planned and monitoring it?
S5	記多啲單詞囉，增加自己嘅詞彙量，然後有時間就播下啲英文視頻去睇下，即使我係有做其他野嘅時候，都可以學下。我諗唔樣做令到我聽英文，咁我嘅英文能力就會提升掛。	Memorise more vocabulary and enhance my lexical range. If I have time, I will also watch more English videos. That means even when I am working on other things, I am still learning. I think this way of incidental learning can help to improve my English ability.
I	好嘅，咁最後就想問下啦，你成個過程，包括安排，調節，同反思之後呢，你嘅心情如何呀？	I see. At last, throughout the whole processing, including planning, monitoring, and reflecting, how do you feel?
S5	希望做到啦，但唔太確定。因為呢，平時雖然腦海中計劃好左，係一段時間內要做啲乜野，但係我發現自己仲係會比其他野吸引，沒法去嚴格去執行啲計劃。我希望自己可以通過呢三個方式可以幫到我。	I hope I can follow this, but I am unsure. Because each time when I have planned it on my mind, like I have to work on something in a specific time, I will be attracted by other things. I can rigidly ask myself to follow the plan. I hope the three-way procedure can really help me.
I	OK，好，咁呢個 interview 就完結啦，好多謝你嘅參與，Thank you。	OJK, so this is the end of the interview. Thank you for your participation. Thank you.

Interview #6

Pseudo Name: Tom
School: Band 2
Language and Content Results: Low achiever (English: 53; Academic English: 8/30; Mathematics: 64; Science: 54)
Level of self-regulation: Low (34%)

	Cantonese Chinese version (original)	English version (translated)
I	首先好多謝你參與呢個 research project 先，呢個研究呢其實最主要都係想了解你用英文學術科例如 science 呀 history 呀嘅一啲方式。呢個 interview 係會絕對保密嘅。唔知你有冇咩問題呢？	First of all, thank you so much for participating in this research project. This project is to understand how you study subjects that are taught in English, such as Science and History. This interview will be strictly confidential. Do you have any questions?
S6	(Silence)	(Silence)
I	好，咁首先想下，如果有一個咁嘅情況，就係如果你係一啲英文學術科嘅科目例如 maths, science 咁，可能最近學習你唔太滿意，你會點去訂一個咩目標去幫自己呢？	Ok, so first of all, if there is a situation like this – there are some content subjects such as Maths and Science, you feel that you are not satisfy with the learning recently. What would you do to help yourself?
S6	努力下囉，有進步就好啦。冇咩 plan 喎，可能盡量 keep 到成績就得。	Work harder. Making improvement is enough. No plan at all, but I just hope I can keep up the same results.
I	明白，咁點解你會咁樣 set 嘅？背後有冇啲咩原因呀？	I see. Why do you set your plan like this? Is there any reason behind?
S6	冇咩架。。其實。我淨係想同自己班 fd 同班囉。。。我都唔太 expect 自己會好叻嘅。。。。因為我其實都唔知點去安排啲野咁。	I just want to be in the same class with my friends… I don't expect myself to be successful, like I don't really know how to arrange stuff actually.
I	好嘅，咁你會定咩目標比自己呢？	I see. What target will you set for yourself?
S6	唔好掛科就好啦。	No failing subject is good enough.
I	好嘅，明白。咁你期唔期望自己會成功呀？	I understand. Do you expect yourself to be successful?
S6	唔會，我本身就已經好蠢。	No, I am already very stupid.
I	好嘅。咁下一步就係如果你係學習嘅時候如果遇到有啲語言同學術嘅問題，你會點幫自己呢？	OK. So this next step is asking you about…how will you do to help with your learning if you encounter some content and language problems?
S6	查字典囉，睇得明啲英文就自然會睇得明啲 concept 架啦。	Check up the dictionary. I can understand the concept if I can understand the English words.

I	係嘅。唔知你仲有冇其他方式去幫自己呢？	Yes. Is there any other way that you will use to help yourself?
S6	仲會問下啲 friend 囉，佢地都會幫下我嘅。	I will also ask my friend. They will also help me.
I	你會唔會去請教老師呀？	Will you ask your teachers?
S6	好少，多數都係比老師捉我罰留堂，先會問佢地，否則都好少會去問佢地野。	Seldom. I will ask them only if they punish me and ask me to stay behind. Otherwise, I will not ask them.
I	好好喎。咁好啦，最後想問下你有關你….咁你安排好同埋調節好自己嘅學習之後呢，你會點去反思呀？	I see. So at last, after you have planned and monitored your own learning, how will you reflect on your learning?
S6	只可以去背單詞囉，背得爛熟就會高分啦。仲有上堂比心機啲，雖然對我來講都幾難。	Memorise the vocabulary. If I can remember them well, I think I can get a really high mark. Also, pay more attention in class, but it's going to be very difficult for me.
I	好嘅，咁最後就想問下啦，你成個過程，包括安排，調節，同反思之後呢，你嘅心情如何呀？	Also, at last, I would like to ask how you feel after planning, monitoring, and reflecting your learning?
S6	好攰，不過講真呀，我自己真係自律唔到，手機誘惑太大啦，講左咁多野其實都唔知自己係咪真係做到。	Very tired. To be honest, I cannot be a disciplined person. I always get addicted to the phone. Even I have told you many things, I am still unsure if I can really make it.
I	OK，好，咁呢個 interview 就完結啦，好多謝你嘅參與，Thank you。	OK, good. That is the end of the interview. Thank you so much for your participation. Thank you.

Interview #7

Pseudo Name: Kitty
School: Band 3
Language and Content Results: High achiever (English: 83; Academic English: 25/30; Mathematics: 79; Science: 87)
Level of self-regulation: High (82%)

	Cantonese Chinese version (original)	English version (translated)
I	首先好多謝你參與呢個 research project 先，呢個研究呢其實最主要都係想了解你用英文學術科例如 science 呀 history 呀嘅一啲方式。呢個 interview 係會絕對保密嘅。唔知你有冇咩問題呢？	First of all, thank you so much for participating in this research project. This project is to understand how you study subjects that are taught in English, such as Science and History. This interview will be strictly confidential. Do you have any questions?
S7	冇啦，可以開始。	No. Let's get started.
I	好嘅，咁首先想下，如果有一個咁嘅情況，就係如果你係一啲英文學術科嘅科目例如 maths, science 咁，可能最近學習你唔太滿意，你會點去訂一個咩目標去幫自己呢？	Ok, so first of all, if there is a situation like this – there are some content subjects such as Maths and Science, you feel that you are not satisfy with the learning recently. What would you do to help yourself?
S7	Um…我會 set 自己目標一定要達到 90 分，下次嗰陣。我會去嘗試去睇番點解自己得 50 分，係今次考試。主要係睇自己會唔會係學科嗰啲內容唔熟，還是係我自己考試技巧問題，或者自己唔小心。	I will firstly set my target to achieve at least 90 marks for the next time. I will also see why I only got 50 marks in my exam. What I will mainly do is to see if I am unfamiliar with the subject content, or my exam skill, or simply being careless.
I	明白，咁點解你會咁樣 set 嘅？背後有冇啲咩原因呀？	Got it. Why do you set your target like this?
S7	我對自己都有信心囉。我希望自己真係可以係考試入面將自己有溫嘅野發揮出來。我唔想自己係一個 anomaly。	I believe in myself. I really hope that I can apply what I have learnt in my exam. I don't want to be an anomaly.
I	嘩，anomaly，你識得用咁嘅字都代表你真係好叻嘅，咁你會定咩目標比自己呢？	Wow, anomaly. You can such this word so are actually a clever student. What target will you set for yourself?
S7	每科考試都有 90 分以上。	90 marks for each subject.
I	好嘅，明白。咁你期唔期望自己會成功呀？	Got it. Do you expect yourself to be successful?
S7	Of course 啦，我期待自己會成功，因為成功後我會感到好滿足，同埋都希望自己可以係學術上會有大進步。	Of course, I expect myself to be successful, because I can feel a sense of achievement, and I will have a big improvement in my academic studies.

I	好嘅。咁下一步就係如果你係學習嘅時候如果遇到有啲語言同學術嘅問題，你會點幫自己呢？	The next step is, what will you do if you encounter content and language problems in your study?
S7	我一般都係用 Google，去 search 下有啲咩字我係唔識嘅，同埋我都會去 Google 去明白下啲 concept 嘅原理。有時都會用下 YouTube 去睇下片學都幾好玩。	I will usually use Google to search the words that I don't understand. Also, I will also google the theories behind the concepts. Sometimes it will be really fun to learn from YouTube.
I	好，咁你講起 Google 啦，咁用 Google search，或者睇 YouTube 片係時候，你會係睇中文片呀，定係英文片呀？	You talked about Google. When you are searching on Google or watching videos on YouTube, will you watch Chinese narrated videos or English narrated videos?
S7	我會睇英文片，因為依家學校教嘅內容都係用英文，同埋我自己本身都好中意英文，所以我會睇英文片。	I will watch the English one, because the contents taught in schools are in the English medium. I also like English, so I will watch those narrating in English.
I	明白，咁你會唔會去問下老師呀？	I see. Will you also ask teachers?
S7	會嘅，不過啲老師好似成日都好忙，開學都會去問下，但佢地成日都唔係到我就決定自己上網 search 算數。	Yes, but they are always busy. I would go to ask them in the beginning of the semester, but they were always not there, so I will go to search it online.
I	好嘅。咁好啦，最後想問下你有關你….咁你安排好同埋調節好自己嘅學習之後呢，你會點去反思呀？	I see…at last, I would like to ask…how will you reflect on your learning after planning and monitoring it?
S7	主要都係自己寫作能力囉。因為我知道係大學所有野都會用英文去教導，咁就算有啲科，例如 Maths 呀，Physics 呀，都要寫下啲學術論文咁，咁所以我想去提升自己嘅 writing skills, 特別係啲學術嘅 writing。但係我唔知會唔會 DSE 嘅 syllabus 都會教我地。但點都好，我會自己去加強呢方面嘅練習。	Mainly my writing skill, because I know that all subjects are taught in English in the universities. For some subjects such as Maths, Physics, we also need to write academic essay. I want to get my writing improved, especially academic writing. However, I am not sure if it will be covered in the DSE syllabus. Anyway, I will still enhance my writing skill by practising more.
I	好嘅，咁最後就想問下啦，你成個過程，包括安排，調節，同反思之後呢，你嘅心情如何呀？	I see. At last, throughout the whole process, how do you feel after planning, monitoring, and reflecting on your learning?
S7	都樂觀嘅，我對自己都充滿信心。	I am still optimistic, and I am confident.
I	係咪因為經過呢三步曲呢？	Is it because of the three-step cycle?
S7	係呀，主要係我覺得做完都有成功同成就感，我會覺得好興奮。	Yes, mainly because I feel a sense of achievement and success after doing it. I also feel very excited.

I	OK，好，咁呢個 interview 就完結啦，好多謝你嘅參與，Thank you。	OK, great. This is the end of the interview, and thank you so much for your participation. Thank you.

Interview #8

Pseudo Name: Peter
School: Band 3
Language and Content Results: Low achiever (English: 48; Academic English: 10/30; Mathematics: 49; Science: 45)
Level of self-regulation: Middle (45%)

	Cantonese Chinese version (original)	English version (translated)
I	首先好多謝你參與呢個 research project 先，呢個研究呢其實最主要都係想了解你用英文學術科例如 science 呀 history 呀嘅一啲方式。呢個 interview 係會絕對保密嘅。唔知你有冇咩問題呢？	First of all, thank you so much for participating in this research project. This project is to understand how you study subjects that are taught in English, such as Science and History. This interview will be strictly confidential. Do you have any questions?
S8	冇呀。	
I	好嘅，咁首先想下，如果有一個咁嘅情況，就係如果你係一啲英文學術科嘅科目例如 maths, science 咁，可能最近學習你唔太滿意，你會用咩方式去幫自己呢？	Ok, so first of all, if there is a situation like this – there are some content subjects such as Maths and Science, you feel that you are not satisfy with the learning recently. What would you do to help yourself?
S8	吓，我冇方法比自己架喎。	Um, I don't have anything to help myself.
I	明白，咁點解嘅？背後有冇啲咩原因呀？	I see, why? What is the reason behind?
S8	我覺得冇咩用囉，因為我成日都覺得好攰，我都已經冇時間瞓覺啦。我只係唔想去 plan 或者去做任何野。好攰呀。	It may not work for me…because I always feel tired and I don't have time to sleep. I just don't want to plan or make anything.
I	好嘅，咁你會定咩目標比自己呢？	I see. So any target you will set for yourself?
S8	都係高分啦，其實都唔係高分，合格升級就 OK。	Higher marks. Actually not higher marks. Passing and getting promoted is okay.
I	好嘅，明白。咁你期唔期望自己會成功呀？	Do you expect yourself to be successful?
S8	會嘅，我都會期望自己成功，可以合格就好。	Yes, I will expect myself to be successful, but passing is enough.
I	好嘅。咁下一步就係如果你係學習嘅時候如果遇到有啲語言同學術嘅問題，你會點幫自己呢？	OK. So the next step is, what will you do to help yourself if you encounter any content and language difficulties?
S8	可能去網上查資料，例如去百度去 search 下囉，或者問下老師都會嘅。	I will surf the internet. For example, I will search it on Baidu, or I will also ask the teachers.

I	好嘅，仲有冇其他呀？	Any more?
S8	都係問身邊嘅人為主。可能一唔識我就會發個信息比自己啲同學，佢地一般都會好發就覆我架啦。	I usually ask those around me. I will send a message to my classmates, and they will usually reply to me promptly.
I	好好喎。咁好啦，最後想問下你有關你….咁你安排好同埋調節好自己嘅學習之後呢，你會點去反思呀？	Good. At last may I ask… how will you reflect on your learning after planning and monitoring it?
S8	背下單詞囉，或者記下一啲必考嘅東西。我懶啲，不過我諗如果知道自己唔得，上課積極啲應該都會有幫助嘅。	Memorise more vocabulary, or memorise those will be examined. I am lazy though. I think being more attentive in class is also helpful.
I	好嘅，咁最後就想問下啦，你成個過程，包括安排，調節，同反思之後呢，你嘅心情如何呀？	I see. At last, throughout the whole process, including planning, monitoring, and reflecting on your learning, how do you feel?
S8	唉，其實都好覺得好辛苦呀，要我搞咁多野其實都想放棄。同其他人比較好辛苦好攰。點解呢個世界乜都要成績。	Sigh, I feel exhausted to be honest. I just want to give up if I have to do all of these. I always feel tired if I need to be compared with others. Why are the results always needed in this world?
I	所以其實你都會覺得有少少堅持唔到，係唔係呀？	So you feel that you can't do it, can you?
S8	係咯，可能我太蠢掛。	Yes, maybe I am stupid.
I	當然唔係啦，唔好咁樣諗！好嘅，好啦，咁呢個 interview 就完結啦，好多謝你嘅參與，Thank you。	Of course not, don't think in this way. Ok, so this is the end of this interview. Thank you for your participation. Thank you.

Interview #9

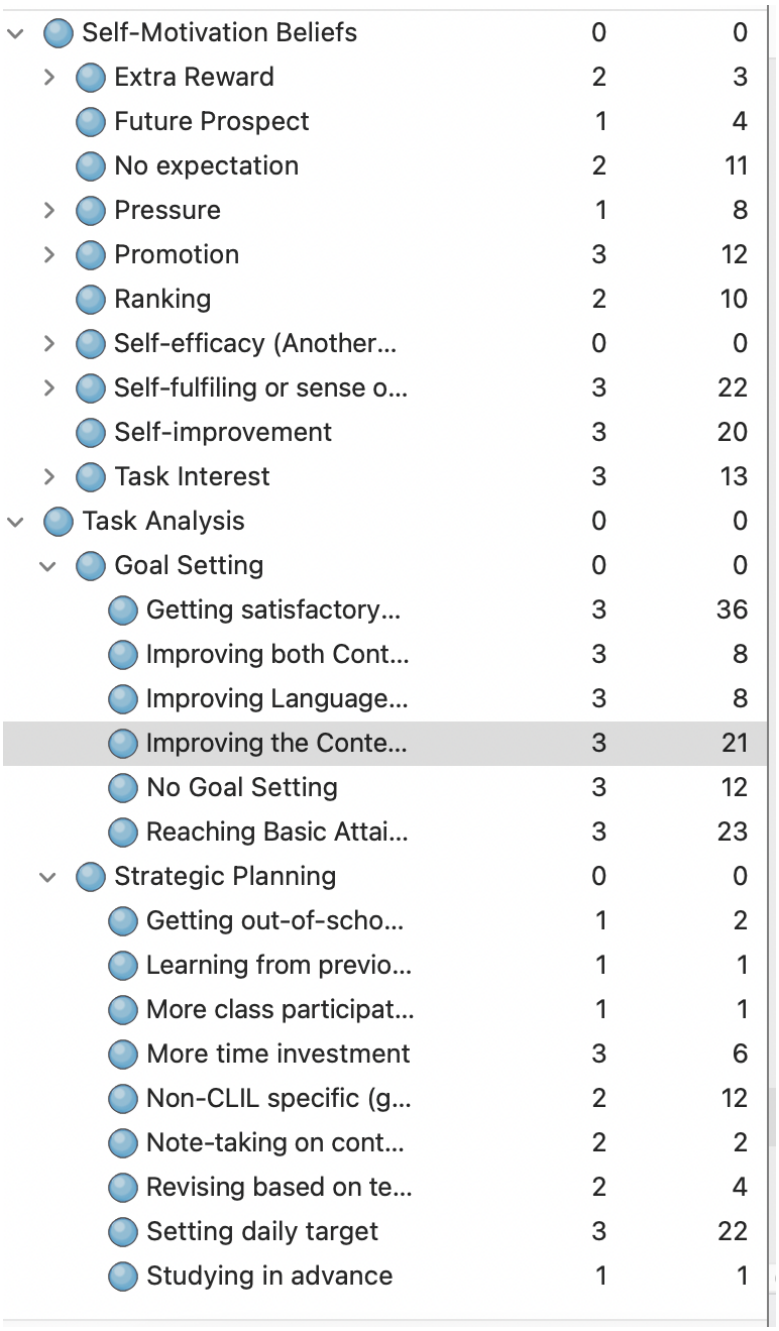
Pseudo Name: Alex
School: Band 3
Language and Content Results: High achiever (English: 75; Academic English: 25/30; Mathematics: 68; Science: 76)
Level of self-regulation: High (34%)

	Cantonese Chinese version (original)	English version (translated)
I	首先好多謝你參與呢個 research project 先，呢個研究呢其實最主要都係想了解你用英文學術科例如 science 呀 history 呀嘅一啲方式。呢個 interview 係會絕對保密嘅。唔知你有冇咩問題呢？	First of all, thank you so much for participating in this research project. This project is to understand how you study subjects that are taught in English, such as Science and History. This interview will be strictly confidential. Do you have any questions?
S9	無咩。	Nope.
I	好嘅，咁首先想下，如果有一個咁嘅情況，就係如果你係一啲英文學術科嘅科目例如 maths, science 咁，可能最近學習你唔太滿意，你會點去訂一個咩目標去幫自己呢？	Ok, so first of all, if there is a situation like this – there are some content subjects such as Maths and Science, you feel that you are not satisfy with the learning recently. What would you do to help yourself?
S9	冇喎，我唔 set 野架喎。我個腦 is like a jelly in a bowl…冇咩野期待咁。	No, I don't really set anything before studying… I didn't expect anything because my brain is like a jelly in a bowl.
I	明白，咁點解你會咁樣 set 嘅？背後有冇啲咩原因呀？	I see. Why will you set this? What is the reason behind?
S9	可能係我懶掛。	Maybe I am lazy.
I	好嘅，咁所以你知道自己成績可能已經冇咁好，但都冇咩感覺，唔會去做一啲行動？	Ok, so you know that your results are not good, but you don't have any feelings. Don't you want to do something?
S9	係呀，我太蠢，冇咩用。Plan 黎都浪費時間。	Yes, I am stupid, so it's useless. Planning is just a waste of time.
I	好嘅，明白。咁你期唔期望自己會成功呀？	Ok. Do you expect yourself to be successful?
S9	可能啦，I don't know。可能我要溫下習就會成功掛？	Maybe, I don't know. Maybe I will be successful after studying?
I	好嘅。咁下一步就係如果你係學習嘅時候如果遇到有啲語言同學術嘅問題，你會點幫自己呢？	Ok. The next is about how you will help yourself when you encounter some content and language problems?
S9	Google is the best。Google 大神。	Google is the best. Google is the God.

I	例如呢？你可唔可以簡單講下你會點用 Google 呀？我都好有興趣想你點用 Google 幫你自己去溫習。	For example? Can you briefly talk about how you will use Google? I am very much interested to know how it will help with your learning.
S9	佢好好好方便。因為我可以去翻譯 Science 唔識啲字囉，特別係 Science 啲文。係 Google，姐係 Google Translate 到，佢會直接去 show 中文個意思出黎，咁樣會好方便，同埋我唔使用好多時間去比到底成篇英文講乜。	It [Google] is very useful…because I can translate the words I don't know from Science, especially the texts, in Google translate and it immediately shows the Chinese meaning. It's very convenient and I don't have to spend a lot of time to understand the whole text in English.
I	好好喎。咁好啦，最後想問下你有關你….咁你安排好同埋調節好自己嘅學習之後呢，你會點去反思呀？	Good. At last, I would like to ask…how will you reflect on your learning after planning and monitoring it?
S9	睇 YouTube 囉。最好架啦。又好笑，又學到野。	Watching YouTube is the best way. It's fun and educational.
I	好嘅，咁最後就想問下啦，你成個過程，包括安排，調節，同反思之後呢，你嘅心情如何呀？	OK. At last, throughout the whole process, how do you feel after planning, monitoring, and reflecting it?
S9	冇咩任何感想可以發表喎。Maybe pay more attention in class 就會積極啲咯。	I don't have anything to share. Maybe 'pay more attention is class will make me more active.
I	好嘅，咁呢個 interview 就完結啦，好多謝你嘅參與，Thank you。	OK, so this is the end of the interview. Thank you for your participation. Thank you.

Appendix 23. *Exemplar of Coding for Scenario-based Microanalytic Assessment (NVivo)*

Remarks:
This is used as an exemplar for coding students' self-regulatory process using NVivo and for conducting inter-rater reliability (30% of the original data). Negotiation was made on the result after the separate, individual coding process.



Appendix 24. *School Information*

Remarks:

- ◊ As noted, there is no studies or official report that indicates the CLIL subjects in Hong Kong. For the purpose of selecting the appropriate school offering the similar proportion of CLIL subject, a systematic classification of all the Hong Kong secondary school's demographic information and medium of instruction were reported. This is by far the most up to date (as of Aug 2022) comprehensive comprehension indicating the provision of CLIL subjects in HK.

- ◊ As research in Hong Kong has mentioned comparable schools were selected without further providing information, this also provides an insightful and detailed information for future researchers to select schools that have the similar characteristics for a reliable comparison.

- ◊ Please note that all the information was triangulated on the school websites and school reports in order to ensure the reliability of the source.

- ◊ In this study, fifteen schools (including Band 1,2 and 3) were selected based on the similar proportion of CLIL subjects and the researcher's connection (English/ content subject teachers). For the sake of confidentiality, they were not indicated in the table.

- ◊ School Type:
  - ◊ Gov't = Government School (authorized and managed by the government)
  - ◊ DSS = Direct Subsidy Scheme School (receiving partial subsidy from government and a highly flexibility in curriculum planning)
  - ◊ Aided = Aided School (receiving full subsidy from government)

- ◊ Gender:
  - Boys = Boys' school
  - Girls = Girls' school
  - Co-ed = Co-educational school

Models of CLIL in the form of EMI in Hong Kong (Source adopted from Lin & Lo, 2019)

Models	Characteristics	Features
Mostly EMI	● Top-ranking schools ● Students with high language proficiency and general academic ability	Nearly all content subjects (except Chinese-related) are taught in English across all grade levels
Mostly CMI	● Students with low language proficiency and general academic ability	Content subjects mostly taught in L1 Chinese, but schools can offer "Extended Learning Activities" (ELA) in English for a maximum of 15%, 20%, and 25% of the total class time at Secondary 1, 2, 3

		respectively
MoI switching	● Students with average language proficiency and general academic ability	Most subjects are taught in Chinese at junior secondary levels, but in English at senior secondary levels
EMI by class	● Students with average language proficiency and general academic ability ● Non-Chinese speaking students (e.g., South Asian origin)	A number of classes in each grade level of which all content subjects are taught in English
EMI by subject	● Students with average language proficiency and general academic ability	One or two content subjects in English (Mathematics and science subjects being the most inclined to adopt English as MoI, Kan et al., 2011)

District	School	Gender	School Type	EMI Content Subjects	EMI (partial)	Selection Criteria (why only partial?l)	Note	Extended Learning Activities (<25%)
Central & West	King's College	Boys	Gov't	Mathematics, Music, Visual Arts, Physical Education, Integrated Science, Computer Literacy, History, Geography, Business Fundamentals (S.3)				N/A
Central & West	Lok Sin Tong Leung Kau Kui College	Co-ed	Aided	Mathematics, Integrated Science		more-able students	* Class-based for more-able classes (English), other classes: unit-based ,	N/A
Central & West	Raimondi College	Aided	Aided	Mathematics, Integrated Science (S.1 2), Physics, Chemistry, Biology (S.3), Computer Literacy, History, Geography, Life and Society, Music, Visual Arts, Physical Education				N/A
Central & West	St Clare's Girls' School	Girls	Aided	Mathematics, Computer Literacy, History, Geography, Music, Physical Education, Visual Arts, Technology and Living, Junior Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Business and Management (S.3), Economics and Commerce (S.3)				N/A
Central & West	St. Joseph's College	Boys	Aided	Mathematics, Religious Studies, Integrated Science, Physics, Chemistry, Biology (S.3), Computer Literacy, Integrated Humanities, Business Fundamentals (S.2 S.3), Physical Education, Music, Visual Arts				N/A
Central & West	St. Louis School	Boys	Aided	Mathematics, Life and Society, Computer Literacy, Geography, History, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Visual Arts, Music, Physical Education				N/A

Central & West	St. Paul's Co-Educational College	Co-ed	DSS	Society Studies, Mathematics (Integrated) Science, Computer Literacy, History, Geography, Economy Studies (S.3), Religious Studies, Music, Visual Arts, Design & Technology, Enquiry Learning (S.1 S.2), Aesthetic & Creativity Education (S.3)				N/A
Central & West	St. Paul's College	Boys	DSS	Chemistry, , Religious Studies, Mathematics, Physics, Biography, Integrated Humanities, Integrated Science, Visual Arts, Computer, Music, Physical Education				N/A
Central & West	St. Stephen's Church College	Co-ed	Aided		Mathematics (S.1 2), Integrated Studies (S.1 2)	X	*no selection criteria	No
Central & West	St. Stephen's Girls' College	Girls	Aided	Mathematics, Science, History,, Geography, Life and Society, Information and Communication Technology, Visual Arts, Technology and Living, Music, Physical Education, Religious Education				N/A
Central & West	Ying Wa Girls' School	Girls	Aided	Language Arts, Mathematics, Integrated Science (S.1 2), Physics, Chemistry, Biology (S.3), History, Geography , Information and Communication Technology (S.1), Home Economics, Visual Arts, Music, STEM (S.1), Generic Skills (S.2 3),				N/A
Eastern	Belilios Public School	Girls	Gov't	Mathematics, History, Geography, Computer Literacy, Integrated Science, Visual Arts, Home Economics (S.1 2), Music, Physical Education, Business Fundamentals (S.3), Life Planning (S.3),				N/A
Eastern	Caanossa College	Girls	Aided	Mathematics, Integrated Science (S.1 2), Computer Literacy, Home Economics, Music, History, Geography, Life and Society, Visual Arts, English Drama, Physics, Chemistry, Biology (S.3)				N/A

Eastern	Caritas Chai Wan Marden Foundation Secondary School	Co-ed	Aided					
Eastern	CCC Kwei Wah Shan College	Co-ed	Aided		Mathematics, Science, Information Technology Application, Geography, Life and Society, Ethics/ Religious Education, Design & Technology, Home Economics, Visual Arts, Music, Physical Education	NCS Only	** only for non-Chinese speaking students, but not mentioned how it actually works in practice	Yes
Eastern	Cheung Chuk Shan College	Co-ed	Aided	Mathematics, Integrated Science (S.1 2), Physics, Chemistry, Biology (S.3), Economics (S.3), Business, Accounting and Financial Studies (S.3), History, Geography, Life and Society, ICT, Visual Arts, Home Economics, Music, Physical Education				N/A
Eastern	Chong Gene Hang College	Co-ed	Aided	Mathematics*, Science**, Life and Society**, Design Thinking and Technology**, Physics, Chemistry, Biology (S.3)			* only 1 class in each form (i.e, 1A,2A,3A) are taught in English for the subject, for other classes only 25% are taught in English, , **only 15% for all classes,	N/A
Eastern	Clementi Secondary School	Co-ed	Gov't					N/A
Eastern	CNEC Lau Wing Sang Secondary School	Co-ed	Aided	Science (S.1), Mathematics*, Science (S.2 3)*, Computer Literacy*, Geography (S.1 2)*, Life and Society (S.1 2)*, Computer Design & Technology (S.3)*, Economics and Public Affairs (S.3)*,			*only 2 classes are taught in English, for other classes only 25%, (not mention of how they categorize students)	

Eastern	Cognitio College (HK)	Co-ed	Aided					No
Eastern	Fortress Hill Methodist Secondary School	Co-ed	Aided					No
Eastern	Fukien Secondary School (Siu Sai Wan)	Co-ed	Aided	Home Economics, Music				No
Eastern	Henrietta Secondary School	Co-ed	Aided		Mathematics, Integrated Science (S.1 2), History*, Geography*, Music*, Music*, Computer*, Life & Technology (S.1 2)*, Physics, Biology, Chemistry (S.3)*		*only specific class(es) are used, but not mentioned how they categorize students	Yes
Eastern	Hon Wah College	Co-ed	DSS		History*, Geography*, Integrated Science*, Mathematics*, Physics, Chemistry, Biology*, Computer Studies**, Music**, Physical Education**, Visual Arts**, Life and Society**		*only two classes (out of three) are taught in English ** one of the classes above also uses English in these subjects	Yes
Eastern	Hong Kong Chinese Women's Club College	Co-ed	Aided	Mathematics, Geography, History, Life and Society, Integrated Science (S.1 2), Physics, Chemistry, Biology (S.3), Computer Literacy, Music, Physical Education, Home Economics, Design and Technology, Visual Arts				N/A
Eastern	Islamic Kasim Tuet Memorial College	Co-ed	Aided		Music, Visual Arts, Mathematics*, Life and Society*, Computer Literacy*, Integrated Science*, Technology and Living*, Religious Studies*, Physical Education*		*only for non-Chinese speaking students (MOI – may used Urdu, Nepali, Arabic)	
Eastern	Kiangsu-Chekiang College	Co-ed	DSS	Mathematics, Science, Physics, Chemistry, Biology, Life and Society, Geography, History, Computer Literacy, Visual Arts, Music, Physical Education			*only some classes used English, but not mentioned how they categorize students	Yes

Eastern	Liangnan Hang Yee Memorial Secondary School	Co-ed	Aided					No
Eastern	Lingnan Secondary School	Co-ed	Aided					No
Eastern	Man Kiu College	Co-ed	Aided					No
Eastern	Munsang College (Hong Kong Island)	Co-ed	Aided	Mathematics, Integrated Science, History, Geography, Technology Education, Music, Physical Education, Visual Arts (S.1 2), Integrated Humanities (Economics & BAFS) (S.3)				N/A
Eastern	Precious Blood Secondary School	Girls	Aided	Mathematics*, Integrated Science*, Computer*			*some classes are taught in English, but not mentioned how they categorize students	Yes
Eastern	Pui Kiu Middle School	Co-ed	DSS	Mathematics*, Integrated Science*, History*, Physics, Chemistry, Biology*			*some classes are taught in English, but not mentioned how they categorize students	Yes
Eastern	Salesian English School	Boys	Aided	English Language, Mathematics, Geography*, Computer Literacy*, Integrated Science*			*2 classes are taught in English	
Eastern	Shau Kei Wan East Government Secondary School	Co-ed	Gov't	Mathematics*, Computer Literacy*, Science*			*only some classes are taught in English, but not mentioned how they categorize students	Yes
Eastern	Shau Kei Wan Government Secondary School	Co-ed	Gov't	Mathematics, Geography, History, Science, Computer Literacy, Visual Arts, Home Economics, Design & Technology, Music, Physical Education				N/A
Eastern	SKH Li Fook Hing Secondary School	Co-ed	Aided					No

Eastern	St. Joan of Arc Secondary School	Co-ed	Aided		Mathematics*/**, Science*/**, Geography**, History**, Computer Literacy**, Physical Education**, Music**, Life and Society**		*only some classes are taught in English, , ** for Non Chinese-speaking students only	Yes
Eastern	St. Mark's School	Co-ed	Aided	Mathematics, Life and Society, Integrated Science, History, Geography, Business Fundamentals (S.3), Computer Literacy, Home Economics (S.1 2), Music, Visual Arts				N/A
Eastern	The Chinese Foundation Secondary School	Co-ed	DSS	Mathematics, Integrated Humanities, Science, Information and Communication Technology, Music, visual Arts, Physical Education, Enrichment Course (S.1 2)				N/A
Eastern	The Methodist Church HK Wesley College	Co-ed	Aided	Mathematics, Physics and Chemistry (S.3), Computer Literacy*, History*, Geography*, Economics (S.3)*, Integrated Science (S.1 2)*, Biology (S.3)*			* only 3 classes are taught in English (S.1 1st term: 'scaffolding model' – use Cantonese	N/A
Southern	Aberdeen Baptist Lui Ming Choi College	Co-ed	Aided		Science (S.1,2)*, Physics, Chemistry (S.3)*,		*only some classes are taught in English, but not mentioned how to categorize students	Yes
Southern	Aberdeen Technical School	Boys	Aided	Mathematics (S.2 3)			*only some classes are taught in English, but not mentioned how to categorize students	Yes
Southern	Caritas Chong Yuet Ming Secondary School	Co-ed	Aided	,				No

Southern	Caritas Wu Cheng-chung Secondary School	Co-ed	Aided		Mathematics*, Integrated Science (S.1 2)*, Physics, Chemistry, Biology. (S.3) *, Chinese History*, Computer Studies and Technology*, Life and Society*, Economics and Commerce*, Ethics and Religious Studies*, Visual Arts*, Physical Education*, Music*, Activity Education and Life Education*, STEAM Education*		*only for Non-Chinese speaking students	Yes
Southern	HKUGA College	Co-ed	DSS	Humanities, Information and Communication Technology, Integrated Science (S.1 2), Physics, Chemistry, Biology (S.3), Life and Society, Mathematics, Physical Education, Technology and Living, Drama, Music, Visual Arts				N/A
Southern	Hong Kong Sea School	Boys	Aided					N/A
Southern	Hong Kong True Light College	Girls	Aided	Integrated Science (S.1& S.2), Life and Society (S.1 & S.2), Science & Technology (S.3), Economics and Accounting (S.3)	Mathematics*, Computer Literacy (S.1 S.2)*, Music*, Visual Arts*, Home Economics*, Geography (S.1 S.2)*, History (S.1 S.2)*		* subjects offered in the 2 "bilingual classes" (cf. English classes)	
Southern	Pui Tak Canossian College	Girls	Aided	Life and Society (S.1), Science (S.1 3), Mathematics (S.2 S.3), Science (S.2 S.3)				N/A
Southern	Pui Ying Secondary School	Co-ed	Aided					
Southern	Sacred Heart Canossian College	Girls	Aided	Mathematics, Physics, Chemistry, Biology (S.3), Economics (S.3), Geography, History, Integrated Science(S.1 & S.2), Life and Society, Religious & Moral Education, Computer Literacy, Drama (S.1 & S.2), Home Economics, Music, Physical Education, Visual Arts				N/A

Southern	San Wui Commercial Soc. Chan Pak Sha School	Co-ed	Aided	Mathematics, Integrated Science				No
Southern	S.K.H. Lui Ming Choi Secondary School	Co-ed	Aided	Mathematics, Geography, Computer Liteacy, Science (F.1 & F.2), Physics, Chemistry, Biology (F.3), Economic & Financial Literacy (F.2, F.3), Music, Physical Education, Visual Arts				N/A
Southern	St. Peter's Secondary School	Co-ed	Aided		Mathematics, Science (S.1S.2), Physics, Chemistry, Biology (S.3)			No
Southern	St. Stephen's College	Co-ed	DSS	Mathematics, Science, Integrated Humanities, Geography, History, Physics, Chemistry, Biology, Religious Studies, Computer and Information Technology, Music				N/A
Southern	Yu Chun Keung Memorial College No.2	Co-ed	Aided		Mathematics, Integrated Science, STEAM Education, Mathematics, Integrated Science, Information Technology, Design and Technology, Visual Arts, Religious Studies, Life and Society, Physical Education, Music		*only for Non-Chinese speaking students	
Wanchai	Buddhist Wong Fung Ling College	Co-ed	Aided		Mathematics (S.1 3), Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Life and Society (S.1 S.2), History S.1 S.3), Geography (S.2 S.3)		*only for non-Chinese speaking students	Yes
Wanchai	CCC Kung Lee College	Co-ed	DSS				(Junior Secondary will be introduced next year)	N/A
Wanchai	Concordia Lutheran School – North Point,	Co-ed	Aided		Mathematics, Science, Integrated Humanities, Computer Literacy, Religion, Visual Arts, Music*, Physical Education		*only for non-Chinese speaking students	Yes

Wanchai	Confucius Hall Secondary School	Co-ed	DSS		Mathematics, Integrated Science, History, Geography, Life and Society, Information and Communication Technology, Music, Physical Education, Technology Education, Visual Arts, Confucius Studies		not mentioned how they categorize students	Yes
Wanchai	Hong Kong Tang King Po College	Boys	Aided		Mathematics, Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Geography, Life and Society		not mentioned how they categorize students	Yes
Wanchai	Hotung Secondary School	Girls	Gov't		Mathematics, History, Geography, Science (S.3), Technology & Living, Music, Business Fundamentals (S.3)			
Wanchai	Marymount Secondary School	Girls	Aided	Mathematics, Religious Education, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Life and Society, Geography, History, Computer Literacy, Music, Physical Education, Technology & Living, Visual Arts				N/A
Wanchai	Queen's College	Boys	Gov't	Mathematics, Science, History, Geography, Computer Literacy, Visual Arts, Music, Physical Education, Life and Society				N/A
Wanchai	Rosaryhill Secondary School	Co-ed	Aided	Mathematics, Science	Geography, History, Chinese History, Life and Society (S.3), Computer Literacy, Home Economics, Music, Visual Arts, Religious Studies, Life Education, Physical Education		*only for non-Chinese speaking students	Yes
Wanchai	S.K.H. Tang Shiu Kin Secondary School	Girls	Aided	Mathematics, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3), History, Geography, Computer Literacy, Personal Finance Education (S.3), Home Economics (S.1 S.2), Design and Technology (S.1 S.2), Creativity and Technology (S.3), Music, Visual Arts, Physical Education				N/A

Wanchai	St. Francis' Canossian College	Girls	Aided	Mathematics, Integrated Science (S.1 S.2), Life and Society (S.1 S.2), History, Geography, Economics (S.3), Business, Accounting and Financial Studies (S.3), Physics, Chemistry, Biology (S.3), Information Technology, Visual Arts, Technology & Living (S.1 S.2), Music, Ethics/ Religious Education, Physical Education, Information Literacy S.1 S.2)				N/A
Wanchai	St. Paul's Convent School	Girls	DSS	Mathematics, Life and Society, Integrated Science, Biology, Chemistry, Physics, History, Geography, Economics, Further Mathematics – Accounting, Business, Enhanced IT, Computer Literary, Learning to Learn, Religious Studies, Visual Arts, Home Economics, Music, Physical Education, BTEC Programmes: (Art and Design, Business, Home Cooking Skills, Information Technology, Performing Art: Musical Theatre (Cantonese Opera), Sports)				N/A
Wanchai	St. Paul's Secondary School	Girls	Aided	Mathematics, Science, History, Geography, Computer Literacy, Visual Arts, Home Economics, Music, Physical Education, Religious Studies, Life and Society				N/A
Wanchai	Tang Shiu Kin Victoria Government Secondary School	Co-edd	Gov't		Mathematics, Science, Geography, Computer Literacy, Music		* not mentioned how they categorise students	Yes
Wanchai	True Light Middle School of Hong Kong	Girls	Aided	Mathematics, Science (S.1 S.2), Physics, Chemistry, Biology (S.3), History, Geography, Computer, Life and Society, Visual Arts, Home Economics, Music, Physical Education				N/A
Wanchai	TWGHs Lee Ching Dea Memorial College	Co-ed	Aided		Mathematics, Science (S.1 S.2), Physics, Chemistry (S.3)			Yes

Wanchai	Wan Yan College Hong Kong	Boys	Aided	Mathematics, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3), History, Geography, Computer, IDEEA (S.1), Visual Arts, Music, Physical Education, Ignatian Values Education, Life and Society, Life Education/ Religious Education				N/A
Kowloon City	Bishop Hall Jubilee School	Co-ed	Aided	Mathematics, Life and Society, Physical Education, Integrated Science (S.1 S.2), History, Geography, Music, Computer Literacy, Visual Arts, Religious Studies (S.2), Physics, Chemistry, Biology (S.3)				N/A
Kowloon City	Carmel Secondary School	Co-ed	Aided	Mathematics, Biblical Studies (S.1 S.2), History, Geography, Integrated Science (S.1 S.2), Information and Communication Technology, Home Economics (S.1 S.2), Design and Technology, Visual Arts, Music, Physical Education, Economics and Public Affairs (S.1 S.2), Business Fundamentals (S.3), Physics, Chemistry, Biology (S.3)				N/A
Kowloon City	CCC Kei To Secondary School	Co-ed	Aided		Mathematics, Integrated Science (S.1 S.2), Physics, Chemistry (S.3)			Yes
Kowloon City	Chan Sui Ki (La Salle) College	Boys	Aided	Mathematics, Integrated Science, Integrated Humanities, Computer Literacy, Business Fundamentals (S.3), Religious Studies, Physical Education, Music, Visual Arts				N/A
Kowloon City	Cognitio College (Kowloon)	Co-ed	Aided	Geography, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3)	Computer Literacy, Mathematics,		* not mentioned how they categorize students	Yes
Kowloon City	Diocesan Boys' School	Boys	DSS	Mathematics, Integrated Science, History, Geography, French, Computer Literacy, Visual Arts, Innovation & Design, Music, Physical Education, Religious Studies, Life and Society				N/A

Kowloon City	Heep Yunn School	Girls	DSS	Mathematics, Integrated Science, Life and Society, History, Computer Literacy, Geography, Religious Studies, Visual Arts, Music, Physical Education, Technology and Living (S.1 S.2), Science & Technology Education (S.1 S.2), Business and Economics (S.3)				N/A
Kowloon City	HKICC Lee Shau Kee School of Creativity	Co-ed	DSS					No
Kowloon City	Hoi Ping Chamber of Commerce Secondary School	Co-ed	Aided	Mathematics, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3), History, Geography, Life and Society, Economics (S.3), Computer Literacy (S.3), STEM & IT, Home Economics (S.1 S.2), Music, Physical Education, Visual Arts				N/A
Kowloon City	Holy Family Canossian College	Girls	Aided	Mathematics, Geography, History, Integrated Science (S.1 S.2), Life and Society (S.1 S.2), Physics, Biology, Chemistry (S.3), Information and Communication Technology, Home Economics, Music,				N/A
Kowloon City	Homantin Government Secondary School	Co-ed	Gov't		Mathematics, Integrated Science, Geography, Home Economics, Visual Arts, Music		Only mentioned some classes adopt English, others not; not mentioned how they categorize students	Yes
Kowloon City	Jockey Club Government Secondary School	Co-ed	Gov't		,			Yes
Kowloon City	Kowloon Tong School (Secondary Section)	Co-ed	Aided	Social Studies				Yes
Kowloon City	Kowloon True Light School	Girls	Aided	Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Geography				Yes

Kowloon City	La Salle College	Boys	Aided	Mathematics, Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Life and Society, Geography, Information and Communication Technology, History, Design and Technology (S.1 S.2), Economics (S.3), Music, Visual Arts, Religious Education, Physical Education				N/A
Kowloon City	Maryknoll Convent School (Secondary Section)	Girls	Aided	Mathematics, Life and Society, Geography, History, Science, Physics, Chemistry, Biology, Visual Arts, Music, Physical Education, Computer Literacy, Technology and Living, Ethics/ Religious Education				N/A
Kowloon City	Munsang College	Co-ed	Aided	Mathematics, Life and Society, Geography, History, Integrated Science, Physics, Chemistry, Biology, Business and Economics, Information and Communication Technology, Music, Visual Arts, Physical Education				N/A
Kowloon City	New Asia Middle School	Co-ed	Aided		Mathematics		*mentioned "some classes adopt English", mentioned how they categorize students	Yes
Kowloon City	Notre Dame College	Co-ed	Aided					Yes
Kowloon City	Pentecostal School	Co-ed	Aided	Mathematics				Yes
Kowloon City	Po Leung Kuk Ngan Po Ling College	Co-ed	DSS	French, Mathematics, Geography, History, Computer Literacy, Visual Arts, Home Economics, Physical Education, Music, Life and Society (S.1), Graphical Communication (S.2 S.3), Integrated Science (S.1 S.2), Physics, Chemistry, Biology, Economics, Business and Account (S.3)				N/A
Kowloon City	Pooi To Middle School	Girls	Aided	Mathematics, Integrated Science, Physics, Chemistry, Biology	History (S.1 S.2), Information and Communication Technology		*three classes use EMI, one called 'Less EMI' class, but not mentioned how they categorize students	Yes

Kowloon City	Pui Ching Middle School	Co-ed	Aided	,				Yes
Kowloon City	Rhenish Church Pang Hok Ko Memorial College	Co-ed	Aided	Mathematics,Computer Literacy				Yes
Kowloon City	Scientia Secondary School	Co-ed	DSS		Mathematics, Science, Computer and Information Technology, Physics, Chemistry		Only Class A uses EMI	No
Kowloon City	SKH Holy Carpenter Secondary School	Co-ed	Aided					Yes
Kowloon City	S.K.H. Holy Trinity Church Secondary School	Co-ed	Aided		Mathematics, Integrated Science		Not mentioned how they categorize students	No
Kowloon City	SKH Tsoi Kung Po Secondary School	Co-ed	Aided		Life and Society, Integrated Science		Mentioned some classes use English, and group according to students' English ability	Yes
Kowloon City	St. Teresa Secondary School	Girls	Aided	Mathematics, Science, Physics, Chemistry, Biology				Yes
Kowloon City	STFA Seaward Woo College	Co-ed	Aided	Mathematics	Geography, History		Mentioned some classes use English, but not mentioned how they categorize students	Yes
Kowloon City	Tang King Po School	Boys	Aided					Yes
Kowloon City	The Y.W.C.A. Hioe Tjo Yoeng College	Co-ed	Aided	Mathematics, Geography, History, Computer Literacy, Physical Education, Home Economics, Design and Technology, Music, Visual Arts, Science				N/A
Kowloon City	TWGHs Wong Fut Nam College	Co-ed	Aided	Mathematics, geography, History, Integrated Science, Physics, Chemistry, Biology, Computer Literacy, Visual Arts, Physical Education, Music				N/A

Kowloon City	Wa Ying College	Co-ed	Aided	Mathematics, Integrated Science, Physics, Chemistry, Biology, History, Geography, Computer Literacy, Home Economics, Design & Technology, Visual Arts , Music				N/A
Kowloon City	Yu Chun Keung Memorial College	Co-ed	Aided					Yes
Kwun Tong	Buddhist Ho Nam Kam College	Co-ed	Aided					Yes
Kwun Tong	CCC Kei Chi Secondary School	Co-ed	Aided					Yes
Kwun Tong	CCC Mong Man Wai College	Co-ed	Aided	Mathematics, Science, Geography, History, Commerce (S.3), Computer Literacy, Visual Arts, Music, Home Economics, Physical Education				N/A
Kwun Tong	Delia Memorial School (Hip Wo)	Co-ed	DSS		Mathematics, Science, Integrated Humanities, History, Chinese History, Computer and Technology, Life Education, Physical Education, Visual Arts, Music		*not mentioned how they categorize students, but certain amount of non-Chinese speaking students	No
Kwun Tong	Delia Memorial School (Hip Wo No.2 College)	Co-ed	DSS	Mathematics, Science, Geography, History, Life and Society, Computer Literacy, Music, Visual Arts, Physical Education, STEM				N/A
Kwun Tong	ECF Saint Too Canaan College	Co-ed	DSS	Mathematics, Information Technology, Geography (S.1 2), History (S.1 2), Integrated Science (S.1 2), Physics, Chemistry, Biology (S.3), History (S.3), Economics (S.3), BAFS (S.3)	Religious Studies*		For Non-Chinese speaking students	N/A
Kwun Tong	FDBWA Szeto Ho Secondary School,	Co-ed	Aided	Mathematics				No

Kwun Tong	Fukien Secondary School	Co-ed	DSS	Mathematics, Computer Literacy, Geography, History, Integrated Science, Integrated Business, Physics, Chemistry, Biology, Music, Visual Arts				No
Kwun Tong	HKSKH Bishop Hall Secondary School	Co-ed	Aided					No
Kwun Tong	HKWMA Chu Shek Lun Secondary School	Co-ed	Aided		all content subjects except PE and Chinese related subjects		*only for non-Chinese speaking students	No
Kwun Tong	Ko Lui Secondary School	Co-ed	Aided					Yes
Kwun Tong	Kwun Tong Government Secondary School	Boys	Gov't	Mathematics, Science, Geography, History, Life and Society, Computer Literacy, Music, Technology and Living, STEM education, visual Arts, Physical Education, Business and Management				N/A
Kwun Tong	Kwun Tong Kung Lok Government Secondary School	Boys	Gov't					Yes
Kwun Tong	Leung Shek Chee College,	Girls	Aided	Mathematics, Science, History, Geography, Business Fundamentals, Economics, Computer Literacy, Physical Education, Visual Arts, Music, STEM				N/A
Kwun Tong	Maryknoll Secondary School	Girls	Aided					Yes
Kwun Tong	Mu Kuang English School	Co-ed	DSS		Mathematics, Integrated Science, Integrated Humanities (S.3), Geography (S.1 S.2)		*only 1 class use English, other classes use Chinese, not mentioned how they categorize students	Yes
Kwun Tong	Ning Po College	Co-ed	Aided		Mathematics, Geography		No extra information	Yes
Kwun Tong	Ning Po No.2 College	Co-ed	Aided	Integrated Science, Information Technology				No

Kwun Tong	NLSI Lui Kwok Pat Fong College	Co-ed	Aided	Mathematics, Science, Computer Literacy, Home Economics, Geography, History, Life and Society (S.1 S.2), Visual Arts, Music				N/A
Kwun Tong	Po Chiu Catholic Secondary School	Co-ed	Aided					No
Kwun Tong	Shun Lee Catholic Secondary School	Co-ed	Aided	Mathematics, Integtaed Humanities, Visual Arts, Music, Technology & Living, Computer, Home Economics, Design & Technology, Science (S.1 & S.2), STEM (S.2), Physics, Chemistry, Biology S(.3)				N/A
Kwun Tong	Sing Yin Secondary School	Boys	Aided	Mathematics, Integrated Science, Physics, Chemistry, Biology, History, Geography, Economic and Public Affairs, Computer Literacy, Music				N/A
Kwun Tong	S.K.H. Kei Hau Secondary School	Co-ed	Aided					Yes
Kwun Tong	S.K.H. Leung Kwai Yee Secondary School	Co-ed	Aided					No
Kwun Tong	St. Antonius Girls' College	Girls	Aided					Yes
Kwun Tong	St. Catherine's School for Girls	Girls	Aided	Mathematics, Computer Literacy, Geography, History, Technology and Living, Physical Education, Music, Science				N/A
Kwun Tong	St. Joseph's Anglo-Chinese School	Boys	Aided	Integrated Science, Integrated Humanities				Yes
Kwun Tong	St. Paul's School (Lam Tin)	Girls	Aided	Mathematics, Integrated Science, History, Geography, Life and Society, Computer Literacy, Visual Arts, Home Economics, Music, Physical Education				N/A
Kwun Tong	The Hong Kong Taoist Association Ching Chung	Co-ed	Aided					Yes

	Secondary School							
Kwun Tong	The Mission Covenant Church Holm Glad College	Co-ed	Aided					Yes
Kwun Tong	United Christian College (Kowloon East)	Co-ed	DSS	Mathematics, Science, Physics, Chemistry, Biology, Information and Communication Technology, STEM, Geography, Music, History, Visual Arts, Business Foundation (S.3)				N/A
Kwun Tong	Yan Chai Hospital Law Chan Chor Si Colelge	Co-ed	Aided					Yes
Sham Shui Po	Buddhist Tai Hung College	Co-ed	Aided	Mathematics, Science (S.1 S.2)	Computer Literacy, Music, Visual Arts, Physical Education, Physics, Chemistry, Biology (S.3), Life and Society (S.3)		Mentioned some classes are taught in English, but not mentioned how they categorize	Yes
Sham Shui Po	CCC Ming Yin College	Co-ed	Aided	Mathematics, Integrated Science, History, Geography, Social Economic and Business Studies, Home Economics, Music, Visual Arts, Computer Literacy				N/A
Sham Shui Po	Chan Shu Kui Memorial School	Co-ed	DSS		Mathematics, Integrated Science, History , Biology, Physics, Chemistry, Geography, Information Technology, Music, Visual Arts		*mentioned only taught in “EMI class”, requirement: good English level ; less no. of students to cater for individual needs	No
Sham Shui Po	Cheung Sha Wan Catholic Secondary School	Boys	Aided	Mathematics, Integrated Science, Life and Society, History, Geography, Computer and Technology, Visual Arts, Music				N/A
Sham Shui Po	China Holiness College	Co-ed	DSS					No

Sham Shui Po	CMA Secondary School	Co-ed	Aided					No
Sham Shui Po	Concordia Lutheran School	Co-ed	Aided		Mathematics, Integrated Science, Physics, Chemistry, Biology, Economic and Public Affair (S.3), Business Fundamentals (S.3), Computer Literacy, Music, Visual Arts, Physical Education		Not mentioned how they categorize students	Yes
Sham Shui Po	Delia Memorial School (Broadway)	Co-ed	DSS	Mathematics, Integrated Humanities, Science, Computer Literacy, Music, Visual Arts, Physical Education				N/A
Sham Shui Po	Delia Memorial School (Glee Path)	Co-ed	DSS		Mathematics, Science, Geography, History, Visual Arts, Physical Education, Computer Literacy, Chinese History, Individudals and Societies, Research and Inquiry, STEM, Culture and Identity, Biology, Physics, Chemistry, Tourism and Hospitality, Business, Accounting and Financial Stuies, Economics		*not mentioned how they categorize students	No
Sham Shui Po	Heung To Middle School	Co-ed	DSS	Integrated Science, Mathematics, Business Fundamentals, Information Technology				No
Sham Shui Po	HKSYC & IA Wong Tai Shan Memorial College	Co-ed	Aided	Mathematics, History, Geography, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Economic and Public Affairs (S.3), Computer Literacy, Music, Digital Graphis, Business Fundamentals (S.3), Visual Arts, Physical Education				N/A
Sham Shui Po	Holy Trinity College	Girls	Aided	Mathematics, Life and Society, Geography, History, Integrated Science (S.1 S.2), ICT, Visual Arts, Music, Physical Education, Technology and Living, Physics, Chemistry, Biology				N/A

Sham Shui Po	Kowloon Technical School	Co-ed	Gov't					Yes
Sham Shui Po	Maryknoll Fathers' School	Co-ed	Aided	Integrated Humanities, Integrated Science (S.1 S.2), Principles of Accounts (S.3)	Mathematics, Computer Literacy, Music (S.1 S.2), Integrated Science (S.3)		*only class in Chinese, 3 classes in English, not mentioned how they categorize students	N/A
Sham Shui Po	Nam Wah Catholic Secondary School	Co-ed	Aided					Yes
Sham Shui Po	Our Lady of The Rosary College	Girls	Aided	Mathematics, Science (S.1 S.2), STEM Education (S.2), Life and Society, Physics, Chemistry, Biology (S.3), History, Geography, Home Economics (S.1 S.2), Music, Visual Arts, Computer Literacy, Physical Education				N/A
Sham Shui Po	Po Leung Kuk Tong Nai Kan Junior Secondary College	Co-ed	Aided	Mathematics, Science, Physics, Chemistry, Biology (S.3)				Yes
Sham Shui Po	S.K.H. St. Mary's Church Mok Hing Yiu College	Co-ed	Aided					Yes
Sham Shui Po	St. Margaret's Co-Educational English Secondary and Primary School	Co-ed	DSS	Mathematics, Integrated Science, Physics, Chemistry, Biology (S.3), Life and Society, ICT, Physical Education, Music, Visual Arts, Technology Education, Religious Studies, History, Economics, Geography, Tourism and Hospitality Studies, Business, Accounting and Financial Studies				N/A
Sham Shui Po	Tack Ching Girls' Secondary School	Girls	Aided					No
Sham Shui Po	Tak Nga Secondary School	Girls	Aided	Mathematics, Science				Yes

Sham Shui Po	Tsung Tsin Christian Academy	Co-ed	DSS	Mathematics, Life and Society, Physics, Chemistry, Biology, History, Geography, Economics, BAFS, Computer Literacy, Visual Arts, Music, STEM				N/A
Sham Shui Po	TWGHs Chang Ming Thien College	Co-ed	Aided	Science, Geography	Mathematics, Computer Literacy, Life, History, Society		- students' average marks of Chinese, English, Mathematics, and pass of English à English class; others, Chinese class, , - distinctive results + pass English à keep in EMI; students who fail à put in CMI	Yes
Sham Shui Po	United Christian College	Co-ed	Aided	Mathematics,				Yes
Sham Shui Po	Wai Kiu College	Co-ed	DSS		Geography, History, Life and Society, Integrated Humanities (S.2 S.3), Mathematics, Information Technology, Science (S.1 S.2), Physics, Chemistry, Biology		- according to students; English ability, streamed to EMI/CMI class	No
Sham Shui Po	Ying Wa College	Boys	DSS	Mathematics, Music, Integrated Science (S.1 S.2), Physics, Chemistry Biology (S.3), History, Geography, Business Education (S.3), Computer Literacy				N/A
Wong Tai Sin	Buddhist Hung Sean Chau Memorial College	Co-ed	Aided		Mathematics		Only in S2-S.3	Yes
Wong Tai Sin	CCC Heep Woh College	Co-ed	Aided	Mathematics, Integrated Science (S.1 S.3), Life and Society, History, Geography, Religious Education, Computer Literacy, Visual Arts (S.1 S.2), Music, Physical Education				N/A

Wong Tai Sin	CCC Kei Heep Secondary School	Co-ed	Aided					Yes
Wong Tai Sin	CCC Rotary Secondary School	Co-ed	Aided		Life and Society, Integrated Science		- a designated class – some units taught in English	No
Wong Tai Sin	Chi Lin Buddhist Secondary School	Co-ed	Aided					No
Wong Tai Sin	Choi Hung Estate Catholic Secondary School	Boys	Aided		Mathematics		- one class taught in English, but not mentioned how they categorize students	Yes
Wong Tai Sin	Good Hope School	Girls	DSS	Biology, Physics, Chemistry, Business Studies, Ethics and Religious Education, Geography, History, Information and Communication Technology, Integrated Science, Life and Society, Mathematics, Music, Physical Education, STEAM, Technology and Living, Visual Arts				N/A
Wong Tai Sin	Ho Lap College (Sponsored by the Sik Sik Yuen)	Co-ed	Aided	Mathematics, Life and Society, History, Geography, Science, Physics, Chemistry, Biology, Technology Education (Computer Literacy, Home Economics), Visual Arts, Music, Physical Education				N/A
Wong Tai Sin	Kit Sam Lam Bing Yim Secondary School	Girls	Aided	Mathematics	Science		*in elite class	
Wong Tai Sin	Lee Kau Yan Memorial School	Co-ed	Aided					Yes
Wong Tai Sin	Lok Sin Tong Yu Kan Hing Secondary School	Co-ed	Aided	Mathematics				Yes
Wong Tai Sin	Lung Cheung Government Secondary School	Co-ed	Gov't					No

Wong Tai Sin	Ng Wah Catholic Secondary School	Boys	Aided		Mathematics, Integrated Science, Biology (S.3)		Some classes taught in English, but not mentioned how they categorize	
Wong Tai Sin	Our Lady's College	Girls	Aided	Geography, History, Life and Society, Economics and Business, Science, Physics, Chemistry, Biology	Mathematics, Computer Literacy, Technology & Living, Music		Only for English class, but not mentioned how they categorize	N/A
Wong Tai Sin	PHC Wing Kwong College	Co-ed	Aided	Mathematics, Life and Society				No
Wong Tai Sin	Po Leung Kuk Celine Ho Yam Tong College	Co-ed	Aided	Mathematics, Science, Geography, History, Computer Literacy, Economics and Business, Accounting and Financial Studies, Music, Physical Educatioj, Visual Arts, Home Economics				No
Wong Tai Sin	Po Leung Kuk No.1 W.H. Cheung College	Co-ed	Aided	Mathematics, Science, History, Geography, Business, Accounting and Financial Studies (S.3), Economics (S.3), Life and Society (S.1 S.2), Computer Literacy, Visual Arts (S.1 S.2), Technology and Living, Music, Physical Education				N/A
Wong Tai Sin	Salvation Army William Booth Secondary School	Co-ed	Aided					No
Wong Tai Sin	S.K.H. St. Benedict's School	Co-ed	Aided					Yes
Wong Tai Sin	St. Bonaventure College and High School	Co-ed	Aided	Mathematics, Integrated Science, Physics, Chemistry, Biology				Yes
Wong Tai Sin	Stewards Pooi Tun Secondary School	Co-ed	Aided	Mathematics (S.1 S.2), Integrated Science (S.1 S.2)	Mathematics (S.3), Science (S.3)		*only 2 classes use English	No
Wong Tai Sin	Tak Oi Secondary School	Girls	Aided	Mathematics, Life and Society, Technology & Living, Computer Literacy, Visual Arts, Music, Physical Education, Science, Physics, Chemistry, Biology, Business & Economics, Geography, History				N/A

Yau Tsim Mong	CCC Ming Kei College	Co-ed	Aided	Mathematics, History, Geography, Life and Society, Integrated Science, Physics, Chemistry, Biology, Business Fundamentals, Computer Literacy, Home Economics, Music, Visual Arts, Ceramics, Physical Education				N/A
Yau Tsim Mong	Diocesan Girls' School	Girls	DSS	Mathematics, Science, Hisotyr, Geography, Economics and Commerce, Religious Education, Visual Arts, Technology and Living, Music, Physical Education, Information Technology				N/A
Yau Tsim Mong	ELCHK Lutheran Secondary School	Co-ed	Aided		History, Mathematics, Computer Literacy, Geography, Science		*2 classes out of 4 use English, * based on students' ability	Yes
Yau Tsim Mong	HK & KLN Chiu Chow Public Assn. Sec. School	Co-ed	Aided		Mathematics, Science (S.1)		*not mentioned how they categorize/implement it	No
Yau Tsim Mong	HKMA David Li Kwok Po College	Co-ed	DSS	Mathematics, Integrated Humanities, Integrated Science, Physics, Chemistry, Biology, Home Economics, STEM, Information and Communication Technology, Music, Health and Physical Education, Visual Arts				N/A
Yau Tsim Mong	Kowloon Sam Yuk Secondary School	Co-ed	DSS		Mathematics, Science, Music		Only mentioned "some classes", but not mentioned how they categorize students	Yes
Yau Tsim Mong	Lai Chack Middle School	Co-ed	Aided					Yes
Yau Tsim Mong	Lung Kong WFSL Lau Wong Fat Secondary School	Co-ed	Aided					Yes
Yau Tsim Mong	Methodist College	Co-ed	Aided	Mathematics, History, Geography, Computer Literacy, Design and Technology, Visual Arts, Physical Education, Home Economics, Music, Science, Physics, Chemistry, Biology				N/A

Yau Tsim Mong	Newman Catholic College	Co-ed	Aided		Mathematics, Science		*no info	No
Yau Tsim Mong	Queen Elizabeth School	Co-ed	Gov't	Mathematics, Integrated Science, Physics, Chemistry, Biology, Computer Literacy, Design and Technology, Home Economics, Accounting and Economics, Geography, History, Life and Society, Visual Arts, Music, Physical Education				N/A
Yau Tsim Mong	Sir Ellis Kadoorie Secondary School (West Kowloon)	Co-ed	Gov't	Mathematics, Life and Society, Geography, Integrated Science, Computer and Information Technology, Home Economics, Music,Visual Arts, Physical Education, STEM (S.2)				N/A
Yau Tsim Mong	S.K.H. All Saints' Middle School	Co-ed	Aided					No
Yau Tsim Mong	St. Francis Xavier's College	Boys	Aided	Mathematics, Integrated Humanities (S.1 S.2), Science, Geography, Computer Literacy, Religious Studies, Music, Visual Arts, Moral and Civic Education, Physical Education, Business Fundamentals (S.3)				N/A
Yau Tsim Mong	St. Mary's Cannossian College	Girls	Aided	Mathematics, Physics, Chemistry, Biology, Geography, History, Integrated Science, Life and Society, Visual Arts, Home Economics, Music, Physical Education, Information Technology, Religious Education				N/A
Yau Tsim Mong	True Light Girls' College	Girls	Aided	Mathematics, Science, Physics, Chemistry, Biology, Business Fundamentals, History, Geography, Computer Literacy, Music, Physical Education, Home Economics, Visual Arts, Life and Society				N/A
Yau Tsim Mong	Wah Yan College, Kowloon	Boys	Aided	History, Geography, Mathematics, Visual Arts, Music, Computer Literacy, Integrated Science, Physics, Chemistry, Biology				N/A

Islands	Buddhist Fat Ho Memorial College	Co-ed	DSS		Mathematics, Life and SocietY, Integrated Science (S.1 2), Physics, Chemistry, Biology (S.3), Business Fundamental (S.3), Computer and Information Technology, Physical Education, Visual Arts, Music, Buddhist Morals and Values Education		*only offer in EMI stream, and students are placed based on their learning needed.	Yes
Islands	Buddhist Wai Yan Memorial College	Co-ed	Aided					No
Islands	Caritas Charles Vath College	Co-ed	DSS				NOT OFFERING JUNIOR SEC CURRICULUM	No
Islands	Cheung Chau Government Secondary School	Co-ed	Gov't					No
Islands	HKFEW Wong Cho Bau Secondary School	Co-ed	Aided		Mathematics (S.1 S.2), Integrated Science (S.1 S.2)		*only some classes are offered in English, but not mentioned how they categorize students	Yes
Islands	Ho Yu College And Primary School (Sponsored by Sik Sik Yuen)	Co-ed	Aided		Mathematics, Integrated Science		*only 'selected' classes are offered in English, but not mentioned how they categorize students	Yes
Islands	Ling Liang Church E Wun Secondary School	Co-ed	Aided		Mathematics, Integrated Science		*only some classes are offered in English, but not mentioned how they categorize students,	Yes

Islands	PLK Mrs. Ma Kam Ming-Cheung Fook Sien College	Co-ed	Aided		Mathematics, Science, Computer Literacy, Geography		*some classes are offered in English, but not mentioned how they categorize students,	Yes
Islands	Tung Chung Catholic School	Co-ed	Aided		Mathematics, Science, Music, Visual Arts, Physics, Chemistry, Biology		*only 'English classes' are taught in English (but 'Chinese classes' also receive some specific vocabulary learning),	Yes
Islands	YMCA of Hong Kong Christian College	Co-ed	DSS	Mathematics, Information & Communication Technology, Integrated Science, Physics, Chemistry, Biology, Economics, Business, Accounting and Financial Studies, History, Geography, Philosophy and Religious Studies, Religious Students, Tourism & Hospitality Studies, Life and Society, Music, Visual Arts, Drama, Home Economics, Physical Education, Reading				N/A
Kwai Tsing	Buddhist Sin Tak College	Co-ed	Aided	Mathematics, Integrated Science (S.1 S.2), Geography (S.2 S.3), History (S.1 S.3), Physics, Chemistry, Biology (S.3), STEM Education (S.1 S.2), Computer Literacy (S.1 S.2), Home Economics (S.1 S.2), Music				N/A
Kwai Tsing	Buddhist Yip Kei Nam Memorial College	Co-ed	Aided					No
Kwai Tsing	Caritas St. Joseph Secondary School	Co-ed	Aided					No
Kwai Tsing	Carmel Alison Lam Foundation Secondary School	Co-ed	Aided		Mathematics (S.3)		*not mentioned how they categorize students	Yes

Kwai Tsing	CCC Chuen Yuen College	Co-ed	Aided	Mathematics, Geography, Physical Education (S.2 S.3), History, Integtaed Science, Creative Technology, Basic Business & Accounting				N/A
Kwai Tsing	CCC Yenching College	Co-ed	Aided					No
Kwai Tsing	CNEC Christian College	Co-ed	Aided	Mathematics, Geography, History, Computer Literacy, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Visual Arts (S.2 S.3), Business & Economics (S.3), Physical Education, Music				N/A
Kwai Tsing	CNEC Lee I Yao Memorial Secondary School	Co-ed	Aided	Mathematics, Physics	Chemistry		Not mentioned how they categorise students	Yes
Kwai Tsing	Cotton Spinners Association Secondary School	Co-ed	Aided		Life and Values Education		Not mentioned how they categorise students	No
Kwai Tsing	Daughters of Mary Help of Christians Siu Ming Catholic Secondary School	Girls	Aided	Mathematics, Geography (S.2 S.3), History (S.2 S.3), Social Studies (S.1), Science (S.1 S.2), Computer Literacy, Physics, Chemistry, Biology (S.3), Technology and Living, Music, Physical Education				N/A
Kwai Tsing	HKSYC & IA Chan Nam Chong Memorial College	Co-ed	Aided					No
Kwai Tsing	HKTA The Yuen Yuen Institute No.1 Secondary School	Co-ed	Aided					No
Kwai Tsing	Ju Ching Chu Secondary School (Kwai Chung)	Co-ed	Aided					yes
Kwai Tsing	Kiangsu-Chekiang College (Kwai Chung)	Co-ed	Aided	Integrated Science (S.1 S.2), Physics, Chemistry, Biology	Mathematics		*some classes are EMI, but not mentioned how they categorize students	yes

Kwai Tsing	Kwai Chung Methodist College	Co-ed	Aided					yes
Kwai Tsing	Lai King Catholic Secondary School	Co-ed	Aided	Integrated Science, Mathematics				No
Kwai Tsing	Lingnan Dr. Chung Wing Kwong Memorial Secondary School	Co-ed	Aided					Yes
Kwai Tsing	Lions College	Co-ed	Aided		Mathematics, Science		*not mentioned how they categorize students	Yes
Kwai Tsing	Lok Sin Tong Ku Chiu Man Secondary School	Co-ed	Aided					Yes
Kwai Tsing	Lok Sin Tong Leung Chik Wai Memorial School	Co-ed	Aided					Yes
Kwai Tsing	Po Leung Kuk Lo Kit Sing (1983) College	Co-ed	Aided	Mathematics, Science, Integrated Humanities, Technology & Living, Music, Visual Arts, Computer Literacy, Physical Education, Geography (S.3)				N/A
Kwai Tsing	Pope Paul VI College	Girls	Aided	Mathematics, Computer Literacy, Visual Arts, Music, Integrated Science (S.1 S.2), Integrated Humanities (S.1 S.2), Home Economics (S.1 S.2), Physics, Chemistry, Biology (S.3), History (S.3), Geography (S.3), Business Fundamentals (S.3)				N/A
Kwai Tsing	Queen's College Old Boys' Association Secondary School	Co-ed	Aided		Mathematics, Integrated Science (S.1 S.2), Physics, Biology		2 out of four classes in S.1 and S.2 are taught in English; 1 out of four classes in S.3 are taught in English	Yes

Kwai Tsing	Salesians of Don Bosco Ng Siu Mui Secondary School	Boys	Aided		Ethics/ Religious Studies, Mathematics, Integrated Humanities, Chinese History, Integrated Science, Design and Technology, Arts, Physical Education, Music, Moral and Civic Education, Well being Learning Experiences		*only offered for non-Chinese speaking students	No
Kwai Tsing	Shek Lei Catholic Secondary School	Co-ed	Aided		Mathematics, Integrated Science		*only “some classes are taught in English”, not mentioned how they categorize students	Yes
Kwai Tsing	Shun Tak Fraternal Assocation Lee Shau Kee College	Co-ed	Aided	Mathematics, Integrated Science (S.1 S.2), Computer Literacy, Home Economics, Design and Technology, Physics, Chemistry, Biology (S.3), Integrated Humanities (S.2 S.3), Music, Visual Arts, Physical Education, Geography (S.1), Life & Society, History, Economic & Business Fundamentals (S.3)				N/A
Kwai Tsing	S.K.H. Lam Woo Memorial Secondary School	Co-ed	Aided	Mathematics, Life and Society, Computer Literacy, Design and Technology, Geography, History, Home Economics, Integrated Science (S.1 S.3), Music, Visual Arts, Physics, Chemistry, Biology (S.3)				N/A
Kwai Tsing	The Methodist Lee Wai Lee College	Co-ed	Aided					Yes
Kwai Tsing	Tung Wah Group of Hospitals Mrs. Wu York Yu Memorial College	Co-ed	Aided	History, Geography, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3),	Mathematics		*3 classes are EMI classes, 1 class is flexible class (without Maths) in each form, *weaker English students will be in flexible class	No

Kwai Tsing	TWGHs Chen Zao Men College	Co-ed	Aided	Mathematics, Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Life and Society, Geography, History, Computer Literacy , Business Fundamentals (S.3)				N/A
Kwai Tsing	TWGHs S. C. Gaw Memorial College	Co-ed	Aided	Science, Integrated Humanities				Yes
North	Caritas Fanling Chan Chun Ha Secondary School	Co-ed	Aided					No
North	CCC Kei San Secondary School	Co-ed	Aided		Mathematics, Computer Literacy, Business Fundamentals, Technology and Living, Music, Religious Studies, Visual Arts, Integrated Humanities (S.1 S.2), Life and Society (S.3), E.P.A. (S.3), Geography (S.3), Physics, Chemistry, Biology (S.3), Tourism and Hospitality Studies (S.3), Values Education (S.3)		-only 25% in the subjects are taught in English	Yes
North	Christian Alliance S W Chan Memorial College	Co-ed	Aided	Integrated Science (S.1 S.3)	Mathematics (S.2 S.3)		Not mentioned how they categorize students	Yes
North	De La Salle Secondary School, N.T.	Co-ed	Aided					Yes
North	Elegantia College (Sponsored by Education Convergence)	Co-ed	Aided	English Drama (S.3), Science, Mathematics	Geography, Computer Literacy, Living and Technology, Music, Drama Education (S.3), Principles of Accounts (S.3), Economics (S.3)		*only one class use Chinese, for other 4 classes use English	Yes
North	Fanling Government Secondary School	Co-ed	Gov't					No

North	Fanling Kau Yan College	Co-ed	Aided	Science (S.1,S.2), Physics, Chemistry, Biology (S.3)	Mathematics, Life and Society, History (S.3), Geography, Music, 21st Century Whole Person Development and Core Literacy (S.2 S.3)		*English would be used to supplement learning	Yes
North	Fanling Lutheran Secondary School	Co-ed	DSS	Mathematics, Science, Computer Literacy, Physics, Chemistry, Biology				N/A
North	Fanling Rhenish Church Secondary School	Co-ed	Aided	Mathematics, Science	History, Geography, Visual Arts, Music, Computer Literacy, Home Economics		*only 25% of the subject time is taught in English (i.e., Extended Learning Activities in English)	Yes
North	Fung Kai Liu Man Shek Tong Secondary School	Co-ed	Aided		Mathematics, Integrated Science		*not mentioned how they categorize students	Yes
North	Fung Kai No.1 Secondary School	Co-ed	Aided	Mathematics	Science (S.1 S.2), Geography, History, Life and Society (S.3), Physics, Chemistry, Biology (S.3)		* not mentioned how they categorize students (only “EMI enhanced in some classes/forms/ groups”)	Yes
North	HKCKLA Buddhist Ma Ham Chan Memorial English Secondary School	Co-ed	Aided	Integrated Science, Geography (S.1 S.2), Integrated Humanities,				Yes
North	Hong Kong Taoist Assoication Tang Hin Memorial Secondary School	Co-ed	Aided	Mathematics, Integrated Science, Life and Society, Geography, Computer Literacy, Visual Arts, Music				N/A

North	Po Leung Kuk Ma Kam Ming College	Co-ed	Aided	Mathematics, Science	Geography*, History*, Computer Literacy*		*only students with high proficiency in English is taught with English	Yes
North	Sheung Shiu Government Secondary School	Co-ed	Gov't					No
North	S.K.H. Chan Young Secondary School	Co-ed	Aided	Mathematics, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Technology Education, History (S.1 S.2), Geography, Life and Society, Arts Education				N/A
North	St. Francis of Assisi's College	Co-ed	Aided					No
North	Tin Ka Ping Secondary School	Co-ed	Aided	Mathematics, Integrated Sciences, History (S.2 S.3), Geography (S.2 S.3), Technology Education (Business Module) (S.3), Computer and Technology, Visual Arts, Music, Physical Education				N/A
North	TWGHs Kap Yan Directors' College	Co-ed	Aided	Mathematics, Science, Geography, History, Life and Society (S.3), Computer Literacy, Design and Technology, Home Economics, Music, Visual Arts				N/A
North	TWGHs Li Ka Shing College	Co-ed	Aided	Mathematics, Geography, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Computer Literacy, Home Economics, Design and Technology				N/A
Sai Kung	Carmel Divine Grace Foundation Secondary School	Co-ed	Aided	Mathematics, Computer Literacy, Integrated Science, Physics, Chemistry, Biology, Geography, History, Economics, Music, Design and Technology, Home Economics, Physical Education, Visual Arts				N/A
Sai Kung	Catholic Ming Yuen Secondary School	Co-ed	Aided					No

Sai Kung	Cheng Chek Chee Secondary School of SK & HH District N.T.	Co-ed	Aided					Yes
Sai Kung	Christian & Missionary Alliance Sun Kei Secondary School	Co-ed	Aided	Mathematics, Computer Literacy, Integrated Science, Physics, Chemistry, Biology, Geography, History (S.1 S.2), Economics (S.3), Music, Information and Communication Technology, Project Learning (S.1 S.2), Home Economics, Physical Education				N/A
Sai Kung	Creative Secondary School	Co-ed	DSS	English, Mathematics, Science, technology, Social and Humanities, Music, Visual Arts, Physical Education				N/A
Sai Kung	Evangel College	Co-ed	DSS	Mathematics, Integrated Science, Music, Visual Arts, Creative Technology, Geography, History, Economics, Life and Society, Physics, Chemistry, Biology (S.3), Accounting				N/A
Sai Kung	G.T. (Ellen Yeung) College	Co-ed	DSS	Integrated Science (S.1 S.2), Mathematics, Geography, Physics, Chemistry, Biology (S.3), Visual Arts, Music, Economics				N/A
Sai Kung	Heung To Secondary School (Tseng Kwan O)	Co-ed	DSS					Yes
Sai Kung	HKCKLA Buddhist Ching Kok Secondary School	Co-ed	Aided					Yes
Sai Kung	HKCCCU Logos Academy	Co-ed	DSS	Mathematics, Natural Sciences, Social Studies, Technology Education, Information and Communication Technology (S.2), Physics, Chemistry, Biology (S.3), History, Geography, Psychology, Business, Accounting and Financial Studies				N/A
Sai Kung	HKMLC Queen Maud Secondary School	Co-ed	Aided	Mathematics, Integrated Science				Yes

Sai Kung	Hong Kong Taoist Association The Yuen Yuen Institute No.3 Secondary Sch.	Co-ed	Aided		Life and Society, Integrated Science, Computer Literacy, History (S.1,S.3), Geography (S.2 & S.3) – Religious and Ethics Studies, STEM Education (S.3)*		* for non-Chinese speaking students	Yes
Sai Kung	King Ling College	Co-ed	Aided	Mathematics, Integrated Science, History, Geography, Information & Communication Technology, Economics & Business, Technology & Living, Visual Arts, Music, Physical Education				N/A
Sai Kung	MKMCF Ma Chan Duen Hey Memorial College	Co-ed	Aided	World History (S.1 S.2)				Yes
Sai Kung	PLK Laws Foundation College	Co-ed	DSS	Mathematics, Integrated Science, Business, Accounting and Financial Studies, Economics and Geography, Computer and Information Technology, Technology & Living, Visual Arts, Music, Physical Education, Integrated Humanities				N/A
Sai Kung	Po Kok Secondary School	Co-ed	Aided	Mathematics (S.3), Integrated Science, Physics, Chemistry	Mathematics, Integrated Science		Not mentioned how they categorize students	No
Sai Kung	Po Leung Kuk Ho Yuk Ching (1984) College	Co-ed	Aided					Yes
Sai Kung	POH 80th Anniversary Tang Ying Hei College	Co-ed	Aided	Mathematics, Integrated Science (S.1)	Mathematics (S.2 S.3), Integrated Science (S.2)		Not mentioned how they categorize students	No
Sai Kung	Man Kwan QualiEd College	Co-ed	DSS		Mathematics*, Science*, Geography*, Computer and Information Technology*, InnoTech Sessions*, Business Foundation*		*2 classes in S.1, 1 class in S.2 and S.3 use English, , *S1 students applying for admission to the English class will take an	No

							English writing assessment	
Sai Kung	Sai Kung Sung Tsun Catholic School (Secondary Section)	Co-ed	Aided					Yes
Sai Kung	Shun Tak Fraternal Association Cheng Yu Tung Secondary School	Co-ed	Aided					Yes
Sai Kung	Tseung Kwan O Government Secondary School	Co-ed	Gov't	Mathematics, Science, Computer Literacy, History, Geography, Home Economics, Music				No
Sai Kung	TWGHs Lui Yun Choy Memorial College	Co-ed	Aided					Yes
Sai Kung	WEO Chang Pui Chung Memorial School	Co-ed	Aided					Yes
Sai Kung	Yan Chai Hospital Lan Chi Pat Memorial Secondary School	Co-ed	Aided		Mathematics, Information and Communication Technology		*some classes are taught in English, but not mentioned how to categorize students	No
Sai Kung	Yan Chai Hospital Wong Wha San Secondary School	Co-ed	Aided	Mathematics, Economics	Life and Society, Computer and Information Technology, History, Music, Integrated Science, Business, Accounting and Financial Studies		* 3 out of 4 are taught in English, 1 in Chinese	No

Shatin	Baptist Lui Ming Choi Secondary School	Co-ed	Aided	Mathematics, Science (S.1 & S.2), Physics, Chemistry, Biology (S.3), History, Geography, Computer Literacy, Design and Technology, Home Economics (S.1 S.2), Music, Drama (S.1), Visual Arts				N/A
Shatin	Buddhist Kok Kwong Secondary School	Co-ed	Aided		Mathematics, Science*, Computer Literacy (S.2 S.3)*, Music (S.1)*		* 2 out of 3 subjects are taught in English	Yes
Shatin	Buddhist Wong Wan Tin College	Co-ed	Aided		Integrated Science (S.1S.2), Physics, Chemistry, Biology (S.3), Geography		* no info on the website	Yes
Shatin	Caritas Ma On Shan Secondary School	Co-ed	Aided		Maker Programme*		* Junior form school-based curriculum (but no info provided)	Yes
Shatin	Chinese Y.M.C.A. College	Co-ed	Aided	Integrated Humanities, Mathematics, Integrated Science	STREAM Studies (S.1 & S.2)*, Multi learning Curriculum (S.3)**		*including – Design and Technology, Home Economics, Computer Literaacy, Visual Arts, , **including – Humanities Project Learning, Scienifiic Inquiry, STEM Project, Design and Technology, Home Economics, Computer Literacy, , Note: the school website has not provided any extra info regarding the two school-based curriculum	Yes

Shatin	Chiu Chow Association Secondary School	Co-ed	Aided					No
Shatin	Christ College	Co-ed	Aided		Mathematics, Integrated Science (S.1 S.3), Economics, Geography, History, Computer Literacy		The subjects are taught in English in S1; Less than 25% are taught in English in S.2 and in S.3	Yes
Shatin	Christian Alliance Cheng Wing Gee College	Co-ed	Aided	Mathematics, Integrated Science, Physics, Chemistry, Biology (S.3), History (S.2), Geography, Computer Literacy, Visual Arts, Music, Physic Education, Design and Technology, Technology and Living, Integrated Arts Education (S.3), Economics (S.3), Business, Accounting and Financial Studies (S.3)				
Shatin	CUHKFAA Chan Chun Ha Secondary School	Co-ed	Aided	Mathematics (S.1), Science	,		the school mentioned that they would offere 'EMI-dominant classes' in 2-3 next year (no extra information)., , Some units of Integrated Humanities would be conducted and assessed.	Yes
Shatin	GCC&ITKD Lau Pak Lok Secondary School	Co-ed	Aided		Mathematics, Science (S.1 S.2), Physics, Chemistry, Biology (S.3)		*no information how they implement	Yes
Shatin	Helen Liang Memorial Secondary School (Shatin)	Co-ed	Gov't		Mathematics, Science		*mentioned, 'EMI class set up', but no information of how they categorise students	Yes

Shatin	HKBU Affiliated School Wong Kam Fai Secondary & Primary School	Co-ed	DSS	Mathematics, Integrated Humanities, Integrated Science, Information and Computer Literacy, Business Fundamentals (S.3), Music, Visual Arts, Physical Education	Liberal Arts*		*bilingual teaching	Yes
Shatin	HKCWC Fung Yiu King Memorial Secondary School	Co-ed	Aided					
Shatin	Immaculate Heart of Mary College	Co-ed	Aided	Mathematics, Integrated Science (S.1 S.2), Physics (S.3), Chemistry (S.3), Biology (S.3), History, Geography, Life and Society, Computer Literacy, Visual Arts, Music, Technology and Living, Design and Technology				N/A
Shatin	Jockey Club Ti-I College	Co-ed	Aided	Mathematics, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3), History, Geography, Life and Society, Physical Education, Visual Arts, Economics and Accounting (S.3), Information and Communication Technology, Technology in Living (S.1 S.2), Music				N/A
Shatin	Kiangsu-Chekiang College (Shatin)	Co-ed	Aided	Mathematics, Life and Society, History, Geography, Computer Literacy, Visual Arts, Home Economics, Design and Technology, Music, Physical Education, Science (S.1 S.2), Physics, Chemistry, Biology (S.3),				N/A
Shatin	Kwok Tak Seng Catholic Secondary School	Co-ed	Aided	Mathematics, Computer Literacy, Visual Arts, Music,Geography, Integrated Science (S.1 S.2), Life and Society (S.1 S.2), Home Economics (S.1 S.2),INNO Master (S.1 S.2), Physics, Chemistry, Biology (S.3), Economics (S.3)				N/A
Shatin	Lam Tai Fai College	Co-ed	DSS	Mathematics, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Integrated Humanities, Innovative Technology, Visual Arts, Health Education, Music				N/A
Shatin	Lock Tao Secondary School	Co-ed	Aided					Yes

Shatin	Lok Sin Tong Young Ko Hsiao Lin Secondary School	Co-ed	Aided		Mathematics, Integrated Humanities, Integrated Science, Integrated Business (S.3)		*only one class of each form is taught in English for all content subjects,	
Shatin	Ma On Shan St. Joseph's Secondary School	Co-ed	Aided		Mathematics, Integrated Science, Computer Literacy, Geography, Life and Society		*taught in English or supplemented with Extended Learning Activities according to students' abilities	Yes
Shatin	Ma On Shan Tsung Tsin Secondary School	Co-ed	Aided	Mathematics, Computer Literacy (S.1 2)	Science (S.1 S.2), History, Geography, Humanities and Economics (S.1 S.2), Design and Technology (S.1 S.2), Music, Visual Arts, Physical Education, Physics, Chemistry, Biology (S.3), Computer Technology (S.3)		*by class	Yes
Shatin	Ng Yuk Secondary School	Co-ed	Aided					No
Shatin	Pentecostal Lam Hon Kwong School	Co-ed	Aided	Mathematics, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3), History, Geography, Computer Literacy (S.2 S.3), Home Economics (S.1 S.2), Design and Technology (S.1 S.2), Physical Education, Arts Education				N/A
Shatin	Po Leung Kuk C. W. Chu College	Co-ed	Aided					No
Shatin	Po Leung Kuk Wu Chung College	Co-ed	Aided	Mathematics, Science	Life and Society, Geography, History, Computer Literacy, Economics and Financial Literacy (S.3)		*no mention how they categorise students	Yes
Shatin	POH Chan Kai Memorial College	Co-ed	Aided		Mathematics, Integrated Science		*"certain S.1 & S.2" classes will adopt EMI, no mention how to	

							categorize students	
Shatin	Pui Kiu College	Co-ed	DSS	Mathematics, History, Geography, Integrated Science, Computer and Information Technology, Life and Society				N/A
Shatin	Sha Tin Government Secondary School	Co-ed	Gov't	mathematics, Science (S.1 S.3), Project based learning (S.3), History, Geography, Life and Society, Computer Literacy, visual Arts, Music, Physical Education				N/A
Shatin	Sha Tin Methodist College	Co-ed	Aided	Mathematics, Integrated Science, Computer Literacy, STEM (S.1 S.2), Design and Technology (S.1), History, Music, Visual Arts, Geography, Life and Society, (S.2 S.3)				N/A
Shatin	Shatin Pui Ying College	Co-ed	Aided	Mathematics, History, Geography, Science, Information Technology, Physical Education, Music, Visual Arts, Drama Education, Home Economics (S.1 S.2)				N/A
Shatin	Shatin Tsung Tsin Secondary School	Co-ed	Aided	Mathematics, Science, Technology (Computer and Design), Physics, Chemistry Biology (S.2 S.3), History, Geography, Economics (S.3), Arts in Life (Visual Arts and Home Economics), Physical Education				N/A
Shatin	S.K.H. Lam Kau Mow Secondary School	Co-ed	Aided	Mathematics, Science, History, Geography, Economics, Accounting and Personal Finance (S.3), Computer Literacy, Visual Arts, Home Economics, Design & Technology, Music				N/A
Shatin	S.K.H Tsang Shu Tim Secondary School	Co-ed	Aided	Mathematics, Science, Computer Literacy, Geography, History, Home Economics, Music, Visual Arts, Physical Education, Design and Technology				N/A
Shatin	St. Rose of Lima's College	Girls	Aided	Mathematics, Life and Society, Integrated Science, Geography, History, Computer Literacy, Home Economics, Visual Arts, Music , Physical Education				N/A

Shatin	Stewards Pooi Kei College	Co-ed	DSS	Mathematics, Integrated Humanities (S.1 S.2), Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Business, Accounting and Financial Studies (S.3), Economics (S.3), Geography (S.3), History (S.3), Information and Communication Technology (S.3), Visual Arts, Music				N/A
Shatin	Tak Sun Secondary School	Boys	DSS	Computer Literacy, Geography, Integrated Science, Mathematics, Music, Visual Arts, Life and Society				N/A
Shatin	Toi Shan Association College	Co-ed	Aided					No
Shatin	Tsang Pik Shan (Sung Lan) Secondary School	Co-ed	Aided					No
Shatin	TWGHs Mrs. Fung Wong Fung Ting College	Co-ed	Aided		Integrated Science (S.2), Geography, History, Mathematics, Chemistry (S.3)		*not mentioned how they categorise students, but on the website, the matreials provided for one class (S1D) is different from other class (S.1A-C) – much more an complex vocabulary	Yes
Shatin	TWGHs Wong Fung Ling College	Co-ed	Aided					No
Shatin	TWGHs Yow Kam Yuen College	Co-ed	Aided					No
Shatin	Yan Chai Hospital Tung Chi Ying Memorial Secondary School	Co-ed	Aided					No

TaiPo	Assembly of God Hebron Secondary School	Co-ed	Aided					No
TaiPo	Buddhist Tai Kwong Chi Hong College	Co-ed	Aided					No
TaiPo	Carmel Holy Word Secondary School	Co-ed	Aided	Mathematics, Computer Literacy				No
TaiPo	Carmel Pak U Secondary School	Co-ed	Aided	Mathematics, Information & Communication Technology, Integrated Science, (S.1 S.2), Physics, Chemistry, Biology (S.3), History, Geography, Life and Society (S.1 S.2), Economics and Business (S.3)				N/A
TaiPo	CCC Fung Leung Kit Memorial Secondary School	Co-ed	Aided		Mathematics, Integrated Science, Computer, Business, Visual Arts, Music, Religious Education, Life and Society (S.1 &S.2), Integrated Humanities (S.3)		*not indicate how they allocate the class time to EMI	Yes
TaiPo	China Holiness Church Living Spirit College	Co-ed	Aided					No
TaiPo	Confucian Tai Shing Ho Kwok Pui Chun College	Co-ed	Aided		Mathematics, Science (S.1, S.2), Life and Society, Physics, Chemistry Biology (S.3)		*25% of the class time allocated to English	Yes
TaiPo	HK & KLN Kaifong Women's Association Sung Fong Chung College	Co-ed	Aided	Computer Literacy, Integrated Science,				
TaiPo	Hong Kong Red Swastika Tai Po Secondary School	Co-ed	Aided		Mathematics, Integrated Science, Computer, History, Geography		* not more than 25% of the class time allocated to English	Yes

TaiPo	Hong Kong Taioist Association The Yuen Yuen Institute No.2 Secondary School	Co-ed	Aided		Mathematics, Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Computer Liracy, Life and Society, Geography (S.1 & S.3), History (S.2 & S.3), Business and Accounting (S.3), Design & Technology, Home Economics, Music, English Drama (S.1)			Yes
TaiPo	Hong Kong Teachers' Association Lee Heng Kwei Secondary School	Co-ed	Aided					No
TaiPo	Kau Yan College	Co-ed	Aided	Science, Geography	Mathematics			Yes
TaiPo	Law Ting Pong Secondary School	Co-ed	DSS	Mathematis, Life and Society, Science, Information and Communication Technology, Music, Visual Arts, Physical Education, Design and Technology, Food Science, Performing Arts, Geography, History, Spanish Language and Culture,	Life Education*, History*		*for non-Chinese speaking students	N/A
TaiPo	Ling Liang Church M H Lau Secondary School	Co-ed	Aided		Mathematics (S.1 S.3)			Yes
TaiPo	N.T. Heung Yee Kuk Tai Po District Secondary School	Co-ed	Gov't					No
TaiPo	SALEM-Immanuel Lutheran College	Co-ed	Aided	Mathematics, History, Geography, Visual Arts, Music, Integrated Science, Computer Literacy, Home Economics, Design and Technology (S.1 S.2), Physics, Biology, Chemistry, Integrated Technology, Life and Society (S.3)				N/A
TaiPo	SKH Bishop Mok Sau Tseng Secondary School	Co-ed	Aided	Mathematics, History, Geography, Computer Literacy, Music, Home Economics, Science, Economics and Business (S.3)				N/A

TaiPo	Tai Po Sam Yuk Secondary School	Co-ed	DSS	Mathematics, Integrated Science, Geography, Computer & Information Technology, Visual Arts, Music, Design and Technology, Home Economics, Physical Education				N/A
TaiPo	Valtorta College	Co-ed	Aided	Mathematics, Science (S.1 S.2), Computer Literacy, Music, Visual Arts, Home Economics, Life and Society, History, Geography, Physics, Chemistry, Biology (S.3)				N/A
TaiPo	Wong Shiu Chi Secondary School	Co-ed	Aided	Mathematics, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Integrated Humanities, History, Geography, Economics and Society (S.3), Computer Literacy, Home Economics, Design & Technology				N/A
Tseun Wan	AD&FD POHL Leung Sing Tak College	Co-ed	Aided	Mathematics, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3)				No
Tseun Wan	Ho Fung College (Sponsored by Sik Sik Yuen)	Co-ed	Aided	Mathematics, Integrated Science, Geography, History, Physics, Chemistry, Biology, Life and Society, Business Fundamentals, Computer & Technology, Technology and Living, Music, STEM Education				N/A
Tseun Wan	Liu Po Shan Memorial College	Co-ed	Aided	Mathematics, Science	History, Geography, Visual Arts, Physical Education, Music, Innovative Technology, Technology & Living (S.1 S.2)		Not mentioned how they categorize students	No
Tseun Wan	Mui Ming Choi Lutheran College	Co-ed	Aided					No
Tseun Wan	Po Leung Kuk Lee Shing Pik College	Co-ed	Aided	Mathematics, Science (S.1)	Science (S.2), Physics, Chemistry, Biology (S.1), Geography, History, Computer Literacy, Music, Visual Arts (S.2 S.3)		Not mentioned how they categorize students	No
Tseun Wan	Po Leung Kuk Yao Ling Sun College	Co-ed	Aided					Yes

Tseun Wan	Po On Commerical Associataion Wong Siu Ching Secondary School	Co-ed	Aided	Mathematics, Geography, Computer and Information Technology, History, Science, Physics, Chemistry, Biology (S.3)				No
Tseun Wan	S.K.H. Li Ping Secondary School	Co-ed	Aided					Yes
Tseun Wan	St. Francis Xavier's School Tseun Wan	Boys	Aided	Mathematics, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3)				No
Tseun Wan	TIACC Woo Hon Fai Secondary School	Co-ed	Aided	Mathematics				No
Tseun Wan	Tseun Wan Government Secondary School	Co-ed	Gov't	Mathematics, Science, Computer Literacy, History, Geography, Visual Arts, Music, Home Economics, Design and Technology, Physical Education				N/A
Tseun Wan	Tsuen Wan Public Ho Chuen Yiu Memorial College	Co-ed	Aided	Mathematics, Geography, Life and Society, History, Computer Literacy, Physical Education, Science (S.1 S.2), Physics, Chemistry, Biology (S.3), Business, Accounting and Financial Studies (S.3)				N/A
Tseun Wan	YCH Lim Por Yen Secondary School	Co-ed	Aided					Yes
Tuen Mun	Baptist Wing Lung Secondary School	Co-ed	Aided	Mathematics, Integrated Science				No
Tuen Mun	Buddhist Sum Heung Lam Memorial College	Co-ed	Aided					Yes

Tuen Mun	Caritas Tuen Mun Marden Foundation Secondary School	Co-ed	Aided		Mathematics, Science (Junior Secondary), Humanities, Music, Physical Education Lessons, Business Fundamentals, Visual Arts, Ethics/Religious Education, Moral Education, Innovative Computing,		Non-Chinese speaking students	Yes
Tuen Mun	Carmel Bunnan Tong Memorial Secondary School	Co-ed	Aided		Mathematics, Integrated Science		Elite classes	No
Tuen Mun	CCC Hoh Fuk Tong College	Co-ed	Aided		Mathematics, Science		No information	No
Tuen Mun	CCC Tam Lee Lai Fun Memorial Secondary School	Co-ed	Aided					Yes
Tuen Mun	Ching Chung Hau Po Woon Secondary School	Co-ed	Aided					Yes
Tuen Mun	Christian Alliance College	Co-ed	Aided		Life and Society, Integrated Science		Elite classes	No
Tuen Mun	Christian Alliance S.C. Chan Memorial College	Co-ed	Aided	Mathematics, Geography, History, Music, Computer Literacy, Physical Education, Visual Arts, Economics, Physics, Chemistry, Biology				No
Tuen Mun	Chung Sing Benevolent Society Mrs. Aw Boon Haw Secondary School	Co-ed	Aided		Computer Literacy, Mathematics			Yes

Tuen Mun	CMA Choi Cheung Kok Secondary School	Co-ed	Aided		English Language, Mathematics, Integrated Humanities, Chinese History, Integrated Science, Business Fundamentals, Design and Technology, Computer Literacy, Home Economics, Visual Arts, Music, Physical Education,		NCS	No
Tuen Mun	HHCKLA Buddhist Leung Chik Wai College	Co-ed	Aided					Yes
Tuen Mun	Ho Ngai College (Sponsored by Sik Sik Yuen)	Co-ed	Aided					Yes
Tuen Mun	Ju Ching Chu Secondary School (Tuen Mun)	Co-ed	Aided					Yes
Tuen Mun	Lui Cheung Kwong Lutheran College	Co-ed	Aided	Computer Studies	Mathematics*, Integrated Science (S.1 S.2)*, Chemistry* (S.3), Physics (S.3)*, Biology (S.3)*, Geography, History, Home Economics, Music, Design and Technology, Visual Arts,			Yes
Tuen Mun	Madam Lau Kam Lung Secondary School of Miu Fat Buddhist Monastery	Girls	Aided	Mathematics, STEM, History, Geography, Business and Financial Literacy, Economics, Integrated Science, Physics, Chemistry, Biology, Technology and Living, Computer Literacy, Physical Education,	Life and Society		One class in each form, no mention how they categorise students	N/A
Tuen Mun	NLSI Peace Evangelical Secondary School	Co-ed	Aided		Mathematics		Only two classes in each form (1A, 1D), , Not mentioned how they cateogrise students	Yes

Tuen Mun	PAOC Ka Chi Secondary School	Co-ed	Aided		Mathematics, Integrated Science, History, Geography, Economics, Technology and Design, Technology and Living, Commerce, Life and society, Life Education,		NCS	Yes
Tuen Mun	Po Leung Kuk Centenary Li Shiu Chung Memorial College	Co-ed	Aided	Mathematics, Geography, History, Integrated Science, BAFS (S.3), Economics (S.3), Computer Literacy, Home Economics, Music, P.E., Visual Arts,				N/A
Tuen Mun	Po Leung Kuk Tang Yuk Tien College	Co-ed	Aided	Mathematics, Geography,, History, Computer Literacy, Visual Arts, Music, Physical Education, Design and Technology, Science, Economics, Biology				N/A
Tuen Mun	San Wui Commercial Society Secondary School	Co-ed	Aided					No
Tuen Mun	Semple Memorial Secondary School	Co-ed	Aided					No
Tuen Mun	Shun Tak Fraternal Association Leung Kau Kui College	Co-ed	Aided	Mathematics, Integrated Science, Physics, Chemistry, Biology, History, Geography, Information & Communication Technology, Visual Arts, Home Economics, Design and Technology, Music, Physical Education, Library,				N/A
Tuen Mun	Shun Tak Fraternal Association Tam Pak Yu College	Co-ed	Aided	Mathematics, Integrated Science, Physics, Chemistry, Biology, Computer and Information Technology				No
Tuen Mun	S.K.H. St. Simon’s Lui Ming Choi Secondary School	Co-ed	Aided					Yes

Tuen Mun	South Tuen Mun Government Secondary School	Co-ed	Gov't	Mathematics, Geography, Life and Society, Integrated Science, History, Computer and Information Technology, Visual Arts, Home Economics, Music, Physical Education				N/A
Tuen Mun	Stewards MKMCF Ma Ko Pan Memorial College	Co-ed	Aided	Mathematics, Science, Physics, Chemistry, Biology, History, Geography, Accounting Studies, Economics, Information and Communication Technology, Music, Visual Arts				N/A
Tuen Mun	Tsung Tsin College	Co-ed	Aided	Mathematics, Integrated Science				No
Tuen Mun	Tuen Mun Catholic Secondary School	Co-ed	Aided	Mathematics, Science	History, Geography, Computer Literacy, Technology and Living, Design and Technology, Visual Arts, Music, Physical Education,		No information	No
Tuen Mun	Tuen Mun Government Secondary School	Co-ed	Gov't	Life & Society, Mathematics, Chemistry, Physics, Biology, Science, Geography, History, Strategies & Management, Technology and Living, Computer Literacy, Visual Arts, Music, Physical Education				N/A
Tuen Mun	TWGHs Mr &. Mrs Kwong Sik Kwan College	Co-ed	Aided	Mathematics	History, Geography, Science, Junior Commerce,		English proficiency	No
Tuen Mun	TWGHs Yau Tsz Tin Memorial College	Co-ed	Aided		Mathematics, Integrated Science		No information	No
Tuen Mun	Yan Chai Hospital No. 2 Secondary School	Co-ed	Aided					Yes
Tuen Mun	Yan Oi Tong Chan Wong Suk Fong Memorial Secondary School	Co-ed	Aided					Yes
Tuen Mun	Yan Oi Tong Tin Ka Ping Secondary School	Co-ed	Aided	Mathematics, Computer literacy, History, Geography, Integrated Humanities (S.2), Life & Society (S.3), Science,				No

Tuen Mun	YPI & CA Lee Mim Ming College	Co-ed	Aided					Yes
Yuen Long	Bethel High School	Co-ed	Aided		Mathematic, Integrated Science*, Life and Society, History*, Geography*, Visual Arts*, Computer Literacy*, Physical Education*, Music*, Home Economics*, Design & Technology*, Religious Studies*		*only for non-Chinese speaking students	
Yuen Long	Buddhist Mau Fung Memorial College	Co-ed	Aided					Yes
Yuen Long	Caritas Yuen Long Chan Chun Ha Secondary School	Co-ed	Aided					No
Yuen Long	CCC Fong Yun Wah Secondary School	Co-ed	Aided					Yes
Yuen Long	CCC Kei Long College	Co-ed	Aided	Mathematics, Integrated Science (S.1 S.2), Physics, Chemistry, Biology (S.3)	Life and Society, Computer Literacy, Music, Physical Education, Home Economics, Visual Arts, Design and Technology, Geography (S.3)		*only mentioned some classes are in EMI, but not mentioned how they categorize students	No
Yuen Long	CCC Kei Yuen College	Co-ed	Aided	Mathematics, Geography, History, Integrated Science (S.1 S.2), Physics (S.3), Chemistry (S.3), Biology (S.3), Computer Literacy, Visual Arts, Design and Technology, Physical Education, Music, Home Economics				N/A
Yuen Long	Chinese Y.M.C.A. Secondary School	Co-ed	DSS	Physics, Chemistry, Biology, Business Studies, Geography, History, Home Economics, Information Technology, Integrated Science, Mathematics, Music, Physical Education, STEM, Visual Arts				N/A

Yuen Long	Chiu Lut Sau Memorial Secondary School	Co-ed	Gov't	Mathematics, Science, Geography, History, Computer Literacy, Design and Technology (S.1 S.2), Home Economics (S.1 S.2), Music				N/A
Yuen Long	CUHK FAA Thomas Cheung Seconary School	Co-ed	Aided	Mathematics				Yes
Yuen Long	Cumberland Presbyterian Church Yao Dao Secondary School	Co-ed	Aided	Mathematics, Science, Physics, Chemistry, Biology				No
Yuen Long	ELCHK Lutheran Academy	Co-ed	DSS	Mathematics, Visual Arts, Music, Drama, Integrated Science, Physical and Health Education, Life Education, Bible Study, Integrated Humanities, Design				N/A
Yuen Long	Gertrude Simon Lutheran College	Co-ed	Aided					Yes
Yuen Long	Heung To Middle School (Tin Shui Wai)	Co-ed	DSS					Yes
Yuen Long	HKFYG Lee Shau Kee College	Co-ed	DSS	Mathematics, Integrated Science, Geography, History, Music, Visual Arts, Physical and Health Education, Computer Literacy, Physics, Chemistry, Biology, Economics				N/A
Yuen Long	Ho Dao College (Sponsored by Sik Sik Yuen)	Co-ed	Aided					No
Yuen Long	Ju Ching Chu Secondary School (Yuen Long)	Co-ed	Aided		Mathematics, Science, Physics, Chemistry			No
Yuen Long	N.T. Heung Yee Kuk Yuen Long District Secondary School	Co-ed	Gov't	Mathematics, Science, Accounting and Economics, History, Geography, Computer Literacy, Technology for Life, Music, Visual Arts, Physical Education, Physics, Chemistry, Biology (S.3)				

Yuen Long	Man Kwan Pak Kau College	Co-ed	DSS		Mathematics, Life and Society, Geography, History, Integrated Science, Computer and Information Technology, Visual Arts, Physical Education, Music		*only for English class	No
Yuen Long	Pok Oi Hospital Tang Pui King Memorial Colelge	Co-ed	Aided	Mathematics, Integrated Science				Yes
Yuen Long	Pui Shing Catholic Secondary School	Co-ed	Aided					No
Yuen Long	Queen Elizabeth School Old Students' Association Secondary School	Co-ed	Aided					Yes
Yuen Long	Queen Elizabeth School Old Students' Association Tong Kwok Wah Sec. Sch.	Co-ed	Aided					No
Yuen Long	Shun Tak Fraternal Association Yung Yau College	Co-ed	Aided		Mathematics, Life and Society, Integrated Science, Computer Literacy, Economics and Commerce (S.1 S.2), Commerce (S.3), Physical Education, Music, Visual Arts, Geography, History		*according to TSA + school-based assessment, students with higher English results will be taught in English	No
Yuen Long	Shung Tak Catholic English College	Co-ed	Aided	Mathematics, Geography, History, Integrated Science, Physics, Chemistry, Biology (S.3), Business Fundamentals (S.3), Computer Literacy, Technology and Living (S.1 S.2), Physical Education, Music, Visual Arts				N/A

Yuen Long	SKH Bishop Baker Secondary School	Co-ed	Aided	Mathematics, Geography, Economics and Principles of Accounts, Integrated Science (S.1), Physics, Chemistry, Biology (S.3), Computer Literacy, Visual Arts, Home Economics (S.1 S.2), Music, Physical Education				N/A
Yuen Long	SPHRC Kung Yik She Secondary School	Co-ed	Aided					Yes
Yuen Long	The ELCHK Yuen Long Lutheran Secondary School	Co-ed	Aided	Mathematics, Life and Society, Integrated Science, History, Geography, Computer Literacy, Business Studies & Economics (S.3), Religious Studies, Visual Arts, Music, Physical Education, Science, Art				N/A
Yuen Long	The Hong Kong Management Association K. S. Lo Colelge	Co-ed	Aided	Geography (S.1 S.2), Mathematics	Science, Geography (S.3), Integrated Business		Not mentioned how they categorise students	No
Yuen Long	Jockey Club Man Kwan EduYoung College	Co-ed	Aided					Yes
Yuen Long	The Yuen Yuen Institute MFBM Nei Ming Chan Lui Chung Tak Mem. College	Co-ed	Aided					No
Yuen Long	Tin Shui Wai Government Secondary School	Co-ed	Gov't					Yes
Yuen Long	Tin Shui Wai Methodist College	Co-ed	Aided					Yes
Yuen Long	Tung Wah Group of Hospitals Lo Kon Ting Memorial College	Co-ed	Aided	Mathematics, History, Geography, Economics, Integrated Science, Physics, Chemistry, Biology, Computer Literacy, Accounts Fundamental (S.2), Design and Technology, Home Economics, Music, Visual Arts, Physical Education				N/A

Yuen Long	TWGHs C.Y. Ma Memorial College	Co-ed	Aided					Yes
Yuen Long	TWGHs Kwok Yat Wai College	Co-ed	Aided		Integrated Science			Yes
Yuen Long	YLPMSAA Tang Siu Tong Secondary School	Co-ed	Aided					Yes
Yuen Long	Yuen Long Catholic Secondary School	Co-ed	Aided					No
Yuen Long	Yuen Long Merchants Association Secondary School	Co-ed	Aided	Mathematics, Integrated Science, Physics, Chemistry, Biology, Geography, Life and Society, Computer Literacy, Visual Arts, Home Economics, Music, Physical Education, Design and Technology, Service Learning & Civic Education (S.1 & S.2)				N/A
Yuen Long	Yuen Long Public Secondary School	Co-ed	Gov't	Mathematics, Geography, Science, History, Physics, Chemistry, Biology, Computer Literacy, Music, Home Economics, Visual Arts, Design and Technology				N/A