# PRODUCTION OF QUESTIONS IN ENGLISH LANGUAGE BY NATIONAL-TYPE CHINESE PRIMARY SCHOOL STUDENTS

WONG AI L

# FACULTY OF LANGUAGES AND LINGUISTICS UNIVERSITI MALAYA KUALA LUMPUR

## PRODUCTION OF QUESTIONS IN ENGLISH LANGUAGE BY NATIONAL-TYPE CHINESE PRIMARY SCHOOL STUDENTS

WONG AI LI

# DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS (LINGUISTICS)

FACULTY OF LANGUAGES AND LINGUISTICS UNIVERSITI MALAYA KUALA LUMPUR

2023

# UNIVERSITY OF MALAYA ORIGINAL LITERARY WORK DECLARATION

Name of Candidate: **WONG AI LI**Matric No: **TOA 180007/17036560/1** 

Name of Degree: MASTER OF ARTS (LINGUISTICS)

Production Of Questions In English Language By National-Type Chinese Primary

**School Students**Field of Study: **Syntax** 

I do solemnly and sincerely declare that:

- (1) I am the sole author/writer of this Work;
- (2) This Work is original;
- (3) Any use of any work in which copyright exists was done by way of fair dealing and for permitted purposes and any excerpt or extract from, or reference to or reproduction of any copyright work has been disclosed expressly and sufficiently and the title of the Work and its authorship have been acknowledged in this Work;
- (4) I do not have any actual knowledge nor do I ought reasonably to know that the making of this work constitutes an infringement of any copyright work;
- (5) I hereby assign all and every rights in the copyright to this Work to the University of Malaya ("UM"), who henceforth shall be owner of the copyright in this Work and that any reproduction or use in any form or by any means whatsoever is prohibited without the written consent of UM having been first had and obtained;
- (6) I am fully aware that if in the course of making this Work I have infringed any copyright whether intentionally or otherwise, I may be subject to legal action or any other action as may be determined by UM.

Candidate's Signature	Date: 18/1/2023
Subscribed and solemnly declared before,	
Witness's Signature	Date: 18/1/2023
Name:	
Designation:	

PRODUCTION OF OUESTIONS IN ENGLISH LANGUAGE BY NATIONAL-TYPE CHINESE PRIMARY SCHOOL STUDENTS

**ABSTRACT** 

Students from different language backgrounds may face distinct difficulties when

acquiring English as a second language and this may present a challenge in the teaching

and learning of English in multilingual Malaysia. Learning about potential differences

between learner groups can inform teaching practice of English language teachers,

particularly in relation to challenging language structures such as questions. Therefore,

the current study aims to examine production of English questions by a group of National-

type Chinese primary school students, categorized as either Dominant Speakers of

English or Dominant Speakers of Mandarin. Categorisation of the participants was

conducted via self-report, Bilingual Language Profile (BLP) questionnaire by Birdsong,

Gertken, and Amengual (2014), and interview sessions with randomly selected guardians.

The researcher obtained data from 56 Year-Four students to examine production of

English questions via three language elicitation tasks: a simulation task, sentence

transformation task and translation task. The findings revealed major difficulties faced

by both groups of participants were tenses errors, incorrect verb phrase structures, and

erroneous use of some wh-words. In addition, Mandarin dominant language students

made visibly more omission, inversion and sentence structure errors in contrast to English

dominant language. In conclusion, learners from different backgrounds may have

different learning needs, which could be due to the transfer of structural patterns from

their first language.

Keywords: English questions production, national-type primary Chinese school,

dominant languages, common errors

iii

# PENGHASILAN SOALAN DALAM BAHASA INGGERIS OLEH PELAJAR SEKOLAH RENDAH JENIS KEBANGSAAN CINA

#### **ABSTRAK**

Di negara multibahasa seperti Malaysia, pelajar daripada latar belakang bahasa pertama yang berbeza telah ditempatkan dalam bilik darjah yang sama. Pelajar-pelajar ini mungkin menghadapi kesukaran yang berbeza dalam penghasilan soalan Bahasa Inggeris yang memberikan cabaran dalam pengajaran dan pembelajaran Bahasa Inggeris. Mempelajari tentang perbezaan potensi antara kumpulan pelajar boleh membantu amalan pengajaran. Oleh itu, kajian semasa bertujuan untuk mengkaji penghasilan soalan Bahasa Inggeris oleh sekumpulan pelajar sekolah rendah jenis kebangsaan cina, yang dikategorikan sama ada sebagai Penutur Dominan Bahasa Inggeris atau Penutur Dominan Bahasa Mandarin. Pengkategorian peserta dijalankan melalui laporan kendiri, soal selidik Profil Bahasa Dwibahasa (BLP) oleh Birdsong, Gertken, dan Amengual (2014), dan sesi temu bual dengan penjaga yang dipilih secara rawak. Pengkaji mendapatkan data daripada 56 orang murid Tahun Empat untuk meneliti penghasilan soalan Bahasa Inggeris melalui tugasan elisitasi bahasa: tugasan simulasi, tugasan transformasi ayat dan tugasan terjemahan. Kajian mendedahkan kesukaran utama termasuk penggunaan tatabahasa, struktur frasa kata kerja yang salah, dan kesilapan penggunaan perkataan WH. Kesimpulannya, pelajar daripada latar belakang yang berbeza mungkin mempunyai keperluan pembelajaran yang berbeza, disebabkan oleh pemindahan corak struktur daripada bahasa pertama mereka yang boleh dikesan dalam kalangan pelajar bahasa dominan Mandarin yang membuat lebih banyak kesilapan peninggalan dan penyongsangan perkataan jika dibandingkan dengan pelajar bahasa dominan Inggeris yang membuat ralat struktur yang lebih sedikit.

Kata Kunci: Penghasilan Soalan Bahasa Inggeris, Sekolah Rendah Jenis Kebangsaan Cina, Bahasa Dominan, Kesilapan Biasa.

#### **ACKNOWLEDGEMENTS**

First and foremost, my heartfelt gratitude to Dr Sharifah Ayeshah, my advisor, who guided me through all the stages required to complete this dissertation, starting with the designing of the study to data collection, and from data analysis to discussion of the findings in connection to the results of the findings till the writing process. I am also grateful to have the chance to have her as my supervisor as she taught me many other useful skills such as organizing documents more efficiently.

Her advice and knowledge of empirical research was extremely helpful, and help resolved a lot of my concerns. She was such an encouraging, patient, and nice to me and always ensured that I was doing well mentally and physically taking up her time to answer my questions. When I was writing a dissertation and working full-time, there were times when I wanted to give up. It turned out to be a little too much. Instead, she demonstrated empathy and understanding. It would have been difficult to finish this dissertation without her.

I would also like to extend my deepest thanks to all the committee members for their wisdom and guidance. Despite their various academic duties, they made to provide me suggestions on ways to improve my dissertation and revisions. I am also grateful to my family members, colleague who have supported me throughout this journey.

### **TABLE OF CONTENTS**

Ack	owledgements	V
Tabl	of Contents	vi
List	f Figures	viii
List	f Tables	ix
List	f Symbols and Abbreviations	X
List	f Appendices	xi
CH	PTER 1: INTRODUCTION	1
1.1	Research Background	
1.2	Problem Statement	
1.3	Significance of the study	
1.4	Research Objective	
1.5	Research Questions (RQ)	
1.6	Summary of Chapter 1	
CII	PTER 2: LITERATURE REVIEW	0
2.1	Linguistic Syntactic Context and Learners' Acquisition of Interrogative Sen	
	2.1.1 Question Types in The English Language	
	2.1.2 Linguistic Difference between English and Mandarin Questions	
	2.1.3 Studies on Acquisition of Question Forms	
2.2	2.1.4 Investigating Language Development Stages and Learners' Errors	
2.2	Language profiles of national-type school students.	
	2.2.1 Multilingualism in Malaysia	
	2.2.2 Language profiles of Students at Malaysian Chinese Medium School	
	2.2.3 Assessing Language Dominance	
2.2	2.2.4 Language Dominance and Language Learning	
2.3	Summary of Literature and Research Gap	21
CH	PTER 3: METHODOLOGY	29
3.1	Research Design	29
3.2	Participants	30
3.3	Instruments	33
	3.3.1 Simulation Task	34
	3.3.2 Sentence Transformation Task	36
	3.3.3 Translation Task	38
3.4	Data Collection Procedures	40
3.5	Data Analysis and Coding	41
3.6	Validity and Reliability	47
3.7	Ethical Considerations	49
3.8	Summary of Chapter 351	

CHA	APTER 4: ANALYSIS AND RESULTS	52	
4.1	Types of English Questions Produced by Year 5 Chinese Primary School Str		
	(RQ1)	53	
	4.1.1 Most Used Types of Questions Based on Given Scenario	56	
	4.1.2 Summary of RQ 1 Findings		
4.2 C	Overview of English Questions Errors found in Sentence Transformation (ST)	and	
	Translation Task (TT) (RQ2)	62	
	4.2.1 Most common errors found in both tasks	65	
	4.2.2 Most common errors found in among WH and Yes/ No questions	67	
	4.2.3 Most common errors found among two groups of participants	70	
	4.2.4 Items that contain the highest number of errors found	75	
	4.2.5 Summary of RQ 2 Findings	80	
4.3 C	Conclusion	82	
СНА	APTER 5: DISCUSSION AND CONCLUSIONS	83	
5.1	Summary of the Findings	84	
5.2	Higher Number of Yes-No Questions Compared to WH Questions		
5.3	Higher number of Modal Verbs Used to Produce Questions by Participants in		
	Simulation Task	87	
5.4	Overusing of 'CAN' Modal Verb	88	
5.5	Most Common Error Types in Sentence Transformation Task and Translation		
	Task	90	
5.6	High number of Question Word Errors in Sentence Transformation Task	93	
5.7	Misapplication of DO verb and double-marking errors	97	
5.8	Differences in errors made among both groups of participants		
5.9	Implications of the Study		
	5.9.1 Practical Implications	100	
	5.9.2 Methodological Implications	102	
	5.9.3 Methodological Implications		
5.10	Limitation of the Study		
	Conclusions and Recommendations		
	rences		
APP	ENDIX	116	

### LIST OF FIGURES

Figure 2. 1: Development Stages in Question Formation
Figure 3. 1: Tasks Applied to collect data for each research question34
Figure 3. 2: Screenshot of Simulation Task Coded Data Example
Figure 3. 3: Screenshot of Sentence Transformation Task Coded Data Example45
Figure 3. 4: Screenshot of Translation Task Coded Data Example
Figure 3. 5: Screenshot of Categorizing Differences of Errors Between Both Group46
Figure 3. 6: Screenshot of Total Number of Errors Made by Both Groups of Participants
Figure 4. 1: Types of Questions produced by Participants
Figure 4. 2: Overview of Errors in English Questions Produced by Year 4 Pupils62
Figure 4. 3: Distribution of Errors in WH Questions
Figure 4. 4: Distribution of Yes/No Questions Errors
Figure 4. 5: Total Errors found in Each Item
Figure 5 1: Summary of the Findings

## LIST OF TABLES

Table 2. 1: Huddleston's (1994) Questions Typology	11
Table 2. 2: D-Structure vs S-Structure Tree Diagram	12
Table 2. 3: Categorisation of Errors (Dulay, 1982; James, 1998)	20
Table 3. 1: Adaptation of Birdsong, Gertken, & Amengual (2012)'s Bilingual Langu Profile (BLP) instrument	_
Table 3. 2: Sentence Transformation Task Auxiliary Verb and Question Word Allocation	36
Table 3. 3: Translation Task Auxiliary Verb and Question Word Allocation	38
Table 3. 4: Rowland's (2007) Error Coding	42
Table 3. 5: Elements adapted in Rowland's (2007) Error Coding	43
Table 3. 6: Adjustment Made after Pilot Study	48
Table 4. 1: Percentages of Direct and Indirect Questions Produced by Participants	54
Table 4. 2: Most Common Question Type Based on Communicative Functions	57
Table 4. 3: Most Common Errors Found among Both Groups of Participants	71

#### LIST OF SYMBOLS AND ABBREVIATIONS

PQW : Placement of Question word Errors

QW-S : Question Words Errors – Selection Causes Syntactic Errors QW-L : Question Words Errors – Selection Causes Lexical Errors

DM : Double Marking Errors

AX-S : Auxiliary Errors - Selection Causes Syntactic Errors AX-T : Auxiliary Errors - Selection Causes Tenses Errors

AX-L : Alternative Auxiliary
IV : Inversion Errors
AG : Agreement Errors
OM : Omission Errors
CS : Case Errors
OT : Other Errors

## LIST OF APPENDICES

Appendix A: Principal Permission Form and Participants' Consent form	116
Appendix B: Types of Question Produced by Participants in RQ 1	118
Appendix C: Overview of RQ2 Findings	119
Appendix E: Simulation Task Items	121

#### **CHAPTER 1: INTRODUCTION**

#### 1.1 Research Background

This study is centered in the context of English language learning by students in Chinese-medium primary schools in Malaysia. English is considered a second language in Malaysia, but English proficiency varies widely among Malaysians (Govindan & Pillai, 2017). Since English proficiency can facilitate an individual's academic performance and career prospects, there is a keen interest in identifying ways to help Malaysian students improve their English proficiency. However, Malaysia's multicultural and multilingual demography may pose a challenge to these efforts, considering the widely held assumption that a person's native language can influence their acquisition of a second language (L2) (David et al., 2017).

The impact that a person's understanding of one language has on their learning or usage of another language is commonly known as cross-linguistic influence. It can be defined as the application of a learner's first language's linguistic knowledge to help them acquire a second language (Krashen, 2003). According to Horst et al. (2010) a second language learner will always elicit first language associations despite the level of proficiency. Furthermore, Horst et.al stated that even if teachers prohibited the use of their native language in the classroom, a learner's first language will remain as a connector between both languages. Considering that Malaysian students have various native languages, including Malay, Mandarin, Tamil, Chinese dialects and other minority languages, cross-linguistic influence may be one of the factors leading to the varying levels of proficiency among Malaysian students.

Language is a set of symbols and norms that allows people to communicate in meaningful ways. The structure of language parallels the structure of our minds' processing of the world in many ways (Kuo & Lai, 2006). Therefore, learners from different language backgrounds require a transformational period when they are learning

a new language. Learners will often compare the structures of their mother tongue to the new language to understand its structure. Lado (1957) states that if a certain aspect of L2 differs significantly from a student's native language, the learners will most certainly encounter difficulty in learning the language. Following the argument from Lado, it is reasonable to assume that similarities between languages can facilitate the learning of L2. Conversely, this could mean that differences between languages can inhibit L2 learning, which could present challenges for Malaysian learners of English whose first languages are considerably different in structure.

Furthermore, studies on Interlanguage or L1 interference have shown that L2 learners have an automatic habit to transfer surface structure of their first language onto a second language which causes higher instances of errors. For example, the sentence (她去学校。 She go(es) school.) is a correct surface structure in the Mandarin language but needs to be transformed to include auxiliaries and framing elements such as prepositions to make sense in the English Language. According to Ellis (1997, as cited in Khansir, 2012), interference refers to 'transfer' and defined as "the influence that the learner's L1 exerts over the acquisition of an L2", where learners construct their own interim rule while learning a target language. These are particularly evident in studies that examine the writing of students with different first languages, such as Japanese, Chinese, Iranian and Spanish (Davies, 2010; Karim & Nassaji, 2013; Tavarez & Almanzar, 2020; Zou, 2013). These studies have observed that students' work contains word-for-word translations of expressions in their first language, making the writing sound like their native tongue. This indicates that English language teachers who teach learners from different backgrounds, such as those in the Malaysian context, may have to consider similar situations in their classroom settings.

One way of examining students' early stages of language learning is by examining errors made by language learners. The contrastive analysis theory (CA), which compares

the structures of two languages, was introduced in 1960 to analyze language transfer errors. However, CA received criticism due to its limitation in the assumption that errors made by L2 learners are only resulting from mother tongue interference (Al-khresheh, 2016). Therefore, error analysis (EA) was employed in the late 1970s by Corder (1978) to provide a more holistic approach towards describing L2 learners' errors (Heydari & Bagheri, 2012). Error analysis also provides a fundamental role in investigating, analyzing and categorising errors made by L2 learners, where it can reflect some of the underlying linguistic rules (Al-khresheh, 2016). However, in recent times, some researchers are moving away from error analysis because of criticisms that the sole investigation on incorrect output means leaving out other important sources of knowledge that may assist in comprehending learners' acquisition process, as a learner's language production of language may vary in several ways. However, language transfer can result in facilitation (positive influence), errors (negative influence), avoidance and over-use. Error analysis can still be a competent contributor to study the processes of SLA, as according to Brown (1981), SLA is a process that differs from FLA in its trial-and-error nature (as cited in Myles, 2010) and errors in learning process are unavoidable.

In addition, the significant differences between Mandarin and English may result in learning difficulties for Chinese L1 students. For instance, in interrogative sentences, the order of the constituents of English and Chinese interrogative sentences differs significantly, with the auxiliary verbs, copula, and wh- situated at the beginning of the former and the latter's sentential order being invariable (Chomsky, 1993 as cited in Li & Liu, 2016). Therefore, English interrogative sentences have been quite challenging for learners of English to master despite the high frequency of occurrence in daily life (Lee, 2016). Up to the present, learners' difficulties in acquiring these structures have received little attention in Malaysia.

#### 1.2 Problem Statement

In Malaysian primary schools, English is taught in a one-size-fits-all classroom setting that does not take in account learners' language background. In Malaysia's multilingual society, this means that an English classroom could have learners with various first languages, for example, Malay, Tamil, English or Chinese dialects. Even though students in Chinese national-type primary schools are dominantly Chinese, their linguistic background is not homogenous. There has been a rising trend and ongoing shift of more frequent usage of English as their home language especially in urban places. A study by Low et al. (2010) has demonstrated that 73% of the subjects in his study among Malaysian Chinese admitted to generally speaking English to their children at home. As a result, students in Chinese-national-type primary schools may have different spoken languages at home such as Mandarin, English or their ethnic dialects such as Cantonese, Hakka, Teochew and many more.

Considering that L1 has been found to influence how a learner acquires a language, the various language backgrounds of these learners may further complicate their acquisition of the English language as students have different needs. In addition, the linguistic differences between Mandarin and English, whether intonation, word order, or the absence of inversion and auxiliary verbs, may result in additional challenges faced by these students. Therefore, students may require different teaching instruction to assist them in acquiring English.

One particularly difficult area to acquire in the English language is the formation of questions. Previous studies have displayed surprisingly high error rates in English question formation among L1 or L2 English learners (Al-Hassaani & Mahboob, 2016; Lee, 2016; Rowland & Pine, 2007; Valian & Casey, 2003; Zhang, 2016). Results from a study on oral communication among Malaysian University students has also revealed that

question formation was the second highest type of grammatical error made followed by prepositions (Ting et.al 2010). However, there are only a handful of studies looking at language proficiency of Chinese national-type primary schools' students and to my best knowledge, there are no available studies which describe students' question forms in Malaysia. Having taught in a Chinese primary school for a few years, I also witnessed students struggle especially when attempting to produce syntactically accurate English questions. Researchers in Hong Kong, Indonesia, Singapore, and China have conducted similar studies and expressed concerns about young learners' weak command in producing simple WH questions and yes-no questions (Chen, 2013; Jiang, 2019; Lee, 2016; Gao, 2009; Zhang, 2016).

Since students in Chinese national-type primary schools could have different difficulties when it comes to acquiring English questions, information about students' production of different type of questions and their limitations could be useful to teachers to target the needs of their students efficiently. Furthermore, interlanguage acquisition theory also suggests that L1 also influences the production of the language they are learning (Muhsin, 2016). Therefore, examining questions production among students with different dominant languages, namely English and Mandarin, can make an interesting contribution to the literature on English Language Teaching in Malaysia, by identifying certain learning difficulties involving English question structures that Chinese National-type primary school students encounter. This could help teachers target their teaching activities accordingly.

#### 1.3 Significance of the study

The findings of this study will provide evidence on the different English question structures National-Type Chinese primary school students produce in given scenarios and their difficulties in producing certain question forms. This information may be useful to English teachers, particularly those who teach in Chinese-medium schools. Furthermore, results of the study can help to identify specific challenges faced by students from different language backgrounds, namely Mandarin and English, and consequently, assist teachers in identifying suitable instructional activities that will improve their students' understanding of specific language structures that are required to construct structurally correct interrogative sentences.

#### 1.4 Research Objective

The purpose of this study is to investigate the production of English questions by Chinese primary school students. These students were grouped based on their dominant languages, namely Mandarin and English. The study uses three language production tasks to first identify the types of questions participants produced in given scenarios and subsequently examine the common errors in questions made by participants. A simulated language task was used to elicit different types of questions in written form from the students while a sentence transformation task and translation task were conducted to examine the difficulties participants faced when constructing English questions. Overall, the study aims to produce a comprehensive picture of production of questions by these two groups of students.

#### 1.5 Research Questions (RQ)

The following research questions study guided our study.

- 1. What types of English questions do Year 4 Chinese primary school students from different language backgrounds produce in response to written scenario prompts?
- 2. What are the common errors in the questions formed by these students in a sentence transformation task and translation task, respectively?

#### 1.6 Summary of Chapter 1

This chapter has provided the problem statement, followed by the purpose of conducting the study, significance of the study, research objectives and research questions. Chapter 2 discusses relevant literature to this study while in Chapter 3, the procedures for collecting and analyzing data are outlined. The results and findings in relation to the study topics are presented in Chapter 4. Chapter 5 concludes with an overview of the research's findings, practical and methodological implications, and recommendations for further research.

#### **CHAPTER 2: LITERATURE REVIEW**

In this chapter, the literature review will be presented in two sections. The first section (2.1) will discuss the linguistic syntactic context and learners' acquisitions of interrogative sentences which cover four key areas. The second section (2.2) will discuss the context related to language background profiles of national-type school students. This section contains three keys areas which related to this study participants' language background profiles

# 2.1 Linguistic Syntactic Context and Learners' Acquisition of Interrogative Sentences

This section covers four key areas relating to syntactic structures of different question types in the English language, linguistic differences between English and Mandarin questions, studies on acquisition of question forms, and investigating learners' errors in SLA.

#### 2.1.1 Question Types in The English Language

The expression of a question refers to a certain type of linguistic syntactic structure found in interrogative sentences. There are many ways to categorize the type of English questions as demonstrated by previous studies by Bolinger (1957); Huddleston (1994); Kartunnen (1977); Leech and Svartvik (2013); Salim (2008)and more. According to Bolinger (1957), the primary categorisation of questions is a fourfold division said to be based upon distributional criteria speciffically upon the kinds of answers a question receives. They are distinguished by assent-dissent (answers are replaced with yes or no); selection (answer is one or two more alternatives posed by the question); elaboration (answer elaborates upon a question point which contains interrogative word) and continuation (answer is completive). The assent-dissent questions are seen as multiple-choice questions while the latter two are seen as explanatory questions.

There is also function-based question categorisation which consist of six types: causal, choice, confirmation, factoid, hypothetical, and list, introduced by Mohasseb et al. (2018). The classification is based on the types of questions produced by users and the responses provided. Each of these questions has its own set of qualities, features, and structure that assist in classification as shown below:

- 1. Confirmation questions are identified as yes-no questions and begin with auxiliary verb. E.g., *Is tomato a fruit?*
- 2. Factoid questions feature the presence of questions words that can even begin with a preposition. E.g., *In what year Rome was built?*
- 3. Choice questions offers choices in a question connected with conjunction 'or.' E.g., Did Thomas Edison invent the light bulb or electricity?
- 4. Hypothetical questions applied to get a general sense of a situation that usually starts with a 'What' Question word.
  - E.g., What would you do if you have a billion dollars?
- 5. Causal questions, where the answers of the questions necessitate further explanation. E.g., Why didn't you leave the house earlier?
- 6. List questions, which require an answer in the form of a list of entities or facts that usually contain plural terms. E.g., Which products contains more sugar?

On the other hand, Karttunen (1977) categorized English interrogative sentences according to syntactic structure: direct and indirect questions. The basic idea is that any direct questions can be assimilated into indirect questions.

- 1 (a) Is he coming?
  - (b) What is he reading?
- 2 (a) Can you tell me if he is coming?
  - (b) Can you tell me what are you reading?

A direct question 1(a) and (b) can correspond to indirect questions embedded under a suitable performative verb such as 2(a) and (b). These assimilations can be achieved obtaining the questions in 1 and preserving the transformation. The other distinction can be made to categorize types of English questions shown in Karttunen (1977) as alternative questions as shown in 3.

- 3 (a) Does he like red or blue?
  - (b) Does he know what colour he like?
  - (c) Does he know whether he like red?
  - (d) \* Does he assume what colour he like€(e) \* Does he assume what colour he like?

Karttunen (1977) noted that alternative questions are a form of prefix with whether, if and or. However, this depends on the verb of the sentence. Frequently, only verbs that are able to take indirect wh-questions as compliments also take embedded alternative—questions: such as 'knows' and 'assumes' as shown in 3.

Huddleston (1994) classified questions into three categories: polar Q, alternative Q, and variable Q. Additionally, there are closed and open interrogative phrase. Closed interrogatives are distinguished from open interrogatives by subject-auxiliary inversion, placement of tensed auxiliary verb before the subject, and usage of one or both of the subordinators *whether* and *if* in subordinate sentences. The presence of one or more interrogative words, as well as subject-auxiliary inversion when the interrogative word appears within a phrase preceding the subject, characterized open interrogatives. Examples are as follows:

Table 2. 1: Huddleston's (1994) Questions Typology

Type	Example	Categorisation
Polar Q (Closed Questions)	<ul> <li>Are you coming home?</li> <li>[She wants to know]</li> <li>[Can I know] if/whether</li> <li>you are coming home?</li> </ul>	Defined by a set of two answers. One with a propositional content expressed and another with the polar opposite.
	• They have won, haven't they?	Polar tag questions have a dependent form. It has the form of declarative and closed interrogative.
Alternative Q (Closed Questions)	<ul><li> Is he a girl or a boy?</li><li> Do you know if/whether he is a boy or a girl?</li></ul>	A set of alternatives is given in the question.
Variable Q / X  Question  (Open Questions)	<ul> <li>Whose book is this?</li> <li>I wonder whose book is this?</li> </ul>	Have a propositional content containing a variable that can be substituted with a particular value.

In summary, there are numerous ways to categorize questions, based on intonation, kinds of answers a question receives, function-based question categorisation or syntactic structure. Both Kartunnen (1977) and Huddleston (1997) used the syntactic characteristics of English interrogatives to categorize questions, which is consistent with the purpose of the study that aims to examine the syntactic features of question produced by participants. By adopting English question categorisation by Kartunnen (1977) and Huddleston (1997) in the current study, the researcher categorized English questions into four types: direct questions, indirect questions, alternative questions and tag questions.

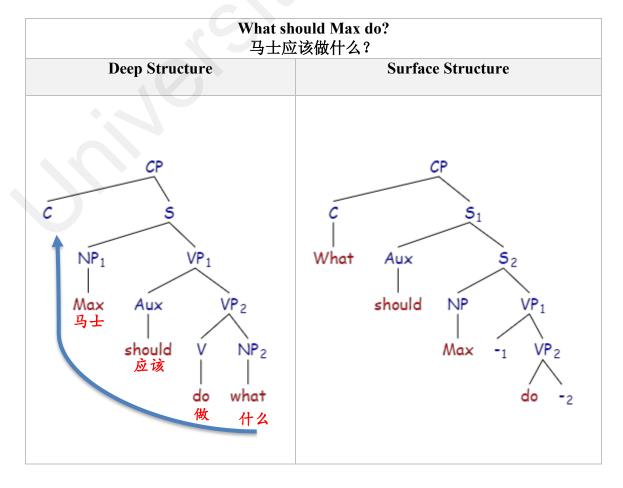
Following the classification of the types of English questions, the researcher also looked into the significant differences between Mandarin and English questions, as linguistic differences between the two languages can influence L2 learners' acquisitions to some extent (Jarvis & Pavlenko, 2008).

#### 2.1.2 Linguistic Difference between English and Mandarin Questions

Wh-questions are questions with interrogative words such as who, what, why and so on. The main fundamental syntactic distinctions among languages in the formation of wh-questions can be categorized into in-situ, movement language and optional fronting languages.

Languages such as Mandarin and Japanese do not have to be displaced in overt syntax, which means that the WH question words would stay at the position where they are generated in the deep structure (Gao, 2009). On the other hand, the English language is a movement language; WH question words requisitely move to Spec CP in overt syntax, which means that WH question words must be raised to the initial position of the sentence and leaves a trace in the original position in surface structure (Liting et al., 2015) Examples as shown in the Table 2.2

Table 2. 2: D-Structure vs S-Structure Tree Diagram



Although the SVO syntactic order is the identical in Chinese and English, English and Mandarin languages use different methods to generate WH-questions. Examples in Table 2.2 showed that Mandarin questions and declarative sentences have similar structure. English questions on the other hand requires inversion syntactic operations such subject-auxiliary inversion and Do-Support insertion (Koffi, 2015). In addition, there are no questions, negation, or passive voice in the deep structure. In contrast to Mandarin, where WH questions remain in situ, in its declarative counterpart, WH questions in English are the outcome of transformation in multiple stages such as WH fronting, DO-Support Insertion, Subject-Auxiliary Inversion, and Affix Hopping.

Chomsky (2014) suggested that Mandarin language WH question words remains in-situ because the category C in the languages does not project specifier position. Therefore, it does not have a landing site for wh-words at surface structure. Cheng (2009) explained that Mandarin language does not need syntactic movement to form WH quetions as they do not have WH words. Instead, quantifiers undergo Quantifier Raising (QR), which occurs only due to logical structure (LF). Chomsky (1995, as cited in Li & Liu, 2016) contends that the wh/Q-feature/operator is formed differently in different languages: at the word level (e.g., English) and at the sentence level (e.g., Chinese) where English contains obligatory wh-movement in contrast to Chinese language.

Differences between both languages can also be found in yes-no questions. The main contrast between both languages are the existence of question particles or Q morpheme like "吗" (ma) and "呢" (ne) that mandarin question possessed. This question particle acts as an antecedent that turns declarative sentences into yes-no interrogative sentences (Zhu & Wu, 2011). For example,

e.g., 她在吃 - 她在吃吗? (She is eating) - (She is eating ma?) Therefore, the sentence structure is vastly different from English yes-no questions that mainly involve movement of an auxiliary or modal verb to a position preceding the subject. The transfer of the auxiliary or modal from the functional head I (Inflection) following the subject to the functional head C (Complementizer) preceding the subject are represented as subject-auxiliary inversion. As described by Chomsky (2014), it is presumed that auxiliary and modal are formed directly in the head of infection phrase (IP) and subsequently moved to the C position. As a result, auxiliaries and modals are linked to inflection's functional phrase structure. Lexical primary verbs however do not move from V but require the insertion of do support into Inflection (I) and subsequently to Complementizer (C) to satisfy the question feature [Q+] in English interrogative sentences.

On the other hand, both languages show similar syntactic structures in alternative questions. Alternative questions are questions that present two or more alternative responses from which one answer should be selected. In English, alternative question syntactic structures are similar with yes-no questions which are associated with subject auxiliary inversion with the addition of disjunction operator *or* and the use of complementizers *whether* or *if* to form a coordinated sentence *e.g.*, *Are we eating in or eating out tonight*? similar to mandarin questions that also consists of disjunction 还是 (hai shi) or 或者 (huo zhe) which are interchangeable (Erlewine, 2014). For example,

e.g., 我们今晚是在家里吃饭还是(hai shi)在外吃饭? (We tonight are in eat or out eat?)

Tag questions also contain similarities among both languages where tag questions switch at the end of the clause to become an interrogative sentence which can be regarded as a yes-no question. In English, a tag is negative when the preceding statement is positive or vice versa. It involves an auxiliary verb that agrees with the host sentence in tense and

number, a pronoun and matching or contrasting polarity (Ai-li, 2016). *e.g., She's a doctor, isn't she?* In Chinese, tag questions are expressed respectively by tags with two particles such as 是吗 (shi ma) and 对吧 (dui ba) after the declarative sentence.

e.g., 她是医生,对吧 (dui ba)? (She's a doctor, dui ba?)

Mandarin tag questions also consist of another structure which is the A not A structure (Li, 2017). It involves the disjunctive of an affirmative predicate for example go  $\pm (qu)$  combined with a negative counterpart no go  $\pm (bu \ qu)$ .

e.g., 你去不去 (qu bu qu) 她的家? (You go no go her de house?)

In summary, while both languages follow the same basic syntactic pattern of Subject-Verb-Object (SVO), speakers of the two languages use different methods to generate questions. Mandarin interrogative sentences contrast with English in many ways such as the position of question word in a sentence, absent of inversions and fronted finite verb such as *Do* verb, existence of Q morphemes such as "吗""呢""呀" to the sentence final position. Thus, these syntactic cross-linguistic differences in interrogative sentences may cause different challenges to different background language learners.

#### 2.1.3 Studies on Acquisition of Question Forms

Due to their relative difficulty, question formation in English has been the subject of many studies in both first and second language research. Research on acquisition of question formation among First Language Learners (FLA) has been done extensively as there is a surprisingly high error rate which is inconsistent with the hypothesis of Universal Grammar (UG) rules claiming that young learners will quickly map rules that govern a language (Bellugi, 1965). Acquisition of question formation can be a window

into studying the grammatical development in child language. Studies suggest that young learners are unable to raise tense and agreement out of verb phrase (VP) and inflectional Phrase (IP), in addition to omitting tenses or double marking them (Maratsos & Kuczaj, 1978; Rowland & Pine et al., 2005) (e.g., what she does do? what she doing?) According to Pozzan, & Valian (2017), the inability of young learners to invert subject and verb is due to limited transformation used in utterance where almost virtually no errors are reported on the placement of wh-word, in contrast with subject-auxiliary inversion.

The main difference between (FLA) and second language acquisition (SLA) in the acquisition of question formation is that FLA learners can acquire target language naturally by immersing themselves in a large amount of comprehensible language input (Krashen, 2003). Second language acquisition learners are required to acquire not only linguistic rules but also to use them to produce utterances. Two main considerations that may be related to learners making errors in L2 language are due to interlingual and intralingual transfer (Heydari & Bagheri, 2012). These factors will also be relevant to their acquisition of English questions.

As the present research involves Chinese speaking young learners, it is also relevant to consider language specific challenges arising from their first language. There is a vast typological difference in English and Chinese WH questions according to a comparative study by Huang (1982, as cited in Zhang, 2016), which claimed that English WH questions are formed by overt WH movement while Chinese WH movement are formed by covert WH movement. Studies on many Mandarin mother tongue young learners is done on subject and object WH questions (Gao, 2009). Researchers such as Chen (2013), discovered that subject questions are more undemanding for mandarin-speaking learners to produce unlike object questions which required subject-auxiliary inversion, similar to results from research such as Lee (2016) and Zhang (2016). Another syntactic restriction in Mandarin makes it challenging for speakers to learn WH-

questions is flexibility of placement of the Mandarin locative prepositions, directional prepositions, as well as as prepositions in comparison to English (Jiang et al., 2019). For example Mandarin question 你今天在哪吃午餐? You today at where eat lunch? Despite both Mandarin and English are SVO languages, Mandarin's word order is more contextual than positional, and "today" can be used in front of the verb which distinguish it from English's question form.

According to Halliday (1985, as cited in Zhu & Wu, 2011), yes/no interrogative contains a fronted finite verb which expresses polarity then a subject (*Do you know?*). In terms of intonation, there is a rise contour at the end of the clause. Unlike in Mandarin, yes/no interrogatives present a structure which resembles a declarative clause with an interrogative particle (ma) attached at the end. Thus, the differences may be attributable to the impact of their native language on second language learners, as numerous studies have shown that second language learners tend to transfer forms of their native language into the target language, especially when it comes to complex structures among lower achievers (Chan, 2004). Most of the studies have been taken from other countries like Singapore, Indonesia, Hong Kong and China. Although these studies were not conducted in Malaysia, the shared first language means that these findings could be relevant to the participants of the present study.

#### 2.1.4 Investigating Language Development Stages and Learners' Errors

It is evident that question formation cannot be detached from language development as it is very likely that learners may make errors in their sentence structures as part of their development process to progress in their language development (Spada & Lightbown, 1999, as cited in Matiini, 2019). Scholars, such as Dulay (1982) and Pienemann (1988), who have examined the stages of question formation, have suggested that because question formulation is a process of language development, it is highly

probable for learners to have imperfect structures. Pienemann (1988) categorized the stages of question acquisition into four categories as in Figure 2.1.

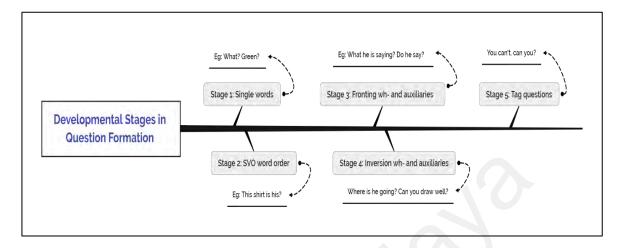


Figure 2. 1: Development Stages in Question Formation

As learners proceed through each stage, they could still return to the previous stage and produce imperfect structures of previously acquired questions forms. Therefore, various scholars implemented error analysis as a systematic procedure used to identify, categorize, and explain the errors made by learners when forming questions (e.g., Lee, 2016; Masruddin & Karmila, 2018; Santelmann, 2002; Rowland, 2007; Valian, 2003).

These studies analyze learner errors to determine areas which need reinforcement in language teaching. Researchers such as Richard (1971), Corder (1974), Dulay (1982), and James (1998), as cited in Khansir (2012) are just a few of the researchers who have devised methods for categorizing and identifying learner errors. The type of errors categorized by Dulay (1982) and James (1998) is as shown in Table 2.3.

The study of language learners' errors started with contrastive theory (CA), a well-known theory in second language acquisition (SLA) that facilitated the comparison of language structures. However, CA was not without limitations as its main criticism was interlingual interference from learners' first language is not the only reason for occurrence of errors. As a reaction to the limitations of CA, error analysis (EA) was introduced as an

alternative approach to explore and describe learners' errors. EA not only examines input of a new language but also focuses on linguistic and cognitive processes. It is often applied as a systematic procedure to identify, categorize and explain the errors made by learners to determine areas which need reinforcement. According to James (1998, as cited in Al-Khresheh, 2016), EA is a process of determining incidence and nature of unsuccessful language. Consequently, in the late 1970s, interlanguage analysis was introduced, which involved looking at the intermediate stages between learners' L1 and L2 where learners use rules from both linguistic systems to produce language. This theory perceived learner's errors as evidence of assimilation of the new language into the learner's reality (Luna, 2010).

In recent years, however, some researchers have moved away from error analysis in response to criticism that error analysis focuses solely on incorrect output and excludes other important sources of information that may aid in understanding the acquisition process of language learners, whose language production may vary in numerous ways (Khansir, 2012). Yet, according to Brown (1981, as cited in Gass & Slinker, 1994), analysis of learners' errors can still contribute towards understanding the processes of SLA as SLA is a process that differs from FLA in its trial-and-error nature and forming errors in learning is inevitable. Besides that, the mother tongue can be perceived to interfere learning negatively and positively (Denizier, 2017). This indicates cross-linguistic influence may result in learners having possibility to make certain errors more frequently than learners with other mother tongues.

Various researchers have come up with ways to categorize and identify learner errors, including Corder (1974, as cited in Masruddin, & Karmila, 2018); Dulay (1982, as cited in Masruddin, & Karmila, 2018); James (1998, as cited in Masruddin, & Karmila, 2018) and Richard (1971, as cited in Masruddin, & Karmila, 2018). Examples are presented in Table 2.3.

Table 2. 3: Categorisation of Errors (Dulay, 1982; James, 1998)

Dulay (1982)	James (1998)	
Omission Characterized by the absence of a necessary component in a well-structured utterance.	Omission Where some aspects of a word that should be present are omitted.	
Addition Characterized by the presence of an item must not present in a well-structured speech.	Overinclusion Where an element that should not be present is present.	
Misformation Defined by the usage of a morpheme or structure that is wrong.	Misselection Where there are not one but two distinct targets.	
Misordering Defined by an erroneously placed morpheme or set of morphemes in an utterance.	•	
-	Blend When the incorrect item was selected instead of the correct one.	

The aforementioned researchers classify errors using surface strategy taxonomy that mainly appear by omission, addition, misformation and misordering of some items found in a sentence. Such taxonomies are usually used to investigate errors in student's writing. Although, there are various taxonomies to classify errors, Rowland's (2007) error coding was considered the most suitable for this research because it presented a comprehensive code to distinguish different types of errors particularly in interrogative sentences. This framework had been used in three consecutive studies by Rowland et al. (2005); Rowland (2007) and Ambridge and Rowland (2009) to investigate incidence and patterning of errors in children production of English questions, with a high agreement level between coders recorded in the studies at 97.5%. Methodological concerns will be further discussed in Chapter 3, research design (3.1).

As the present study examines participants from two different language backgrounds, the second part of the literature review will discuss literature related to the

study's multilingual context, including matters related to participants' dominant language profiles.

#### 2.2 Language profiles of national-type school students.

This section will cover discussion on multilingualism in Malaysia, language profiles of students at Malaysian Chinese medium school, assessing participants' language dominance and the relationship between language dominance and language learning.

#### 2.2.1 Multilingualism in Malaysia

Malaysia is a land of multiculturalism which engenders multilingualism. It is a home to numerous languages, including Malay, Mandarin, Tamil, and many others. Malaysia also has many indigenous groups in east Malaysia such as the Ibans, Kadazandusun and Orang Asli, with almost 137 living languages spoken in the country (Eberhard et al., 2019).

After Malaysia gained independence in 1957, Malay was chosen as the official national language in an effort to promote social cohesion and facilitate effective communication. The rationale was that the numerous immigrants who had chosen to settle in the then Malaya had also brought with them distinct languages, beliefs, and values (Gill, 2014) and if these settlers were not integrated into the system, there would be a great deal of disharmony due to the lack of common languages to communicate.

However, in the 1990s, as Malaysia responded to globalisation and sought to become an education centre for the region, the education sector placed a greater emphasis on English. As the language shift was implemented, the relationship between English as a worldwide language and Malay as the national language has been intrinsic and complex (Zhou & Wang, 2017). According to Hashim (2014), on the one hand, English is significant due to its role as the de facto working language of ASEAN, its worldwide

status, and its value in international trade and commerce. Nation building, on the other hand, requires a common language to aid in the formation of a national identity, and Malay, as the language spoken by the biggest ethnic group in Malaysia, is the language of choice.

Although the national language policy was implemented, it does not necessarily translate to the people of the nation. According to David et al. (2017), people choose the language they speak depending on the group with whom they are conversing. The middle class is typically fluent in the English language and communicates in English regardless of ethnicity, but other socioeconomic classes have a wider range of language preferences. Malaysians such as the Chinese and the Indians will typically use English, their ethnic language, or a mixed code while conversing with members of their own ethnic community. English is often considered to be the language of higher education and the private sector. A considerable number of Malaysians of all ethnicities speak English fluently. This group uses English as their lingua franca since it is the language in which they are most proficient. When interacting with other groups, the same set of speakers could switch to Mandarin, Tamil, or other ethnic dialects if they are part of their linguistic repertoire. If not, proficient English-speaking non-Malays are more inclined to resort to their limited Malay.

When reviewing multilingualism in Malaysia, it is also crucial to introduce the different types of school in Malaysia in the next section as these schools were formed based on using other than the national language as the main medium such as Mandarin and Tamil language.

#### 2.2.2 Language profiles of Students at Malaysian Chinese Medium School

Malaysia's education system consists mostly of two sorts of schools: national and national-type schools. Malay or Bahasa Malaysia is the primary language of instruction

in national schools. Others attending national type schools that are also vernacular type schools are instructed in Mandarin or Tamil, the vernacular languages. It appears that this occurrence exists solely in Malaysia (David et al., 2017). There were also private Chinese Independent schools, private international schools and local religious schools that operated in the country.

As this study focuses primarily on Chinese national-type school children, the following literature will focus solely on the background language of students who attend this type of school. According to the CPPS - Vernacular Schools Report (23 April 2012), 95 percent of Chinese children attend Chinese-medium schools, indicating the majority of students that attend the Chinese vernacular school were of Malaysian Chinese descent.

While Bahasa Malaysia stands as the national language, English, as the second language and other languages such as Mandarin, Tamil, ethnic dialects as the third. The situation is rather complex as Chinese national-type school children in Malaysia may acquire these languages in a different order. At home, a child may speak their native language depending on their ethnicity at home, speak the local national language at school and also learn a second or third language, which is the English language. Furthermore, depending on the national type of school, the order of acquiring the English language also differs.

Although the English language stands as a compulsory second language in both types of national schools, Chinese and Tamil national-type schools place English as the third language, which may result in less exposure to the language among these students. According to Darus (2009), as the medium of instruction of national-type schools is their mother tongue, English was only taught about 90 minutes per week in comparison to national school for about 210 minutes per week. These vast differences in language

exposure may pose difficulties for students to master the English language, especially among students without any English language background.

On the other hand, in different parts of the country, especially in the Klang Valley, a trend of language shift from the ancestral language or mother tongue to English as the dominant home language has occurred across many different communities, such as the Chinese, Indians, Malayalees Christians and many others (David, Dealwis & Kuang, 2017). The reason for the shift varies among communities. According to David et al. (2017), the decline of mother tongue fluency may be due to the lack of literacy in the minority language due to language policies of a country. In the desire for the betterment of their progeny, Haugen (2001 as cited in Mukherjee, 2011) also revealed that there is a general decline among immigrant communities' preservation of their language from one generation to the next. These communities could perceive mastery of the English language as necessary because they view it to be practical and contain transactional value in contrast with the ethnic language. Nonetheless, it is crucial to remark that even though English may be their first or dominant language, the local creole used at home may not be the standard English. According to Govindan and Pillai (2017), speakers that substitute English as their mother tongue are likely to use a more mesolectal version of ME to reflect the informality and closeness of home speech. This shows that although children may perceive themselves as English dominant language speakers, they are bilingual children that practice alternating between two or more languages at home to converse and engage with their family and friends.

A study by How et al. (2017) observed that national-type primary Chinese school students rated English second in vitality behind Mandarin, suggesting that students were quite eager to use English and perceived themselves to have slightly above-average language skills. The study also showed that the students' parents viewed acquisition of both languages as vital for their children, with English having a minor edge over Malay,

especially in media uses such as entertainment, social interactions, and general reading. How et al. (2017) also explored proficiency level, finding that higher proficiency can be seen in reading and speaking whereas students show better understanding and reading for English and Malay. As for speaking and writing proficiency, English and Malay scores were much lower than Mandarin, which suggests that kids have acquired language production skills in Mandarin, but merely reached comprehension skills in English and Malay.

# 2.2.3 Assessing Language Dominance

As Malaysian children are surrounded by so many different languages, most learners are commonly bilingual, trilingual, or even multilingual. Nevertheless, it is rather challenging to distinguish learners' dominant language as there is no unified methodology for assessing language dominance. According to Dubiel (2019), the language that bilinguals are exposed to and use the most becomes the language in which they can access words without stops or hesitations, hence being the language in which they are more dominant. Furthermore, dominant language can be measured by the rate of advancement of one of a child's languages in comparison to the others (Yip & Matthews, 2010). Barroso and Stefanich (2019) also stated the connection of a child's language dominance and psycholinguistic or against one of their languages, which is a common critique of selfratings. Bilinguals may be also predisposed to undecidability. Barroso and Stefanich (2019) experimented on four different dominant language measures among the same Spanish dominant bilinguals, concluding that self-ratings may not be an accurate reflection of participants' abilities as it occasionally provides contradictory results with other measurements. Therefore, self-rating tests often require the support of other methods of measuring. According to Argyri and Sorace (2007), while self-rating of language use and exposure was primarily used by adults, it has also been used with

children, with the main difference being bilingual children's parents providing reinforcement to supplement the self-ratings.

## 2.2.4 Language Dominance and Language Learning

As learners from different language dominance are placed in the same classroom in the Malaysian ELT context, it is also vital to review how these students learn language. When learning a first language (L1), it is often perceived that learners can acquire the language effortlessly, naturally, and essentially perfectly. Comparatively, learning second, third, and fourth languages is often accompanied by issues of interlanguage and specific language impairment (Murphy, 2003)

According to Aziz (2011), first language or mother tongue and second language are not same as no other languages influence the acquisition of mother tongue, but mother tongue competence may influence a learner's acquisition of other languages. This can lead to errors and mistakes in English learning. Aziz (2011) also added that the trial-and-error traits of second language acquisition may inevitably lead learners to make errors during the process of acquisition, and the process will be impeded if they do not commit errors and subsequently receive feedback on those errors in various forms.

Studies have shown that multilingual speakers often develop mixed utterances and hybrid structures as it is a language-natural behaviour in a multilingual environment where speakers borrow and share linguistic characteristics as a result of linguistic interactions (Rahman, 2021). This phenomenon can be related to cross-linguistic transfer where language learners' use of their first language's linguistic knowledge to help them acquire a second language.

According to Yang et al. (2017), the recognition of congruent forms across the learner's native and target languages either promotes or hinders L2 acquisition. If two

languages are thought to share a certain structure, transfer is more likely to occur, but a perceived dissimilarity is more likely to result in the avoidance of that structure. However, Kellerman (1983, cited in Murphy, 2003) also added that interlanguage transfer was not solely based on L1 and L2 congruence, but rather refers to a judgement the learner makes about his L1 prior to knowing the matching L2 structure, a judgement that remains consistent independent of the target language. Therefore, errors made by each L2 learner may vary from one another.

In recent years, studies of multilingual language contact have also expanded examining cross-linguistic influence which happens not just during the acquisition of a second language, but also during the acquisition of a third which were also applicable to some participants of the study which may place the English language as their third language. However, according to Cenoz (2013), the study of third language acquisition as an extension of SLA research, as it is still in the process of defining its scope and specificity as well as an appropriate methodology. Cenoz (2013) added that it appears natural that a multilingual learner gaining an additional language will approach the learning process differently and that cross-linguistic influence will be more complex when three or more languages are in contact as opposed to two.

## 2.3 Summary of Literature and Research Gap

As presented in this chapter, there are various areas of literature relevant to this study, firstly in relation to the types of English questions and the syntactic differences in Mandarin and English questions. Previous studies indicated that although the SVO syntactic order in Chinese and English are the same, speakers of the two languages use different processes to produce questions. For example, English questions require interrogative words fronted to the initial part in the sentence, while in Mandarin questions remains in-situ in the location of the deep structure where they originated. As a result of

this syntactic contrast, producing English questions remains a challenge especially for young learners whose main language is Mandarin. Furthermore, as mentioned in this chapter, a multilingual context has various implications on language learning. By examining English questions produced by Chinese medium primary school students, this study can assist teachers to identify some specific language difficulties and different needs among different language background English learners that are placed in a one-size-fits all classroom.

In addition, different theoretical frameworks related to cross-linguistic transfer and interlanguage that were reviewed in this chapter demonstrate how multilingual speakers tend to transfer a particular structure if the two languages are perceived as similar. However, as according to Kellerman (1983, as cited in Murphy, 2003) "not everything that looks transferable is transferable", which can cause learners to make errors.

As discussed in this chapter, difficulty in forming English questions have been found in previous research by examining the stages of question formation and identifying errors when forming questions either among FLA or SLA learners. However, the findings of these studies might not be directly applicable to the Malaysian context, including in national-type Chinese schools, which involve learners from various language backgrounds. Therefore, more information is needed on this groups' ability in producing questions. The researcher of this study would like to first identify the young learners' familiarity with different types of English questions and then identify the difficulties faced by participants from two different dominant language backgrounds when producing two types of questions: WH questions and yes-no questions. The methodology used to carry out these objectives will be discussed in the next chapter.

#### **CHAPTER 3: METHODOLOGY**

This chapter discusses the methods used in this cross-sectional quantitative study to investigate the production of English questions by 56 Year-Four students from a Nationaltype Chinese primary school. The study is guided by the two research questions laid out in Chapter 1. To address research question 1 on types of questions produced by the students, participants were given stimuli based on six communicative functions to elicit production of different types of English questions. Research question 2 examines the common errors made by participants when producing English questions. In addition, researchers looked at the similarities and differences in difficulties faced by two groups of individuals based on their dominant language which is either Mandarin or English. Three tasks were conducted in this study to elicit learner language data for analysis, namely a simulation task, a sentence transformation task, and a translation task. This chapter begins with description of the research design used in this study (3.1), followed by details of the participants involved (3.2), instruments employed in the study (3.3), data collection procedures (3.4), data analysis and coding process (3.5). Chapter 3 ends with clarification on research validity and reliability (3.6) and steps taken to fulfill ethical considerations (3.7).

# 3.1 Research Design

This study used a descriptive quantitative method to systematically examine the production of question forms by students from a Chinese national-type primary school. Descriptive research attempts to collect quantifiable information from a population sample to identify characteristics, patterns, correlations and categories (Paltridge & Phakiti, 2015). Data collected in the study were coded and presented in percentage, graphs and tables to identify patterns that reflect the most used type of English questions of both groups and the difficulties faced by two groups of participants when producing English questions. The study also employed a cross-sectional study design, where the researcher

collected data at a single point in time to investigate language production of a group of students from a school. This study only explored learners' language production from a sample population and the types of errors made, which did not require an extended time commitment and observation.

## 3.2 Participants

The sample of the present study consisted of 56 year-four participants aged 10 years old from a national-type Chinese school. The students' participation is on a voluntary basis among four classes which consist of 120 pupils in total. The researcher recruited the participants by describing the nature of the study in each class concurrently encouraging the participants to challenge themselves regarding their ability to produce English questions.

As the present research identified mainly two dominant language participants, the researcher wanted to examine some language specific challenges arising from participants with different first languages. This required first categorising the students into two groups based on their language background. The researcher employed Birdsong et al. (2012)'s Bilingual Language Profile (BLP) instrument to determine participants' dominant language as this instrument has been used successfully in a variety of contexts, including bilingual education, literacy development, heritage learning, and communication sciences to collect information by school administration regarding the linguistic history of children enrolled in a school. This instrument is a multi-measure questionnaire designed to reflect the gradient nature of linguistic dominance and the several factors that influence it, including, but not limited to, gender, age, and education. It includes age of acquisition, years of schooling, frequency of use, linguistic environment, proficiency, and language attitudes.

With this instrument as a guideline, the researcher also took the following steps to determine the participants' dominant language or main spoken language at home. Before the participants signed up to join the study, the researcher posed four questions to the students to reflect on, prior to distributing a Participant Information Sheet that describes the study, and a consent form to be signed by their parents. The questions were as follows.

- Do you use English or Mandarin when speaking with your family at home? –
   Language exposure
   How often do you use the language when speaking with your family at
  - home?
  - Rating scale: 1 never 2 rarely 3 sometimes 4 always/ all the time
- 2) Do you use English or Mandarin to talk to your friends at school? Language use
- 3) Do you feel more comfortable using English or Mandarin to express your feelings (when you are happy/angry/sad?) Language processing
- 4) Do you prefer all your subjects to be taught in Mandarin or English in school? Language preference/ proficiency

Pupils who expressed an interest in participating in the research and who had their parents' consent to do so were interviewed individually by the researcher to collect information about their perceptions regarding their dominant language spoken at home. In addition, the researcher created a checklist to aid in the interviewing process. Overall, students that were interviewed were able to provide clear answers regarding the questions asked. They were able to express their preference of language and coherent answers throughout the brief interview. However, the researcher encountered seven students who were interested in joining but unsure about the question asked. These students still took part in the given task, but their results were not included in the research results. Selected students were then divided into two groups according to their dominant language. The English dominant participants consisted of (N=28) similar to the Mandarin dominant participants (N=28).

Subsequently, the researcher also randomly selected seven participants to do follow-up interviews with their parents to get a comprehensive picture regarding the participants' dominant language. The researcher also adapted Birdsong, Gertken, and Amengual (2012)'s Bilingual Language Profile (BLP) instrument to build the questionnaire items with the purpose to interview the participant's parents. The details of the instrument used to guide the follow up interviews are presented in Table 3.1.

Table 3.1: Adaptation of Birdsong, Gertken, and Amengual (2012)'s Bilingual Language Profile (BLP) instrument

Module	Items
Module Language	1. When did your child start acquiring the ENGLISH language?
History	2. When did your child start acquiring the MANDARIN language?
	3. Which language was used when your child first learns to speak?
Module Language	1. Which language is most frequently spoken in your home?
Use	2. In an average week, how would you rate the amount of time you
	spoke ENGLISH with your child?
	3. In an average week, how would you rate the amount of time you
	spoke MANDARIN with your child?
	4. Which language does your child use more frequently to interact
	with their siblings?
. (	5. Which language does your child use more frequently to interact
\ \	with their grandparents?
	6. Which language television programmes were usually preferred
	at home?
	7. Which language settings were more commonly used in home
	gadgets and devices?
	8. Which language would your child use more often to tell you
	about their day at school or other similar settings?
Module 3:	How would you rate your child's ENGLISH language
Language Proficiency	proficiency?
	2. How would you rate your child's MANDARIN language
	proficiency?
	3. Which would be your child's preferred language when choosing
	reading materials for leisure purposes? For example,
	storybooks, comics, etc.

The researcher interviewed seven participants' parents using the module and the items listed above. These interview sessions were conducted online and were recorded for evidential reasons. In addition, the researcher spoke with the participants' English language teachers about their language skills and performance in class. The researcher compared the results of the interview with the response provided by the participants. The information gathered about participants' initial perceptions of their respective dominant language was aligned and congruent with other parties' corroborating information combining self-report and interview.

In summary, prior to conducting the study, the researcher was informed by teachers in this school that students can mainly be identified as either dominant in English or Mandarin language. Therefore, the researcher decided to include the information in the study, by dividing the participants according to their dominant language to examine similarity and differences in some language specific challenges arising from participants with different first language. The researcher constructed interview questions by adapting Birdsong, Gertken, and Amengual's (2012) Bilingual Language Profile (BLP) instrument for both participants and selected parents to assist in providing supporting reinforcement along with the information given by the participants regarding their home language.

## 3.3 Instruments

In the present study, a combination of three tasks were assigned to the participants that were used to address each research question (RQ): a simulation task, a sentence transformation task and translation task as shown in the Figure 3.1. Each task is then described in the following sub-sections.

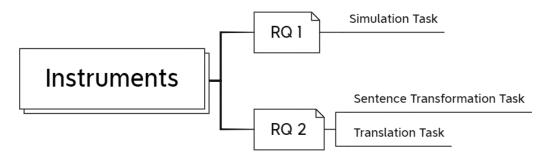


Figure 3. 1: Tasks Applied to collect data for each research question

#### 3.3.1 Simulation Task

The first task was a simulation task which presented different stimuli and situations to examine participants' production of different types of English questions. The objective of the task was to collect data to answer research question one (RQ1), which investigated the types of English questions that participants produced when given a particular scenario. As there were very few studies conducted in Chinese national-type primary schools related to production of English questions, it is important to ascertain these students' knowledge about different types of English questions. By examining their production of questions, the researcher was able to identify question types that were familiar to the young learners. Consequently, the task showcased the variety of interrogative sentence structures that these young learners possess and their ability to use different question types to correspond in various communicative functions.

However, the findings of this task did not take into account the syntactic accuracy of the questions produced, as the objective of the task was only to collect data regarding participants' use of different types of English questions prior to data collection for the next research objective. In addition, this task was a convenient way to collect target structures by getting participants to respond to a stimulus, but it did not reflect real-life language production. Even so, the researcher attempted to include scenarios associated

with the children's lives such as school subjects, birthdays, holidays with the assumption

that it would mirror their actual language use (Kreutel, 2007).

Six communicative functions were retrieved from Year Four Common European

Framework of Reference for Languages (CEFR) English syllabus (Ministry of Education

Malaysia, 2019) and they were as follows:

1. Asking for information

2. Asking for preference

3. Asking for personal information

4. Asking about possessions

5. Asking for obligations/planned action

6. Asking to make invitation

A total of 14 stimuli was given as shown in Appendix E. The development of

instrument was guided by the six communicative functions above, with two to three

stimuli items constructed for each function. Examples of the items in the simulation task

are provided below:

a) Science exam is just a few days away. You want to know whether topic 8 or topic

9 will be included in the test.

Write ONE possible question that you will ask your teacher.

Student 1 answer: Which topic will be included in the test?

Analysis: Direct WH Question (WH Q)

Student 2 answer: Teacher, is topic 8 and topic 9 included in the test?

Analysis: Direct Yes/no Question (Be Y/N Q)

b) You met a new friend on the internet. You wanted to know more about her/him.

Write ONE possible question that you will ask the new friend.

Student 1 answer: How old are you?

Analysis: Direct WH Question (WH Q)

Student 2 answer: Can I know more about you?

Analysis: Direct Modal Yes/no Question (Modal Y/N Q)

35

## 3.3.2 Sentence Transformation Task

A sentence transformation task was administered to collect information about participants' difficulties in producing English questions, to address RQ2. The task presents participants with 14 statements, each with an underlined phrase. The students must then transform the sentences into questions for which the underlined phrase is the answer. The statements in the task were selected by extracting tenses and question types incorporated in the Year Four Common European Framework of Reference for Languages (CEFR) English syllabus (Ministry of Education Malaysia, 2019) as shown in Table 3.2.

Table 3. 2: Sentence Transformation Task Auxiliary Verb and Question Word Allocation

No	Statements	WH Question word	Yes/No Auxiliary verb	Tenses
1	They're playing badminton.	What	Are	Simple Present Tense
2	Jack often goes home <u>by</u> <u>bus</u> .	How	Does	Simple Present Tense
3	Mary can improve her English by <u>listening to</u> English songs.	How	Can	Simple Present Tense
4	They were told to be silent by the librarian.	What	Were	Simple Past Tense
5	He should speak to her.	Who/ To whom	Should	Simple Present Tense
6	The <u>brown</u> dog is Joshua's.	Which	Is	Simple Present Tense
7	Jack likes ice cream.	What	Does	Simple Present Tense
8	She has been living here for 3 years.	How long	Has	Present Perfect Continuous

9	Dinner will be ready by 8pm.	When	Will	Future Tense
10	Her phone rang.	Whose	Did	Simple Past
				Tense
11	They had been talking for	What	Had	Past Perfect
	an hour.			Continuous
12	They have been to the	Where	Have	Present Perfect
	theatre.			Continuous
13	He was awake all night	Why	Was	Simple Past
	because he had a			Tense
	nightmare.			
14	I'm coming home by	When	Are	Simple Present
	next Thursday.			Tense

Table 3.2 shows the tenses, auxiliary verbs and question words used in the given task. Most of the items used in the task were in the simple present tense as a substantial amount of grammar focus of Year 4 syllabus covers the present tense. In this task, participants were asked to transform each given statement into a WH and a Yes/no interrogative sentence using the underlined phrases as answers. See the following example:

a) Jack often goes home <u>by bus.</u> – **WH Q**: How does Jack go home? **Y/N Q**: Does Jack go home by bus?

Student 1 answer:

WH Q: \*What do Jack goes home by?

Analysis: Question word error (QW-S); agreement error (AG); double marking error (DM)

YN Q: Is Jack goes home by bus?

Analysis: Auxiliary error (AX-S)

## 3.3.3 Translation Task

Participants were also presented with a translation task which contained 10 Mandarin questions. Six of them were WH questions while the other four were Yes/No questions. Participants were asked to translate them into English questions. The task was conducted to collect information about errors participants may make when translating Mandarin questions to English questions. Furthermore, compare the errors made by participants between this task and sentences transformation task. Similar to the previous task, the researcher referred to the Year 4 English syllabus to construct the task items as shown in Table 3.3.

Table 3.3: Translation Task Auxiliary Verb and Question Word Allocation

No	Mandarin Questions	WH	Yes/No	Tenses
		Question	Auxiliary/	
		word	Modal Verb	
1	你最喜欢的老师是谁?	Who	Is	Simple Present Tense
	You most like teacher			
	who?			
2	他们住在那里?	Where	Do	Simple Present Tense
	They live at where?			
3	这是谁的铅笔?	Whose	Is	Simple Present Tense
	This is who de pencil?			
4	他们为什么迟到学校?	Why	Were	Simple Past Tense
	They why late reach			
	school?			
5	你在家里做什么?	What	Are	Simple Present Tense
	You at home do what?			
6	什么时候下雨了?	When	Did	Simple Past Tense
	When rained?			
7	你见过他们吗?	-	Have	Present Perfect Tense
	You seen before them ma?			
8	她是美国人吗?	-	Is	Simple Present Tense
	She is American ma?			
9	他每天走路上学吗?	-	Does	Simple Present Tense
	She everyday walks to			
	school ma?			
10	她会不会跳舞?	-	Can	Simple Present Tense
	She can or cannot dance?			

Table 3.3 shows the allocation of question words and auxiliary verbs in each question. This task was also employed to address RQ2, to examine different errors made by participants when translating Mandarin questions into English questions. Furthermore, this task is constructed to assist the researcher to distinguish similarities and differences of errors found across both tasks as different tasks characteristics and conditions may contribute to variability on task performance. As stated by Geeslin and Gudmestad (2008), task variation is important to study learners' language as previous studies have demonstrated that differences across tasks may prompt a variety of responses. See the following example:

- a) 他们住在哪里?—Where do they live?
- Student 1 answer: \*Where does he lives?

Analysis: Case error (CS); double marking (DM)

b) 你见过他们吗?—Have you seen/met them?

Student 1 answer: \*Did you meet him before?

Analysis: Case error (CS); alternate question (ALT)

To minimize the possibility that learners' production of English questions would be affected by their limited knowledge of vocabulary, words were meticulously selected from their learned vocabulary based on their syllabus. Altogether there were three instruments used in this study. Each instrument was specifically selected to address the two research questions in the study. To examine learners' error in producing English questions, two tasks were adopted for a reason. Sentence transformation tasks are traditionally used in classroom practice, so participants would be familiar with this task, while the translation task was relatively unique and new to the participants. Therefore, data from both tasks was considered suitable to provide the researcher a broader perspective into participants' difficulties in producing English questions by enabling a comparison of similarities and differences in the errors made by participants in both tasks.

#### 3.4 Data Collection Procedures

All the tasks were in written form as the target sample were primary school children. In consideration that children might feel intimidated to ask questions orally, an oral task might prevent shy children from participating. Children may also react differently to spontaneous situations, where they might not be able to catch the stimuli given or be unable to give an instant response. Oral assessments, according to Joughin (2007), might induce more anxiety than written ones, which can be associated with learners' lack of experience in oral tasks. Therefore, this study opted to use only written form.

Due to the constraints resulting from the COVID-19 pandemic during the data collection period, data collection for two out of the three tasks was conducted online. The simulation task and sentence transformation task were conducted using Google forms. Separate Google Meet sessions were conducted for each task. The researcher also read and explained the instructions slowly, allowing participants to ask more questions if they had trouble grasping the task instruction. At the same time, the researcher gave examples to convey the task requirements. Participants were also instructed to complete the task without any external assistance, but they were permitted to ask for the meaning and spelling of words that are unfamiliar to them. The initial time limit for both tasks, excluding instructional sessions, was around 30 minutes each. However, the participants were given up to an hour to complete the task as the pilot study had shown that many unexpected technical interferences arose in completing the tasks online and the children were also unaccustomed to doing their work by typing on the keyboard.

On the other hand, the translation task was conducted in class on paper to prevent students from using other applications and translation tools to produce English questions. As with the other tasks, participants were allowed to inquire the meaning of

words that they did not understand. As the translation task only had 10 items, the maximum time given to participants to complete the task was 30 minutes.

# 3.5 Data Analysis and Coding

Data collected from participants were sorted in an Excel sheet and coded accordingly. For research question 1, the questions students wrote in response to the simulation task were coded using a framework which combined question typologies by Kartunnen (1977) and Huddleston (1994), as described in the literature review. Any response that could not be categorised into interrogative sentences were excluded. In comparison to other frameworks such as Leech and Svartvik (2013) and Quirk and Greenbaum (1990), which categorize questions based on their functional features, the question typologies of Kartunnen (1977) and Huddleston (1994) were chosen because they distinguish English questions based on syntactic features, which was in line with the focus of this study. For example, Leech and Svartvik (2013) categorised the type of question depending on the information the speaker requires from the listener.

To address research question 2, WH questions and yes/no questions produced by the participants in the sentence transformation task and translation task were coded using an adaptation of Rowland's (2007) error coding as explained in the next page.

Table 3. 2: Rowland's (2007) Error Coding

		Rowland's (200	7) Error Coding	
No	Error	Ex	xplanation & Sample	
	Coding	Elements	WH Questions	Yes/No Questions
1.	Correct Questions	-	correct choice placement of wh word, auxiliary, main verb and subject.	choice placement of auxiliary, main verb and subject.
2	Double Marking Errors (DM)	<ul> <li>i. Doubling of auxiliary</li> <li>ii. Errors in marking on tense and agreement in auxiliary and main verb</li> <li>iii. Errors with two auxiliaries present.</li> </ul>	i. Where does he does work? ii. Where does he works?/ Where do he works	<ul> <li>i. <u>Does</u> he <u>does</u> work?</li> <li>ii. <u>Does</u> he <u>works/</u> <u>Do</u> he <u>works</u></li> <li>iii. <u>Does</u> he <u>can</u> work?</li> </ul>
3.	Inversion Errors (IV)	<ul><li>i. Do- support inversion errors.</li><li>ii. Non- inversion errors</li></ul>	i. Where he works? ii. Where he does work?	i. He does work?
4.	Agreement Errors (AG)	Errors in which an auxiliary was present but did not agree with the subject.	Where does you work?	Is you working? Does you work?
5.	Omission Errors (OM)	i. Auxiliary ii. Subject iii. Subject and Auxiliary	i. Where he going? ii. Where is going? iii. Wheregoing?	<ul><li>i. He going to school?</li><li>ii. Is going to school?</li><li>iii. Going to school?</li></ul>
6.	Case Errors (CS)	Errors in which the subject had incorrect non-nominative case.	Where does <u>his</u> work?	Does <u>her</u> work? Has <u>he</u> r work?
7.	Other errors of commision (OT)	Errors that could not be categorized according to the scheme above or where the type of error could not be reliably identified	What he work does work?	Does work he works?

Rowland's (2007) error coding was adopted in this study as it presented a comprehensive code to distinguish different types of errors. This framework had been used in three consecutive studies by Rowland et al. (2005); Rowland (2007) and Ambridge and Rowland (2009) to investigate incidence and patterning of errors in children production of English questions, with a high agreement level between coders was recorded in the studies at 97.5%.

For the current study, seven new elements were added to Rowland's (2007) error coding that will be explained as follows.

Table 3. 3: Elements adapted in Rowland's (2007) Error Coding

	A	daptation of Current Stud	y from Rowland's (2007	<i>'</i> )						
No	Error	Explanation & Sample								
	Coding	Elements	WH questions	Yes/No Questions						
1.	Placement of question word errors (PQW)	Interrogative morpheme incorrectly placed in a question	You are going where?	-						
2	Question word error (QW-L)	Selection of QW does not match the statements given but syntactically accurate	What colour is his dog?	-						
3	Question word error (QW-S)	Selection of QW that causes sentence structure errors	What does Jack go home by?	-						
4.	Auxiliary Errors (AUX-S)	Selection of wrong auxiliary verb that caused sentence structure errors	_	Are she live here for 3 years?						

5.	Auxiliary Errors (AUX-T)	Selection of wrong tenses	What <u>do</u> librarian tell them?	Are they told to be silent by the librarian?
6.	Auxiliary Errors (AUX-L)	Select a different auxiliary from the given statements but syntactically accurate.	<u> </u>	Did the librarian tell them to be silent?
7.	Alternative Questions (ALT)	To indicate variation in participants questions that used either different QW or tenses from given statements, but questions formed are syntactically accurate and able to correspond with the statements given well.	How can Mary improve her English?  What does Mary do to improve her English?	Should he speak to her?  Must he speak to her?

These elements were added to provide a clearer depiction of participants' difficulties in producing questions. Elements were added after analysing the data from the pilot study, which indicated that more detailed coding was required to differentiate types of errors made by participants. In analysing question word errors (QW), the researcher found that many were not syntactically wrong, but the selected question word was wrong in terms of meaning or did not correspond with the given statements. A similar situation occurred with auxiliary error (AX), where some participants opted to use a different auxiliary verb, but questions constructed were still syntactically accurate. Therefore, it was considered necessary to distinguish these errors to provide a more accurate description of the students' errors. Also, the "placement of question word error" (PQW) code was added to provide more detailed information on the type of inversion errors made by participants. Lastly, the "alternative questions" (ALT) code was included to indicate variations of questions that participants were able to produce that are syntactically accurate and corresponded with the statements given well (refer to table 3.3).

The data were coded using an Excel sheet, and the totals were added up using formulas to ensure to ensure accuracy of the calculations. This was followed by categorizing the data into tables as shown below in Figure 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6.

	AQ1	ANALYSIS AQ1	AQ2	ANALYSIS AQ2
E1	Teacher may I know if topic 8and 9 is in the test?	IND BE Y/N Q	Hi may I know when is the party coming this month?	IND WH Q
E2	What is our topic for the Science exams?	WH Q	When is your party?	WH Q
E3	Teacher can you teach me topic 8 and topic 9?	MODAL Y/N Q	Do you give me the correct information?	DO Y/N Q
E4	can i know topic 8 or 9 will be included?	IND ALTER Q	can i know the correct venue?	MODAL Y/N Q
E5	Which topic will be included in the Science test?	WH Q	Is this the correct information?	BE Y/N Q
E6	Will the science exam have topic 8 or 9?	ALTER Q	Do i have the correct information?	DO Y/N Q
E7	What test will be included?	WH Q	Where is the venue that you change to?	WH Q
E8	Teacher is topic 8 and topic 9 is included in the test?	BE Y/N Q	I heard that the venue of the party has changed my i know the correct information ?	MODAL Y/N Q
E9	which topic will be included in the test?	WH Q	where is the venue of the party?	WH Q

Figure 3. 2: Screenshot of Simulation Task Coded Data Example

CODE	S1				\$2				\$3			
	They're playing <u>badminton</u> .			Jack often	goes home <u>by bu</u>	.21	Mary can improve her English by listening to English songs,					
	What are they playing?	Anal	ysis	How does Jack/he often go home?		Analysis		How can Marylishe improve her English?	Analys	sis		
M1	Why is Jack playing with a football?	QW(L)		What vehicle did Jack ofen_go home by?	QW(L)	AX(T)	OM	Why is Mary listening to English songs?	QW(L)	AX(L)		
M2	What are they playing?	CORRECT		What does Jack often goes home with?	QW(S)	DM		What does Mary do to improve her English?	ALT	AX (L)		
М3	What are they doing?	CORRECT		Which cars did Jack go back?	QW(S)	AX(T)		What can she_improve her English?	QW(L)	ОМ		
M4	Who are they?	QW(L)		Who goes home by bus?	QW(L)			What can improve english by listening?	QW(L)			
M5	_they are play football?	OM	IV	what Jack goes by bus?	QW(S)			How do she improves English?	DM	AG		
M6	Where did they play football?	QW(L)	AX (T)	Why Jake goes home by bus?	QW(S)			What is English songs?	ОТ			
M7	What are they playing?	CORRECT		What does Jack often goes home?	QW(S)	DM		How can Mary improve her English?	CORRECT			
M8	What are they playing?	CORRECT		How does Jack go home?	CORRECT			How can Mary improve her English?	CORRECT			
M9	What are they playing?	CORRECT		What does Jack often goes home?	QW(S)	DM		How can Mary improve her English?	CORRECT			

Figure 3. 3: Screenshot of Sentence Transformation Task Coded Data Example

		ENG MAN			ENG	MAN	EN	NG	]	MAN			
CODE ENG	CODE MAN	T1					T2				T3		
				ou seen them?		Is she an American?		Does he walk to school everyday?					
E1	M1	DM		DM			CORRECT	CORRECT	DM		CORRECT		
E2	M2	AX (T)		CORRECT			CORRECT	CORRECT	CORRECT		CORRECT		
E3	M3	AX (T)		IV			CS	CORRECT	DM	AG	AX (T)		
E4	M4	CORRECT		OM			CORRECT	IV	CORRECT		OM		
E5	M5	CORRECT		DM			CORRECT	CORRECT	CORRECT		CS		
E6	M6	CORRECT		ALT	AX (L)		CORRECT	CORRECT	CORRECT		AX (T)		
E7	M7	IV		DM	AX (T)		CORRECT	CORRECT	AX (S)	IV	AX (S)	IV	
E8	M8	AX (L)	ALT	OM			IV	CORRECT	AX (T)		CORRECT		
E9	M9	CORRECT		IV	DM	AX (L)	CORRECT	CORRECT	CORRECT		AG	CS	DM

Figure 3. 4: Screenshot of Translation Task Coded Data Example

	Analysis S1		Ana	Analysis S2		Analysis S3		Analysis S4	
STT: WH Questions	ENG	MAN	ENG	MAN	ENG	MAN	ENG	MAN	
Position of Question word Errors (PQW)	0	0	2	5	0	1	0	1	
Question word Syntactic Errors (QW-S)	0	0	4	18	0	1	1	4	
Question word Lexical Errors (QW-L)	6	8	4	4	4	4	16	6	
Double Marking Errors (DM)	0	0	3	4	0	1	2	2	
Auxiliary Errors (AX - S)	0	0	0	3	0	0	1	1	
Auxiliary Tenses Errors (AX - T)	2	1	1	2	1	0	4	3	
Auxiliary Lexical Errors (AX - L)	0	0	0	1	4	3	1	1	
Inversion Errors (IV)	0	2	0	0	0	2	2	6	
Agreement Errors (AG)	4	1	3	0	2	2	1	0	
Omission Errors (OM)	0	4	4	4	1	10	1	6	
Case Errors (CS)	0	0	0	0	0	0	1	0	
Other Errors (OT)	0	0	2	1	3	2	0	5	
Alternate Questions (ALT)	0	0	6	0	2	2	0	0	
Correct Questions (CORRECT)	22	16	7	2	14	6	4	3	
TOTAL	34	32	36	44	31	34	34	38	
TOTAL Errors	12	16	23	42	15	26	30	35	

Figure 3. 5: Screenshot of Categorizing Differences of Errors Between Both Group

	Sentence Trans	formation Task	Translati	on Task	TO	TAL
Overview of Findings	ENG	MAN	ENG	MAN	ENG	MAN
Position of Question word Errors (PQW)	3	24	1	10	4	34
Question word Syntactic Errors (QW-S)	11	63	1	13	12	76
Question word Lexical Errors (QW-L)	89	66	4	9	93	75
Double Marking Errors (DM)	71	83	8	14	79	97
Auxiliary Errors (AX - S)	31	125	8	14	39	139
Auxiliary Tenses Errors (AX - T)	77	47	27	43	104	90
Auxiliary Alternative (AX - L)	63	25	12	15	75	40
Inversion Errors (IV)	22	73	7	17	29	90
Agreement Errors (AG)	28	35	5	13	33	48
Omission Errors (OM)	19	78	6	46	25	124
Case Errors (CS)	19	22	19	24	38	46
Other Errors (OT)	38	54	15	12	53	66
Alternate Questions (ALT)	40	19	7	6	47	25
Total	471	695	113	230	584	925

Figure 3. 6: Screenshot of Total Number of Errors Made by Both Groups of Participants

Data was then analyzed to identify patterns, similarities and differences. The findings were then placed in line, pie and bar charts, to make it easier to comprehend enormous amounts of data as well as the relationships between different types of data. Findings also assisted the researcher to read data more rapidly than raw data since they are more visually appealing. Some of these figures will be used to present the findings in Chapter 4.

## 3.6 Validity and Reliability

According to Dornyie (2007), reliability is defined as the degree to which a study's measurement instruments and processes deliver consistent results, whereas validity is defined as the meaningfulness and appropriateness of the interpretation of the results of assessment procedure outcomes.

Throughout the research process, validity and reliability were given great emphasis. This includes from the initial stages of building the three instruments, through pilot testing of the instruments and data collection procedures, up to the analysis of the data. In analysing the data, to ensure errors were coded correctly, coding items went through multiple checking by the researcher and further changes were made after reviewing the items with the supervisor. Multiple checks by more than one person enabled the rectification of any human errors such as coding mistakes. The coding of language items is not always straightforward, where there may be more than one error type in a question or certain errors may appear ambiguous. The coding was reviewed by the student's supervisor and any disagreements about codes were discussed and resolved. Thirdly, the researcher and supervisor also looked through all the codes to make certain all the coding consists of the same characteristics and consistency to enhance validity of the findings. Examples are as follows.

	Participants' Questions	Type of errors	Researcher	Supervisor
1	Is Jack likes ice cream?	AX-S	√	√
2	<u>Did</u> she <u>lives</u> here for 3 years?	DM, AX-L	√	<b>√</b>
3	<u>Is</u> he awake for all night?	AX-T	√	√

Besides that, a pilot study was also conducted on three children during the development of the study. According to Malmqvist et.al (2019), pilot studies are conducted mainly to determine the viability of a study protocol, to highlight the study's shortcomings, and to assess whether it is necessary to conduct the study. This helped the researcher to quickly identify unforeseen problems and allowed changes in any questions or tasks that were unproductive. Preliminary data were gathered to provide guidance for procedures of the instruments, simultaneously highlighting potential issues in the instruments such as time limit, how instrument was delivered, and the vocabulary used. Based on this pilot study, the researcher made changes in the instructions and instrument items to ensure the terms used were suitable for children at the age of 10. The researcher also took in consideration of technical difficulties that children faced where participants might require extra time responding to the task as using devices to answer questions and typing the answers were fairly new to them. In addition, the researcher took use of the opportunity to make revisions and add new coding items as mentioned in Chapter 3.5 in order to more clearly characterize different types of errors as shown in the table.

Table 3. 4: Adjustments Made after Pilot Study

NO	Discovery retrieved from pilot study	Adjustment Made				
1	Placing simpler words and terms.	Estimated – Expected				
	You are buying a train ticket to visit your grandmother in Penang. You would like to know if the estimated arrival time of your train is at 3p.m.	You would like to know if the expected arrival time of your train is at 3pm.				
2	Provide the definition of certain words.	Give definition of a 'booking clerk'				
	Pilot study participants have difficulty understanding terms like 'booking clerk'. Therefore, further elaboration was provided to explain the term.	write ONE question that you will ask the booking clerk (a person who sells tickets, especially in a train station).				

3	Confusing item in Sentence	Remove item from the task.
	Transformation Task.	
	I agree with you.  Q: Who do you agree with?  Pronouns I and you may confuse participants.	
4	Time given  One of the pilot study participants reported unstable internet connection and	Increase the time limit by providing extra half an hour.
	faulty device that required him to restart his computer.	
5	Ambiguous instructions in sentence transformation task	Allocate some time to provide explanation and examples regarding the two types of questions: WH questions and yes-
	Participants were unclear about the instructions of the task and some of them were unsure about the term WH questions and yes-no questions	no questions
6.	New categorisation of errors	Added new element in Rowland's (2007) error coding such as  Syntactic errors and lexical errors in Question Words (QW-L & QW-S) coding and Auxiliary verbs
		(AX-T, AX-L, AX-S) to differentiate between types of errors.

Lastly, the frequency count of the errors was calculated using Excel formula and inspected twice to ensure the accuracy of the data produced.

# 3.7 Ethical Considerations

Creswell (2009) stated that researchers have the responsibility to protect their research participants, establish trust with them and simultaneously foster the integrity of research by safeguarding against misconduct that may reflect on an organization. The

researcher, according to Creswell (2009), needs to anticipate and address any ethical dilemmas especially if the study involves children.

In the current study, the researcher was aware of the vulnerability of the participants involved, due to their age. Therefore, the researcher had taken the necessary steps to address every ethical issue that arose. Prior to the study, a letter of permission was sent to the school principal for approval regarding the study that will be conducted on the school pupils (see Appendix A).

In recognition of the fact that the participants were minors, a participant information sheet was distributed to all Year 4 pupils (see Appendix A). This form contains the purpose, procedures and benefits of the study as well as information regarding participation and confidentiality, researcher background and contact information, and a parent or legal guardian's signature box to indicate acknowledgement and written permission for their child to either participate in the study or vice versa. This form acknowledges that participants' rights will be protected during data collection. Additionally, verbal consent was taken from the participants, after the details of the study were explained to them, to ensure that they fully comprehended what their participation in the study would entail. The researcher also conveyed the purpose of the study to the participants while explaining that their involvement was completely voluntary, and they were able to withdraw from the study at any time for any reason. As the researcher is also an English teacher at the school, the potential conflict of interest and the power difference between the researchers and the participants were also considered. To minimize the impact of the researcher's role as a teacher at the school, the researcher also emphasized that if participants decided to withdraw from the research at any time, no action will be taken upon them that will affect their school grades.

## 3.8 Summary of Chapter 3

In summary, this chapter has the presented the details of the methodology used in this study, beginning with a brief discussion of the research design, participants, demographic information and how their language dominance was determined and categorised into two groups: English dominant speaker and Mandarin dominant language speaker. Next, the combination of tasks used as the study instrument to address the two research questions was discussed. Furthermore, the chapter described the procedure of data collection and analysis to systematically code and analyze the type of questions produced by participants in response to a given prompt, as well as identifying the common errors found. Lastly, steps taken to ensure validity and reliability as well as ethical considerations were also discussed. The findings and results of the current methodology will be discussed in the next chapter.

#### **CHAPTER 4: ANALYSIS AND RESULTS**

This chapter reports and presents the findings of participants' production of English questions. As discussed in the previous chapter, the analyzed data were collected in an excel sheet and coded and coded using Rowland's (2007) error coding. The frequency of the data was added up using Excel built-in formulae to ensure the accuracy of the calculations. Finally, data from each task were combined to present a comprehensive analysis of the most common errors made by two groups of participants.

The findings will be presented in two parts, to address each of the research questions listed in Chapter 1. The first section (4.1) reports the findings related to research question 1 (RQ1), on the types of questions participants produced with written scenario prompts. Next, the findings for research question 2 (RQ2), regarding the common errors made by the participants in two types of questions namely WH questions and Yes/No questions, will be discussed (4.2). The findings in both sections were based on analysis of participants' production of English questions elicited through a simulation task, sentence transformation task and translation task. The data collected from both groups were examined to determine the types of errors made by participants, as well as the similarity and differences in language-specific issues faced by participants with different language backgrounds. This chapter ends with a summary of the findings.

# 4.1 Types of English Questions Produced by Year 5 Chinese Primary School Students (RQ1)

This section presents an overview of the types of questions produced by English and Mandarin dominant language participants from the simulation task. Findings are presented in Figure 4. Data of Figure 4.1 is link to Appendix B.

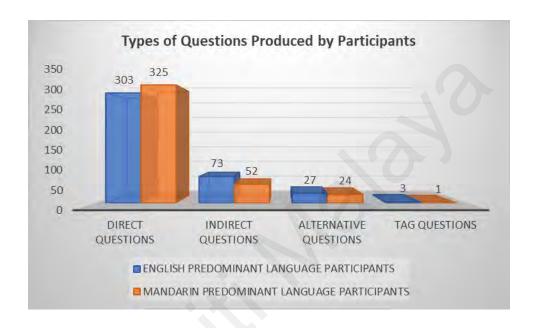


Figure 4. 1: Types of Questions produced by Participants

Figure 4.1 shows the frequency of questions produced by participants, according to 4 main types of questions: direct questions, indirect questions, alternative questions and tag questions. As mentioned earlier, this categorisation was developed by adapting the English question typologies by Kartunnen (1977) and Huddleston (1997). It can be seen that direct questions were the most common type of questions produced. Out of 808 questions produced, Mandarin dominant language participants produced 402 questions while English participants produced 406 questions. Figure 4.1 showed a significant difference between direct questions and other types of questions, which indicates that participants were much more familiar with using direct questions. The researcher further categorised the questions according to the types of direct and indirect questions (see Table 4.1).

Table 4. 1: Percentages of Direct and Indirect Questions Produced by Participants

Types of Questions	ENG	%	MAN	%	TOTAL	%
Direct WH Questions	76	19%	104	26%	180	22%
Direct Yes/No Questions	227	56%	221	55%	448	55%
Indirect WH Questions	25	6%	13	3%	38	5%
Indirect Yes/No Questions	16	4%	13	3%	29	4%
Indirect Alternative questions	32	8%	26	6%	58	7%
Alternative questions	27	7%	24	6%	51	6%
Tag Questions	3	1%	1	0%	4	0%
Total	406	100%	402	100%	808	100%

Table 4.1 shows direct yes-no questions were the most common types of questions produced, accounting for 55% of the total 808 questions, followed by direct WH questions, which accounted for 22%. In the category of yes-no questions, participants from both groups tended to produce more MODAL yes-no questions, which accounted for 38% of all yes-no questions, followed by BE 31% and DO 23% yes-no questions in contrast with HAVE yes-no questions which were significantly lower at only 1%. Examples are as follows:

# **DIRECT QUESTIONS**

MODAL Questions:	*Can I invite all mine classmate to mine party?  Would you all like to come to my birthday party?
BE Verb	Are you free in the weekend?
<b>Questions:</b>	Is this pencil yours?
DO Verb	<b>Do</b> you like the shirt too?
Questions	*Did you guys want to go to my party?
HAVE Verb	Have you made up your mind?
Questions	*Have my train arrive yet?
WH Questions	*Who's pencil is this?
-	*Which food do you like to order?
ALTERNATIVE	Do you want spaghetti or pizza?
Questions	Do you <b>prefer</b> to have ice cream <b>or</b> a slice of cake?
<b>TAG Questions</b>	You do like ice cream, don't you?

Participants also used modal verbs to form indirect questions. Participants were able to embed performative verbs such as "know" with modal verbs 'can' and 'may' to produce indirect questions, successfully preserving its transformation. Overall, English dominant language participants produced slightly more indirect questions. Examples are as follows.

<b>Indirect Questions</b>					
Tindirect BE Verb Questions:  *Can I know if we are going to a trip this end of the year Hello, good afternoon, sir, may I know whether the exparrival time of my train is at 3pm?					
Indirect DO Verb Questions	*May I know do you like this shirt, please? May I know if I have the correct information about the party that you are throwing?				
Indirect HAVE Questions	*May I know have you seen my new shirt?				
Indirect MODAL Questions	May I know if anyone would like to join my birthday party?				
Indirect WH	May I know when is your birthday?				
Questions	*May I know when the expected arrival time of my train is at 3pm?				
Indirect ALTERNATIVE Questions	Can you please help me to pick between ice cream or a cake?				

Furthermore, there were also a small number of participants who attempted to use negative questions to substitute alternative questions among participants such as 'Why don't you order pizza?' and 'Don't you like spaghetti more?' compared to the more frequently used question form 'Would you like to order spaghetti or pizza?'

The results demonstrated that both groups of participants produced a similar pattern of question types, indicating that participants were much more familiar with direct questions in comparison with other question types. This finding was expected as from a syntactic perspective, indirect questions are more challenging to construct as it requires embedded verbs, usage of 'if' or 'whether', changing word order and the omission of

auxiliary verbs. However, it should also be pointed out that the scenarios and prompts given can significantly influence the type of questions produced by participants as each type of questions can be defined in a discourse category. According to Quirk et al. (1985, as cited in Stivers, 2010) types of questions can be divided into three major classes based on the type of reply they expect. For example, yes-no questions are frequently used to communicate dissatisfaction, alternative questions provide the listener with two or more options, and modal questions were created to include a courteous request, permission, or use in formal contexts. Therefore, in the next section, the questions produced were analyzed according to their communicative functions.

## 4.1.1 Most Used Types of Questions Based on Given Scenario

Only through managing language and meaning, speakers and listeners are able to communicate. Thus, all questions and statements are typically provided with a function in the speaker's mind and these functions are referred to as communicative functions (Darani & Afghari, 2013). As a result, the different communicative functions related to the given prompt played a significant role in determining the type of question produced. For example, tag questions may occur more often in scenarios that ask for confirmation or an invitation to the hearer to agree with the speakers. This study extracted six communicative themes from Year 4 CEFR framework syllabus (Mitchell & Malkagianni, 2019). In total 14 scenarios were used as a guide to elicit questions responses from the participants. Participants' questions responses were recorded as follows. Findings of participants' questions responses were recorded in Table 4.2.

Table 4. 2: Most Common Question Type Based on Communicative Functions

CF	Asking for Information		Asking Prefer	_	Asking for Personal Information		Asking about Possessions		Asking about Obligations		Asking to make Invitation	
	QT	%	QT	%	QT	%	QT	%	QT	%	QT	%
ENG	WH Q IND WH Q	25 16	DO Y/N Q	35	WH Q	41	WH Q	41	MD Y/N Q	52	BE Y/N Q	43
MAN	WH Q IND WH Q	42 7	DO Y/N Q	31	WH Q	38	WH Q	43	MD Y/N Q	52	MD Y/N Q	41
	Communica	ative Fun	ctions		MD: Mod	al Questi	ons					

Table 4.2 lists the six communicative functions and the most frequently produced types of questions for each question, by participants from different language backgrounds. It can be observed that both groups of participants applied similar types of questions in the majority of the functions, except when asking for information and asking to make invitations. When asking for information, both groups of participants frequently used WH questions. However, English dominant language participants also employed indirect WH questions while Mandarin dominant language second highest question types produced was BE yes/no. Examples are as follows.

Theme: Asking for Information

Scenario 1

You are buying a train ticket to visit your grandmother in Penang. You would like to know whether the expected arrival time of your train is 3 p.m.

Write ONE possible question that you will ask the booking clerk (the person who sells train tickets).

Example of participants' question responses

ENG WH Q: \*What is the price of the ticket?

When would the train arrive?

*Indirect WH Q:* \* May I know when the expected arrival time of my train is?

*MAN* WH Q: \*When do the train arrival?

BE Y/N Q: \* Is the expected arrival time of my train is at 3 pm?

Findings as shown in the examples above, English dominant participants used modal verbs such as 'may' and 'can' to produce indirect questions, which suggested awareness and ability to use a more polite language when asking for information. About 16% of English dominant language participants produced indirect WH questions compared to Mandarin dominant language participants at only 7%. Mandarin dominant language participants preferred to ask direct WH questions and Yes/No questions when retrieving general information.

However, in scenarios that required participants to ask personal information, both groups of participants displayed a similar pattern in the type of question used. In scenarios that involved a friend, the majority of participants tend to produce direct WH questions and Yes/No questions in contrast with scenarios of asking for personal information from a stranger. Participants were more inclined to employ modal verbs when asking questions. Examples are as follows.

Theme: Asking for Personal Information

Scenario 1

You want to buy a gift for your friend. You want to make sure that your friend's birthday is on the 2nd of June.

Write ONE possible question that you will ask your friend.

Example of participants' question responses

ENG WH Q: When is your birthday?

Y/N Q: \* \*Just to confirm, is your birthday 2nd of June?

*MAN WH Q: What gift should I buy for my friend?* 

BE Y/N Q: \* \*Is your birthday 2nd of June?

Theme: Asking for Personal Information

Scenario 2

You meet a new friend from the internet. You want to know more about her/him.

Write ONE possible question that you will ask the new friend.

Example of participants' question responses

ENG MODAL Q: Could you please tell me more about yourself, so that I can know you better?

WH Q: How old are you?

MAN MODAL Q: \*Can you tell me more about you?

WH Q: What is your favourite food?

Results suggested that participants understood that modal verbs serve to represent the degree of politeness of a sentence based on the examples presented above. This was also particularly evident in both groups when asking about obligation. As the scenario presented revolved around the participants' elders, it prompted them ask for permission. A total of 59% of English dominant languages participants and 54% of Mandarin dominant languages participants favoured using modal verbs to produce questions. Examples are as follows.

Theme: Asking about Obligations/ For Permission

Scenario 1

Your parents ask you to help and do the house chores, but you wanted to watch your favourite television programme instead of doing the chores.

Write ONE possible question that you will ask your parents.

Example of participants' question responses

ENG WH: \*Can I watch mine favourite television programme?

MAN MODAL Q: Can I only do chores after watching my favourite television programme?

It can also be observed from the findings that most modal questions produced by participants used the modal verb 'CAN'. According to Richard (1990, as cited in Leonard et al., 2007), the modal verb 'CAN' emerged earlier and is used more frequently than other modal verbs as the modal 'CAN' as it is frequently used for many communicative functions. For example, 'CAN' are used to request permission and expressing the notion of ability which resulted its usage represented somewhere on a continuum between ability and circumstantial possibility. Li (2022) also stated that the modal verb is used more frequently due to its multi-functional nature where it can be used to express the notion of ability, possibility and even to request permission. However, due to these varied functions

of 'CAN', its forms and functions are linked together by a complicated, non-linear mapping system that may make it rather difficult for ESL learners to distinguish between other modal verbs, which may cause misuse of modal verbs.

Overusing and underusing of modal verb 'CAN' became more evident in the scenario relating to asking to make an invitation. Findings revealed that when it came to making invitations, there was another substantial variation in the types of questions used by both groups of participants. About 43% of English dominant participants opted to use BE yes/no questions in comparison to 41% Mandarin dominant language, who opted to use modal questions as shown below. Examples are as follows.

Theme: Asking to Make Invitation

Scenario 1

Your birthday is coming up soon. You want to invite all your classmate to your party.

Write ONE possible question that you will ask your classmates.

Example of participants' question responses

ENG

BE Y/N Q: Are you all interested to come to my birthday party?

DO Y/N Q: Do you want to come to my birthday party?

MAN

MODAL Q: Can you all come to my birthday party?

It was observed from the example provided above that Mandarin dominant language participants were unable to effectively distinguish the functionality of modal verbs accurately. Findings suggested that the participants used the same modal verbs for all contexts including asking for permission and asking to make invitation., in contrast to English dominant participants. The production of BE Y/N and DO Y/N questions when making invitations were more visible among English dominant participants. According to Hyland (1994), modal verbs are mostly used in communication, as they appear in nontensed forms and have no person-number agreement. However, learners may have difficulty recognizing and using modal verbs properly as they are often simplified in the textbook solely as a function to express politeness, rather than its modal meaning which may cause learners to overuse, underuse or misuse modal verbs.

#### 4.1.2 Summary of RQ 1 Findings

To sum up, both groups of participants were able to produce a variety of questions to perform different communicative functions. The most common type of questions used by participants to correspond with different communicative functions were direct modal yes-no questions. Both groups of participants also applied similar types of questions across the majority of scenarios suggesting accurate usage and function of different types of questions. However, it was notable from the task that participants faced challenges in constructing syntactically accurate interrogative sentences. As the findings indicated that both groups of participants were considerably more comfortable with direct questions, the following investigation will only examine both groups' abilities to produce direct questions by analysing the common errors made by participants. The findings are presented in the following sub-section.

# 4.2 Overview of English Questions Errors found in Sentence Transformation (ST) and Translation Task (TT) (RQ2)

This section presents he findings of research question 2, which aimed to identify the common errors in questions produced by participants. As mentioned in the Methodology chapter, the data to address the second research question was obtained from a sentence transformation task and a translation task. Figure 4.2 below provides an overview of the findings. Figure 4.2's data is linked in Appendix C.

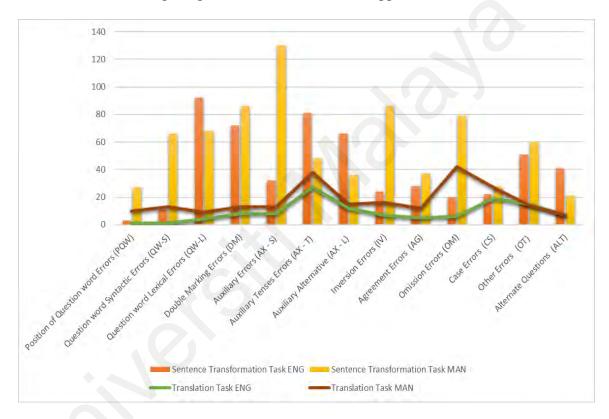


Figure 4. 2: Overview of Errors in English Questions Produced by Year 4 Pupils

Figure 4.2 is a combination of two graphs. The bar chart represents the findings from the sentence transformation task, while the line graph illustrates findings from the translation task. The graph shows the different types of errors, along with the most and less common errors made by both groups of participants when producing questions. The types of errors shown along the X axis include Auxiliary Alternative (AX-L) and Alternative Questions (ALT). These are not technically errors, but indicate instances in which participants used alternative questions to conduct the task, for example:

Statement given: Jack often goes home by bus.

Sample question: Does Jack/he go home by bus?

How does Jack/he go home?

Questions formed by participants

S1. **Is** he going home by bus? (AX- L)

S2. What kind of transport does he use to go home? (ALT)

From the example above, both questions produced by participants were structurally accurate. However, the instructions required participants to produce questions using words given from the statements as there were instances in which they completed the task without using the exact words provided. For example, when participants used a different auxiliary from the given statement and also added a modifier to the interrogative word such as 'what time' to replace 'when' and what kind of transport to substitute 'how does' to produce questions. Although the analysis aimed to identify language errors, it is often said that learners may avoid producing challenging structures by applying avoidance strategy where the speaker of a language tries to avoid a difficult word or structure by using other words as replacement (Richards, et al 1989). Therefore, identifying instances in which the participants used alternate question forms could indicate structures which they may find difficult.

Out of the 2128 questions produced by participants, this study identified a total of 440 errors made among English dominant participants while Mandarin dominant participants made 921 errors, which amounted to double the errors in comparison. Overall, across both tasks, it was evident that Mandarin dominant learners made more errors. This is indicated in Figure 4.2, where the maroon line and yellow bars indicating errors made by Mandarin dominant participants in the sentence transformation and translation tasks respectively, are mostly higher than the corresponding line and bars for English dominant participants. This is most evident in the case of the translation task,

63

indicated by the line chart, where Mandarin dominant learners' errors were consistently

higher than those of English dominant participants across all error types.

Despite the higher number of errors made by Mandarin dominant language

learners, the overall pattern of errors across error types in sentence transformation task

was similar across both groups. In other words, the most frequent types of errors were

similar in both groups. This can be seen in Figure 4.2, in which both the bar and line

charts follow roughly the same curvature, in terms of the highest points for auxiliary

errors (AX) and lowest points for placement of question words (PQW). However, the type

of auxiliary errors between both groups were different. English dominant participants

made more lexical errors that can be observed in selection of question words (QW-L) and

auxiliary tenses errors (AX-T). Examples are as follows.

Statement given: Mary can improve her English by listening to English songs?

Sample question: Can Mary/she improve her English by listening to English songs?

Questions formed by

P1: What can improve Mary's English? (OW-L)

P2. Did Mary improve her English by listening to English songs? (AX-T)

In contrast, Mandarin dominant participants made more structural and semantics

errors in both categories. Examples are as follows.

Statement given: Dinner will be ready by 8pm.

Sample question: When will dinner be ready?

Questions formed by

P1: **Who** dinner will be ready by 8pm? (*QW-S*)

P2. When **is** dinner ready? (AX-S)

Furthermore, errors such as position of question word errors (PQW) and inversion

errors (IV) were more prevalent for Mandarin dominant language participants, indicating

that these structures may be more difficult to master. Although, at first glance it can be

64

observed that PQW were the least errors found among two groups, the findings between both groups differ in that Mandarin dominant language participants' PQW errors can be found in majority of the items in the task and account for 90% of the errors observed in that category (refer to Appendix C). This means that English dominant language participants only made about 10% of the PQW errors identified.

Taking into account the large set of data gathered from the sentence transformation and translation tasks, the researcher divided the findings into five primary categories: most common errors found in both tasks, most common errors found in WH and Yes/ No questions, most common errors found among two groups of participants and items that contains the highest number of errors found. The collected data were analyzed in accordance with the categorisation as shown in the following sub-sections.

#### 4.2.1 Most common errors found in both tasks

The two tasks employed to examine participants' difficulties when constructing questions were sentence transformation task and translation task. In the transformation task, question word (QW-L) and auxiliary errors (AX-S) were the most common type of errors found while auxiliary tenses errors (AX-T) and case errors (CS) were the most common errors found in translation tasks. Examples are as follows

Sentence Transformation Task

Statements	Sample questions	Participants' Questions	Errors
They had been talking for an hour.	What had they been doing for an hour?	*When does they been talking? *What time have they been talking for hour? *How long do they talk? *Are they been talking for an hour? *Did they been talking for an hour?	QW-S, AX-S QW-S, AX-S QW-S, AX-T AX-S AX-T

The difficulties participants had in selection of suitable auxiliary verbs to produce interrogative sentences as revealed in some of the examples above. Some participants were also unable to select suitable question words to correspond with the underlined phrase in each statement. Mandarin dominant language participants mainly had problems with the question words (2) how (6) which and (10) whose while English dominant language participants made more errors in items (4), (7) and (11) that require QW what. In these three questions, a large number of participants opted to produce questions using QW who instead. This finding could indicate that participants are employing an avoidance strategy, in which a speaker of a language tries to avoid a difficult word or structure by substituting alternative words (Richards, et al. 1989). Creating questions with QW who may have a simpler syntactic structure. Examples are as follows.

Statement (4) given: They were told to be silent by the librarian.

Sample question: What were they told by the librarian?

P1: Who told them to be silent? (QW-L)

Statement (7) given: Jack likes <u>ice cream.</u>
Sample question: What does Jack like?
P1: **Who** likes ice cream? (QW-L)

## Translation Task

Statements	Sample questions	Participants' Questions	Errors
他们为什么昨天 迟到学校? They why yesterday late to school?	Why were they late to school?	Why do they come late to school? Why are you late to school? Why did he come to school late?	AX-S AX-T, CS AX-L, CS

Findings also revealed participants used present tense to produce questions even when the question indicated past tense as shown in the example above. As Mandarin language does not contain tenses but uses time words such as 'yesterday' to talk about past events, participants may find difficulty to distinguish the tense change when translating the questions as shown in the examples above. It could also indicate that participants have a weak command of tenses. Analysis also showed that case errors were

quite common especially when given pronouns 'they' especially in item T2 and T9. Participants tended to use 'he' case instead. This could be due to carelessness as (他 ta) the 'he' case is quite similar to the (他们tamen) the 'they' case in Mandarin with the additional (们men) to change the case. Examples are as follows.

Statement (T2) given: 他们往在那里? Sample question: Where do they live? P1: Where does **he** live? (CS)

Statement (T8) given: 他每天走路上学吗?

Sample question: Does he walk to school every day?

P1: Do you walk to school every day? (CS)

### 4.2.2 Most common errors found in among WH and Yes/ No questions

Findings were also categorised according to the type of questions which involved direct WH and yes-no questions, as shown in Figure 4.3 and 4.4.

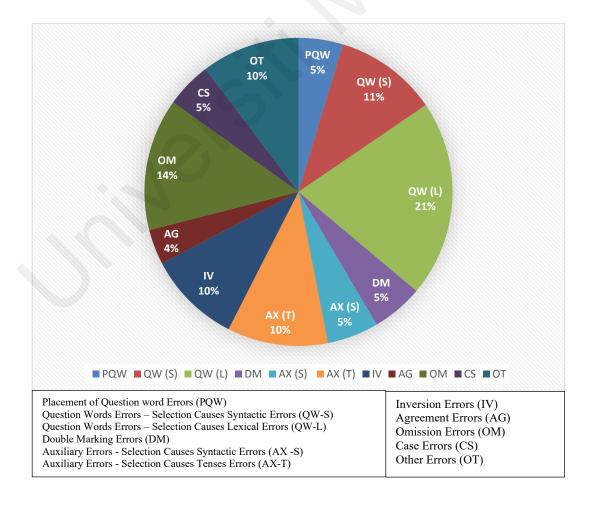


Figure 4. 3: Distribution of Errors in WH Questions

Figure 4.3 shows question word errors (QW) as the most common type of errors found in WH questions. However, the majority of QW errors were due to selection of different question words that did not match the underline statements given (QW-L) but questions formed were syntactically accurate. Examples were as follows.

Statements	Sample questions	Participants' Questions	Errors
Jack often goes home by bus.	How does Jack/he	Who goes home by bus? Where does Jack go? What does Jack often	QW -L QW-L QW-S, DM
		goes home with?	

Findings of the study also revealed that the participants may be selective when forming questions as shown in the example above. Participants often used other question words (QW) than those which corresponded to the underlined words in the sentence. While we cannot be certain whether the participants intentionally ignored the underlined words, the high frequency of such errors could be instances of language avoidance. According to Richards, et al. (1989, as cited in Moghimizadeh, 2008), avoidance strategy, referred to when the speaker of a language tries to avoid a difficult word or structure by using other words as replacement. The researcher also identified a few participants that only used two to three similar question words (QW) such as what, who and why to complete the entire task, regardless of the requirement of the task.

On the other hand, double marking errors (DM) and auxiliary errors (AX) were the most common types of errors found in yes-no questions.

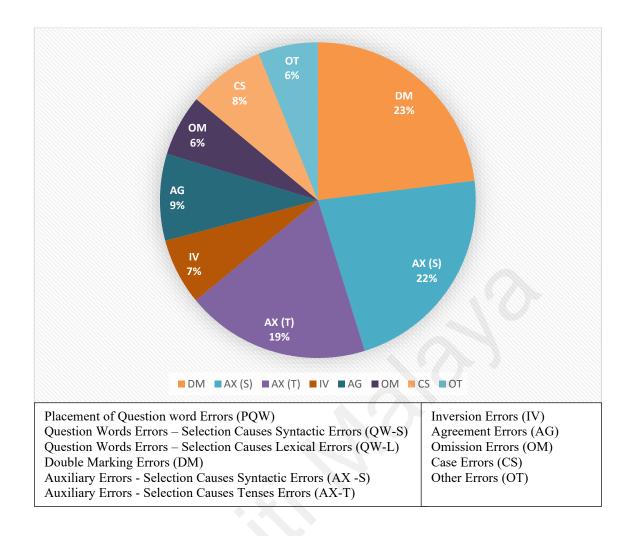


Figure 4. 4: Distribution of Yes/No Questions Errors

Figure 4.4 shows the distributions of errors found in yes/no questions. Majority of errors found in yes-no questions is Double Marking at 23%, followed closely by auxiliary errors which consists of AX-S and AX-T.

Statements	Sample questions	Students' Questions	Errors
Her phone rang.	Did her phone ring?	Is her phone rang?  Did her phone rang?  Does her phone rang?	AX-S DM AX-T, DM
Dinner will be ready by 8pm.	Will dinner be ready by 8pm?	Is our dinner ready by 8pm? Do dinner be ready at 8pm? Are dinner will be ready at 8pm?	AX-S AX-S AX-S, DM

Upon analyzing the data, findings revealed participants tend to use the present tense to form questions, even when the task included past and future tense as shown in the examples above. This may indicate participants were unable to distinguish between present, past and future tenses clearly. Participants were not able to apply the yes-no questions formation rules in which the formation of these questions does not require participants to change the marking of tenses from the declarative sentence provided.

Also, the participants performed differently in producing WH versus Y/N questions although the task required them to do both transformations for the same sentence. Participants sometimes used different tenses in WH questions and Y/N questions for the same item. In transforming the sentence to a question, the participants often used the same auxiliary verb presented in the statements when producing WH Questions but used different tenses or auxiliary verbs when forming the corresponding Y/N questions for the same item as shown in the examples below. For example, to transform the sentence "Dinner will be ready at 8 pm", E3 uses 'will' in the WH question but 'do' in the Y/N question.

Participants	WH Questions	Y/N Questions	
<i>E3</i>	What time will dinner be ready?	*Do dinner be ready at 8pm?	
	How long they have been talking?	*Do they talk for an hour?	
E15	What time will dinner be ready?	'Is dinner gonna be ready at 8pm?	
	Where <mark>had</mark> they been?	Have they been to the theater?	
M11	What were they told by the	*Did them told to be silent by the	
	librarian?	librarian?	
	What had they been doing for an	*Does they talk for an hour?	
	hour?		

## 4.2.3 Most common errors found among two groups of participants.

The findings in the study also examined data collected by two groups of participants that were distinguished based on their dominant spoken language at home namely Mandarin and the English language, as shown in Table 4.3 below.

Table 4. 3: Most Common Error Found among Both Groups of Participants

	Engli	ish Dor	ninant Lang	guage	N	/Iandari	in Dominar	nt
		Par	ticipants		La	nguage	e Participar	nts
Type of Errors	STT	TT	TOTAL	%	STT	TT	TOTAL	%
Position of Question word	3	1	4	1%	24	10	34	4%
Errors (PQW)								
Question word Syntactic	11	1	12	2%	63	13	76	9%
Errors (QW-S)								
Question word Lexical	89	4	93	17%	65	9	74	8%
Errors (QW-L)								
Double Marking Errors	71	12	83	15%	83	13	96	11%
(DM)								
Auxiliary Syntactic	31	8	39	7%	125	11	136	16%
Errors (AX - S)								
Auxiliary Tenses Errors	77	37	114	21%	47	38	85	10%
(AX - T)		4						
Inversion Errors (IV)	22	13	35	6%	78	16	90	10%
Agreement Errors (AG)	28	10	38	7%	35	12	47	5%
Omission Errors (OM)	19	15	34	6%	78	42	120	14%
Case Errors (CS)	19	23	42	8%	22	27	49	6%
Other Errors (OT)	38	17	55	10%	54	14	68	8%
TOTAL ERRORS	408	141	549	100	670	189	875	100

Highlighted in yellow to indicate the four most common types of errors found in the category of participants.

Table 4.3 distinguishes the types of errors made by both groups of participants. Referring to the highlighted percentages of each type of errors, auxiliary tenses errors (AX)-T, questions words errors (QW), double marking errors (DM) and other errors (OT) were the most common errors made by English dominant language participants. On the other hand, Mandarin dominant language participants' most common errors were auxiliary syntactic errors (AX-S), double marking errors (DM), inversion errors (IV) and omission errors (OM).

Findings indicate a higher percentage of auxiliary tenses errors (AX-T) found among English dominant language participants in comparison to Mandarin dominant language participants. However, selection of wrong auxiliary that resulted to syntactic errors were higher among Mandarin dominant language participants which indicate Mandarin dominant language participants faced more difficulty in selecting suitable auxiliary to produce questions that were structurally accurate (AX-S). Examples are as follows.

Example Items	English Dominant Language Participants	Mandarin Dominant Language Participants
They were told to be silent by the librarian.  Were they told to be silent by the librarian?	What <i>are</i> they told by the librarian? – (AX-T)	What <i>did</i> they been told to be silent? – (AX-S) Why are they silent by the librarian? –(AX-T)
Her phone rang. Did her phone ring?	Does her phone rang? – (AX-T)	Is the phone rang? – (AX-S)  Does her phone ring? – (AX-T)

Findings showed that both groups of participants encountered difficulty in selecting correct tenses to produce questions. However, Mandarin dominant language participants also faced additional difficulty in selecting suitable auxiliary verbs to produce structurally accurate sentences. Double marking errors (DM) were also one of the common errors that were found among both groups of participants. Double marking errors which consisted of two auxiliaries presented in a question or errors in marking on tense and agreement in auxiliary and main verbs as shown in the example below were commonly found in questions that require 'DO' verb.

<b>Example Items</b>	<b>English Dominant</b>	Mandarin Dominant	
	Language Participants	Language Participants	
Jack likes ice cream. What does Jack like?	What does Jack likes? – (DM)	What does Jack likes? – (DM)	
Dinner will be ready by	Is the dinner will be ready	Does dinner will be ready	
<u>8pm.</u>	by 8pm?	by 8pm?	

Will dinner be ready by 8pm?	- (DM)	- (DM)
They have been to the	Did they went to the	Are they have been to the
theatre. Have they been	theater?	theatre?
to the theatre?	-(DM)	-(DM)

Findings revealed that although double marking errors (DM) often appeared in questions that require 'DO' verbs, it can also be found in questions that do not requires 'DO' verbs as both groups of participants also made errors in producing questions by placing two auxiliaries.

Findings also showed a higher percentage of inversion (IV) and omission errors (OM) among Mandarin dominant participants. Examples are as follows.

Example Items	English Dominant Language Participants	Mandarin Dominant Language Participants
They have been to the theatre. Where have they been?	Where they have been to? - (IV)	What they have been to? – (IV) _they have been? – (OM, IV)
He was awake all night because he had a nightmare. Why was he awake all night?	Why he can't sleep? – (IV)	Why he was awake all night? – (IV)
She has been living here for 3 years, Has she been living here for 3 years?	Has she living here for 3 years? (OM)	She has been living here for 3 years?  - (IV) She living here for 3 years?  - (OM)

While both types of errors can be found among both groups of participants, Mandarin dominant language participants made significantly higher number of errors, tripled in comparison to English dominant language participants. Findings shows the majority of omission errors occurs in past participle tenses with 'HAVE' verbs.

Findings also demonstrated selection of wrong question words (QW) as one of the most common errors made by English dominant language participants. However, it should be acknowledged that most errors only occurred in sentence transformation task in comparison with translation task. Participants have the tendency to dismiss the underline statements given when producing questions but were able to translate questions word accurately as shown in the examples below.

Example Items	English Dominant Language Participants	Mandarin Dominant Language Participants
They had been talking for an hour. What had they been doing for an hour?	How long they have been talking? – (QW-L)	When does they been talking? - (QW-S)
Jack likes ice cream. What does Jack like?	Who likes ice cream? – (QW-L)	Who likes ice cream? – (QW-L)
They were told to be silent by the librarian.  What were they told by the librarian?	Who told them to be silent? - (QW-L)	Why we silent in library? – (QW-S)

Furthermore, English dominant language participants often did not use the underline phrases to produce questions, especially statements in passive form. Participants often opted to make subject questions instead of object questions. On the other hand, Mandarin dominant language participants also have difficulty selecting correct question words (QW-S) that cause structural and semantic errors in the questions as seen above.

Lastly, English dominant language participants also made other errors (OT) which were mainly made up of spelling and miscellaneous errors that could not be reliably identified. Examples are as follows.

Example Items	English Dominant Language Participants	Mandarin Dominant Language Participants
The <u>brown</u> dog is Joshua's. Which is Joshua's dog? Which dog is Joshua's?	Who's brown dog is that? – (OT)	Who's dog is Joshua's? – (OT, QW-S)
<b>Her</b> phone rang. Whose phone rang?	Who's phone rang? – (OT)	Who's phone has rang? – (DM)

In addition, participants cannot differentiate between 'who's' and the question word 'whose'. From both questions, who's and whose is a common error found among both group of participants. To sum up, the most common errors can be identified among both groups of participants. However, certain errors such as omission errors, inversion errors and structural errors resulting in wrong selection of question words and auxiliary verbs were significantly more visible among Mandarin dominant language participants.

## 4.2.4 Items that contain the highest number of errors found

In this final section, the findings also identified the items in the tasks given with the highest error rate among participants as shown in the figure below.

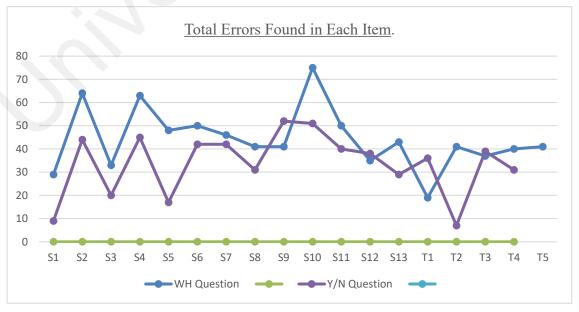


Figure 4. 5: Total Errors found in Each Item

The line graph above shows the total errors found in two types of questions namely WH question and Y/N questions based on items given. 'S' items represented findings from sentence transformation task, while 'T' items represented findings from translation task.

The line graph above shows that participants made more errors in WH questions. The highest number of errors can be seen in item S2, S4 and S10 whereas Yes-no questions highest number of errors can be found in S4, S9 and S10. Examples are as follows.

WH Questions	English Dominant	Mandarin Dominant
items	Language Participants	Language Participants
S10 They had been talking for an hour. What had they	How long they have been talking? – (QW-L, IV, AX-T)	What time have they been talking for hour? – (QW-S, AX-T)
been doing for an hour?	What did they been doing for the hour? – (AX-S)	What _ they _ doing for an hour? - (OM)
		How long does they talking? – (QW-L, AX-T, DM)
		They _ been talking for how many hours? – (PQW, OM)
S2 Jack often goes home by bus.	How do Jack goes home? – (AX-T)	What does Jack often goes home by? – (QW-S, DM)
How does Jack/he go home?	What kind of transport _ Jack often _ goes home? _ (OM)	Who often goes home by bus? – (QW-L)
	Who often goes home by bus? - (QW-L)	How_ Jack often goes home? - (OM)
	What type of transport does jack use to go home? - (ALT)	Jack often goes home by what? - (QW-S, PQW)
		What is jack go back by? – (QW-S, AX-S)

<u>S4</u>	Who told them to be silent?	Why did they been told to be
They were <u>told to</u>	-(QW-L)	silent?
be silent by the		How they were told by the
librarian.	What they were told by the	librarian?
What were they	librarian?	Who were told to be silent by
told by the	-(IV)	the librarian?
librarian?		-(QW-L)
	What do librarian told them?	
	– (AX-T, DM)	What they were told by the
		librarian?
	Who are told to be silent by	-(IV)
	the librarian?	
	-(AX-T)	What they told by the
	, ,	librarian?
		-(OM)
		They were told to what by the
		librarian?
		-(PQW)

The example above showed the three WH items that contained the highest number of errors. In S10 and S4, the majority of errors found were wrong selection of question words (QW-L) where participants produced questions referring to the time and subject instead of the underlined verb phrase. While in S2, it was observed that the question word 'how' was more challenging for Mandarin dominant language participants. Findings from item S2 demonstrated that participants were able to modify the question word 'what' to produce questions instead of using 'how'. For instance, participants produce alternative questions with 'What type of transport does he use to go home?' to replace 'How does he get home?'

Findings also indicate participants often opted to select 'Do' verbs to produce questions even if it was not required by the item given, such as S10 and S4. For instance, the statement provided was *They had been talking for an hour* and participants opted to use 'Do' verb when producing question such as What *did they been doing for an hour?*How long does they talking? or What did they talking? However, participants produced more errors in these questions as DO verb is also associated with the change of inflection

lexical verbs such as singular -s and past tense to the base verb form resulting in high double marking errors (DM). Omission errors also occurred quite frequently in dosupport questions in comparison to items that presented an auxiliary in the declaratives. Unlike omission errors, inversion errors were absent in questions with do support as shown in the examples above, where only S10 and S4 contained inversion errors.

In addition, the findings indicate that participants find tenses difficult to master regardless of their dominant language. Tense errors can be found in simple past tense, present and past participle tenses. Participants would often interchange present and past participle tenses auxiliary verbs 'Have' and 'Had' similar to item S9 'Where have they been?'. Similar to simple past tense with auxiliary verbs such as 'do' and 'did', 'were' and 'is', as demonstrated in the examples above. Participants also made errors by selecting unsuitable auxiliary verbs that caused structural errors in the sentence for example 'What did they been doing for an hour?' and 'What is Jack go back by?'.

Lastly, analysis of the errors also revealed that Mandarin dominant language participants made significantly more errors in placement of question words. However, this particular type of error often only occurred repetitively with a small number of participants.

It can also be observed that yes-no questions also recorded a higher number of errors found in Sentence Transformation task items compared to translation task. Examples are as follows.

Y/N Questions items	English Dominant Language Participants	Mandarin Dominant Language Participants
<u>89</u>	Did her phone rang?	Did her phone rang?
Her phone rang.	- (DM)	- (DM)
Did her phone ring?		
	Does her phone rang?	is the phone rang?
	– (AX-T. DM)	-(AX-S, AX-T)
		_her phone rang?

S10 They had been talking for an hour. Had they been talking for an hour?	Are they talking for an hour?  – (AX-T)  Did they have been talking for an hour?  – (AX-S, DM)	- (OM)  Does her phone rang? (AX-T, DM)  Was her phone rang? (AX-S)  Are they talking for an hour? - (AX-T)  Does they been talking for an hour? - (AX-S)  Is they talking an hour? - (AX-T, AG)
S4 They were told to be silent by the librarian. Were they told to be silent by the librarian?	Did the librarian told_ to be silent?  - (DM, OM)  Are they told to be silent by the librarian?  - (AX-T)  Did them told to be silent by the librarian?  - (AX-S)  Do we have to be silent by the librarian?  - (AX-T, DM)	Did the librarian told to be silent?  – (DM)  Do the librarian tell them to be silent?  – (AX-T)  Was they told to be silent by the librarian?  – (AG)  Are they told to be silent by the librarian?  – (AX-T)

The example above showed the three yes-no questions items that contained the highest number of errors. Findings were identical to WH questions, as S10 and S4 also contained the top three highest number of errors. Errors made in S10 and S4 also have the same pattern of errors as participants often produced present and past participle tenses 'have' and 'had' using do-support verbs such as 'do', 'does' and 'did', disregarding the tenses. In addition, Mandarin dominant language participants tend to interchange unfamiliar auxiliary verbs with 'BE' verbs. This may indicate that participants still do not fully master the rules for using the inversion subject-auxiliary when producing questions as participants often substitute the auxiliary given in the sentence with another form of auxiliary verb.

It is also notable that the item with the least errors can be found in item S1, T1, T2. Present tense was a characteristic shared by these questions as shown below.

teacher?	S1 They're playing badminton. What are they playing?	T1 你最喜欢的老师是谁? (You most favourite de teacher is who?) Who is your favourite teacher?	T2 她是美国人吗? (She is American ma?) Is she an American?
----------	--	---	---

Selection of wrong question words was the most common type of error found in S1 and T1. Participants produced a subject question in S1 using 'Who are playing badminton?' and T1 'Which is your favourite teacher?'.

#### 4.2.5 Summary of RQ 2 Findings

In summary, the findings from the second research questions were based on the data collected from two separate tasks: sentence transformation task and translation task. The researcher presented the findings based on four standpoints as shown above. Key findings from both tasks revealed auxiliary errors (AX) as the most common errors made by participants when producing questions. However, the common auxiliary errors made by participants were distinct among different dominant language participants.

Both groups of participants encountered difficulty in using tenses correctly, especially simple past and past participle tense which resulted in the use of the wrong auxiliary verbs such as 'is and was', 'has and had' when producing questions. In addition, Mandarin dominant language participants made significantly more errors in selecting suitable auxiliary verbs that resulted in structural and semantic errors in the sentence. Mandarin dominant language participants can be seen substituting 'DO' verb with 'BE' verb. For instance, participants produce question 'Is he walk to school every day' instead of 'Does he walking to school every day'.

Furthermore, double marking errors (DM) were also considerably frequent among participants of the study. Majority of double markings were due to errors in marking of tense and agreement in the main verb when producing questions using the 'DO' verbs. They were more commonly found in Yes/ No questions in comparison to WH questions. An interesting finding suggested that participants have a tendency to use 'DO' verb in items that did not require 'DO' especially in yes/no questions which caused more double marking errors when the participants did not mark the tenses correctly. Similar errors were observed in both groups of participants but only occurred repeatedly with a particular few participants.

Consequently, a significantly high number of question word errors error (QW) were found, especially in the sentence simulation task. Findings also revealed differences in the errors made by both groups of participants when transforming the underlined statements given into a question. English dominant language participants made QW errors by substituting other questions words for example, 'What were they told by the librarian' to 'Who told them to be silent', which may not correspond with the underlined phrase given, but were syntactically accurate sentences. On the other hand, Mandarin dominant language participants substituted wrong question words such as 'How they were told to the librarian?' that caused syntactic and semantic errors.

Lastly, findings also indicate placement of question words error (PQW) omission errors (OM), and inversion errors were more prevalent among Mandarin dominant language participants. This suggests that Mandarin dominant language participants may face more difficulties in mastering the rule of inversion in comparison with English dominant language participants.

### 4.3 Conclusion

This chapter presents the findings of the current study concerning to the two research questions. Section 4.1 presented the type of questions participants of the study produced based on the prompt given. Also, the similarities and differences between the types of questions produced by two groups of dominant language participants in response to the scenario given were also described. Next, section 4.2 of this chapter described the details of the common errors participants made along with examples, which revealed the difficulties faced by different dominant language participants. These findings will be discussed further in the next chapter.

#### **CHAPTER 5: DISCUSSION AND CONCLUSIONS**

The present study set out to examine the production of English questions by national-type Chinese primary school students to gain insights into the types of challenges they may face in using these language structures. As Mandarin and English were the main languages spoken at home among the population of this national-type Chinese primary school, the study only attempted to examine production of questions by students who were either identified as Mandarin or English dominant language speakers. The students were divided evenly into two groups based on their dominant language or home spoken language and completed three language elicitation tasks (see Chapter 3). Analysis of learner language, as presented in Chapter 4, revealed that there were differences in errors and question structures used across the two groups of students Furthermore, the results showed that structural errors were more evident in questions produced by Mandarin dominant language participants in comparison to English dominant language participants.

This final chapter summarizes the research findings and discusses them in relation with previous research, including studies of errors made by young English language learners from other countries. The discussion also draws on L2 acquisition theories as possible explanations for the difficulties faced by participants of the study. The researcher concludes this chapter by highlighting some of the study's implications to guide future studies in a similar context. The researcher also addresses the limitations of the study and provides suggestions to further improve the present study.

#### 5.1 Summary of the Findings

The production of English questions by pupils from a Chinese national-type primary school was investigated using a descriptive quantitative method, which involves obtaining quantifiable data from a population sample in order to find characteristic, patterns, correlations, and categories. A cross-sectional study design was implemented, whereby the researcher collected data from a group of students from a school at a specific point in time to analyze language production. This study looked at a sample of learners' language and the types of errors they produced.

Data relating to the production of English questions from 56 participants aged 10 to 11 years old from a Chinese national-type school was retrieved using a combination of three separate tasks. The findings were presented in the previous chapter, according to the two research questions that guided the study. The first research question explored the type of questions produced by participants in response to written scenario prompts using a simulation task. Subsequently, the second research question examined the common errors made by participants when producing direct wh and yes-no questions collected using a sentence transformation and a translation task. The items constructed in the three tasks consisted of questions with auxiliary BE, DO, HAVE and modal verbs. The summary of the findings of the study is shown in Figure 5.1, which is followed by a discussion of each of the key findings.

#### Production of English Questions by national-type primary Chinese school pupils. **RQ 2: RQ 1:** Type of questions produced based Common errors in the questions produced by on written scenario prompts participants in sentence transformation task and translation task. **KEY FINDINGS KEY FINDINGS Simulation Task** Sentence Transformation Task Translation Task Most common type of Applied similar types of Produced more Yesquestion produced no questions than questions in the majority of the Question words errors (QW) Higher number of Case Errors (CS) were direct questions WH questions communicative functions were significantly more prompts. Majority auxiliary errors (AX-T) Majority of yes-no question Majority auxiliary errors (AX-S) found were tenses errors. produce in response to given found resulted in structural errors prompts were modal questions and BE verb questions Most common errors found were auxiliary errors (AX) Double Marking errors (DM) were common across both tasks and among both, English and Mandarin dominant language participants. Mandarin dominant language participants made more syntactic errors by selecting wrong question words and auxiliary verb. Mandarin dominant language participants also made significantly higher omission (OM) and Inversion (IV) errors. For example 90% of wrong Placement of Question words (PQW) were committed by

Figure 5. 1: Summary of the Findings

Mandarin dominant language participants.

## 5.2 Higher Number of Yes-No Questions Compared to WH Questions

The findings from the first research question identified four types of questions: direct questions, indirect questions, alternative questions, and tag questions produced by participants based on given written prompt. The most common type of question is direct questions (60%), which consisted of direct WH questions, BE yes-no questions, DO yesno questions, HAVE yes-no questions and modal questions. Both groups of participants produced more yes-no questions (61%) compared to WH questions (27%). This indicated that participants were more familiar with constructing direct questions and using auxiliary and modal verbs in comparison to using WH question words. Findings from the second research questions also supported this indication as participants made significantly more errors in selecting correct question words (QW) when producing questions, especially in the sentence transformation task where participants were required to construct questions. Hence, this finding revealed that participants were more likely to produce more yes-no questions as the level of complexity was slightly less compared to WH questions. Yes-no questions only differ from the formation of the corresponding declarative in one major way. where it only requires an inversion while all the other markings of tense are identical. A learner can easily modify the declarative sentence into a yes-no question by using inversion instead of selecting a question word to construct a question.

Higher usage of yes-no questions can also stem from early exposure and use of polar questions especially Modal questions and BE yes-no questions. As participants of the study were young learners, their usage of English may have been limited to classroom practice, especially for Mandarin dominant language participants, resulting in young learners being more accustomed to yes-no questions. This is supported by Park (2000), who states that immersion context of question development sequence influences the acquisition of questions. Hence, given that students are frequently instructed to be

courteous when asking questions in the classroom, it is possible that participants were more likely to use modal verbs and produce modal questions.

On the other hand, English and Mandarin participants produced similar type of questions across given written prompts. These given prompts were based on communicative functions such as asking for personal information and asking for preference. For example, when asking for personal information, the majority of participants produced direct and indirect WH questions in comparison to asking for preference, where the majority of participants responded to the written prompt using Do verb. Consequently, a higher number of yes-no questions was resulted from participants' responses to the type of communication functions given.

## 5.3 Higher number of Modal Verbs Used to Produce Questions by Participants in Simulation Task

Findings from the first research question also indicate that both group of participants were able to use modal verbs to produce indirect questions such as *Can you tell me when the expected arrival time of my train is*? and modal questions such as *Can you tell me more about yourself*? in scenarios that involved speaking to an older person, such as teachers and parents. These tendencies may suggest that the subject preferred a more polite use of language when asking questions. According to Halliday and Hasan (1989), modal verbs are classified into high and low values, low-value modals like may, might, can, and could denoted the most courteous use of language. Previous research by Ma and Liu (2007) and Liang (2008), indicated that Mandarin speakers or non-native speakers of the English language are more inclined to use modality in producing questions. However, in the present study, findings indicated both groups of participants produce an equivalent number of modal questions, with English dominant language participants producing slightly more indirect questions.

In the perspective of syntactic and semantic features, participants may choose modal verbs when producing questions as modal questions may have less complex syntactic rules. Modal verbs do not have obligatory inflections to indicate tense, person or voice (Qian, 2017). In addition, Yang (2017) also explained that modal verbs are more commonly used in spoken than written form and suggested that learners may transfer conversational uses of modal verbs to written form or academic genres as they have difficulties differentiating informal spoken and academic written forms. These claims are also relevant to this study as the participants may still be too young to differentiate among informal and formal situations and may have opted to use modal verbs to produce questions in the task given.

## 5.4 Overusing of 'CAN' Modal Verb

On the other hand, findings also revealed participants' tendency to overuse 'CAN' modal verbs in certain scenarios. For example, when asking to make an invitation. This was especially noticeable among Mandarin dominant language participants, who frequently used modal verbs such as 'CAN' (Can I invite you to play video games?) to make invitations or (Can you tell me your name?) to ask for personal information which is uncommon as 'CAN' modal verbs are usually used to indicate possibility, permission, or ability. Instead, a large number of Mandarin dominant participants used modal verbs to extend an invitation, which might suggest that the modal verb 'CAN' was used more than 'would like to' because the grammatical structure of modal 'CAN' is less complex.

This overuse of 'CAN' modal verbs may also be related to classroom teaching practice that places more emphasis on structural accuracy rather than the exposure to pragmatic appropriateness. As a result, students may find 'CAN' modal verbs more accessible to employ when producing questions. Earlier exposure to the modal verb 'CAN' could also mean participants have greater familiarity with using these structures,

as suggested by Ma and Liu (2007), who stated that learners tend to use modal verbs that are first taught to them.

The frequent use of 'CAN' modal questions found on this study could also be linked to the acquisition order of English verb forms. According to Richards (1990, as cited in Leonard et al., 2007), 'CAN' modal verb appears sooner and is used more frequently among children than other modal verbs with the exception of its negative counterpart 'CAN'T'. Choi (1995) also asserted that children appear to utilize 'CAN 'as the first modal to convey the concept of ability and circumstantial possibility, expressed by age 2 to 6. They are also acquired sooner than epistemic modality-related tasks because they do not need children to reflect on their own mental states. For instance, the modal verb 'CAN' indicates either a positive ability on the part of the agent or some potential energy, in contrast to 'MAY' and 'MUST' modal verbs, which connote limitations that requires operation in the domain of reasoning which may become an argument for the earlier emergence of the modal verb 'CAN' in language acquisition than epistemic modal verbs (Papafragou, 1998). Other elements that influence acquisition order, according to Choi (1995), include the consistency and prominence of the modal form's sentence location, and whether the modal is utilized for a single modality function or is multifunctional in nature (Leonard et al., 2007). Therefore, modal questions may be used more frequently by language learners to produce questions, as seen in this study's findings where 'CAN' was the most common modal verb. To sum up, the frequent use of 'Can' in participants' modal questions could be due to the aforementioned reasons such as acquisition order, familiarity and less complex structure.

## 5.5 Most Common Error Type in Sentence Transformation Task and Translation Task

The findings from the second research question also revealed wrong selection of auxiliary verb and tense (AX) as the most common type of error in both tasks. The researcher has further categorized auxiliary error (AX) found in this study into three subcategories: wrong usage of auxiliary (AX-S), auxiliary tenses error (AX-T) and alternative auxiliary (AX-L) to provide a clearer indication of the distinction between the type of auxiliary errors made by participants. Both AX-S and AX-T caused structural and tenses errors while (AX-L) were not errors but an indication of participants' ability to use an alternate auxiliary to produce questions differ from the auxiliary provided in the item statements given.

The number of auxiliary tenses (AX-T) errors observed in both tasks was high. However, in both tasks, yes-no questions consist of double the number of tense errors in comparison to WH questions. Most errors observed among English dominant language participants consisted of the combinations where+have, what+had, how long+has, why+were and what+were. Findings indicated higher occurrences of tenses errors in questions with HAVE verbs and BE verbs past expression (WAS and WERE) as findings showed items containing HAVE verb and BE past expression were frequently substitute with one another. For example, participants often substituted question 'Where have they been?' with 'Where had they been?' and 'What were they told by the librarian?' with 'What are they told by the librarian?'.

Although findings indicated the percentage of auxiliary tenses mistakes (AX-T) committed by English-dominant participants was slightly greater, auxiliary tenses errors were prevalent among both participant groups. According to a study on the development of auxiliary verbs among English learners (Kuczaj & Maratsos, 1983, as cited in Tsvetkova, 2017), the use of auxiliary verbs is associated with competence and speech

production characteristics, and they viewed that the learner will gradually acquire auxiliary verbs but initially restrict their use to a specific context.

Furthermore, Stromswold (1994) also stated that while there is an existence of an innate mechanism for learning word categories, it does not necessarily extend to specifical linguistic properties as shown in this study, where auxiliary errors are high despite the participants' dominant language. Consequently, the mastery of tenses may be extremely difficult for both groups of participants at this stage but may improve through more years of learning the language, gradually increase learners' capacity to differentiate between auxiliary and main verbs may influence their ability to differentiate between functional categories (auxiliary verbs, noun and verb conjugations) and lexical categories (nouns, verbs, adjectives)

In addition, Mandarin dominant language participants made significantly higher errors in the selection and usage of auxiliary verbs (AX-S) which caused structural errors in the sentence such as (*When* <u>is</u> dinner be ready? / <u>Is</u> dinner be ready?). They appeared to face more difficulty selecting a suitable auxiliary when producing questions although auxiliary verbs were provided in the task sheet. This indicated that participants were unable to master yes-no questions formation rules when it was a change in the marking of tenses was not needed to form a question for the provided declarative statement. Moreover, difficulty in selecting suitable auxiliary was more apparent in future tense and participle tense.

According to Tsvetkova (2017), the auxiliary verb also has a direct connection semantically, syntactically, and lexically to the main verb and mastering both is crucial for learners to produce them accurately in a question. Huddleston (2004) stated that auxiliary verbs are subordinate and dependent on the main verb. Therefore, if learners do not comprehend the function of the main verb, there is a high possibility they may confuse

the usage of auxiliary verb. Examples exhibited by the participants such as *Does she living here for three years? Is Jack like ice cream? Where do they been?* indicate that participants may have difficulty in distinguishing functions, head, mood and tense of the main verb and formed errors related to inflections.

Besides that, there is an interesting finding in data from the Sentence Transformation Task regarding application of auxiliary to produce questions. Despite using similar items where participants were asked to transform the statement given into a WH question and a yes-no question, some participants were able to form wh-questions correctly but used a different and wrong auxiliary verb to form yes-no questions. For example, participants may use the modal verb 'WILL' to produce WH questions 'When will dinner be ready?' but use a different auxiliary verb to produce yes-no question '\*Is dinner be ready at 8pm?'. Both groups of participants encountered similar situations indicating that there may be complicated interactions between young learners' acquisition of English auxiliary types and question types. This is supported by Santelmann et al. (2002), who stated that children who are able to produce one particular type of question do not necessarily generalize the knowledge to form another type of question correctly. Therefore, it showed that regardless of their dominant language, both groups of participants still faced similar constraints where command of auxiliary remains a major challenge when producing questions. However, Mandarin dominant language participants encountered greater difficulty not only in the selection of incorrect tenses, but also in the placement of incorrect auxiliaries, resulting in structural errors

## 5.6 High number of Question Word Errors in Sentence Transformation Task

Question word errors (QW) were the second most frequent type of error in WH questions on the Sentence Transformation Task. Conversely, a much lower frequency of QW errors was found in the Translation Task, particularly among English dominant participants which indicates that the translation task may be less demanding for participants to complete, whereas the sentence transformation task required participants to transform the underlined statements into interrogative sentences.

Similar to auxiliary errors (AX), the researcher attempted to distinguish participants' selection of different QW which may either cause structural errors (QW-S) in question formation or simply a lexical error (QW-L). At first glance, the high QW error in this study contrasts against the findings of similar research such as studies by Zhang (2016) and Lee (2016), who found subject auxiliary inversion as their main errors and the high occurrence of QW word errors only in *How* and determinative/modifying question words. There are two possible explanations for this difference. Firstly, the task given may be rather challenging for this age group of participants, suggesting that participants had a rather poor command of selecting suitable QW to produce questions. Secondly, it is not clear whether participants were confused about the task instructions or chose to ignore the instructions. Although participants can produce questions that were structurally accurate, they often opted either using other question words (QW) than those which corresponded to the underlined words in the sentences provided, despite the instructions given. Participants also tried to produce alternate question, because they could not figure out how to transform the sentence as directed.

The findings showed participants were able to perform the task without errors in certain items, indicating that they understood what was required. However, a higher

number of QW errors were identified only in items with longer sentences which contained more variables as shown below in exception of Item S6.

Code	Items given	Common QW-L errors
S4	They were told to be silent by the librarian.	Who were told to be silent by the librarian?
S10	They had been talking for an hour.	How long had they been talking?
		Who had they been talking to?
<b>S6</b>	Jack likes <u>ice cream.</u>	Who likes ice cream?
S11	They have been to the theatre.	Who have been to the theatre?
S5	The <u>brown</u> dog is Joshua's.	Whose dog is it? Who's brown the dog is that?

The result showed a consistent pattern of QW who applied in longer statements indicating participants tend to produce subject questions in these given statements. According to a study by Chen (2013), subject questions do not need subject-auxiliary inversion; therefore, learners are able to produce and comprehend them with fewer errors compared to object questions. This may lead to participants opting to produce subject questions with QW 'who' when met with uncertainty, as these questions are less cognitively demanding and follow a predictable pattern which may be easier to process.

While both groups of participants also made similar errors, the findings showed that most question words (QW) errors made among English dominant participants were wrong selection of question word (QW-L), where sentence structures were accurate despite the wrong selection of question words. The majority of QW errors among this group were found in questions with more variables such as statement S4 *They were told* 

to be silent by the librarian. A number of participants opted for QW who instead of what to formed questions similar to item S11 They had been talking for an hour. Participants opted for QW how long and who instead of what. As for item S5, The brown dog is Joshua's. Many participants have selected QW such as whose instead of which.

On the other hand, Mandarin dominant participants produced more question words errors that consisted of participants selecting wrong question words that led to sentence structure errors (QW-S), as shown in the following examples.

Code	Items given	Common QW-S errors
S2	Jack often goes home by bus.	What is jack go back by?
<b>S9</b>	Her phone rang?	Who phone rang? Who's phone rang? (OT)
S110	They had been talking for an hour?	When had they been talking?
S11	They have been to the theatre?	What have they been to?
T1	Whose pencil is this?	Who pencil is this?

Higher frequency of QW-S errors can be found in Item S2 *Jack goes home* <u>by bus</u>. Participants applied QW *what* instead of *how* that resulted to semantic and syntactic errors. Participants retained its adjunct phrase in the interrogative sentence such as *What does Jack go home by?* In terms of determinative/modifying question words that required question word (QW) *how: how does, how long and how can*, Mandarin dominant language participants had low success rate in choosing correctly. This finding is in line with Lee (2016) study on WH- questions.

In item T1 Whose pencil is this? and item S9 <u>Her phone rang</u> presented similar errors, where a large number of participants were confused with the usage of QW who

and *who's*. These kinds of errors were categorized as "other errors" (OT), which consisted of ambiguous questions and spelling errors. As both terms are homophones, which are words that are spelt differently, have distinct meanings but are pronounced identically, the data obtained may first be regarded as a participant error. However, following completion of the translation task. This error may possibly be attributed to the absence of 'whose' QW in Mandarin.

Furthermore, the results demonstrated that many participants struggled with QW such as *how, which* and *whose* which supported Bloom et al. (1982) on QW words acquisition development sequence patterns. According to Bloom et al. (1982), pronominal forms such as *what, where* and *who* are learned prior to sentential forms of *how, why* and *when* followed by adjectival forms *which* and *whose*. While this insight of acquisition sequence may not provide a complete explanation for participants' performance limitation, it does suggest that participants may show a gradual decline in making errors over the acquisition process.

Consequently, the findings also suggested that the ability of participants to produce correct questions is significantly higher if questions given have been derived from entrenched frames. This hypothesis assumes that children may learn lexical patterns, precisely replicate them, and use them as the basis for subsequent generalization. For example, when a child wishes to inquire where the dog is going. has already heard a considerable number of where's X? questions in her input and has learned that to generate these types of questions, where's pivot must be combined with a specific set of noun and verb types. The data suggests that participants made fewer errors in questions that could have been based on frames that occurred more frequently in the child's input of learnt content such as Where do you live? What are they playing? When are you coming home? Who is your favorite teacher? According to Ellis (2002, as cited in Rowland, 2007), entrenched frames have important implication for errors as it is easier for learners to look

something up than to compute it, at the same time the use of equations in child speech minimizes the working memory demands of the processing task, resulting in fewer errors, less hesitation in completion of the given task. Therefore, the use of frame is likely to limit the possibility of inaccuracy.

According to Rowland (2007), although using entrenched frames to create questions will help reduce errors, the theory does not rule out errors inside frame-based questions since the children must creatively combine an appropriate pivot with the proper elements in the variable slot. Therefore, if a child makes an error on a frame-based question, the error should be more likely to occur in the variable slot for example '<u>Who</u> <u>are they playing</u>' instead of the pivot part 'What are they <u>play</u>' where the material can be used to fill the variable slot in the frame.

## 5.7 Misapplication of DO verb and double-marking errors

Although frequent errors in DO verbs were found in the data, it was also observed that both groups of participants often opted to use DO verbs to form yes-no questions even in items that did not require DO verbs. Examples are as follows.

Code	Items given	Common Alternate Questions (ALT)
S11	They have been to the theatre?	Did they go to the theater? (ALT)
S12	He was awake all night because he had a nightmare.	Did he have nightmares? (ALT)
S5	The brown dog is Joshua's	<b>Does</b> this brown dog belong to Joshua? (AX-L)
S7	She has been living here for $\underline{3}$ years.	<b>Did</b> she live here for 3 years? (ALT)
S4	They were told to be silent by the librarian.	<b>Did</b> they been told to be silent by the librarian? (DM)

As shown in the examples above, the findings revealed that participants were able to place DO verbs correctly when forming both WH and yes-no questions. In addition, DO verbs were the most common auxiliary verb used by participants to form yes-no questions. Errors that were often found in DO verb were often associated with double marking errors (DM), where errors were found in marking on tense and agreement in auxiliary and main verb. According to Lee (2016), do-support errors are unsurprising higher as it is more cognitively taxing for Mandarin speaking learners given the absence of do-support and inflected verb forms in the Chinese language.

On the other hand, participants made substantially lower inversion errors in DO verbs. These results coincide with Van Valin (2002, as cited in Rowland, 2007), stating that the children were able to accurately place overtly tensed auxiliaries such as 'does' and 'did' compared to overt tense auxiliary like modal auxiliary, therefore attracting more errors with uninflected 'do'.

# 5.8 Differences in errors made among both groups of participants

Even though placement of question words (PQW), omissions errors (OM) and inversion errors (IV) were not the most prevalent errors observed, Mandarin dominant language participants produced significantly more errors in these three types errors when producing questions. There is a notable difference in the frequencies of these types of errors across both groups of participants. For example, 90% of PQW errors made by Mandarin dominant language participants can be traced across the majority of the items given regardless of the type of task given. These results indicated a potential negative transfer of L1 language in contrast with the English dominant participants where hardly any PQW errors were identified.

Similarly, OM errors found were consistently high among Mandarin dominant language participants. The majority of omissions are associated with DO verb questions.

Results showed young learners often disregard using DO verbs especially in WH

questions. The difficulty of placing DO verb in WH questions can be attributed to the absence of this grammatical marker in their L1 language. A similar observation was made by Lee (2016), who demonstrated that Cantonese and Mandarin speaking pupils tend to make more mistakes in formation of questions which require do-support.

There were also substantially more inversion errors (IV) among Mandarin dominant language participants. High frequency of IV errors can be found in whquestions with HAVE verbs and past tense BE verbs such as 'WAS' and 'WERE'. According to Brown (1986, as cited in Tsvetkova, 2017) indicated that the inability to invert subject and verb is due to learners' limitations in their utterance transformations as English learners understand the rules for using the inversion subject-auxiliary at the starting placement of the wh-word in questions, but they are unable to combine the two rules in a single sentence. This study shows clear evidence that inversion errors are much higher in WH questions compared to yes-no questions. Furthermore, according to Valian and Casey (2003, as cited in Goodwin et al., 2015), the question word at the beginning of a sentence is the first to be learned. Therefore, PQW errors are considerably less than IV errors. Furthermore, Dekeyser (2003) explained that the inconsistency in the application of inversion rules may be attributed to learners' recognition of the requirement to follow subject-operator inversion but lack of 'automatization of the rules.'

### 5.9 Implications of the Study

The findings of this study provide further evidence that the language background of a learner influenced their practice of the second language, which could be a reflection of language transfer from the learner's native language, contrastive interference from the target language, or overgeneralization of newly acquired rules. The findings provide practical, methodological, and theoretical implications for those in the field of education as well as syntax. The implications are as follows.

#### 5.9.1 Practical Implications

The findings of this study could be applied to improve teaching practice, particularly for teachers in National-Type Chinese schools. This study demonstrated that errors involving structural features of interrogative sentences were more prevalent among Mandarin dominant language speakers. Failure to invert auxiliary verbs and wrong placement of question words in the sentence were more common among Mandarin dominant language participants. Frequently, WH interrogative sentence teaching in a classroom focuses primarily on understanding the usage of WH question words while neglecting teaching of the sentence structures. Apart from guiding students to use interrogative words correctly, teachers can also help these students perceive and consciously identify distinctions between English and Mandarin question structures, at the same time emphasizing these two common errors. Teachers can demonstrate the transformation of English question from a declarative sentence and how it varies from Mandarin interrogative sentences.

The most common errors in the study were errors in using appropriate auxiliary verbs particularly questions involving do-support and HAVE verbs. Participants were unable to master auxiliary verb and tenses, as the majority of English-dominant participants' errors were attributable to tenses, whilst Mandarin-dominant participants also selected the incorrect auxiliary verb, resulting in structural errors. However, these errors are language-specific features that generate issues, therefore, they can also affect declaratives and questions alike.

Teachers can design teaching materials that can accommodate learner differences. Mandarin dominant language participants may require assistance understanding each auxiliary usage, which requires more rule learning so that learners are made aware of the requirement of auxiliary verbs in English sentences. This can be implemented by engaging students in discovery-type grammar activities to raise their grammar awareness

and familiarize students with the various types of auxiliaries, particularly regarding the DO verb. The absent of DO verb in the Chinese language often resulted in the omission of DO verb especially in WH questions and double marking errors in the inflected verbs.

Findings also showed Mandarin dominant language participants have less DO verb omission errors in yes-no questions, indicating these participants were aware of presence of DO verb but unacquainted on the placement of the verb in WH questions.

As for English dominant language participants who made significantly less errors in selecting wrong auxiliary verb but made abundantly more tenses errors, language learning should shift to more natural language input. Moreover, teachers could use communication activities for young learners to practice asking questions in a more authentic relevant circumstance. This could assist them in consolidating grammatical information and improve their ability in selecting correct tenses as well as providing them opportunity for implicit learning in more complex questions. The findings showed that English dominant language participants may be avoiding certain auxiliary verbs by selecting other auxiliary verbs to produce questions. For example, when item given requires past participle tense *How long has she been living here*? participants may change the tense to simple past tense How long did she live here?. To address such difficulties, educators can include tasks that highlight linguistic complexities like the link between tenses meanings and production of the target structures in meaningful contexts. Next, miscellaneous errors and faulty learning such as the usage of who's and whose should be addressed by teachers in the classroom as the majority of participants were unable to distinguish their usage.

Lastly, the findings of this study are also applicable to classroom instruction of modal verbs to young learners. When teaching modal verbs, educators can provide different contexts in which they are used, allowing more authentic dialogue rather than

just controlled practice. Consequently, in teaching modal verbs emphasis should not just be placed on accuracy but the literal meanings of each modal verb and also their pragmatics of functional discourse. In an ESL (English as a Second Language) classroom where children have bilingual backgrounds, consideration should also be given how L1 and L2 utilize different modalities to reduce L1 interference during learning.

## 5.9.2 Methodological Implications

There are also several methodological implications for researchers who intend to do similar studies. This research gathered data from a population of 56 Year four students in a Chinese national-type primary school located in the Klang Valley. The researcher selected this approach of data collection instead of using corpus data since information relating to production of questions among these group of students was insufficient. Working with children requires patience and understanding as children may be shy that cause them to refrain from taking part in the study. Moreover, the young learners in this study also constantly required words of encouragement and promises to not to publicly proclaim their performances to their peers.

During the lockdown, the majority of data was gathered via online Google meets and Google forms, which required coordination with their class teacher to ensure the participants showed up during the meet session. As participants were involved in many extra classes, the researchers also had to carry out several meeting sessions to accommodate the participants' schedules. In addition, the researcher also had to repeat the instructions several times as there were a few participants who joined the meeting late due to various personal reasons. However, one advantage of the using an online form is that the data collected can be simply extracted into an Excel sheet, making data consolidation and coding much quicker and convenient.

Moreover, the translation task is considered to be a unique part of the research as it provided further insight into participants performance in producing WH and yes-no questions. The data from the translation task could reflect participants' recognition of the structural differences between Mandarin and English questions. In addition to constructing questions, participants were required to translate the questions. This task provided more insight into potential negative language transfer of L1, which was more apparent among Mandarin dominant language participants as some participants completed the task by directly translating the Mandarin question structure, disregarding the syntactic differences of interrogative sentences between both languages. Similar to the other task, auxiliary tenses errors were the most common errors found, indicating participants' inability to master auxiliary tenses perhaps because the concept of verb tenses is absent in Mandarin language and the language relies heavily on context and time phrases to convey temporal meaning. Even when translating sentences that included time phrases such as '昨天(yesterday) and 每天(everyday), participants were unable to use correct tenses in English. Hence, employing a translation task that is relatively unique and new to the participants provided the researcher a broader perspective into participants' difficulties in producing English questions by enabling a comparison of similarities and differences in the errors made by participants in both tasks.

# **5.9.3** Theoretical Implications

Although the theoretical implications of this study are rather limited, the study provides further evidence that there is a potential negative impact of L1 on ESL learners, complementing Chan's (2004) and Lee's (2016) study of syntactic transfer from Chinese to English among ESL learners. The findings indicate significantly more errors in placement of question words (PQW), difficulty in subject-operator inversion (IV) and omission errors (OM), particularly with 'DO' verbs in WH questions made by Mandarin

dominant language participants. However, more research would be needed to better assist teachers in targeting the different challenges faced by students when producing questions.

In summary, the present research has provided some findings that have potential pedagogical implications, including that the study may assist educators by highlighting the similarities and differences in the types of errors made by participants with different language backgrounds as well as the possibility that different pedagogical practices may be needed for pupils from different language backgrounds. English questions should be taught in a communicative manner, in addition to grammar drills, which can encourage teachers to consider natural language input and communicative activities such as role plays when designing lessons. Furthermore, this research highlighted some challenges faced when gathering data from young participants, which could assist researchers to foresee obstacles for future improvement.

### 5.10 Limitations of the Study

There were a few limitations to this research. Firstly, due to the pandemic, the data collection was done online, which limited the interaction between the researcher and participants. Frequent researcher-participant interactions are essential for fostering participants' interest in the study and motivating them to continue contributing to research, as well as potentially benefiting from this study. Secondly, the participants involved in the study were limited to two groups of students from a Chinese national-type school in Selangor. With only 56 participants, the findings may not be applicable to other groups of students in similar contexts. Therefore, further work is necessary to support the research. Moreover, the researcher only looked at written question production, hence may generalise students' abilities in producing English questions in all circumstances and contexts.

Nonetheless, the limitations of the study do not overshadow their meaningful contribution to the field. This study is one of the few studies to look at production of English questions from students of a Chinese national-type school and identified some linguistic patterns in students' question production that can give insight to English teachers in National-type primary schools.

#### **5.11** Conclusions and Recommendations

Chapter 5 has highlighted, to a certain extent, common errors made by participants and discussed the findings in relation to conceptual frameworks from previous studies on learners' use of English questions such as (Chen, 2013; Lee, 2016; Huddleston, 2004; Rowland, 2007; Stromswold, 1994; Tsvetkova, 2017) which explained certain frequent occurrence of errors found among participants of this study. This chapter also highlighted some differences in errors made by two distinct dominant language participants and revealed some specific difficulties faced by two dominant language participants when producing questions. Overall, the discussion concluded that English interrogative sentence structure is challenging for Chinese primary school year 4 students to master, especially Mandarin predominant language pupils. It requires learners to be familiar with meta-linguistic items in order to apply the rules, as well as a number of crucial grammatical elements that deviate from the normative Chinese interrogative structure. The results were in line with Chan's (2004) conclusion that suggest negative transfer from Chinese to English was especially strong in complex sentence structures in contrast with questions that based on frames that occurred more frequent in the child's input of learnt content such as Where do you live? What are they playing? When are you coming home? Who is your favourite teacher?

Furthermore, Chapter 5 has also summarized the study and provided some implication of the findings especially towards national-type school educators. Simultaneously, this chapter also addressed some limitations faced by the researcher

when conducting the study. Moreover, it was demonstrated that even within the same classroom, pupils from diverse backgrounds can have different learning needs.

While the study has demonstrated some specific difficulties faced by different language background participants when producing English questions, there remain potential intervention for future research. The researcher recommends that a wider variety of tasks be provided to further comprehend the depth of students understanding of WH and yes-no questions at this stage of learning. Morever, since there have only been a few studies related to production of English questions, particularly among primary school students, future studies can also be conducted in different type of school and in different district to collect more data on the challenges different dominant language participants faced when producing questions. Lastly, longitudinal study can be carried on the participants after a few years to examine the same individuals throughout time to detect changes that may occur relating to their prior difficulties in production of questions at the same time evaluate the concept discussed regarding learners who will eventually gain the capacity to use the right tenses but initially confine their use to a certain context when constructing sentences through this method.

#### REFERENCES

- Ai-li, C. H. (2016). An analysis of Chinese tag questions with a cross-linguistic comparison to English tags. *Taiwan Journal of Linguistics*, 14(1), 69-119.
- Al-Hassaani, A., & Mahboob, A. (2016). A Case Study of Question Formations of the Saudi EFL Learners at Bisha University. *English Language Teaching*, 9(5), 54-64.
- Al-khresheh, M. H. (2016). A review study of contrastive analysis theory. *Journal of Advances in Humanities and Social Sciences*, 2(6), 330-338.
- Ambridge, B., & Rowland, C. F. (2009). Predicting children's errors with negative questions: Testing a schema-combination account.
- Barroso, C., & Stefanich, S. (2019). Measuring language dominance in early Spanish/English bilinguals. *Languages*, 4(3), 62.
- Chan, A. Y. (2004). Syntactic transfer: Evidence from the interlanguage of Hong Kong Chinese ESL learners. *The Modern Language Journal*, C88(1), 56-74.
- Bellugi, U. (1965). The Development of Interrogative Structures in Children's Speech. University of Michigan Press.
- Bloom, L., Merkin, S., & Wootten, J. (1982). "Wh"-Questions: Linguistic Factors That Contribute to the Sequence of Acquisition. *Child development*, 1084-1092.
- Bolinger, D. (1957). Interrogative structures of American English. *The direct question*. University of Alabama Press.
- Cenoz, J. (2013). The influence of bilingualism on third language acquisition: Focus on multilingualism. *Language teaching*, 46(1), 71-86.
- Chan, A. Y. (2004). Syntactic transfer: Evidence from the interlanguage of Hong Kong Chinese ESL learners. *The Modern Language Journal*, 88(1), 56-74.
- Chen, X. (2013) A study of subject-object asymmetry in Chinese learners' acquisition of English long-distance wh-questions. *Foreign Language Teaching and Research* 45(4), 543–56.
- Cheng, L. S. (2009). Wh-in-situ, from the 1980s to Now. *Language and Linguistics Compass*, *3*(3), 767-791.

- Choi, S. (1995). The development of epistemic sentence-ending modal forms and functions in Korean children. *Modality in grammar and discourse*, 165-204.
- Chomsky, N. (2014). The minimalist program. MIT press.
- Creswell, J. W. (2009). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Sage publications.
- Damen, A., & Al Hameed, T. M. A. (2013). Syntactic avoidance in the oral production of Arab EFL learners/Tariq Monther Abed Al Hameed Al Damen (Doctoral dissertation). University Malaya.
- Darani, L. H., & Afghari, A. (2013). Variability in English yes/no questions: A study of communicative functions. *Procedia-Social and Behavioral Sciences*, 70, 1664-1670.
- Darus, S. (2009, November). The current situation and issues of the teaching of English in Malaysia. In *International Symposium of the Graduate School of Language Education and Information Sciences, Kinusaga Campus, Ritsumeikan University, Kyoto* (Vol. 7).
- David, M. K., Dealwis, C., & Kuang, C. H. (2017). Language Policy and Language Use in Multilingual Malaysia. *In Pursuit of Societal Harmony*, 83-97.
- Davies, R. J. (2010). Written discourse across cultures: Towards an integrated approach to EL2 composition pedagogy. Retrieved October 22, 2020, from https://www.ed.ehime-u.ac.jp/~kiyou/0402/pdf36-2/5.pdf
- DeKeyser, R. M. (2003). Beyond explicit rule learning: Automatizing second language morphosyntax. *Studies in second language acquisition*, 19(2), 195-221.
- Denizer, E. N. (2017). Does mother tongue interfere in second language learning? *Journal of Foreign Language Education and Technology*, 2(1), 39-54.
- Dörnyei, Z. (2007). Research Methods in *Applied Linguistics: Quantitative Qualitative,* and *Mixed Methodologies*. Oxford University Press.
- Dubiel, B. (2019). The assessment of language maintenance in bilingual children. *TEANGA*, the Journal of the Irish Association for Applied Linguistics, 10, 94-112.
- Eberhard, D. M., Simons, G. F., & Fennig, C. D. (Eds.). (2019). *Ethnologue: Languages of Asia*. SIL International.

- Erlewine, M. Y. (2014). Alternative questions through focus alternatives in Mandarin Chinese. In *Proceedings of the 48th Meeting of the Chicago Linguistic Society* (pp. 221-234).
- Gao, B. (2009). *L2 acquisition of Chinese wh-questions by English-speaking learners*. The University of Iowa.
- Geeslin, K. L., & Gudmestad, A. (2008). Comparing interview and written elicitation tasks in native and non-native data: Do speakers do what we think they do. In *Selected proceedings of the 10th Hispanic linguistics symposium* (pp. 64-77). Somerville, MA: Cascadilla Proceedings Project.
- Gertken, L. M., Amengual, M., & Birdsong, D. (2014). Assessing language dominance with the bilingual language profile. *Measuring L2 proficiency: Perspectives from SLA*, 208-225.
- Gill, S. K. (2013). *Language policy challenges in multi-ethnic Malaysia* (Vol. 8). Springer Science and Business Media.
- Goodwin, A., Fein, D., & Naigles, L. (2015). The role of maternal input in the development of wh-question comprehension in autism and typical development. *Journal of Child Language*, 42(1), 32-63.
- Govindan, I. V., & Pillai, S. (2017). English question forms used by young Malaysian Indians. *The English Teacher*, 74-79.
- Halliday, M. A. K., & Hasan, R. (1989). Language, context, and text: Aspects of language in a social-semiotic perspective. Oxford University Press.
- Hashim, A. (2014). English and the linguistic ecology of Malaysia. *World Englishes*, 33(4), 458-471.
- Haugen, E. (2001). The Ecology Of Language. *The Ecologyistics Reader. Language, Ecology and Environment*, 57-66.
- Heydari, P., & Bagheri, M. S. (2012). Error Analysis: Sources of L2 Learners' Errors. *Theory & Practice in Language Studies*, 2(8).p
- Horst, M., White, J., & Bell, P. (2010). First and second language knowledge in the language classroom. *International Journal of bilingualism*, 14(3), 331-349.

- How, S. Y., Abdullah, A. N., & Chan, S. H. (2017). Patterns of Dominance of Language Vitalities Among Malaysian Students in Primary National-Type and Secondary Schools. *Indonesian Journal of Applied Linguistics*, 6(2), 271-287.
- Hyland, K. (1994). Hedging in academic writing and EAF textbooks. *English for specific purposes*, 13(3), 239-256.
- Huddleston, R. (1994). The contrast between interrogatives and questions. *Journal of Linguistics*, 30(2), 411-439.
- Jarvis, S., & Pavlenko, A. (2008). *Crosslinguistic influence in language and cognition*. Routledge.
- Jayasooria, D. D. (2012). Vernacular Schools Report. From Vernacular Schools in Malaysia: "A Heritage to Be Celebrated or A Hindrance to Nation Building?": <a href="http://www.cpps.org.my/upload/VERNACULAR%20SCHOOLS%20IN%20M">http://www.cpps.org.my/upload/VERNACULAR%20SCHOOLS%20IN%20M</a> ALAYSIA%20REPORT%202012.pdf
- Jiang, X., Koffi, E., & Kuehn, C. (2019). Teaching Chinese Students to Ask WH-Questions. Linguistic Portfolios, 8(1), 4.
- Joughin, G. (2007). Student conceptions of oral presentations. *Studies in Higher Education*, 32(3), 323-336.
- Karim, K., & Nassaji, H. (2013). First language transfer in second language writing: an examination of current research. *Iranian Journal of Language Teaching Research*, *I*(1), 117-134.
- Kartunnen, L. (1977). Syntax and semantics of questions. *Linguistics and philosophy*, *I*(1), 3-44.
- Khan, M. S. (2016). The Impact of Native Language Use on Second Language Vocabulary Learning by Saudi EFL Students. *English Language Teaching*, 9(5), 134-140.
- Khansir, A. A. (2012). Error Analysis and Second Language Acquisition. *Theory & Practice in Language Studies*, 2(5), 255-267.
- Koffi, E. (2015). *Applied English syntax*. Dubuque, IA: Kendall Hunt Publishing Company.
- Krashen, S. (2003). Principles and Practice in Second Language Acquisition. *SPEAQ Journal*, 9-32.

- Kreutel, K. (2007). "I'm Not Agree with You." ESL Learners' Expressions of Disagreement. *tesl-ej*, 11(3), n3.
- Kuo, M. M., & Lai, C. C. (2006). Linguistics across Cultures: The Impact of Culture on Second Language Learning. *Online Submission*, *1*(1).
- Lado, R. (1957). Linguistics across Cultures. Ann Arbor: University of Michigan Press
- Lee, J. F. (2016). '\* Why you can't ask a proper question?'-The Learning Difficulties of Hong Kong ESL Students. *RELC Journal*, 47(3), 295-311.
- Leech, G., & Svartvik, J. (2013). A communicative grammar of English. Routledge.
- Leonard, L. B., Deevy, P., Wong, A. M. Y., Stokes, S. F., & Fletcher, P. (2007). Modal verbs with and without tense: a study of English-and Cantonese-speaking children with specific language impairment. *International Journal of Language & Communication Disorders*, 42(2), 209-228.
- Li, C. (2017). The syntactic and pragmatic properties of a-not-a question in Chinese. University of Canterbury Press.
- Li, L. X. (2022). Developmental patterns of english modal verbs in the writings of Chinese learners of English: A Corpus-Based Approach. *Cogent Education*, 9(1), 205-457.
- Liting, W., Shanshan, G., & Zhen'ai, Z. (2015). Phase derivation of WH-Interrogatives among English, Chinese and Korean. *Dongjiang Journal*, 32, 16-21.
- Li, X., & Liu, J. (2016). Syntactic comparison between the English and Chinese Interrogative Sentences. *International Journal of Liberal Arts and Social Science*, 4(9), 104-110.
- Liang, M. (2008). A corpus-based study of modal sequences in Chinese tertiary EFL learners' written production. *Foreign Language Teaching and Research*, 40(1), 51-58.
- Low, H. M., Nicholas, H., & Wales, R. (2010). A Sociolinguistic Profile Of 100 Mothers from Middle to Upper-Middle Socio-Economic Backgrounds in Chinese Community: What Languages Do They Speak at Home With Their Children? *Journal of Multilingual and Multicultural Development*, 31(6), 569-584.

- Luna, R. M. (2010). Interlanguage in undergraduates' academic English: Preliminary Results from Written Script Analysis. *Online Submission*, 19(5), 60-73
- Ma, G., & Lu, X. (2007). The analysis of modal verbs-based on Chinese learner English corpus ST6. *Computer-assisted Foreign Language Education*, 115(6), 17-21.
- Malmqvist, J., Hellberg, K., Möllås, G., Rose, R., & Shevlin, M. (2019). Conducting the pilot study: A neglected part of the research process? Methodological findings supporting the importance of piloting in qualitative research studies *International Journal of Qualitative Methods*, 18(2), 160-179.
- Maratsos, M., & Kuczaj, S. A. (1978). Against the transformationalist account: A simpler analysis of auxiliary overmarkings. *Journal of Child Language*, 5(2), 337-345.
- Masruddin, M., & Karmila, K. (2018). Constructing WH-Questions through An Error Analysis at Junior High School of Indonesia. *Langkawi: Journal of The Association for Arabic and English*, 4(2), 123-137.
- Ministry of Education Malaysia. (2018). *Annual report Malaysia Education Blueprint* 2013–2025. https://www.moe.gov.my/menumedia/media-cetak/penerbitan/dasar/1207-malaysia-education-blueprint-2013-2025/file
- Ministry of Education Malaysia. (2019). Common European Framework of Reference for Languages (CEFR) English Language Scheme of Work Primary Year 4 SJK.
- Mitchell, H., & Malkagianni, M. (2019). *Get Smart Plus 4*. MM Publications NND Enterprise.
- Mobaraki, M., & Saed, A. (2016). The production of yes/no questions, wh-questions, and embedded clauses as functional categories at the initial stage of child L2 acquisition. *International Journal of Applied Linguistics and English Literature*, 6(1), 39-46.
- Moghimizadeh, R. P. (2008). The study of syntactic avoidance on the written production of Persian university students majoring in teaching English as a foreign language (Unpublished doctoral dissertation). University Sains Malaysia.
- Mohasseb, A., Bader-El-Den, M., & Cocea, M. (2018). Question categorisation and classification using grammar-based approach. *Information Processing & Management*, *54*(6), 1228-1243.

- Muhsin, M. A. (2016). Analysing the students' errors in using simple present (A case study at Junior High School in Makassar). *Pacific Science Review B: Humanities and Social Sciences*, 2(3), 81-87.
- Mukherjee, D. (2011). National language planning and language shifts in Malaysian minority communities: Speaking in many tongues (p. 208). Amsterdam University Press.
- Murphy, S. (2003). Second language transfer during third language acquisition. *Studies in Applied Linguistics and TESOL*, 3(2), 2-5
- Myles, F. (2010). The development of theories of second language acquisition. *Language Teaching*, 43(3), 320-332.
- Nurjanah, N., Anggoro, D., & Dwiastuty, N. (2018). Error Analysis of the Use of Question Words in English Sentences. *Scope: Journal of English Language Teaching*, 2(1), 80-88.
- Paltridge, B., & Phakiti, A. (Eds.). (2015). Research methods in applied linguistics: A practical resource. Bloomsbury Publishing.
- Papafragou, A. (1998). The acquisition of modality: Implications for theories of semantic representation. *Mind & language*, *13*(3), 370-399.
- Park, H. (2000). When-questions in second language acquisition. *Second language* research, 16(1), 44-76.
- Pozzan, L., & Valian, V. (2017). Asking questions in child English: Evidence for early abstract representations. *Language Acquisition*, 24(3), 209-233.
- Qian, L. (2017). A corpus-based study of modal verbs uses in English writing by EFL learners. *Canadian Social Science*, *13*(11), 31-35.
- Quirk, T. & Greenbaum, S. (1990). A student's grammar of the English language. Pearson Education.
- Rahman, A. M., & Rahman, A. R. M. M. (2021). Linguistic hybridization in a television talk show: A sociolinguistic analysis. *Journal of Language and Linguistic Studies*, 17(2), 767-782.
- Rowland, C. F. (2007). Explaining errors in children's questions. *Cognition*, 104(1), 106-134.

- Rowland, C. F., Pine, J. M., Lieven, E. V., & Theakston, A. L. (2005). The incidence of error in young children's wh-questions. *Journal of Speech, Language and Hearing Research*, 48(2), 384–404.
- Salim, N. H. (2008). An introduction to English grammar syntax. Al Manhal.
- Santelmann, L., Berk, S., Austin, J., Somashekar, S., & Lust, B. (2002). Continuity and development in the acquisition of inversion in yes/no questions: dissociating movement and inflection. *Journal of Child language*, 29(4), 813-842.
- Stivers, T. (2010). An overview of the question–response system in American English conversation. *Journal of Pragmatics*, 42(10), 2772-2781.
- Stromswold, K. (1994). Learnability and the acquisition of auxiliary and copula be. In *Proceedings-Eastern States Conference on Linguistics (ESCOL)* (pp. 335-346).
- Tavarez DaCosta, P., & Almanzar Alvarado, V. (2020). Spanish language interference in the English learning process for students of the English immersion program by MESCYT. *Online Submission*.
- Ting, S. H., Mahadhir, M., & Chang, S. L. (2010). Grammatical Errors in Spoken English of University Students in Oral Communication Course. *GEMA Online Journal of Language Studies*, 10(1).
- Tsvetkova, M. (2017). Errors in using Auxiliary Verbs. *Knowledge-International Journal*, 19(3), 1071-1076.
- Valian, V., & Casey, L. (2003). Young children's acquisition of wh-questions: The role of structured input. *Journal of child language*, 30(1), 117-143.
- Yang, M., Cooc, N., & Sheng, L. (2017). An investigation of cross-linguistic transfer between Chinese and English: A meta-analysis. *Asian-Pacific Journal of Second and Foreign Language Education*, 2(1), 1-21.
- Yang, X. (2018). A corpus-based study of modal verbs in Chinese learners' academic writing. *English Language Teaching*, 11(2), 122-130.
- Yip, V., & Matthews, S. (2010). The acquisition of Chinese in bilingual and multilingual contexts. *International Journal of Bilingualism*, 14(1), 127-146.

- Zhang, S. H. (2007). Analysis and classifications of common errors in spoken and written English caused by Chinese university students' lack of English grammatical knowledge. *US-China Foreign Language*, 5(5), 25-28.
- Zhang, X. (2016). A study on the acquisition of English wh-question by Chinese beginning learners. *Theory and practice in Language Studies*, 6(8), 15-28.
- Zhou, M., & Xiaomei, W. (2017). Introduction: Understanding language management and multilingualism in Malaysia. *International Journal of the Sociology of Language*, 2017(244), 1-16.
- Zhu, C., & Wu, X. (2011). A study of yes/no questions in English and Chinese: With special reference to Chinese EFL learners' understanding of their forms and functions. *Journal of Pragmatics*, 43(2), 632-647.
- Zou, R. (2013). The common English errors committed by Chinese national students in *ELC* (Unpublished project paper for Bachelor of Arts in English Language). UCSI.