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# Universidad del País Vasco <br> Euskal Herriko Unibertsitatea 

## Multilingual students＇language use，identities and attitudes in

 TaiwanA doctoral dissertation submitted to the University of the Basque

Country（UPV／EHU）for the Degree of Doctor of Philosophy

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## Thesis dissertation

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This doctoral dissertation is dedicated to my beloved home country，Taiwan Formosa， where my roots are deeply planted in its soil．

# 此著博士論文獻給我美麗的海島家鄉，台灣。 <br> 永遠的番薯仔囝。 

＂We＇ll plant some seeds
We＇ll watch em＇as they grow
And with each new beat

From your heart
The roots grow deeper
The branches
Will they reach out for what
Nobody really knows
But underneath it all
There＇s this heart

All alone

There＇s a world
We＇ve never seen
There＇s still hope
Between the dreams＂
Jack Johnson．（2008）．＂All at once．＂Sleep Through the Static［CD］．
Los Angeles：Bushfire，Universal

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"Everything that is happening to you is being drawn into your life as a means to help you evolve into who you were really meant to be here on Earth. It is not the thing that matters, it is what thing opens within you."

Oprah Winfrey. (2017). The Wisdom of Sundays: Life-Changing Insights from Super Soul Conversations.


#### Abstract

Multilingualism is a worldwide phenomenon. The learning of two or more languages in the school context is becoming very common in different parts of the world. Today, there is increasing interest in research exploring the linguistic practices of multilingual speakers. The main focus of this thesis is situated in the context of Taiwan, a country that has suffered different colonial occupations in the past and has a diverse ethnic population. In the recent decades, Taiwan has moved from promoting monolingualism to multilingualism. The aim of this study is three-folded: to explore to what extent multilingualism has been practiced by Taiwanese multilingual students in different social contexts, to investigate the linguistic identities of students and to analyze the attitudes of students towards different languages, bilingualism and multilingualism. A total of 150 participants took part in this study which uses a mixed method approach including quantitative and qualitative data. Results reveal that Taiwanese students' literacy practices are not only multilingual but also multimodal. The evidence on the use of translanguaging demonstrates that Taiwanese multilingual students have a fluid linguistic communicative repertoire. Our analyses suggest that Taiwanese students' linguistic identities are not fixed but constantly changing and continuously expanding. In terms of attitudes, results indicate that students generally have positive attitudes towards each of the languages. In particular, we found a significant effect of age on attitudes towards Mandarin, English and bilingualism. These results can be linked to psychological, educational and cultural factors.


## Resumen

El multilingüismo es un fenómeno mundial. El aprendizaje de dos o más lenguas en el contexto escolar es cada vez más común en diferentes partes del mundo. Hoy en día cada vez hay más interés en la investigación que explora las prácticas lingüísticas de hablantes multilingües. El enfoque principal de esta tesis se sitúa en el contexto de Taiwán, un país que ha sufrido diferentes ocupaciones coloniales en el pasado y que cuenta con una población étnica diversa. En las últimas décadas, Taiwán ha pasado de promover el monolingüismo al multilingüismo. Los tres objetivos principales de esta tesis son: explorar el uso de lenguas por parte de los estudiantes en diferentes contextos sociales, investigar la identidad lingüística de los estudiantes y analizar las actitudes de los estudiantes hacia diferentes lenguas, bilingüismo y multilingüismo. Un total de 150 participantes participaron en este estudio, que está basado en un método mixto que combina enfoques cuantitativos y cualitativos. Los resultados indican que las prácticas de lingüísticas de los jóvenes estudiantes taiwaneses no solo son multilingües sino también multimodales. La evidencia sobre el uso de translanguaging demuestra que los estudiantes multilingües taiwaneses tienen un repertorio comunicativo lingüístico fluido. Además, los análisis sobre las identidades de los estudiantes sugieren que las identidades no son fijas, sino que cambian y se expanden constantemente. Con respecto a las actitudes lingüísticas, los análisis demuestran que los estudiantes en general tienen actitudes positivas. En particular, encontramos un efecto significativo de la edad sobre las actitudes hacia el mandarín, el inglés y el bilingüismo. Estos resultados se pueden vincular a factores psicológicos, educativos y culturales.

## PREFACE

## "Gustuko lekuan, aldaparik ez." esaera zaharra.

After finishing a bachelor's degree in Taiwan ten years ago, I was fortunate to have the experience of teaching in international schools in the United States and Slovakia for several years. I was amazingly stunned by my polyglot students who knew exactly when to use a certain language with a particular interlocutor. I found myself often wondering why my multilingual students used their languages creatively and sometimes it seemed like they were playing with their languages. Witnessing their linguistic behavior was so awesome and fun! Then, I realized that I had been doing exactly the same all along as they were, but I had never reflected on the use of my languages and discovered why I did that. The magic of the "Aha!" moment sparked my curiosity and triggered me to act on it, to look outwards and seek more knowledge. Holding a strong passion for education with many questions but few answers, I knew that I needed to come back to academia to learn more about multilingual education. The hunger for learning brought me to Donostia to pursue a master's and a doctoral degree with the purpose to reflect on my own teaching experiences and with a goal to grow as a better educator.

In reflecting my interest in conducting this doctoral research, I have focused on the context of Taiwan, where consists of a population of diverse ethnic backgrounds and has moved from promoting monolingualism to multilingualism in the last decades. It is fascinating to see the diversity of language use in different corners of Taiwanese society. As a language educator, I am particularly intrigued to explore the linguistic behaviors of multilingual Taiwanese students.

The journey of completing this doctoral thesis is hard to find the right words to describe. If I must, I would describe it as a caterpillar's miraculous transformation into a butterfly. I have learned and understood what it takes to go through the process of "cocooning", which is about learning to be patient to cope with struggles, to cultivate courage and strength and to be
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＂There is always light，if only we are brave enough to see it．If only we are brave enough to be it．＂
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「一枝草，一點露」 台灣諺語。

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## INTRODUCTION

When "language contact" comes into our mind, we often think that it is a situation where people speaking different languages come to interact with one another. In this sense, language interaction is focused on an individual person. Depending on individuals' personal experiences with their languages and the interlocutors they intend to communicate with, language interaction becomes dynamic and complex. It is important to understand that a multilingual person might have different levels of proficiency in his/her languages and might also carry out linguistic discourses for different purposes. In many different parts of the world, the use of more than two languages on a daily basis for communicational purposes is the norm. Hence, the practice of multilingualism is a common and international phenomenon.

If we can take a moment and digest this following popular metaphor in linguistic: "Language is a living organism, which is born, grows and dies" (Li Wei, 2000: 2), we might as well understand that the true constructs of languages are originated from ourselves, human beings. It is crucial to recognize that we not only use languages to serve social functions but also to make meanings of ourselves to a broader social context. The modern poststructuralist view on identity points out its fluid, dynamic and constantly changing nature. In the last decades, the development in the studies of identities has also gained much attention (Norton, 2013, 2016; Block, 2007; Edwards, 2012). In addition, as we grow and walk into different stages of our lives, our attitudes towards languages can change over time based on our personal trajectories. We might desire or feel burdened to learn another language or languages and it could result in changes in our habitual use of the languages. Studies investigating language learners' attitudes are at large and through different lenses, such as attitudes towards different languages in bilingual social contexts (Baker, 1992; Cenoz, 2001; Bernaus, Masgoret, Gardner and Reyes, 2004), the relationships between language attitudes and language acquisition (Dörnyei, 2006; Gardner, 2006, 2010), the relationship between attitudes and motivation (Dörnyei, 2010, 2019; Gardner, 1985, 1988).

This thesis focuses on the context of Taiwan, a country that has gone through different colonial occupations in the past, is home to a diverse ethnic population. Particularly, in the last few decades, the transformation of Taiwan has moved from promoting monolingualism to multilingualism at both societal and educational levels. Mandarin is not only Taiwan's sole official language but also a lingua franca serving as a communication medium for people of different ethnolinguistic backgrounds. At the societal level, Mandarin is the dominant language, whereas local languages (Taiwanese, Hakka and Austronesian languages) are spoken to different extents. In education, Mandarin is the main language for instruction, while local languages and English are implemented as additional language subjects in the curriculum. Nowadays, Mandarin is spoken as one of the Taiwanese children's mother tongues, and the use of one of the local languages in the home domain may vary due to the ethnolinguistic background of each family. In fact, before entering schools, many children are bilingual speakers of Taiwanese and Mandarin, while some are bilingual speakers of other languages and some are monolingual Mandarin speakers. Moreover, young schoolchildren start learning English as the first foreign language at a very young age and their interest in learning English has gradually increased. Due to the important role English plays in the world, schools strongly emphasize English teaching and demand more English instruction. The local language in education do not get as much attention as English, and there has been a shortage of educational resources and support. Details associated with Taiwan's current sociolinguistic situation and its educational system will be presented in Chapter 1.

There have been different lines of research related to the use of language varieties in Taiwan. The aim of some research studies was to examine the use of language varieties among people from different ethnolinguistic backgrounds (Chen, 2003, 2010; Kubler, 1985; Van den Berg, 1986; Young, 1988; Yeh, Chan and Cheng, 2004). Other research studies focused on attitudes towards different languages (Chan, 1994; Chen, 2010; Lee, 2003, Su, 2019; Young, Huang, Ochoa and Kuhlman, 1992), while others explored the relationships
between language and identity (Dupré, 2013, 2017; Hsiau, 2000; Huang, 2000; Scott and Tiun, 2007; Tse, 2000). However, the majority of these previous studies were carried out on a larger scale and tended to separate their subjects according to their ethnolinguistic backgrounds. There is a lack of studies with a particular focus on pupils. Therefore, this research is precisely designed to analyze the above-related topics on investigating students of different school levels as a whole with the hope that we can make different kinds of contributions to knowledge that grow and challenge in the field of linguistic research in Taiwan.

More precisely, the main focus of this thesis is three-folded: (a) to explore students' use of languages in different social contexts, (b) to investigate students' linguistic identity and (c) to analyze students' attitudes towards different languages, bilingualism and multilingualism. An important aim of this thesis is to understand how Taiwanese pupils make sense of themselves to the wider social context through the use of their whole linguistic repertoire and whether pupils' linguistic behavior can be explained through its relation with identity and attitudes. This is empirical work on the experiences that our subjects have engaged in qualitative and quantitative inquiries.

This dissertation is arranged into six chapters and the content of each chapter will now be introduced.

The first chapter, The Context of the Research Study: Taiwan, provides a brief overview of the history of Taiwan, the complexity of the ethnic makeup of its population and sociolinguistic situations. It introduces the educational system and different types of schools in Taiwan. The final section of this chapter includes two language policies used in the curriculum and further discusses the differences between the two policies regarding the implementations.

Chapter 2, Theoretical Framework, has three sections. The first section draws on the theories on bilingualism and multilingualism and reviews different typologies of bilingual and multilingual education. The "Continua of Multilingual Education (Cenoz, 2009)" is used as a
tool to further discuss different types of bilingual and multilingual programs in Taiwan. The second and the third sections review relevant linguistic identity and language attitudes research in different social contexts.

Chapter 3, Aims of the Study and Research Questions, explains the general aim of this research study. It also presents three main research questions concerning language use, linguistic identity and language attitudes. Each of the three main research questions also has relative sub-research questions.

Chapter 4, Methodology, explains the methods and instruments this research used and outlines the characteristics of our collected samples. This chapter also describes the procedure of how this research study was carried out and the pilot study.

Chapter 5, Results, analyzes the collected data and reports significant findings. The key findings of the results of each research question were given explanations and a brief conclusion respectively.

Chapter 6, Discussion, Conclusions and Limitations has three sections. The first section evaluates the significant findings and highlights how they are related to the previous literature. This chapter discusses not only the expected results but also the unforeseen and interesting ones. The arguments are also made to support the overall conclusion. The last two sections conclude the researcher's personal reflections on the research journey. The second section acknowledges the potential limitations of this research study. The third section provides suggestions to the policymakers and teachers and also points out opportunities for future lines of research continuing from the same field topics in depth.

## CHAPTER 1. THE CONTEXT OF THE RESEARCH STUDY: TAIWAN

### 1.1 A Brief History of Taiwan and the Sociolinguistic Situations

This section is structured according to the time different colonial states were in Taiwan and the social situation that was formed by the encounter of various ethnolinguistic groups. Important events that happened in modern Taiwan are outlined according to the historical timeline as follows: before 1895, from 1895 to 1945, from 1945 to 1987 , from 1987 to 2000 and from 2000 until now.

## Before 1895

Taiwan has been well known as "Ilha Formosa", which means a beautiful island. The name was given by the passing Portuguese sailors in the $16^{\text {th }}$ century. Taiwan was its first name and had been inhabited only by different tribes of Austronesian people long before the European expansion. According to archaeological and linguistic data (Bellwood and Dizon, 2008; Ross, 2008), the most widespread Austronesian language family originated on the island of Taiwan. Approximately five to seven thousand years ago, the spread of Austronesian people migrated to Southern Asia, New Zealand, Hawaii, Oceania, and other Polynesian islands in the Pacific region. However, little is known about the exact time when the Austronesian tribal groups of people resided in Taiwan. In short, the evidence showed that Taiwan was first and had been inhabited only by different tribes of Austronesian people long before the European expansion. Different varieties of Austronesian languages are not mutually intelligible but co-existing on the island of Taiwan. The indigenous inhabitants in Taiwan experienced the influence of the western culture, language, and religion by Dutch (1624-1662) and Spanish (1626-1642) settlers in the first quarter of the $17^{\text {th }}$ century. During the co-colonial period, the Dutch invaded Southern Taiwan while Spain governed Northern Taiwan. According to Price (2019: 84), during the Dutch occupation, the Dutch organized annual meetings (or Landdag) to meet
with leaders of various indigenous groups for the purpose of ensuring the legitimacy and authority, and the missionaries were used by the Dutch colonial state as interpreters to mediate communication with indigenous people. The use of missionaries as translators can be regarded as a solution to a social-political problem. At the beginning of the Dutch colonization, some indigenous languages were used as lingua franca in the annual meetings, while later Dutch was officially introduced in 1648 on the island and taught in the village schools (Heylen, 2001: 224). The very first evidence on the writing form of indigenous languages was documented by using a phonetic orthography by the missionaries who came with the Dutch colonial state. It was used for not only the missionary purpose but also for the assimilation of the local Austronesian inhabitants. According to Tsao (1999), it was used for more than a hundred years before the Chinese characters were introduced. Spanish missionaries and traders were in Taiwan from 1626 to 1642. It seems that there were cultural contacts between Spanish and indigenous people but there is little linguistic evidence of Spanish in Taiwan (Price, 2019: 82-83). During the period of European occupation, Chinese immigrants were transported from the southern provinces of China to the island for helping to promote agriculture. The majority of migrants were speakers of Southern Min and a small number of settlers were speakers of Hakka. It was in 1662 when Ming loyalist, Zheng Zheng-Gong, known as Koxinga, from Fujian province arrived in Taiwan and drove out the Dutch. From 1662 to 1895 , there had been two Chinese dynasties taking control of the island of Taiwan: Ming and Qing. Large immigration from southern China waved in. The mother tongues of these Chinese immigrants are Southern Min (this language is commonly called "Taiwanese" in Taiwan now) and Hakka, which are mutually unintelligible. The Chinese characters were used as a written orthography for two centuries before the Japanese invasion. In the same period, Austronesian people were isolated in the internal mountains regionally located in different parts of Taiwan by the Chinese authorities.

## 1895-1945 the Japanese occupation on Taiwan

The island of Taiwan became Japan's first overseas colony after the First Sino-Japanese War and remained under Japanese control from 1895 to 1945 . Due to the attempt of assimilation of the local populations, Japanese was the only language permitted in educational and overall public registration places. Local languages were restricted to be used mainly at home and private local business. Not only the Japanese culture and religion were imposed in social domains, but also the Japanese language was the lingua franca for communication between different language groups of people in Taiwan (Gates, 1987: 26). According to Simpson (2007: 239), during the Japanese occupation, Japanese was imposed in public, formal and educational domains and this had negative effects on Taiwanese people's ability to speak their mother tongues, Taiwanese, Hakka, and aboriginal languages. These languages were mainly used in the domestic domain. Young generations were; therefore, born as bilingual speakers of Japanese and one of the mother tongues. However, due to the enforcement of Japanese as the sole language of instruction at school, Taiwanese young generations, who were born after the 1930s, were not able to read and write in their mother tongue.

## 1945-1987 post Second World War and ruled by KMT

Equally important to note is the situation in Mainland China during the occupation of Japan in Taiwan. The Qing dynasty was overthrown in 1911, and after that Republic of China was established and led by the Kuomintang (KMT) Nationalist Party since 1919. There were decades of internal conflicts between the KMT, led by Chiang Kai Shek, and the Chinese Communist Party, under Mao Zedong, continued after 1945, when Japan was defeated in World War II. After Japan's surrender at the Second World War, in 1945 Taiwan was ceded to China and was ruled under the Republic of China's govern. However, with the growing power of the Chinese Communist Party in the confrontation, Kuomintang (KMT) fled to

Taiwan along with its military and government officials and relocated its governed sovereign state Republic of China to Taiwan officially in 1949. After two decades of confrontation between the KMT and the Chinese Communist Party, the conflict finally ended when Mao Zedong's Communist forces proclaimed and established the People's Republic of China in Beijing in 1949. While Taiwan was controlled by the Republic of China, mainland China is under the government of the People's Republic of China. Even today, the situation remains unsolved and controversial. China is a legitimate country recognized by the United Nations, whereas Taiwan's sovereignty is not recognized internationally even though Taiwan possesses its ultimate authority on citizenship, territorial jurisdiction, government and military. Along the abrupt of the Korean war in 1950, the clashes between the KMT and the Chinese Communist Party escalated in Taiwan Strait in 1954. Then, the United States signed a mutual defense treaty with Taiwan and committed to helping to defend the Communist forces. The U.S. military has troops in Taiwan since 1954.

There were about two million Chinese refugees who came along with the KMT to Taiwan. These Chinese are called the Mainlanders, who spoke different northern Chinese dialects as their mother tongue, and among themselves, they communicated through Mandarin. Even though since 1949 the island of Taiwan has been self-ruling on its own, during the first four decades Taiwan was under martial law imposed by the KMT-led government. Taiwanese people were suppressed freedom of speech, gathering and, publications. The use of non-Mandarin mother tongues was banned and the monolingual Mandarin policy was launched. This situation has left the mark on the linguistic change at both national and societal levels. During the martial law period, Mandarin was the only language that was allowed to use at school and public domains, and it was seen as a prestigious language. In fact, high proficiency in Mandarin was necessary in order to achieve higher positions in society. Many prestigious positions in the governmental places were occupied by monolingual Mandarin speakers, who were the Mainlanders. Therefore, at the beginning of the post-world
war era, it was a difficult situation for the bilingual speakers of Japanese and Taiwanese, who were used to be the elite during the Japanese occupation. Within four decades of Mandarin as the national language, nearly everyone in Taiwan has become highly proficient in Mandarin both in oral and written form. The spread of Mandarin transformed Taiwan's sociolinguistic situation. Taiwanese and Hakka were excluded from the public domain and a number of Austronesian languages were critically endangered.

Apart from that, the United States set up troops and military bases in Taiwan from 1954 to 1979. Trades between the U.S. and Taiwan are an important factor in Taiwan's economic growth and development. English has become the first foreign language to learn in secondary school and it is a required subject in the university entrance examination since 1954. As a result, after nearly four decades of "Mandarin-only" policy, the different ethnic languages were restricted to their use at home and private domains, while Mandarin was the imposed language and dominated the use at the public and formal domains.

## 1987-2000 Political liberalization and Democratization

The state of Taiwan transformed into democracy in 1987 after lifting the martial law. Democratization has led Taiwan to rapid economic growth and political liberalization. After the reformation of the constitution, the first multi-party democratic presidential election in Taiwan was held in 1996. Since the end of the martial law, restrictions on the use of local languages were gradually removed and the tension among ethnic groups diminished. The restrictions on TV and radio were also eased and the channels were allowed to broadcast in non-Mandarin local languages. Local languages are allowed to be used in school and public domains. Different forms of promotions on local languages in daily use have taken place. However, it was not until 2000 when the Democratic Progressive Party (a Taiwanese nationalist party) was elected as the ruling government in Taiwan that the local languages were firmly included in the reform in education on the political agenda (Price, 2019:230).

## 2000-now Globalization and Immigration today

Societal multilingualism has become diversely protruding since the "Mandarin-only" policy changed to "Mandarin-plus" in education, although Mandarin still remains as the language of instruction (Scott and Tiun, 2007). The Democratic Progressive Party's "bentuhua" project, which refers to "Taiwanization", aims at the revaluation of local languages and the reform of people's identity to replace Sino-centrism (Price, 2019: 174). In 2001, local languages started to be officially implemented as a compulsory subject in primary schools and as an optional subject in junior high and senior high schools. The promotion of English in education began in the same year, and English is taught as a compulsory subject at all school levels. As a result of globalization, the spread of English urges Taiwanese students to learn English to connect to the world in economic, political, cultural, and environmental aspects. Learning English from an early age at school becomes important for young generations because English is associated with success in education and career. At the cultural level, Japanese and Korean popular cultures waved in Taiwan and particularly have impacts on Taiwanese young generations' daily life since the early 2000s. The contact with languages for young people lays in media consumption, and themes related to music, movies and TV shows, trendy dramas, food, and fashion (Huang, 2011). Different languages used in signage can be seen in public spaces (Curtin, 2009).

In addition, since the 1990s there is immigration from south-east Asia and Mainland China. Immigrants look for labor opportunities in manufacturing factories and for cross-border marriage. According to the latest statistical data reported by the Ministry of the Interior in Taiwan, in 2020, the total population of Taiwan is made up of 23.6 million, and new immigrants are $2.27 \%$ of the total population, which is nearly the population of indigenous Austronesians (2.43\%). According to Taipei Times (2018), during a legislative hearing, the Minister of Education reported statistics on the population of second-generation immigrant students. It was estimated that a total of seven percent of the total number of students in

Taiwan have at least one of their parents from a country located in Southern Asia. Since 2019, the Taiwan government began to implement the native languages of new immigrants as a compulsory language subject at primary school along with the local language curriculum. These languages are also an optional subject at junior and senior high schools.

Taiwan has been composed of people from different ethnolinguistic backgrounds, and today the composition of the population is even more complex. Throughout Taiwan's history, the political repression and resistance to repression have salient impacts on the development of language in education policies and the efficiency of its implementation. Until today the national status of Taiwan, whose official name is the Republic of China, is still struggling to be officially recognized since Taiwan's lost membership in the United Nations in 1972. The recognition of the status of Taiwan at the international level still remains controversial. Taiwan has suffered long-term from the external and internal forces including economic issues and language policies. However, this complex history makes Taiwan very colorful and diverse regarding its ethnolinguistic heritage. The interaction between language varieties at the societal level presents diverse and dynamic multilingualism.

Based on the modern history of Taiwan and important events marked in history from several references (Su, 1980; Klintworth, 1996; Price, 2019), we then conclude a brief historical timeline of Taiwan in Figure 1.1 to present the high notes and most significant events of roughly four hundred years from the beginning of European occupation to present.

The chronicle history of Taiwan/Formosa

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1624164816621683 | 1895 <br> 194519491954 <br> 1895~1945 <br> The Empire of Japan colonized Taiwan due to Taiwan was ceded to Japan over the First Sino-Japanese War. | 1979 | 1987 | 1996 |  |
| $\sim 1624$ <br> - Austronesians were the first inhabitants on the island of Taiwan. <br> - Japanese pirates and Chinese "wokou (dwarf pirates)" raided the coast of Taiwan. |  |  |  |  |  |

## 1624~1648

Spanish Empire controlled the northern Taiwan, at the time as Formosa.

## 1624~1662

Dutch Republic conquered southern Taiwan.

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1662~1683
Ming dynasty, The Kingdom of Tungning ruled southwestern Taiwan
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## 1683~1895

Chinese Qing dynasty ruled the coasta
Taiwan.

References: Klintworth (1996: 384-388
P.S. The timeline is not equally proportioned.

## 1945~1949

During Chinese civil war, Taiwan was treated as a conquered territory by a political party called Koumingtang (KMT).
1949 - KMT-led government (Republic of China) was defeated in Chinese civil war and fled with Chinese immigrants to Taiwan.

## 1954~1979

The United States maintained military bases on Taiwan.
1949~now - Republic of China (ROC) government on Taiwan
1949~1987 - Taiwan was under the martial law by KMT-led government. Only Mandarin was allowed to use in public.
1972 - Republic of China (Taiwan) left United Nations, and since then Taiwan has not received an official nation status.
1987 - Political environment changed to democracy. Local vernaculars started to be allowed to use in public, schools and mass media
1996 - The first multi-party democratic presidential election was held.
2001 - Taiwan government began to promote implementing local languages in education. 2019 - Taiwan government for the first time officially announced national languages (native languages).

## 1．2 Ethnic Background

The population of Taiwan is majorly comprised by four socio－cultural ethnic groups of people．Minnan people 閩南人（or The Hoklo鶴佬人），Hakka people 客家人，the Mainlanders外省人 and Austronesians（or Taiwanese indigenous people）原住民．Each of the groups has their own languages，cultures and traditions．According to the National Development Council（國家發展委員會），the ethnic structure of population reported by Lin，Huang and Li （2016：16）is the following：the Minnan people（70\％），Hakka（14\％），the mainlanders（14\％）， the Austronesians（ $2 \%$ ）and the total population is about 23 millions．The population for four groups and descriptions are summarized in Table（Table 1．1）．

| Ethnic Groups | Percentage of the population | Characteristics |
| :---: | :---: | :---: |
| Minnan people <br> 閩南人 <br> （or The Hoklo 鶴佬人） | $70 \%$ of the population | Together they are referred to＂Local Taiwanese 台灣本土人＂who have lived in Taiwan for several hundred years． Minnan people were from two counties of Fujian province |
| Hakka people <br> 客家人 <br> （or Hakka－ren） | $14 \%$ of the population | （福建省）：Zhangzhou（漳州）and Quanzhou（泉州）， whereas Hakka people were from Guangdong province （廣東省）in Southern China．Both were imported as local workers while Taiwan was under Dutch（1624－1662）and Spanish（1626－1642）co－occupation in the $17^{\text {th }}$ century and continued migrating to the island after Dutch rule． |
| the Mainlanders外省人 | $14 \%$ of the population | Most of them are Mandarin monolinguals．The term of Mainlanders is used to call the latest Chinese immigrants who came from mainland China after the Second World War and also for the generations who were born into the Mainlanders＇family． |
| Austronesians <br> （Taiwanese indigenous <br> people） <br> 原住民 | $2 \%$ of the population | Austronesians in Taiwan are also called＂Native Taiwanese＂，＂Taiwanese indigenous people＂or＂Taiwan aboriginal people＂．They are regarded as the aborigines of Taiwan，who are the first residence long before the $17^{\text {th }}$ century．The origin of aborigines is unknown． |

Table 1．1．Four ethnic groups of people in Taiwan

## 1．3 The Languages in Taiwan

As the majority of the population in Taiwan is originally from China，Taiwanese people speak a variety of Chinese languages．Before explaining each of the languages spoken in Taiwan，we would like to give a brief introduction to the Chinese languages and its varieties．

## The Chinese languages

Sinitic languages，commonly known as the Chinese languages，belong to the Sino－Tibetan language family．In the Chinese language group，there are at least seven branches of tongues including Mandarin，Min，Yue，Hakka，Wu，Xiang，and Gan．All Chinese languages are tone
languages and their written forms are logographic. Even though the varieties of the Chinese language group are written in the same Chinese scripts, some use combinations of a standard set of Chinese characters and Roman alphabets (such as Cantonese and Taiwanese) and some do not have a written form. Some of them are considered different languages because the differences between varieties of the Chinese language group may be mutually unintelligible not only in phonology but also in their written form (Mair, 2013). For example: the differences between Mandarin, Cantonese and Taiwanese can be aligned to a similar comparison between Spanish, Catalan and Portuguese.

From the resources given by DeFrancis (1990), and Li and Thompson (2009), the relationship of Chinese language and its varieties used in different regions are summarized in Figure 1.2. The same language can also be called differently an individual country. Mandarin is the major language group in Chinese languages, and it is an official language in many countries in Asia. Because of political boundaries and the historical background of each country, Mandarin is called by different names. For instance, Mandarin is called "Putonghua" in China, "gouyu" in Taiwan, "huayu" in Singapore and Malaysia. The differences between these varieties of Mandarin can be found in vocabulary or pronunciation. Mandarin speakers in different countries have a distinct accent. In Taiwan, there are loan words from Japanese and Southern Min into Mandarin. In Singapore, the inclusion of Malay terms in Mandarin is the main characteristic. Singaporean pronunciation of Mandarin is rather similar to Mandarin spoken in Taiwan because the majority of Chinese descendants in both Singapore and Taiwan were from the same southern provinces of China. Regardless the differences in accents and the use of vocabulary, Mandarin speakers from China, Taiwan and Singapore can understand each other perfectly. Similar criteria apply to speakers of Min from Southern China, Taiwan and Singapore, they can understand each other when speaking Min even though there are differences in the use of vocabulary and accents. It is the same case of speakers of Hakka in China, Taiwan and other south Asian countries when speaking Hakka. However, speakers of

Mandarin, Min, Hakka, Cantonese and other varieties of Chinese do not understand each other. The linguistic tree in Figure 1.2 presents the position of the main varieties of Chinese languages and its varieties.


Figure 1.2. A tentative family tree showing the position of Mandarin, Taiwanese and Hakka within the Chinese languages branch Sino-Tibetan (Source: summarized from DeFrancis (1990) and Li and Thompson (2009))

It is often contentious to name varieties of the Chinese language family as "language" or "dialect". The conflicts between the use of these two terms are mainly based on political
considerations．Some scholars use the term＂dialect＂（Li and Thompson，2009），others use ＂language＂（Cheng and Sybesma，2005）and another uses＂regionalect or regional speech＂ （DeFrancis，1990）to refer to these subdivided groups of Chinese languages．DeFrancis（1990： 57）uses＂regionalect＂to refer to the mutually unintelligible varieties of Chinese，and＂dialect＂ refers to mutually intelligible subvarieties of the regionalect．The widely used criterion to distinguish two terms is＂mutual intelligibility＂．If speakers of two language varieties do not and cannot understand each other，the varieties are considered as two different languages；and vice versa，if the varieties are mutually intelligible，they are considered dialects of the same language．However，Li Wei（2000：8）argues that it is problematic when using＂mutual intelligibility＂to differentiate language and dialect．For instance，in the case of Chinese languages，Mandarin，Cantonese and Hakka are so－called＂dialects of Chinese＂，but they are not mutually intelligible．In the case of Danish，Norwegian and Swedish，they are regarded as different languages，but speakers of these languages can understand each other．

Regardless the conflicts of the definition between the two terms，in this study，the decision has been to follow the commonly used criterion＂mutual intelligibility＂to call these subdivided groups of Chinese languages as＂languages＂for several reasons．First of all，all these varieties of Chinese languages are not only mutually unintelligible but also their phonology and vocabulary differ．Secondly，some of these subdivided Chinese languages are recognized as an official or national language in some states．For example，Mandarin is an official language in China and Taiwan，and it is also one of the official languages in Singapore．Cantonese is one of the two official languages in Hong Kong．

Later in this section，we mention three languages from the Chinese language group： Mandarin，Taiwanese and Hakka．The reason is that each of these three languages is a mother tongue to an individual ethnic group in Taiwan．The major language varieties today in Taiwan are Taiwanese，Mandarin，Hakka and Austronesian languages and together they are called native languages，mother tongues or local languages（台灣本土語言）．English accounts as the
first foreign language to learn at school and it attracts large attention in academic success and future upward mobility．

## 1．3．1 Taiwanese 台語

The origin of Southern Min derives from a province called Fujian（福建省）in Southern China．Southern Min is the mother tongue of Minnan people who gradually came into Taiwan since the $17^{\text {th }}$ century，and it has been commonly used for daily oral communication since then．In Taiwan，the term＂Southern Min＂is commonly called Taiwanese，Taiwan Hua 台灣話，Táiyu or Tâigì 台語．It also refers to Minnan Hua 閩南話（Feifel，1994）or Minnan Yu閩南語．Taiwanese has many loanwords from Japanese because of the 50 years of Japanese occupation in the first half of the $20^{\text {th }}$ century．

According to Klöter（2005：37），the earliest written form of Taiwanese is in Roman alphabet along with the adaptation of Chinese characters．Written Taiwanese has existed for more than four hundred years．Since the late $19^{\text {th }}$ century，Taiwan was under Japanese occupation for 50 years，and the written form of Taiwanese was influenced by Japanese kana． However，most of written Taiwanese is based on the Chinese character script．The diversity of written Taiwanese scripts was previously revealed by Klöter（2004）．Klöter specifically indicates that the representative resources of written Taiwanese，such as Taiwanese literature， textbooks or dictionaries＂can be divided into（a）the character script，（b）the Roman alphabet， and（c）mixed scripts＂．There is not a normative written form of Taiwanese due to the lack of official authorization and recognition for many years．The Ministry of Education in Taiwan launched an official online－based Taiwanese dictionary in 2011，called＂Dictionary of Frequently－Used Taiwan Minnan（臺灣閩南語常用詞典）＂．The dictionary provides audio files and illustrations for every possible word and contains more than twenty thousand words． This online dictionary is easy to use by entering either characters of Taiwanese，Roman alphabet or Mandarin Chinese words to carry out a search．

## 1．3．2 Mandarin／Gouyu 國語

In Taiwan，Mandarin is called guoyu（國語）．Mandarin is not only the official language but also a de facto lingua franca in Taiwan．It is the primary language of the Government and the sole medium of language instruction at school．Also，Mandarin is the first language of about 20 percent of the population，mainly in large cities（such as Taipei，the capital of Taiwan）．It is common for young generations to start learning Mandarin along with their mother tongue．The written system of Mandarin in Taiwan is traditional Chinese as in Hong Kong and Macao，while China and Singapore use simplified Chinese writing system．Besides the two written systems are used in different places，the main difference between the two is the appearance．Traditional Chinese has more strokes and more complicated while simplified Chinese has less strokes，even though both written systems are originally from the same Chinese characters．

## 1．3．3 Hakka 客語

Hakka is originated from Guangdong province（廣東省）in China．There is a considerable amount of Hakka－ren（Hakka people）in Taiwan，Singapore and other south Asian countries． In Taiwan，Hakka is mainly used at home in a few cities that are located in northwestern Taiwan，such as Taoyuan（桃園），Xinzhu（新竹）and Miaoli（苗栗）．According to Young （1988），the ethnic group of Hakka has the best command in using Mandarin and Taiwanese to communicate with the majority of people and other ethnic groups at work and social domains． However，it has been reported that the maintenance of Hakka in the family domain has gradually weaken and Hakka speakers are shifting to Mandarin（Feifel，1994：20）．

## 1．3．4 Austronesian languages in Taiwan 台灣原住民語

Austronesian languages in Taiwan have been referred as Malayo－Polynesian languages in former research studies（Kubler，1985；Chen，2010），Austro－Polynesian languages（Feifel，
1994) or Formosan languages (Li, 2000: 46). In Taiwan, Austronesian languages are also called aboriginal languages. The use of Austronesian languages is restricted to certain areas, usually in the mountains and villages, where only aborigines live. According to the Council of Indigenous People of Taiwan, there are 16 certified tribes speaking different varieties of Austronesian languages at present. Each tribe has its language, culture and traditions. Depending on the area aboriginal people are living in, neighbor tribes might understand some tribal phrases of each other. However, in the past decade, the young generations of aborigines in some cases have moved to the cities, and that consequently leads young children to face difficulties in preserving their heritage of cultures and languages. Nowadays, aborigines generally have a good command of Mandarin or Taiwanese to communicate with other ethnic groups of people.

### 1.3.5 English

English is learned as the first foreign language at school in Taiwan. It is the second or third language of young generations. High proficiency in English is associated with the idea of wider communication and international mobility. It opens many doors to better education and diverse job markets. English has spread to many parts of the world and it has become the lingua franca for global citizens. As a result, English is implemented as a subject in the curriculum at the very early stage of schooling. Particularly in the case of Taiwan, the status of English has outshined vernaculars over the past decade.

### 1.4 School Types and the Educational System

### 1.4.1 Regular School Types

In Taiwan, there are public state-funded schools and private fee-paying schools. All public and private schools are supervised by the Ministry of Education. Students enrolled in either a public or a private school have to study the same curriculum outlined by the Ministry of

Education and also have to sit for the public entrance examination. However, the major difference between public and private schools is the gap in financial support from the government and the need to pay tuition. Even though there are not many private primary schools and private junior high schools, there are many private senior secondary level schools and private universities. Traditionally, private senior high schools and private universities are seen as an option for students who did not do well in the entrance examination and their scores were not high enough to be admitted to a public school. Admission to a secondary high school and a university is according to the score resulting from entrance examinations. Due to the school ranking, elite schools are mostly public schools and parents favor their children to be admitted in public schools.

### 1.4.2 After-School Programs in Taiwan

Testing is very important in Taiwan and students' scores are seen as determining their future from a very young age. Due to the overvalue of students' test scores and the pressure on exam-driven learning, it is very common for Taiwanese students to receive an additional education after regular schooling hours. After-school programs usually take place in private academies, so-called cram schools. Cram schools are set up to help students to prepare for tests and give intensive drilling classes to help students to score higher in entrance examinations. There are two types of cram schools according to the school level: anchinban and buxiban. Anchinban, also called the daycare center, helps primary school students to complete their homework before parents pick them up. Students go to anchinban after regular schooling hours and sometimes can stay as late as 8 p.m. Teachers in anchinban assist and make sure students finish homework and help students to solve academic problems. Buxiban reinforces mostly essential subjects that are taught in regular schools and emphasizes helping junior and senior high school students to score higher in midterm exams and entrance examinations.

## 1．4．3 The Organization of the Educational System in Taiwan

The Ministry of Education is responsible for the development and implementation of educational policy at all administrative levels：national，provincial and county．The educational system is geared toward academic examinations．The current education system requires students to complete a 9 －year compulsory education，which includes 6 years of primary school（age 6 to 12 ）and 3 years of junior high school（age 12 to 15 ）．The majority of students go on to senior secondary education after completing junior high school education． The Taiwan government has planned to extend the compulsory education to a full 12－year program in 2018，but until today it has not yet officially applied．However，a new ＂Curriculum Guidelines of 12－year Basic Education（十二年國民基本教育課程綱要）＂was developed to replace the old 9 －year Compulsory Education and has started implementing national wide since 2018．At the current moment，schools in Taiwan follow the new Curriculum Guidelines of 12－year Basic Education．

All pupils are required to take the entrance examination，the so－called Comprehensive Assessment Program for Junior High School Students，in order to move on to Senior High School Education．This entrance examination is usually held in the last semester of the third year of junior high school．There are three options for pupils to continue the senior secondary education：a 3－year senior high school，a 3－year vocational school or a 5－year program at a junior college．Students，who complete their studies at a senior high school or a vocational school need to take a Joint University Entrance Examination if they wish to go on to study higher education．After the university entrance exam，students，who study at a senior high school，can go on to finish a 4 －year university education．Students，who study at a vocational school，are allowed to choose a 4 －year university or 2 －year junior college to obtain a bachelor＇s degree．Students，who complete a 2－year junior college or a 5－year junior college and wish to obtain a bachelor＇s degree，have to go to a 4 －year university and complete a 2 years study starting from the third year of the university program．Furthermore，students with
a bachelor's degree are required to take on an entrance examination in order to be admitted to a master's program. Even though the duration of a master's program lies between 1-4 years, most students complete their master's degree in 2 years. Students with a master's degree can be admitted to a doctoral program, which ranges from 2 to 7 years to complete. Based on the information given, the following has been developed to better present Taiwan's Education system (see Figure 1.3).


Figure 1.3. The Education system in Taiwan

## 1．5 Language in Education Policies

There are two semesters in one school year．The first semester starts in September and ends in January．The second semester starts in February，after the lunar new year＇s holidays， and finishes in late June．The Curriculum Guidelines of 12－year Basic Education indicates the curriculum structure for different stages of education，from primary school，secondary school to high school（see Table 1．2）．The language course includes Mandarin，local languages，and English．Each language is taught as a subject．Table 1.2 presents the curriculum structure．

| Curriculum Guidelines of 12－year Basic Education |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Educational stage |  | Primary school （6 years） |  |  | Junior high <br> school <br> （3 years） | Senior high school （3 years） |
| Grade |  | 1－2 | 3－4 | 5－6 | 7－8－9 | 11－12－13 |
| Typical age |  | 6－8 | 8－10 | 10－12 | 12－15 | 15－18 |
| Number of classes each day |  | 7 |  |  | 8 | 8 |
| Duration of one class |  | 40 minutes |  |  | 45 minutes | 50 minutes |
| Number of lesson breaks each day |  | 6 |  |  | 7 | 7 |
| Duration of one lesson break |  | 10 minutes（besides lunch break） |  |  |  |  |
| Language courses （number of classes per week） | Mandarin | 6 | 5 | 5 | 5 | 4－5 |
|  | Local languages <br> or Native <br> languages of new immigrants | 1 |  |  | Flexible， not regulated | Flexible， not regulated |
|  | English | － | 1 | 2 | 3 | 4 |
|  | A second foreign language | － | － | － | Flexible， not regulated | $\begin{gathered} 1 \\ \text { optional } \end{gathered}$ |

Table 1．2．Different stages of education and the curriculum of languages in education for all schools

In 2019，the Taiwan government announced a law：＂國家語言發展 Development of National Languages Act＂to include Taiwanese，Hakka，Austronesian languages and

Taiwanese sign languages as national languages of Taiwan. The goal of establishing this law is to maintain the development of local languages and the multicultural nature of Taiwan. Also, the act is to ensure that all Taiwanese citizens from different ethnic groups have equal rights to education and public services so that they can take pride in using their mother tongue. Since 2019, the Ministry of Education officially includes national languages in the 12-year National Basic Education. National languages become a compulsory subject in the regular school curriculum. Students are allowed to choose one of the national languages to learn, including Taiwanese, Hakka, Austronesian languages, and Taiwanese sign languages. In addition, as it has already been said, the Ministry of Education in Taiwan announced the New Immigrant Language Education policy in 2018, which was planned to start implementing one of the native languages of new immigrants in the school curriculum in 2019. The seven immigrant languages to be taught are Filipino, Indonesian, Vietnamese, Malaysian, Burmese, Cambodian and Thai. The program is designed as a required course in each grade at primary school for the second-generation immigrant students. At the junior high and senior high school levels, the implementation of the New Immigrant Language Education policy is flexible. It can be up to an individual school to decide whether they will regulate a local language or an immigrant language class in the curriculum according to their needs and accessibility of resources.

Moreover, the Second Foreign Language course is introduced at junior high and senior high school levels. It is designed as an optional language subject. According to the Curriculum Guidelines of 12-year Basic Education for the Second Foreign Language, selections of languages are Japanese, Korean, French, Spanish, or other European languages. Depending on the accessibility of resources at school, an individual school has the authority to offer a second foreign language course for a maximum of one hour each week. The aim is to cultivate students' interest in foreign cultures and to develop basic communicational linguistic
skills. Following the Common European Framework of Reference for Languages, the goal is to achieve linguistic proficiency at the A1-A2 level.

### 1.5.1 The National Language Policy-Mandarin

The medium of instruction policy draws on some features of Mandarin and its important status in Taiwan. Mandarin is not only the instructional language for all subjects at school, it is also learned as a language subject for literacy purposes. Among all language subjects of the language course in the Curriculum Guidelines of 12-year Basic Education, Mandarin dominates most hours of learning.

### 1.5.2 English in Education Policy

The purpose is to develop students' proficiency in English for effective international communication and to enhance students' interests in learning a foreign language and culture. English in Education policy was officially implemented in 2001. According to the Curriculum Guidelines of 12-year Basic Education by the Ministry of Education in Taiwan (2018), the English in Education policy was officially implemented in primary school. English is taught as a subject through the medium of Mandarin. Based on a top-down approach applying the guidelines of the English curriculum, at the primary level English teaching starts at year 3 and is focused on acquiring basic communication skills and developing learners' interest in foreign language and culture. Listening and speaking skills are the main aims of English learning at the stage of primary school while reading and writing are secondary. As the use of English has reached non-English speaking countries in the past decade, parents are aware of the fact that acquiring a good level of proficiency in English is important for their children's future opportunity of getting into better schools and job opportunities. Even though English is formally introduced from the third grade, most parents in Taiwan enroll their children in English teaching from kindergarten. Furthermore, going to private classes after school so as to
learn English in academies, so-called "buxiban", is a common phenomenon. These academies are set up in great numbers as English is the first foreign language to learn in the nation's educational curriculum. Parents enroll their children in academies both to adapt to the working schedule of the parents and also with the main purpose of enhancing students' English performance at the academic level. Promoting extra exposure to English outside school is a common English learning trend in Taiwan, and English education is much emphasized in both public schools and private institutions. Apart from the English schooling context, social exposure to English for communicative purposes is limited in Taiwan even though pupils have access to original English films, TV, and radio channels. In Table 1.3 we can see many differences between English in Education policy and its implementation.

| English in Education |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Policy | Implementation |
| Target students |  |  | All students | Same as policy |
| S <br> y <br> 1 <br> 1 <br> a <br> b <br> u <br> s | Year | Primary (P) | $3^{\text {rd }}$ grade $-6^{\text {th }}$ grade | $1^{\text {st }}$ grade $-6{ }^{\text {th }}$ grade |
|  |  | Junior high (J) | $7^{\text {th }}$ grade $-9^{\text {th }}$ grade | Same as policy |
|  |  | Senior high (S) | $10^{\text {th }}$ grade $-12^{\text {th }}$ grade | Same as policy |
|  | Hours/ week | Primary (P) | 1-2 hours | 1-6 hours |
|  |  | Junior high (J) | 2-3 hours | 3-5 hours |
|  |  | Senior high (S) | 3-4 hours | 3-6 hours |
| Textbooks |  |  | Standardized textbooks authorized by the Ministry of Education | varieties of textbooks from publishers, which are ed by the Ministry of Education |
| Methodology |  |  | Guideline teaching methods: <br> (1) adopt communicative approach <br> (2) attempt to use English as the medium of instruction | unicative approach and most classes use Mandarin as the of instruction (Even though private schools have CLIL ms , it is not very common to use as the medium of instruction in y stage of schooling.) |
| Teacher qualification |  |  | Qualified | ed or University graduate with lish major |
| Assessment |  |  | Regulated | as policy and additional ations |

Table 1.3. A comparison of English in Education policy and its implementation (Source: summarized from Chen (2006))

According to Chen (2006), most local state governments, in reality, give more English classes each week across all levels of education than the number of hours proposed by the government. In particular, most primary schools offer a minimum 40-minute period of English since the first grade because parents have positive attitudes towards learning English from a young age. In terms of textbooks, besides standardized textbooks, there are different sets of English textbooks from various publishers, which are all approved by the government.

Teachers have a rich selection of English textbooks to choose from in order to meet their students' needs. The teachers' assessment of students' English competences is usually based on oral and written examinations, which are offered by the local government. Additional English tests developed by individual English teachers are also used for the assessment.

In 2018, the Ministry of Education in Taiwan announced new plans to increase the number of hours of English teaching in response to the announcement of the "Blueprint for Developing Taiwan into a Bilingual Nation by 2030" by the National Development Council. In order to increase daily English use, plans include promoting Content and Language Integrated Learning (CLIL) and implementing teaching English and some subjects through the medium of English at the primary and secondary levels. Although putting the bilingual education policy into implementation at the national level is not yet fully carried out, a small scale of experiments of CLIL programs have already taken place in many cities, such as Tainan and Taipei. According to Chen, Kao and Tsou (2020), such experiments of CLIL programs at local individual schools were purposefully designed to help the Ministry of Education in Taiwan to formulate more appropriate guidelines.

### 1.5.3 Local Languages in Education Policy

The Mother Tongue Movement was firstly announced in 1993. The optional teaching of one of three local languages, also called native languages (Taiwanese, Hakka, and Austronesian languages), as a subject was formally implemented in the primary school curriculum in 1997. However, it was not until 2001 that the Local Language in Education Policy was implemented nationwide as a compulsory course at the primary school in all grade levels for a period of 40 -minute class per week. In junior high and senior high school levels, the implementation of the local languages in education policy is flexible. According to the Curriculum Guidelines of 12-year Basic Education (2018), depending on the ethnolinguistic backgrounds of the students at school, each school at a junior high level or a senior high level
can teach one of the local languages or one of the native languages of new immigrants as an optional language subject in the regular curriculum, one class a week. If a school finally teaches a language course of local languages or native languages of the new immigrants, the school can decide to organize these language courses at the weekends or during summer and winter school breaks for the students who are willing to attend.

The purposes of the Local Language in Education policy are to help develop students' understanding and interests in their own native culture and languages, to expand students' basic comprehensive skills for the use of local languages in the social environment at a macro level, and to foster respect for multilingualism (Tsao, 2008: 289). In addition, Chen (2006) wrote an article discussing the comparisons between English in Education policy and Local Language in Education policy and their implementations. Based on Chen's findings, Table 1.4 is organized and formed to present differences between Local Language in Education policy and its implementations.

| Local Language in Education |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Policy | Implementation |
| Target students |  |  | All students from primary to senior high schools | Only primary schools |
| Local languages offered |  |  | Optional one of three local/native languages: <br> Taiwanese, Hakka, one of the <br> Austronesian languages | Most schools offer solely Taiwanese. In particular cities in northwestern Taiwan, where Hakka descendants still reside, schools offer Hakka. In eastern Taiwan and some high mountain areas, schools offer one of the 16 tribal languages. |
| S | Year | Primary (P) | $1^{\text {st }}$ grade $-6{ }^{\text {th }}$ grade | Flexible implemented |
| y |  | Junior high (J) | Flexible | Not regulated |
|  |  | Senior high (S) | Flexible | Not regulated |
|  | Hours | Primary (P) | 1-2 hours | 0-2 hours |
| a | 1 | Junior high (J) | Not regulated | Not regulated |
| u | week | Senior high (S) | Not regulated | Not regulated |
| Textbooks |  |  | Sponsored by the ministry of <br> Education or local government | Not required to use textbooks in the classroom and the resources are limited. Most teachers develop their own materials as there isn't a standardized Taiwanese textbook. |
| Methodology |  |  | Communicative approach <br> Schools should teach four language skills (listening, reading, writing and speaking) and particularly focus on comprehension skills. | Varying approaches <br> Schools mainly focus on developing students' listening and speaking skills. |
| Teacher qualification |  |  | Qualified | Few qualified, most from different background with varying local language proficiency |
| Assessment |  |  | Not regulated | Not regulated |

Table 1.4. A comparison of Local Language in Education Policy and its implementation

Most primary schools offer Taiwanese and follow a minimum one hour per week subject lesson. As we can see from Table 1.4, the implementation of the Local Language in Education Policy has many difficulties. A few scholars identify challenges in implementing local language policy (Chen, 2006, 2010; Tsao, 2008; Dupré, 2014). Chen (2006) reports that the implementation of Taiwanese dominates other local languages in the Local Language in Education Policy. An issue that tags along with the situation is that a certain degree of resistance towards Local Language in Education policy may occur and that is the fear of oppression towards other minority languages. Chen recognizes several factors that prevent effective implementation of the policy. For example, the lack of native language resources and trained native language teachers. Moreover, the teaching of content and methodology were not clearly specified in the policy. The textbooks were not well-designed and sometimes not required to use in the classroom, which leads publishers to lack of interest in producing native language textbooks. Some schools do not offer local languages as a subject. There is also a lack of formal assessment on the acquisition of native languages in the curriculum. In a similar way, Dupré (2014) points out that fundamental issues of the difficulty in the development of local language education contribute to the fact that native languages are used less and less at home and in public in general. Some of these issues are the small amount of native language instruction at school, and the lack of use of local languages as a medium of instruction. Dupré (2014: 406) explains that "the established hegemony of Mandarin and its increasing economic importance in the region, combined with the growing emphasis on English as an international language, has considerably reduced the utility of local languages". Issues such as under-addressed ethnolinguistic identities, regional discrepancies, ineffective curriculum designs and implementation and interethnic distrust lead Taiwan's multilingual education to remain troublesome. These challenges have made local languages to be learned as "the second language rather than mother tongues" (Dupré, 2014: 403). On the other hand,

Dupré also considers that the ruling party in the government has a tremendous effect at a critical level on the development of local language by granting or cutting funds.

In sum, due to its history, the linguistic situation is complex. Even though Taiwan has a diverse ethnocultural society, its multilingual education faces many challenges. As a whole, the implementation of English is far more consistent with English in Education policy than the implementation of local languages with Local Language in Education policy. Regarding the material resources and qualified teachers, the English in Education policy is more systematically planned by the central government. The guidelines of English in Education policy are clearly regulated and designed. On the contrary, the Local Language in Education policy has limited resources and a qualified teaching body, which was seen as the main obstacle to policy implementation (Tsao, 2008). Tsao (2008: 288) also identifies a few tasks that local language implementation needs but have not yet completely developed. Some of these tasks are to form Taiwanese studies faculties, "short-term training programs", and "a teacher certification system". In the case of hours of teaching, the increasing hours of English teaching at school shows that English is highly valued at the international and national level. On the other hand, local language subject classes are not implemented in all schools. Schools seem to meet the minimum requirement of the Local Language in Education policy. Guidelines in the Local Language in Education policy are vague and not specifically regulated; therefore, schools have different interpretations and that leads to inconsistent implementations.

In addition, the promotion of English learning in Taiwan has been advocated even louder recently. As a matter of fact, in June of 2020, Taiwan News reported that the current president of Taiwan, Tsai Ing-Wen, announced that the "2030 Bilingual Country Project" will soon be launched. This project was originally proposed by the National Development Council in December of 2018 and aims at having English as a second official language. The Taiwan government aims to increase the number of class hours devoted to English and to train subject
teachers to teach through the medium of English. The project is seen to optimize Taiwan's competitiveness in the international arena and to create better opportunities for national and international career development. However, since the announcement was released, there had been many criticisms because there is no clear definition of what type of "bilingual/multilingual education" is in the case of Taiwan. The guidelines of the "bilingual education" policy are still under discussion and not yet completely developed. In terms of Local language in Education policy, the ruling party in the government is believed to have tremendous effects on the development of the policy implementation by granting or cutting funds. Issues relating to under-addressed ethnolinguistic identities and interethnic distrust are considered important factors that lead Taiwan's multilingual education to remain challenging (Dupré, 2014).

## CHAPTER 2. THEORETICAL FRAMEWORK

### 2.1 Bilingualism and Multilingualism

Bilingualism and multilingualism have been described at different levels (Baker, 2006; Fishman, 1980; Hamers and Blanc, 2000; Cenoz, 2013). A widely used definition of bilingualism focuses on the use of languages instead of emphasizing on language proficiency (Grosjean, 2012). According to Grosjean (2012), "bilinguals are those who use two or more languages (or dialects) in their everyday lives" (p. 4). Another term used to define bilingualism is balanced bilingualism, which refers to the idea that individuals are equally competent in two languages in all domains. Grosjean (2010) refutes a common myth, which is to think that "bilinguals have equal and perfect knowledge of their languages" (p. 20). He explains that bilinguals use their languages for different purposes, and they do not have equal competences and the same control of two languages. For instance, a bilingual person can be able to speak and understand a language but does not have the ability to read or write in that language. Similarly, García (2009) also rejects the traditional conception of bilingualism and states that "the languages of an individual are rarely socially equal, having different power and prestige, and they are used for different purposes, in different contexts, with different interlocutors" (p. 45).

Grosjean (1982) suggests a holistic view of bilingualism because a bilingual person develops his/her language competences in two languages according to the social context and speech communities where they learn to use the languages. Therefore, bilinguals should not be seen as the sum of two monolinguals or the sum of two monolingual competences. Bilinguals have different linguistic competences in two languages and also have the ability to use the two languages freely or creatively in their everyday life. Grosjean's (1982) holistic view of bilingualism is commonly accepted and further adopted by scholars (Cook, 1992; Jessner, 1997; Canagarajah, 2011). Following this holistic view, individual bilingual language users have different and unique patterns in their languages use. Depending on the contexts, the
interlocutors, and the needs to communicate, bilingual speakers select different elements of the languages strategically to communicate effectively (Canagarajah, 2011). In a similar vein, Cenoz and Genesee (1998) propose that "multilingual may need all the components of communicative competence in total, they do not necessarily and often do not need to develop all competencies to the same extent in each language" (p. 19). For example, a multilingual speaker may not use the target language in the community or at home, but the target language can be used mainly in the school domain. Then the multilingual speaker may acquire competencies at the academic level only. As a result, multilingual competence is dynamic and it is not simply the sum of multiple monolingual competencies. The language competence of a multilingual person can change over time due to the multilingual speaker's communicative needs in a multilingual community.

In the viewpoint of Cenoz and Genesee (1998), multilingualism is more complex than bilingualism but some scholars (Baker, 2006; García, 2011) tend to link the term bilingualism together with multilingualism. Multilingualism in a broader sense is the use of more than one language. It can refer to an individual level or to a societal level. In many parts of the world, it is common to see that the use of more than two languages takes place in everyday life. Multilinguals use languages in different social contexts for different purposes, and sometimes the use of each language is different depending on many variables, such as the speech community, the type of multilinguals, the languages of interlocutors, or the functions of the languages. According to Cenoz and Genesee (1998: 16):
"Multilingual acquisition and multilingualism [...] implicate all the factors and processes associated with second language acquisition and bilingualism as well as unique and potentially more complex factors and effects associated with the interactions that are possible among the multiple languages being learned and in the processes of learning them. Like bilingual acquisition and bilingualism, multilingual acquisition and multiculturalism are complex because they can occur simultaneously or successively,
formally (through instruction) and naturally (outside school), and in childhood, adolescence, or adulthood. The socio-cultural status of each language along with the languages' respective roles and functions in society can contribute additional complexities."

In addition, Cenoz (2013) wrote an article on defining multilingualism from different perspectives, which shows the complexity of multilingualism. In particular, Cenoz looks at three dimensions to discuss the definition of multilingualism: the individual versus social dimension, the proficiency versus use dimension and the bilingualism versus multilingualism dimension. In the first dimension: the individual versus social dimension of multilingualism, Cenoz points out that multilingualism is a multilayer phenomenon at the individual level when considering "an ability of an individual" and at the societal level when referring to "the use of languages in society" (p. 5). The degree of an individual's multilingualism can vary due to each multilingual's experiences of acquiring and using languages that are unique in his or her own way. At the societal level, there are two types of multilingualism to consider: additive and subtractive multilingualism. Lambert (1974) was the first to distinguish additive bilingualism and subtractive bilingualism. Additive bilingualism is a situation where an individual language speaker's additional language is added into his or her first language without neglecting the values nor the importance of the first language. Subtractive bilingualism is to describe a situation where a multilingual person's additional language eventually replaces his or her native language. As a result, additive bilingualism is associated with positive cognitive development and it can benefit the acquisition of a later learned language, while subtractive bilingualism is associated with negative cognitive outcomes. An example of an additive bilingual situation is in the Basque Country. Cenoz and Valencia (1994) found that Basque-Spanish bilingual students, who either have Basque or Spanish as their first language and all receive education through the Basque language, outperformed monolingual Spanish students in the English language tests. In this region, Spanish is the dominant language and
widely used in the street. Even though students who have Spanish as the first language and learn Basque as a second language, the second language does not replace the first language. Thus, several studies (Cenoz and Valencia, 1994; Thomas, 1988; Swain, Lapkin, Rowen and Hart, 1990) report that using the minority language as a language of instruction at school brings bilingual students beneficial effects, such as cognitive advantages and positive effects on the multilingual acquisition. The second dimension of multilingualism pays attention to the proficiency and use of languages at individual and societal levels, which is related to the first dimension. When discussing individual multilingualism, an individual's linguistic competence is often considered. However, it is not easy to determine if a person is bilingual or multilingual based on whether he or she is equally fluent in all his or her languages (Baker, 2011). From the use dimension, Cenoz (2013) mentions that to define a multilingual individual, the use of two or more languages in the speaker's daily life is often "the main characteristic" (p. 6). The third dimension is related to the use of two terms: bilingualism and multilingualism. Cenoz comments that the differences between bilingualism and multilingualism are not always clear. A few examples are provided in Cenoz's article. For instance: some scholars (De Groot, 2011; Kemp, 2009) use the number of languages an individual is able to speak to determine whether he or she is a bilingual (a speaker of two languages) or a multilingual (a speaker of three or more languages). Cook and Bassetti (2011) use bilingualism to refer to "two or more languages". Aronin and Singleton (2008: 2) consider bilingualism "a particular instance" of multilingualism, which for them refers to two or more languages.

One of the concepts related to a holistic view of multilingualism which is widely used nowadays is translanguaging. Translanguaging can be understood from different perspectives and it is often associated with bilingualism and multilingualism. The term translanguaging was firstly used in Wales by Cen Williams in the 1980s, and it refers to a pedagogical practice where teachers use strategies to alternate languages for input and output purposes in the classroom. English and Welsh are used for different classroom activities such as reading in one language
and writing in another. Baker (2001) uses the term to describe this pedagogical practice which involves more than one language switching in a bilingual classroom. Later, García (2009) extends the concept and defines translanguaging as "multiple discursive practices in which bilinguals engage in order to make sense of their bilingual worlds" (p.45). According to this definition, translanguaging can be found not only inside the classroom but also in other contexts. Especially translanguaging occurs often in the home domain where family members with different degrees of abilities construct effective communication. Sometimes, children from minority language communities play an important role as translators in the family because their parents might not be able to understand the majority language. According to García, translanguaging is a strategy that bilingual speakers use to make meaning and sense of the use of their languages in everyday life including at school, home, and street. Other important functions that translanguaging provides are "to construct understandings, to include others, and to mediate understandings across language groups" (García, 2009: 307-308). The term "translanguaging" is also described by Baker (2011) as "the process of making meaning, shaping experiences, gaining understanding and knowledge through the use of two languages" (p. 288).

Translanguaging is often discussed in comparison to code-switching. According to García and Li (2014), there are differences between translanguaging and code-switching. The origins and concepts of the two are different. Translanguaging is about having a single repertoire and using features from the repertoire for effective communication, and code-switching is the alternation of two different languages with two grammatical systems. García (2009: 50) argues that code-switching often requires bilinguals to have sophisticated linguistic skills and speak both languages fluently. Bilingual speakers know the differences between languages and have the ability to select one language from their linguistic repertoire to urge interlocutors to engage in the conversation.
"Translanguaging differs from the notion of code-switching in that it refers not simply to
a shift or a shuttle between two languages, but to the speakers' construction and use of original and complex interrelated discursive practices that cannot be easily assigned to one or another traditional definition of a language, but that make up the speaker's complete language repertoire" (García and Li, 2014: 22).

In an interview García had with Grosjean in 2016, she explained that from a linguistic and cognitive perspective to view translanguaging, which is based on a concept proposed by Grosjean (1985), it is not a simple combination of two monolinguals. Bilinguals have the ability to choose certain features of a language and when to use it in a specific context for a certain purpose. From an external social perspective to view bilinguals' language practice, it may be hard to differentiate code-switching and translanguaging, but looking from the internal perspective, translanguaging is very different from code-switching. In García's view, translanguaging "is more than going across languages; it is going beyond named languages and taking the internal view of the speaker's language use" (p. 1). As García goes on to explain in the interview that translanguaging "legitimizes the fluid language practices with which bilinguals operate" and "posits that bilinguals have a much more complex and expanded repertoire than monolinguals" (p.1).

In education, translanguaging can be used pedagogically in the classroom for teachers and students to perform bilingually, and it is not simply translation. Williams (2002) suggests that translanguaging is a cognitive process of the interchange of students' two languages and it is possible to be triggered by teachers' use of languages in the classroom. Students are more likely to use their stronger language to develop their weaker language. According to Vogel and García (2017), "translanguaging pedagogy has the potential to transform relationships between students, teachers, and the curriculum" (p. 10). Cenoz and Gorter (2017) combine the concepts of translanguaging from different perspectives and further state that translanguaging refers to both pedagogical and spontaneous language practices. Pedagogical translanguaging is used by teachers as a pedagogic activity in the classroom. Spontaneous translanguaging refers to
multilingual speakers juggle between languages and use their resources of the whole linguistic repertoire inside and outside of the classroom. The use of translanguaging strategies can empower and enhance students' learning in the classroom. Translanguaging can also enhance the use of bilinguals' cognitive and linguistic resources and achieve greater progress (Baker and Wright, 2017: 221). Baker (2011) discusses four potential educational advantages of translanguaging and highlights the importance of its practice. Firstly, it may promote a deeper and fuller understanding of the subject matter. Secondly, it may help the development of the weaker language. Thirdly, it facilitates home-school links and co-operation. Fourthly, it may help the integration of fluent speakers with early learners. Baker states that translanguaging may not only help students to gain a deeper understanding of the subject matter but also help students to develop competence in their weaker language. These claims associated with translanguaging are interesting but more evidence is needed to confirm the advantages of translanguaging in educational contexts.

Furthermore, Baker and Wright (2017) point out that not all bilinguals have fair chances to use all their language disposal on a day-to-day basis, and that is when language choice appears. Sometimes a bilingual opts to use one language over another and other times s/he uses both languages at the same time in the same conversation. Baker and Wright explain that a bilingual's language choice is related to his or her attitudes and preferences towards each language (p. 5). In a conversation, bilingual speakers are able to switch languages because they may perceive the preference of one language used by the interlocutor.
"An individual may also switch languages, either deliberately or subconsciously, to accommodate the perceived preference of the other participant in the conversation. A language switch may be made as one language is regarded as the more prestigious or the more appropriate language the other person. To gain acceptance or status, a person may be deliberately and consciously use the majority language. Alternatively, a person may use a minority language as a form of affiliation or belonging to the group" (Baker and

Wright, 2017: 6).
Li Wei (2010) investigated the creativity and criticality of multilingual practices of three young Chinese university students in London. These three young men use their multilingual resources to create a multilingual space to enhance friendship, to have more social connections with people and to seek for personal benefits. Li refers to this interactional multilingual space as "translanguaging space" and it is "a space for the act of translanguaging as well as a space created through translanguaging" (p. 1223). A multilingual speaker uses strategies to apply their linguistic resources in order to connect with others. Language mixing behavior shows the preference and a part of the multilingual identity of a multilingual speaker. Multilinguals can creatively use their languages to make sense of themselves and to accommodate to their audience, and they do not necessarily confine to only one identity or culture.

Another field of research that is attracting growing attention and relates to multilingualism is the linguistic landscape, which focuses on the written languages display in public space (Landry and Bourhis, 1997; Gorter, 2006; Shohamy and Gorter, 2008). Languages are everywhere you see. They are in the street, on the windows, buildings, shops, menus, advertising billboards. The languages that are displayed in words and images in the public environment, which often refer to Linguistic Landscape (Bourhis \& Landry, 2002). The definition of linguistic landscape (LL) given by Landry and Bourhis (1997: 25) is commonly accepted and used in much linguistic landscape research as "the language of public road signs, advertising billboards, street names, place names, commercial shop signs, and public signs on government buildings combine to form the linguistic landscape of a given territory, region, or urban agglomeration". Bourhis and Landry state that LL is an important indicator to reveal and provide information about certain places, which are linguistically contested. Many studies of linguistic landscape have taken place particularly in the cities around the world, for instance, in Tokyo (Backhaus, 2006), Israel (Ben-Rafael et al., 2006), Bangkok (Huebner, 2006), and Donostia-San Sebastian in the Basque Country (Spain) and Ljouwert-Leeuwarden in Friesland
(the Netherlands) (Cenoz and Gorter, 2006). These studies present that the multilingual signs which tend to include English as one of the languages are usually motivated by economic purposes. The spread of English is further indicated as the result of globalization. Furthermore, languages in various spaces attract scholars to study the interpretation of the languages on signs with creative representations. Such as colorful images, the size, and location of the words on signs and the sounds of the objects. In the urban era, the advancement of technology has made the whole linguistic landscape expanded to a wider dimension and accessible everywhere in the world. Languages on signs in the public area not only present the identity of the designers, shop owners, or official representatives but also create a space for languages to interact in a certain society. In many cases, English is often involved in multilingualism in different parts of the world, especially the presence of English can be observed in the street signs (Cenoz and Gorter, 2017).

### 2.1.1 Bilingual and Multilingual Education

In many parts of the world, children use more than two languages in their everyday lives. It has become a norm that increasingly school children learn and use other languages at school than their mother tongue which makes students become bilingual or multilingual. Bilingual education is a complex phenomenon, and it is not just the use of two languages in education. Many countries have two or more languages as official languages, such as Singapore, India, Luxembourg, and there is an increasing number of multilingual speakers in the world. There are various types of bilingual education models that are related to the status of languages, the home languages, the language of the classroom or the composition of the school children. These sociolinguistic variables can influence the success of these educational programs.

According to García (2009), bilingual education is different from the traditional additional language education program, which aims to use only one target language as the medium of instruction. Bilingual education is referred to as the use of two languages in the educational
system, and these two languages are used as the medium of instruction. One of these two languages can often but not always be the students' first language (Baker, 2006; García, 2011). However, in different countries, bilingual education is used for different purposes and can refer to different programs. García (2009) explains that bilingual education in the U.S. is often linked to the programs for immigrants, whose first language is not English, and especially for the speakers of Spanish. Bilingual education in Canada and in particular French-English immersion programs aims at teaching the two official languages of Canada. In Europe, bilingual education in some countries and regions refers to the use of two or more languages in instruction, for example: in Wales and in the Basque Country. The term CLIL, which refers to "Content and Language Integrated Learning", was originated within the European Union in the 1990s and has had an important development. The concept of CLIL aims at intensifying the presence of an additional language in the curriculum including content subjects. Cenoz, Genesee and Gorter (2013), who look at CLIL from various perspectives, such as goals, teachers, students, and pedagogical issues, discuss different definitions and scope of CLIL, that have been used in and outside Europe.

In the viewpoint of García (2009), bilingual education is an integrated vision, which goes beyond "one plus one equals two" (p. 5). She uses the term "bilingual education" to refer to "education using more than one language, and/or language varieties, in whatever combination" (p. 9), and it includes "trilingual and multilingual education". Baker and Wright (2017) suggest that the term "bilingual education" is somewhat unclear because it is often used to refer to the education of two kinds of bilingual students. The distinction is between "(a) a classroom where formal instruction fosters bilingualism and (b) a classroom where bilingual children are present, but bilingualism is not promoted in the curriculum" (p. 197). Baker and Wright (2017) develop a typology of program models for bilingual education (p. 199). They provide eleven different types of bilingual education. The types of bilingual education are mainly described in three categories: "monolingual", "weak bilingual", and "strong bilingual". The different types
of bilingual education are related to the type of child, the medium of instruction, the societal and educational aims, and the language outcomes of the programs. The typologies of bilingual education can be used in primary education, secondary education, and even at the university. However, considering the limitation of the typologies, not all school examples can be categorized into one simple typology.

Cenoz (2009) argues that multilingual education is even more complex than bilingual education considering many combinations of languages and contexts. Cenoz (2009) proposes a definition to refer to multilingual education, which is "teaching more than two languages provided that schools aim at multilingualism and multiliteracy" (p. 32). She explains that it is indeed difficult to draw a clear line between bilingual education and multilingual education because there are several variables to take into account, such as an additional language involved, curriculum designs, and the languages that engaged in a social environment. As Cenoz (2009) points out, when defining bilingual or multilingual education there are two main considerations to take into account: "whether the school aims at bilingualism or multilingualism or whether the school is called bilingual or multilingual because students speak different home languages" (p.26). Earlier some scholars attempted to create typologies of multilingual education (Beardsmore, 1993) and trilingual education (Ytsma, 2001). Cenoz firstly used Ytsma's typology to look at features of Basque primary education and found that the typology is useful but somehow limited because it only looks at three aspects of trilingualism: linguistic context, linguistic distance, and the program design. In the Basque Country, some schools are located in a bilingual area and some are in a monolingual area. Depending on the geographic area a school is located, either Basque or Basque and Spanish both can be the language or languages of instruction, and in some cases, English is added as an additional language of instruction and is introduced as a third language in the curriculum. The linguistic distance among the three languages: Basque, Spanish, and English, can be regarded as non-related languages according to the origins of the three languages. However,

Cenoz argues that when looking at languages in contact along with the history of the Basque Country, the evidence on the influence from Spanish to Basque makes the label "non-related" questionable. Apart from that, Cenoz also points out that using simultaneous exposure to three languages to describe Basque primary education is also troublesome. In some cases, Basque children are exposed to English at the age of four before they learn Spanish. Other Basque children have contact with Spanish at daycare or pre-primary school when they have their first contact with English at the age of four. In sum, Cenoz commented that even though Ytsma's typology is useful, the limitations described above make it difficult to apply a specific case of trilingual school to Basque primary education due to the reality is complex.

Therefore, Cenoz (2009) proposed the continua to look at features of multilingual education in a more appropriate way. Cenoz's "Continua of Multilingual Education" model, which is related to Hornberger's (2008) continua of biliteracy, contains three types of variables: specific educational variables, linguistic variables, and sociolinguistic variables. The model presents the features of multilingual education as a two-way arrow, to describe different situations as "less multilingual" or "more multilingual" (Cenoz, 2009: 34). The interaction among these three types of variables is important to take into account when categorizing multilingual education in a place where there is a high degree of societal multilingualism and there are also many languages used in education. Cenoz discusses different types of multilingual education and particularly takes the Basque Country as an example to explain how complex a type of multilingual education can be.

According to a typology of trilingual education in primary school proposed by Ytsma (2001), there can be two types of education in Taiwanese primary education (see Table 2.1).

## Type 1:

1. Linguistic context: bilingual area
2. Linguistic distance: two related languages (Mandarin and Taiwanese or Hakka) and one non-related language (English)
3. Program design: simultaneous trilingual program

## Type 2:

1. Linguistic context: bilingual area
2. Linguistic distance: three non-related languages (Mandarin and one of Austronesian languages or one of the native languages of new immigrants, and English)
3. Program design: simultaneous trilingual program

Table 2.1. Types of education in Taiwanese primary schools (Source: based on Ytsma, 2001)

Even if these two types of education can be distinguished, the features of Taiwanese, Hakka, Austronesian languages, and native languages of new immigrants are complex and do not fit completely in this typology. For instance, some schools might have two kinds of programs at the same time because of the composition of the students and the geographical area where schools are located. In other cases, some schools in the rural area or high mountains might not offer local languages or immigrant languages classes due to the lack of accessibility to resources. Although it is true that Taiwanese primary schools are in a bilingual area where students are mainly exposed to Mandarin and Taiwanese, the use of target language depends on the environment where students live (geographically talking in the rural or city area, the use of the target language would increase or decrease) and also largely related to students' social circle.

In Taiwan today, most children have Mandarin and one of the local languages or one of the native languages of new immigrants as home languages. In the case of some children, they only know Mandarin and their home language gradually shifts to Mandarin. However, some of the characteristics of the educational stages are different (see Figure 1.3). Based on different stages of education and the curriculum of languages in education for all schools (see

Table 1.2), we then go on and discuss the type of education each stage accordingly in the following.

First of all, the primary school stage in Taiwan includes six years of study. Mandarin is the main language for instruction. One of the local languages is taught as a language subject through the medium of that language. Local language teaching aims at multiliteracy and multilingualism. English is implemented in the third grade in primary schools, although most primary schools begin teaching English in the first grade and many children have already been exposed to English before entering primary school. In recent years, the local government in Taiwan in different districts began to promote Content and Language Integrated Learning (CLIL) at the primary level. The aim is to increase the exposure to English and help students to acquire English rather than using the traditional approach, which is to focus on grammar so as to pass exams. However, even though some cities, for instance: Taipei and Tainan, have begun to take on the CLIL approach since 2016, it is not yet implemented national wide at the primary level at this moment. Therefore, when taking other educational factors, such as the age of introduction of a language, teaching methodology, the language or languages used for communication with teachers or linguistic landscape inside the classroom into account, it adds diversity to Taiwanese primary school types. In fact, it is difficult to fit Taiwanese primary education into a specific typology of multilingual education.

Secondly, the junior high school stage is a three-year program, where Mandarin is used as the main language instruction for all subjects including the subject English. English is taught for three sessions per week, each session is a period of a 45-minute class. Depending on the individual school authority, one to two additional sessions of English teaching could be added per week. According to the Local Language in Education policy, local language learning is not a compulsory subject. However, some schools are exceptions that have implemented one of the local languages as an optional subject, one session a week for a period of 45 minutes. The same applies to the New Immigrant Language Education policy, as the implementation is
not regulated as a compulsory subject, individual schools can decide to offer it or not according to their students' needs. It is reported that in 2019, there were 7 junior high schools in Kaohsiung city offering one of the native languages of new immigrants in the regular curriculum as an optional subject, one session a week for a period of a 45-minute class (Wang and Meng, 2019).

Thirdly, a 3-year program is included in the senior high school stage. Mandarin is used as the sole instructional language for all subjects. English is learned as a language subject for four sessions per week, each session is a period of a 50 -minute class. As in the case of the junior high school stage, an additional one to two English classes per week could be added in the regular curriculum, which is up to the individual schools to decide. Local languages and immigrant languages are not regulated in the regular curriculum as compulsory subjects, but in some schools, they are offered as optional language subjects. Thus, at the senior high school stage, a second foreign language is offered in the curriculum as an optional subject aiming at multiliteracy and multilingualism. Some schools implement a second foreign language in the regular curriculum as a compulsory language subject, one session per week, for a period of the 50 -minute class. For instance, a senior high school located in Taoyuan (Taoyuan Municipal Dayuan International Senior High School, it is a public school although its official name is "international school") has started to regulate a second foreign language as a compulsory subject since 2010. Students in this school must choose one of the second foreign languages from the following languages: Japanese, French, German, and Spanish. This second foreign language is taught two sessions per week, each session has a period of a 50-minute class. Taiwanese senior high schools in some cases can be considered as a bilingual model and in other cases can be considered as multilingual education.

Due to the complexity of bi/multilingual education in Taiwan, "The Continua of Multilingual Education" proposed by Cenoz (2009) can be used so as to analyze the degree of multilingualism at different levels: educational, linguistic and sociolinguistic (see Figure 2.1).

Each of these levels can be analyzed as being more or less multilingual on each of the continuum.


Figure 2.1. Continua of multilingualism (Cenoz, 2009)

## Educational variables

There are four dimensions to consider: subject, languages of instruction, teacher, and school context.

Firstly, subject. In Taiwan, at the primary stage, all languages in the curriculum are school subjects. There might be a difference between schools because some schools might have three languages as school subjects and others might have more than three (Mandarin, English, one of the local languages, and one of the native languages of new immigrants). At the junior high school stage, all schools have Mandarin and English in the curriculum, and only some schools might exceptionally have three languages as school subjects (Mandarin, English and one of the local languages or one of the immigrant languages). At the senior high school stage, all schools have Mandarin and English in the curriculum as school subjects. Some schools might
have three or more than three languages as school subjects (Mandarin, English, and in some cases Japanese, French, German, or Spanish). We can see that the primary and the senior high school stages are towards more multilingual than the junior high school stage is. Different schools might stand on different positions along the continuum because some are more multilingual than others. In particular, those schools that carry out CLIL programs, are towards the more multilingual end of the continuum than other schools that only teach languages as subjects.

Secondly, languages of instruction. Taiwanese primary schools have two languages of instruction, usually Mandarin, and one of the local languages or more than two languages in the case of schools that have native English teachers. At the junior high school stage, the majority of schools use Mandarin as the main medium of instruction for all subjects, yet in the case of some schools, there might exceptionally be two languages used as the languages of instruction (Mandarin and one of the local languages or English). At the senior high school stage, schools might have two (Mandarin and English) or more languages (Mandarin, English and in some cases Japanese, French or Spanish) used as the medium of instruction. There are differences when schools are compared regarding how multilingual they are. Schools that have more languages of instruction have a more multilingual position in the continuum.

Thirdly, teachers. Depending on the proficiency of the teachers in local languages, immigrant languages, and English and their specific training, teachers in Taiwan vary in different positions on the continuum. Some CLIL programs have started in some primary schools in specific districts but the training of teaching the subject through English is still in the process of developing because CLIL programs are new in the Taiwanese education system.

Fourthly, school context. Mandarin is the main language for instruction in all school stages. The languages used at school among teachers, students and school staff vary according to the geographical area schools locate. The dominant language of communication in the school
context is usually Mandarin, although sometimes Taiwanese and English are used in some cases. In terms of written texts in school, there can be other languages, such as English, Taiwanese or Japanese, used in posters, although it is limited. Therefore, Taiwanese schools are not very multilingual in the school context and can be placed towards the "less multilingual" end of the continuum.

## Linguistic Distance

Comparing different schools according to the languages taught at school, there is not a big difference at the primary school level because all schools include Mandarin and English and one of the local languages and in some cases one of the native languages of new immigrants. There is the linguistic distance among the languages but mainly with English. At the junior high school stage, the situation is similar. And concerning senior high school stage, schools that have a different second foreign language as a compulsory subject, their positions on the continuum might differ depending on the languages taught and the linguistic distance among them. Apart from Mandarin and English in some cases, Japanese, German, French, and Spanish are also taught.

## Sociolinguistic variables

When looking at the relationship between sociolinguistic variables and the types of school, there are macro and micro levels to consider. In Taiwan, there are some general aspects at macro levels, such as the status of Mandarin, English, and local languages and the use of languages on media. Mandarin has a high status because it is the country's official language and also the lingua franca for interethnic group communication. The use of Mandarin is dominant in almost all social domains and in the media while the use of local languages is mainly limited to the home domain and some specific geographic areas. Internationally speaking, Mandarin also has a higher status than Taiwanese, Hakka, and Austronesian languages. On the other hand, in spite of the high status of English at the international level, the use of English in daily life in Taiwan is limited. The use of languages in the public space
is another important dimension to take into account. Multilingual schools (Mandarin, English, and one of the local languages) are located in cities where Japanese, Korean, and other foreign languages are often seen on the signage in the street. The public space near schools located in rural areas is less multilingual. Cenoz (2009: 55) points out that "schools located in areas where more languages are used in the macro and micro context will be placed towards the more multilingual end of the continua". In the case of Taiwan, there are important differences and schools can be placed in different positions along the continua.

In sum, the Taiwanese education system at three school levels has different language practices. Schools located in different local districts may have different regulations on the language implementation in the regular curriculum, and that results in schools having different positions towards more multilingual or less multilingual on the continuum. The main differences between the three levels of Taiwanese education are in educational variables.

### 2.2 Language Attitudes and Linguistic Identity

### 2.2.1 Language Attitudes

Attitudes cannot be directly observed as a person's feelings and thoughts are hidden. An attitude is constructed by the previous experiences, the behaviors that influence thoughts, and the behavior towards the objects that are relevant. Baker (1992) highlights the importance of attitudes: "in a life of a language, attitudes to that language appear to be important in language restoration, preservation, decay or death" (p. 9). An early definition of attitude is from a psychological perspective:
"A mental or neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (Allport, 1935, cited in Baker, 1992: 11).

Gardner (1982: 132) points out that the importance of Allport's definition of attitude is that an attitude can influence but not determinate objects or situations. A similar definition proposed
by Ajzen (1988: 4) is the following "a disposition to respond favorable or unfavorable to an object, person, institution, or event". Objects that relate to languages can be grouped as language varieties, minority languages, language speakers, speakers' language behaviors. These two similar definitions indicate that attitudes influence an individual's reaction or behavior to an object or a situation. Garrett (2010: 20) concludes that an attitude can be considered as an evaluated orientation towards a social subject, such as a language or a language policy. In the case of language learning, the attitudes are evaluative reactions towards the activities of learning languages (Cenoz, 2001: 38). To Baker (1992), the meaning of attitude is "a hypothetical construct used to explain the direction and persistence of human behavior" (p. 10). Cenoz (2001: 38) points out that there are three types of responses led by attitudes: affective, cognitive, and behavioral responses. The affective response involves emotions that relate to the speaker's attitudes toward language varieties. Cognitive response refers to the influence of language attitudes on an individual bilingual speaker's view of a certain experience. Behavioral response regards the influences of language attitudes on the use of a certain language or languages.

An important step in the study of language attitude was the study by Gardner and Lambert (1972) in investigating the role of attitudes and motivation in second language learning. Since then, different research studies investigating language attitudes have been carried out in relation to language use, language preference, language learning community, and language learning process (see for example Bernaus \& Gardner, 2008; Al-Hoorie \& MacIntyre, 2019). Gardner (1985) focuses more on the social psychological approach to analyze the relationship between attitudes and motivation in a whole language community. The concept of motivation in Gardner's model includes three components: motivational intensity, desire to learn the language, and attitudes towards learning the language. However, Gardner's social psychological model was challenged in the 1990s. Dörnyei (1994: 273) considers that Gardner's model is fundamentally important but he proposes to focus more on the foreign
language classroom and pedagogical aspects than on the social environment. The two major components of motivation relating to second language learning distinguished by Gardner and Lambert (1972) are integrativeness and instrumentality. An integrative attitude to language is more social and identifies with the target language group. An instrumental attitude to language is self-oriented, personal, and focuses on linguistic achievements. However, Gardner and Lambert's theory on integrative/instrumental orientations has been criticized as it is too limiting and not appliable to everywhere in all sociocultural contexts (Dörnyei, 1994, 2009; Dörnyei, Csizér and Németh, 2006). In general, attitudes are considered a salient factor in language learning.

In many parts of the world, learning two or more than two languages in the school is very common and it is interesting to look at studies on attitudes in some contexts such as Wales and the Basque Country. In Wales, English and Welsh are the two official languages. Many people are bilingual speakers while some are multilingual speakers. Baker (1992) conducted a research study investigating young students' attitudes towards Welsh and English and attitudes towards bilingualism. A total of 797 pupils from three different types of secondary schools in Wales completed a questionnaire twice within an interval of two years. These three schools have been labeled as "natural Welsh", designated bilingual and English medium. The label of "natural Welsh" refers to a school situated in an area where the majority of the population speak Welsh and the medium of instruction is mostly Welsh. A "designated bilingual" school is sited in an area of Wales, where Anglicized culture is dominant. The medium of instruction used at school is mostly Welsh. An English medium secondary school is located in an area where few people speak Welsh, and the curriculum is delivered in English while Welsh is taught as a second language. The questionnaire used by Baker (1992) contained different sections including several variables (age, gender, type of school and ability to Welsh), language background, youth culture, and language attitude scales. Two types of language attitudes scale include general attitude and attitude concerned with "use,
value and status". Baker then used a latent variable analysis to analyze the language attitude survey with an intention to find out whether the attitude items were divided into one or more dimensions, such as integrative and instrumental. Results showed that Welsh teenager pupils (age 11 to 14 ) had overall favorable attitudes towards the Welsh language. A significant change in general attitudes towards the Welsh language appeared between 13 to 14 years of age. In other words, during the teenage years when age increases, a favorable attitude towards the Welsh language declines (p. 63). When considering the school type, it was found that students at the English medium school generally have a less favorable attitude towards Welsh than the other two types of schools. Participants with their language background more closely associated with Welsh held more favorable attitudes to Welsh. In youth cultural contexts, students who show more a favorable attitude to bilingualism tended to have a higher self-rated competence in Welsh, they engaged more with youth culture that related to the Welsh culture and literacy. In addition to attitudes towards bilingualism, significant findings are found to associate with age, ability, and youth culture. A favorable attitude to bilingualism decreases when the age increases. In sum, Baker's study suggests that the strongest influence on language attitude is language background and youth culture. The study especially highlights the importance of youth culture as a major influence on teen students' attitudes towards languages and towards bilingualism. The environmental variables may develop changes in attitudes and further affect language use in various domains.

In the Basque Country, a bilingual autonomous community where Basque shares a co-official status with Spanish, children learn English as a third language. Several studies have been carried out in the Basque Country on the effect of age on attitudes towards English, Spanish and, Basque and towards multilingualism (Cenoz, 2001), on attitudes towards English (Lasagabaster, 2003), and on the influence of variables on attitudes towards English, Spanish and, Basque (Lasagabaster, 2005). Cenoz (2001) conducted a study in exploring whether age has effects on attitudes towards learning English, Basque, Spanish, and attitudes
towards multilingualism. A total of 81 primary and secondary students took part in the study. These students studied in the same linguistic model of school, with Basque as the language of instruction and both Spanish and English as taught as language subjects. The survey used in Cenoz's study was based on Gardner's (1985) questionnaire on attitudes towards each of the languages and Baker's (1992) questionnaire on attitudes towards bilingualism. The results show that younger students in primary school have more positive attitudes towards learning English, Basque, Spanish, and attitudes towards multilingualism. It was also found that students' language proficiency and language attitudes go in opposite directions. A strong age effect was found for the three languages, which is consistent with Baker's (1992) findings on Welsh pupils' attitudes towards Welsh and bilingualism. According to Cenoz (2001: 54), younger students hold more positive attitudes these may be linked to psychological and educational factors.

In Taiwan, children sometimes speak one of the local languages as a mother tongue and go to school to learn Mandarin, which is the official and dominant language in Taiwan. One of the mother tongues is taught as a language subject in primary school since the first grade. Meanwhile, English is introduced as an additional language formally at the primary level, but many children already start learning English before entering primary school. English plays an important role in the world, and in Taiwan, there is a growing interest in learning English. The reform of the English in Education policy in 2018 has demanded more hours of teaching at school. Although English is officially implemented in the third grade, many primary schools have regulated English since the first grade. In some cases, students have already been in contact with English in kindergartens. Furthermore, in 2011, the Ministry of Education in Taiwan began to promote and began to implement Content and Language Integrated Learning (CLIL) programs using English as the medium of instruction in teaching disciplinary knowledge subjects in universities. The aim is to enhance Taiwanese students' English proficiency and to attract more international students. More recently, pilot CLIL programs have
been carried out in primary schools in some cities even before the national "Bilingual Education" policy was announced in 2018 by the Ministry of Education in Taiwan. The goal of the "Bilingual Education" policy is to aim at making Taiwan a bilingual country by 2030, and that means to make English as a co-official language along with Mandarin. To sum up, here, we can see that English plays an important role in Taiwan's education, and the government is committed to implementing more intensive English classes starting at a younger age. On the other hand, one of the mother tongues is taught as a compulsory subject only at the primary school level. The government's focus on mother tongue in education and on English in education is apparently unbalanced. Previous studies that investigate language attitudes in Taiwan will be mentioned later in the subsection of studies on language attitudes and identity in Taiwan.

### 2.2.2 Language Identity

What is identity? In a simple way, identity is asking who an individual is, to which groups an individual belongs, including nationality, religion, gender, generation, and many other possibilities. To define identity is often seen as a complex task. The concept of identity has been always controversial and undergone transformations over the last century from essentialism to poststructuralist perspectives. From an essential perspective, identity is fixed and decided at birth (Gérin-Lajoie, 2011: 168). The biological inherited linguistic and cultural identity will stay with an individual throughout one's life without change. However, the notion of identity from the essential point of view has been criticized by the poststructuralist approach on identity (Norton, 2010; Norton and Morgan, 2013). Identity from poststructuralist perspectives is understood as fluid and constantly changing due to the influence of each individual person's social practices and experiences. Weedon (1987) works on the role of identity plays in the relationship between the individual and the social context and asserts that language is "the place where the sense of selves, our subjectivity is constructed" (p. 21). Being led by poststructuralist
theories and drawn by the work of Weedon $(1987,1997)$, Norton (2013: 4) defines identity as "the way a person understands his or her relationship to the world, how that relationship is constructed across time and space, and how the person understands possibilities for the future". Because a person's relation to the wider social world is constantly shifting, identity is complex, dynamic, multiple, and contradictory (Norton, 1995: 15). In the current debates on sociolinguistic identity, Omoniyi and White (2006:2) summarize the main characteristics of identity:

1. Identity is not fixed;
2. Identity is constructed within established contexts and it may vary from one context to another;
3. Social variables influence contexts and these contexts can be expressed through languages;
4. Identity is an important factor in every communicative context;
5. Identity tells us about social relationships;
6. There is more than one identity may be articulated within the same context.

A poststructuralist approach to identity has been used in research in various contexts and disciplines (Block, 2007; Norton, 2013; Kanno, 2003; Pavlenko and Blackledge, 2004). Block (2007) focuses on how identity is the key construct in different second language learning environments. Norton (2013) investigates immigrant women learning and practicing English in Canada and how their identities are changing across historical time and social space. Kanno (2003) examines the changing identities of Japanese bilingual students, who lived in North American during their adolescent years and returned to Japan to attend university. Pavlenko and Blacklegde (2004) discuss the negotiation of identities in different multilingual contexts and particularly focus on how identities are negotiated in and through language practices.

According to Norton (2010: 350), the poststructuralist theories on identity help us to understand the relationship between language and identity. Identity is constructed in and
through language (Norton, 2013: 4). That is to say, when language learners speak, besides the goal of exchanging information with the target language speakers, they are also organizing and reorganizing the sense of who they are and representing themselves to the wider social world. In the same vein, Joseph (2016: 24) views that "identity is something constructed rather than essential, and performed rather than possessed". An individual person performs a repertoire of identities, which is constantly shifting, negotiating, and renegotiating according to the situations. Identities are hidden in languages in ways that we speak and write, and we interpret our identities through languages without intentions. To keep it in mind, the expansion of a language learner's linguistic repertoire is also considered to have direct effects on the individual's linguistic identities (Joseph, 2016: 30). We use languages to represent our ideas, ourselves, and our social relationships with others. Therefore, language is highly influential and it is "one of the strongest symbols and boundary markers in having a group, regional, cultural and national identity" (Baker and Wright, 2017: 394).

Based on the tenets of ethnolinguistic identity theory (Giles and Johnson, 1987), Noels (2017) refers to ethnolinguistic identity as an individual's feelings of belonging or affiliation with a particular social group, that shares a common ancestral heritage and a common language variety. For instance, in the Basque Country, some research on ethnolinguistic identity has been conducted and reported in Azurmendi and Martínez de Luna's (2011) article. Three prototypes of Basque ethnolinguistic identities are categorized: Basque, Basque and Spanish, and Spanish (Baxok, Etxegoin, Lekumberri, Martínez de Luna, Mendizabal, Ahedo, Itzaina, and Jimeno, 2006; Azurmendi, Larrañaga and Apalategi, 2008). Azurmendi and Martínez de Luna indicate several salient characteristics of regarding someone as Basque. The important characteristics are the use of Basque, feelings and wanting to be Basque, living and working in the Basque Country, having Basque ancestors, and political affiliation. However, there might be some cases of individuals, who might not be competent in Basque but can also feel Basque. Although it is interesting to see that the ethnolinguistic identity work that has been done in the Basque

Country demonstrates some important components of being a member of a certain ethnic group or a combination of two ethnic groups, it is important to take into account that these work (Baxok et al., 2006; Azurmendi et al., 2008) have seen identity as fixed rather than fluid.

In our study, we specifically look at young students' identity in relation to a certain language or languages. Following the modern view on identity, which sees an individual's identity as dynamic and constantly changing, and considering that young school students are in the process of developing their sense of selves, there is a certain degree of challenges to investigate youngsters' identities. A language portrait silhouette is an age-appropriate task to explore children's expression on their linguistic identity by choosing specific colors, shapes, and symbols, and an individual child's description on why they made the choice. It is a way to understand bi/multilingual speakers' self-representation by allowing them to associate their emotional connection to their cultural and linguistic experiences. The language portrait tool was originally developed by Busch and her colleagues (2006) in order to gain a deeper understanding of South African teachers' thoughts and feelings towards languages in practice and life experiences. Busch asked teachers to fill in a language portrait silhouette (see Figure 2.2) by using different colors to present their language experiences in their lives. It is a way to unpack participants' linguistic diversity. Figure 2.2 is the language portrait silhouette that was developed by Busch (2006).


Figure 2.2. Language portrait silhouette

Later in two other studies conducted by Busch $(2010,2012)$ in South Africa and Austria, Busch continued using the same multimodal and creative method to investigate both children and adults and asked the participants to write an explanation according to each color drawing in relating to a language. Busch further analyzed her participants' visual and narrative descriptions by using poststructuralist approaches. In recent years, the language portrait silhouette has been used as a tool to investigate multilinguals' linguistic repertoire, language awareness, and language identity by educators and researchers (Busch, 2010, 2012; Prasad, 2011, 2014; Dressler, 2015). In schools, language portraits are used by language teachers as an instrument to raise students' language awareness towards multilingualism and to get to know more about students' linguistic background. A language portrait is understood as a way of getting insights about an individual's everyday linguistic practice and emotions towards language varieties. In a similar vein, Prasad (2011) used the same language portrait silhouette as a language awareness activity with elementary teachers and students in West Africa. Prasad used the language portrait method to understand the linguistic and cultural differences between her and her participants. Later in 2014, Prasad and her team extended Busch's original language portrait silhouette to a more individualized two-dimensional linguistic self-portrait. Prasad asked her teen participants in Toronto to represent their cultural and linguistic identities by completing the two-dimensional self-portrait. Her participants were then given the chance to speak for themselves in group interviews to present their personal language portraits. From both visual and verbal self-representations, Prasad was able to present her multilingual participants' diverse cultural and linguistic identities. She further stated that art-informed methodologies used in research provide a deeper insight to understand the multiple layers of participants' linguistic repertoire in linking to their life experiences.

Another study using the language portrait silhouette method to explore the linguistic identity of young multilingual children was conducted by Dressler (2015) in Canada. Participants in Dressler's study were 6 to 8 years old and spoke different languages at home.

These Canadian children were enrolled in a bilingual German program and had German and English as the languages of instruction at school. Instead of asking her subjects to write the description, Dressler interviewed and videotaped each subject individually in order to capture words and gestures. Dressler examined how children use different forms (oral, visual, and textural) of representation to make meaning of their linguistic identity. She further analyzed children's linguistic identity particularly from three aspects: expertise, affiliation, and inheritance (Block, 2014). Expertise refers to a child's linguistic proficiency in a language. Affiliation is referred to as an identification or attachment to a certain language. Dressler explained that some children use a flag of a country or a community to represent identification to a certain language that is spoken in the territory (p. 47). Inheritance refers to having a familial or an ancestral connection to a language. Some children might speak the language fluently because the language is still used at home. However, it could be also found in children who do not speak the language at all but feel identified with the language. Dressler found that her young bilingual participants' measurements to their linguistic identity vary according to each aspect of identity mentioned above. Some children are aware of their "knowledge" in languages and largely linked their linguistic identity upon their oral competence. Some relate their linguistic identity to a certain country by drawing the flag to express their affiliation, while some locate a language in a certain position to present as their "favorite" (p. 48). Some of the children in Dressler's study came from families that use languages other than English at home. These children often link their linguistic identity to the connection they share with certain family members. In sum, Dressler demonstrates that the language portrait silhouette can be used as a class activity for teachers to initiate a discussion of the nature of multilingualism awareness and an individual's linguistic identity. The validation of linguistic identity in the classroom setting helps students to find a space for their home languages, and that can benefit young children's developments regarding emotional, social, and educational aspects.

### 2.3 Language Situations in Taiwan

In the study of multilingualism in Taiwan, since the 1980s, there has been growing interest in investigating the sociolinguistic situation in different domains. Topics include Taiwanese people's language behaviors, language choice, language shift and maintenance, attitudes towards languages, and the relationship between language and identity. Studies investigating the frequent use of language varieties and language proficiency among people from different ethnolinguistic backgrounds were conducted by many scholars (Kubler, 1985; Van den Berg, 1986; Young, 1988; Chen, 2003, 2010; Yeh, Chan and Cheng, 2004). Several factors, such as age, generations, domains, and ethnic backgrounds, are considered to have significance on people's language choice and use. Some research studies explore translanguaging and code-switching in particular (Chen, 1996; Kubler, 1988; Su, 2009; Ke and Lin, 2017). Studies with a focus on language shift, maintenance, and accommodation in different contexts are explored by Sandel (2003) and Sandel, Chao and Liang (2006). In relation to societal multilingualism, the use of languages in the environment has been also carried out in Taiwan in recent years (Curtin, 2009, 2015). Many scholars took a different approach to focus on Taiwanese people's attitudes towards language varieties (Young, Huang, Ochoa and Kuhlman, 1992; Chan, 1994; Chen, 2010; Lee, 2003, Su, 2019), while others explore the relationship between language and identity in social contexts (Dupré, 2013, 2017; Hsiau, 2000; Huang, 2000; Scott and Tiun, 2007; Tse, 2000). Literature related to language situations in Taiwan will be reviewed in the following subsections.

### 2.3.1 Language Use in Taiwan

Several early studies aimed at exploring language interaction in social contexts and Taiwanese people's language use in face-to-face situations (Kubler, 1985; Van den Berg, 1986; Young, 1988; Chen, 2010; Yeh, Chan and Cheng, 2004). Kubler (1985) investigated language contact in Taiwan particularly on Taiwanese people's use of languages in different
domains and attitudes towards each language. The investigation on attitudes will be mentioned later in the subsection of language attitude in Taiwan. Kubler conducted his study in Taipei in 1980. A survey, which is designed to gain information about Taiwanese adults' language use and attitude, was sent to college students and other adults. In total, Kubler collected 127 informants, whose age ranged from 18 to 50 . The ethnic origins of these informants were separated into two groups: native Taiwanese and the mainlanders. There were 58 Native Taiwanese and 69 mainlanders. Almost all native Taiwanese have Southern Min (aka Taiwanese) as their first language and almost all mainlanders have Mandarin as theirs. Kubler found that in the group of native Taiwanese, half of them spoke only Taiwanese and the other half spoke both Taiwanese and Mandarin with their parents. With siblings, half of them spoke both Taiwanese and Mandarin, and other spoke either only Taiwanese or Mandarin. In the social domain such as at the university and with friends outside school, the majority of native Taiwanese reported speaking only Mandarin. In the case of the group of mainlanders, the majority of them spoke only Mandarin in and outside the home. Kubler concluded by giving his viewpoint on the linguistic outlook for Taiwan. The use of Taiwanese was limited in comparison to the time when Taiwanese was the main language for communication at home and in society before being under Japanese rule. On the other hand, the use of Mandarin has gradually increased and its position has become stronger. According to Kubler (1985), other minority languages such as Austronesian languages are facing challenges to be preserved. The functions and use of tribal languages are restricted because most of the tribal children nowadays use Mandarin as their main language rather than their tribal language. Kubler also pointed out that the position of the Taiwanese language is very much linked to the island's political factors in relation to China (p. 250). The political situation between China and Taiwan may have effects on the development of Taiwanese ethnic languages.

In addition, Van den Berg (1986) examined the use of language varieties (Mandarin, Taiwanese, Hakka, and Japanese) in specific social contexts. Two aims in his study were to measure to what extent Mandarin is used in face-to-face interactions and to investigate Taiwanese people's language choice behavior in business transactional contexts. Five social domains were observed: vegetable markets (aka local market or farmer's market), department stores, a shopping area, a bank, and a park. Observations were done by seven university students and twelve senior high school students. Through the collected language use data, Van den Berg (1986: 99) found that each language variety has its own function and can control some of the interactions in the different domains. Mandarin was found to be used the most in the bank, followed by shops in the city center and the department store. The use of Mandarin had significantly increased because it was seen as more appropriate in formal places. On the other hand, the use of Taiwanese and Hakka was dominant in the vegetable market, where bargains often appeared during business transactions in a context that it was seen as local and informal. This shows that vernacular languages have the highest presence in the vegetable market, a more informal domain. In sum, depending on the social context and the role of interlocutors, people in Taiwan use vernaculars to show their ethnic identities. Vernaculars are often associated with traditional values, lifestyles and group solidarity. People in Taiwan can also easily switch to Mandarin, as Mandarin is seen as a more modern language and presents high educational or professional status.

Young (1988) conducted a study to examine to which extent language maintenance of Taiwan's language varieties and shift towards Mandarin in three settings: at home, at work, and with friends. A total of 823 participants took part in the survey, and these participants were 18 years and older and from different locations throughout Taiwan. Participants were categorized into four ethnic groups: Southern Min (aka Minnanren), Hakka, Mainlander Mandarin speakers, and Mainlander non-Mandarin speakers. Young found language shift towards Mandarin in all three domains. In the home domain, even though the maintenance of

Taiwanese and Hakka remains at a high degree, the shift towards Mandarin increases in families. In the work domain and with friends, it was found that the shift towards Mandarin often happens more when engaging in an inter-ethnic than intra-ethnic conversation (p. 330). In particular, the shift towards Mandarin is significant especially among the Hakka ethnic group more than the Southern Min ethnic group. As the use of Hakka is mostly restricted to the home domain and intra-ethnic interaction and as Hakka is not the major ethnic group in Taiwan, the need for Hakka people to speak Mandarin and Taiwanese is great. The trends identified by Young (1988) in his study show that the shift towards Mandarin will continue. For instance, more people are moving to urban areas where residents come from different ethnolinguistic groups and the use of Mandarin is necessary for inter-ethnic group communication. In education, Mandarin is the sole medium for instruction. Ethnic languages are used mostly in informal and private places while Mandarin is seen as the language of formal.

A large-scale study, which was conducted by Chen (2010) and carried out in 2003, aimed to investigate to which extent multilingualism takes place in Taiwan. Her analysis included ethnolinguistic backgrounds of Taiwan regarding her participants' language proficiency, and language use in different domains. A total of 2139 questionnaires were collected and analyzed. Participants had different mother tongues, and they were of different ages and they were from both rural and urban areas. Ninety-eight per cent of respondents reported having sufficient Mandarin proficiency to communicate with others regardless of age, mother tongue, educational level, and job occupation. Sixty-eight per cent of respondents can speak fluent Taiwanese, 18\% can communicate in English, 6\% can speak fluent Hakka, and only 1\% reported to be able to communicate in Austronesian languages (aka aboriginal languages). Several factors were identified in influencing Taiwanese people's language proficiency in Chen's study. Firstly, age is an important factor that influences participants' proficiency in Taiwanese, Hakka, and English. According to her participants' report, the younger the
participants are, their proficiency in Taiwanese and Hakka decreases and their proficiency in English increases. Secondly, the mother tongue background is considered another factor in influencing participants' language proficiency. Chen reported that participants who have either one of Taiwanese, Hakka, and Austronesian languages as the mother tongue have higher proficiency in commanding their ethnic languages. Lastly, educational level is found to have an influence on Taiwanese people's English proficiency but not in the case of proficiency in other languages. That is, the higher the educational level a Taiwanese person is, the higher proficiency in English s/he has. Looking at Taiwanese people's language use in different domains, the use of Mandarin was found dominant in all domains (home, religion, friendship, school and government, and work) and followed by the use of other Taiwanese ethnic languages and English was used the least. Chen (2010) explained that the high status of Mandarin in Taiwan's society, which was imposed by the Mandarin-only National Language Policy for several decades, overly dwarfed the status of Taiwanese ethnic languages (p. 100-101). As the use of Mandarin can complete all functions and it is the lingua franca for wider communication in Taiwan, the need for Taiwanese ethnic languages has diminished. In the case of English, its frequent use was reported low in daily use even though Taiwanese people have highly favorable attitudes towards English. Chen also explored Taiwanese people's language attitudes through the use of the same survey and participants, and it will be further addressed later in the subsection of studies of language attitude and identity in Taiwan.

Another large-scale investigation examining Taiwanese people's language proficiency and language use was carried out by Yeh, Chan and Cheng (2004). The study mainly focused on comparing three ethnic groups: Minnanren, Hakka, and aboriginal, in Taiwan. A total of 2900 questionnaires were collected. Subjects of different ages are from all over Taiwan. All subjects self-reported to have high proficiency in Mandarin. While the group of Minnanrens reported speaking better Taiwanese than Mandarin, the group of Hakka people and the group of aboriginals, on the other hand, reported speaking Mandarin more fluently than their mother
tongues. When comparing language proficiency in Mandarin among different ethnicities, it was found that Minnanrens had higher proficiency in Mandarin than Hakka and aboriginal people. The same case applies to subjects' proficiency in their native languages. Minnanrens spoke better Taiwanese than Hakka people spoke Hakka and aboriginal people spoke their tribal languages. Yeh and his colleagues further categorized three ethnic groups of people into three age groups: young (under age of 31), middle-age (31-50), and old (50 and older) and compared their proficiency in Mandarin and their mother tongue. In the group of Minnanrens, middle-aged subjects had the highest proficiency in Mandarin followed by young subjects, and old Minnanrens remained the last. In both groups of Hakka people and aboriginals, young subjects had the highest proficiency in Mandarin followed by middle-aged subjects and then the old subjects. In terms of subjects' proficiency in the mother tongue, it was found that in all three age groups, the young subjects had the lowest proficiency while the older subjects had the highest proficiency. Yeh and his colleagues (2004) pointed out a significant finding in all three age groups on the relationship of age and proficiency in the mother tongue. Younger participants had lower proficiency in the mother tongue than older participants. Yeh and his colleagues continued to discover within each ethnic group, how subjects use their languages with different interlocutors. In the group of Minnanrens, the use of Taiwanese was reported as more frequent than the use of Mandarin. Minnanrens used their mother tongue to communicate within the family domain and with friends, neighbors, colleagues, and people of the same ethnicity. Minnanrens used Mandarin mainly to communicate with people from different ethnic groups and with teachers. For aboriginals, the use of Mandarin was reported high in their everyday life and more than the use of aboriginal languages, basically with everyone except for grandparents and parents. The use of mother tongue for Hakka people was mainly among family members, particularly when talking with grandparents, and with people from the same ethnicity. In addition, a few patterns appeared when comparing language use among three ethnic groups. According to Yeh and his colleagues (2004), the use of Mandarin at home
appeared the most frequent in the group of aboriginals, followed by the group of Hakka and then Minnanrens the last. The frequency of the use of Mandarin was different depending on which interlocutors the individuals belonging to different ethnic groups talk to. For instance, when interlocutors were spouses, friends, or neighbors, it was found that aboriginal and Hakka people used Mandarin more often than Minnanrens. When interlocutors were colleagues, teachers, classmates, or strangers, the group of Minnanrens uses less Mandarin than Hakka and aboriginals. When talking to children, Hakka and aboriginals were found to use more Mandarin than Minnanrens. Lastly, comparing the use of mother tongue among ethnic groups, Minnanrens were found to use the mother tongue significantly more frequently with all interlocutors than the group of Hakka and the groups of aboriginals.

As English has become the main language of international communication, it has taken an important role in many parts of the world especially where English is learned as a foreign language. Nowadays, issues related to the spread of English, multilingualism, translanguaging, and language policy have gained currency. The popularity of English learning in Taiwan can be seen in the growing numbers of private English academies aiming at students' academic success which is often test-oriented and grammatical based English learning. Even though there are private institutes aiming at communicative English learning due to the increase of global mobility and international business, the use of English in the social domain is limited within Taiwan. A study exploring the spread of English in Taiwan was conducted by Chen (2003). She investigated the usage of English in urban and rural communities of Taiwan and compared them with the use of Taiwan's other languages. A total of 596 questionnaires were collected and analyzed. Respondents were from different cities and counties in Taiwan, and their age ranges from 8 to 59 . The majority of Chen's respondents had Taiwanese as their mother tongue. Among all variables (age, educational level, gender, and ethnicity), age is the only significant variable that has highly associated with Taiwanese people's use in three languages: Taiwanese, Mandarin, and English. Because of that, Chen divided her respondents
into five age groups: 12 years old and younger, 13 to 18,19 to 29,30 to 45 , and 46 to 59 . Firstly, Chen compared the use of English and the other two languages in different domains and situations. Overall, in all five domains (government, work/school, religion, friendship, and family), the use of Mandarin was reported to be the most frequent, then comes Taiwanese, and English was used the least. Among all situations, such as talking with parents/siblings, teachers/bosses, colleagues, strangers, and foreigners, the use of English was reported to be low. However, the use of English was more frequent when talking to teachers/bosses than at home, at work, and with strangers. In particular, Chen found that when talking to foreigners, the use of English was reported to be as frequent as the use of Mandarin. In addition, when comparing different age groups of young people, it was found that subjects aged from 19 to 29 had the highest frequent use of English followed by the ones aged 12 or younger and the subjects aged 13 to 18 used English the least. In the case of the use of Taiwanese, subjects aged from 30 to 45 used Taiwanese more frequently than other groups and subjects aged from 19 to 29 used Taiwanese less frequently than other groups. Chen (2003) concluded that the use of English was more frequent in formal places than in informal places. Chen (2003) also observed that Taiwanese people's attitudes towards English are more favorable than their attitudes towards Taiwanese (p. 197). Chen's (2003) investigation of attitudes towards languages and language use will be further discussed later in the subsection of studies of language attitude and identity in Taiwan.

Sandel, Chao and Liang (2006) conducted a study on language shift and accommodation among bilingual Mandarin and Taiwanese families. The sample included 58 parents, 23 living in rural areas and 35 living in urban cities were interviewed. All parents had at least one child, who studied their mother tongue in primary school for more than one year. More than half of the participants lived in an extended family household. The two aims in Sandel and his colleagues' (2006) study were to investigate language shift across generations and to compare language choice between rural and urban areas and also between nuclear and extended families.

When testing language choice across three situations (with elders, peers, and children), results revealed a general pattern of parents' language choice. That is, regardless of the locations and the family compositions when parents speak to an elderly person, the choice of using Taiwanese is greater than the use of Mandarin. When parents speak to other adults and younger generations, the use of Taiwanese decreases, and the use of Mandarin increases. A mixed use of Taiwanese and Mandarin was also found. In addition, when adding rural and urban areas into comparisons across generations, it was found that parents from urban areas use more Mandarin and less Taiwanese. Children from urban areas were reported to use more Mandarin and less Taiwanese than children from rural areas. Even though all parents from both rural and urban areas reported that their children are able to speak Mandarin and Taiwanese, more parents from urban areas reported that their children have lower proficiency in Taiwanese in comparison with their proficiency in Mandarin. The same finding was reported in the case of children in nuclear families who use more Mandarin and less Taiwanese than children in extended families. That means that living with or without grandparents at home has strong effects on children's language choice. Another interesting result was found when testing communication accommodation between parents and children, it is that parents accommodate to children more than children accommodate to parents. Parents choose to use Mandarin to speak with children more than children choose to use Taiwanese to speak with grandparents. Finally, Sandel, Chao and Liang (2006) concluded that language choice across generations differs according to situations. Today the language choice of Taiwanese children has a strong link to locations and the composition of children's families. The location may have more influence than the family composition on language shift towards Mandarin in children. Sandel and his colleagues (2006) took several factors into account when explaining the language shift towards Mandarin across generations. One is television as the majority of kids' channels are in Mandarin. Another is associated with parents' language accommodation. When children do not understand and do not respond to parents when parents speak Taiwanese, parents
accommodate to their children and shift from Taiwanese to Mandarin. Additionally, the vitality of the Taiwanese language is limited. As the interactions between elders and children are more limited parents do not continue speaking Taiwanese at home with their children and children do not speak Taiwanese fluently. Finally, language ideology is considered an important factor to influence Taiwanese people's language use in different situations. Many participants reported feeling a sense of intimacy when speaking Taiwanese and conveyed that Taiwanese is the language of their heritage and it is a language they use with their families and friends. To the majority of parents from rural areas, being able to speak Taiwanese is an important element to mark a person's identity as "being Taiwanese" (p. 140). However, almost all the parents from urban areas think otherwise. The link between language and identity will be discussed later in the subsection of studies of language attitudes and identity in Taiwan.

Another aspect of language use in Taiwan that deserves attention is code-switching and translanguaging. A study conducted by Chen (1996) aimed to explore code-switching between English and Chinese language varieties among different interlocutors in an academic environment and further to identify what functions languages have in different code-switching situations. The study was carried out in a university campus located in Eastern Taiwan, and the observed speech community includes teachers, staff members, students. The majority of the subjects in the speech community were bilingual speakers of Mandarin and Taiwanese and had some command of English as well. The instruments Chen used in her study were observations and interviews. It was found that code-switching between Chinese language varieties and English is part of Taiwanese people's communicative repertoire, particularly in a higher educational setting. Taiwanese phrases were also observed to be used in some conversations. It was found that code-switching between Chinese language varieties and English occurred in different social contexts among interlocutors talking about different topics. Chen analyzed her participants' patterns of code-switching based on the functional
approach to language proposed by Hymes (1972). Different categories of language functions were used to explain Chen's participants' code-switching behavior: expressive, directive, metalinguistic, poetic, and referential functions. First of all, expressive functions refer to emotional relief. It was found that English words of expressing affection, love, and insult are often inserted in a Mandarin dominated conversation. Chen explained that switching codes in the expressive function is related to Chinese social values, which have a lot of influences from Confucius' philosophy. People's emotions are often hidden and not commonly expressed. Therefore, inserting English words in a Mandarin dominant discourse helps people to relieve their true feelings and avoid embarrassment. Secondly, directive functions include two purposes: to direct/persuade interlocutors and to exclude someone from a conversation. Some examples reported in the study show that switching between English and Mandarin not only catches attention to direct or persuade interlocutors to react further, but also establishes rapport between speakers. Thirdly, metalinguistic functions include using quotes, providing definitions of a term in another language and paraphrasing other people's words. Chen explained that her subjects used code-switching of metalinguistic functions mostly to emphasize the message. Sometimes participants switched codes to show group solidarity, especially when engaging in an in-group conversation. The codes that are switched to English are only understood by the members of the same group. Fourthly, the use of code-switching of poetic functions is often for wordplay, making jokes, and using quotations that have double meanings. The examples showed that participants in Chen's (1996) study used paronomasias and contained two completely different meanings in English and Taiwanese or in English and Mandarin, to make a joke or avoid negative connotations that are associated with certain words in Mandarin or Taiwanese. Fifthly, referential functions include the words that are not accessible in another language. Some English words do not have translations or appropriate translations in Mandarin. In sum, frequent code-switching between English and Mandarin and some between English and Taiwanese were observed in the campus setting. Chen (1996)
explained that her subjects' language behavior shows a linguistic style embedded in Taiwan and a social-identity marker that imply the speaker's educational level and professional status. The use of English in linguistic discourse is considered to be associated with the accessibility to English entertainment channels, such as movies, music, magazines, and commercials. The spread of international English "pop" culture has considerable effects on Taiwanese people's habitual language use (p. 278). What's more, the new communicative style of switching codes between English and Chinese language varieties implies the speaker's social background and professional status, although this is not always the case. For instance, the imitation of the elite's code-switching style is commonly seen due to the fact that many people aspire to be seen in a prestigious position. Chen pointed (1996) out that Taiwanese people's choice of using code-switching has a positive relationship with their social identity (p.278).

Furthermore, Ke and Lin (2017) discussed the use of translanguaging as an approach in an English as a foreign language class setting in a rural area in southern Taiwan. In the article, Ke and Lin observed and analyzed the interactions between a Taiwanese English teacher and $8^{\text {th }}$-grade students. The teacher intentionally used English, Mandarin, and Taiwanese to interact with students, and the reason was to make students feel comfortable in using all the languages from students' repertoire. As a result, students started conversations mixing English creatively in and outside the classroom, even though at the beginning of the class observation Ke and Lin found that students resisted using English outside the classroom. From the excerpts shown in Ke and Lin's article, translanguaging appears in different episodes and varies in different degrees. Four languages were observed: Mandarin, Japanese, Taiwanese, and English. Ke and Lin observed that the English teacher and students took turns in role-playing while switching codes between Mandarin and Taiwanese. They explained that the teacher's use of Taiwanese allows students to feel free and use their home language in the classroom. The linguistic behavior of the English teacher serves a purpose to soften the boundaries between languages and also strengthens her relationship with the students. Students became more confident in
using their possible linguistic repertoire in the classroom through the help of the teacher, who strategically used translanguaging to teach and encouraged students to make the most use of all the languages students have in their linguistic repertoire. Students also recognized the benefits of translanguaging can achieve communicative goals both in and outside class settings.

Language use can also be analyzed from the perspective of the linguistic landscape. Languages and words displaying in public space present the linguistic ecology of a certain place at different levels. In Taiwan, language scripts can be easily spotted in public space. As the analysis of linguistic landscape is not the main focus of our study, here following Curtin (2009) only different types of signage that relate linguistic landscape to various frames of identity are discussed. The linguistic landscape can provide a clear picture of the complex societal multilingualism in visualization in the urban space of Taiwan. Curtin (2009) observed public signage in the capital of Taiwan, Taipei, which has been increasingly internationalized. Four categories of scripts were present in this context: traditional Chinese characters, European/US romance languages, Japanese and Korean, and Romanization systems of Chinese. Based on the findings and the signage Curtin provided, the majority of signage is found in Mandarin by using traditional Chinese characters. Many named-brand international chain businesses are also commonly seen throughout the city, such as: McDonalds and 7-Eleven. In the commercial district, some shops have creative names in English and they may or may not have a translation in Mandarin. In addition, Curtin found wordplay between English and Mandarin in many signs. In the high-ended cosmopolitan area of the city, many signs contain Romance scripts, accent marks, and apostrophes. In the district where Taiwanese teenagers and younger generations often gather, Japanese and Korean scripts are used in the signage. The influence of Japanese and Korean popular cultures in such a district can be seen in the public signage. Romanized systems of Chinese, which include Wade-Giles, hanyu pinyin and tongyong pinyin, are often used on translations of street and road names. The three pinyin systems were developed in different period of historical time. Wade-Giles,
the oldest system, was used in Taiwan in the post-second World War period. Hanyu pinyin was developed in the mid-1950s in China and used in China. Tongyong pinyin was developed in the late 1990s by Taiwanese linguistic and used in Taiwan. According to Curtin (2009), hanyu pinyin and tongyong pinyin have about 85 percent of similarity. In sum, the creative and diverse linguistic landscape in Taipei observed by Curtin presents Taiwan's dynamic societal multilingualism. In addition, some of the multilingual texts in the signage in Taipei were also provided in an article written by Chern and Dooley (2014), who took a different approach. They looked at using linguistic landscape for English learning, and the purpose was to share their innovative pedagogy in teaching English though going on a walk in a multilingual setting. Based on the street sign images provided in Chern and Dooley's study, multimodal texts, images, and the use of traditional Chinese characters, English and Japanese were found.

### 2.3.2 Studies on Language Attitudes and Identity in Taiwan

Previous research studies about dealing with language attitudes in Taiwan are mostly investigating people from different ethnolinguistic groups (Young, Huang, Ochoa and Kuhlman, 1992; Chan, 1994; Chen, 2010; Lee, 2003, Su, 2019). In the 1980s, Young (1988) conducted a survey to explore the issues of language shift among four different ethnolinguistic groups of people in Taiwan. It was found that language shift towards Mandarin is apparent among the young. Younger generations are more likely to speak Mandarin instead of a mother tongue, and this might be related to the oppression of forbidding to speak mother tongues in public and at institutions. Later in 1992, Young published a language attitude study with his colleagues (Young, Huang, Ochoa and Kuhlman, 1992) by using the same participants, a total of 823 people from different parts of Taiwan, but with the aim of exploring these people's attitudes towards mother tongues. A 13 items Likert-scale questionnaire was sent out to participants. Their main aim was to analyze the differences in attitudes between instrumental and sentimental attachment to mother tongue among four ethnolinguistic groups: Hakka,

Southern Min, Mandarin-speaking Mainlanders, and non-Mandarin-speaking Mainlanders. The results indicated that Hakka and Southern Min respondents felt the need to use their mother tongue, while Mainlanders reported a strong need to use Mandarin. Hakka and Southern Min groups had more sentimental and instrumental attachments towards mother tongues than Mainlanders. On the other hand, Mainlanders were found to have more sentimental and instrumental attachment towards Mandarin than Hakka and Southern Min respondents. However, all four ethnic groups agreed on the importance and usefulness of Mandarin because Mandarin is the lingua franca used between ethnic groups. Young and his colleagues described that Mandarin "plays an instrumental role in unifying the peoples of Taiwan" (p. 12).

In a similar vein, Chan (1994) conducted a study to investigate Taiwanese people's language use and attitudes towards two main languages: Mandarin and Taiwanese. Four social factors: age, educational level, gender, and geographical area were examined to find out the impact on people's attitudes towards the two mentioned languages. A total of 2755 Taiwanese people took part in Chan's (1994) study and were categorized into three age groups: 31 and younger, 31 to 50 , and older than 50 . As a whole, the younger the subjects are, the higher proficiency in Mandarin and lower proficiency in Taiwanese is. In the questionnaire, subjects were asked to rate four dimensions based on their impression of the two languages. The four dimensions are complexity, activity, potency, and value. Results indicated that subjects as a whole see Taiwanese as more potent and active but less complex and less valuable than Mandarin. When adding four social factors into the analysis, significant differences were only found in the factors age and educational level. Gender and geographical areas did not influence people's attitudes towards the two languages. First of all, the age factor was found to have a significant impact on attitudes towards Mandarin but not Taiwanese. Older subjects gave a higher value to Taiwanese while younger subjects saw higher value in Mandarin. Chan explained that for older subjects, Taiwanese is linked to their ethnic identity, and for younger subjects, Mandarin is used for all functions in life, such as to
attain knowledge and to have wider communications. In addition, the educational level was found to have an influence on people's attitudes only towards Mandarin but not towards Taiwanese. The higher the educational level the subject has, the more favorable attitudes towards Mandarin are.

Lee (2003) conducted a study to explore the language attitudes among aboriginal people of different tribes. The questionnaire Lee used in his study was based on Chan's (1994). The collected data of 195 valid respondents were from 8 different tribes geographically spread throughout Taiwan. Each tribe speaks a distinct Austronesian language. The age of respondents ranged from 16 to 31, although most of them were under 18. Lee analyzed the data from respondents as a whole but not according to their tribes. The language use of respondents revealed that Mandarin has become dominant in almost all social situations except when talking to grandparents. Young aboriginals tended to use their mother tongue in the presence of grandparents. Lee particularly looked into respondents' attitudes towards the three languages: Mandarin, their mother tongue, and Taiwanese. Results revealed that among all respondents from different tribes, Mandarin was seen as more educated, useful, and easier to acquire than their mother tongue. However, respondents reported that they felt a stronger sense of intimacy towards their mother tongue than towards Mandarin.

In addition, a continuing work of exploring the relationship between language use and language attitude was conducted by Chen (2010). It was based on her exploration of analyzing the extent of multilingualism in Taiwan. Chen investigated Taiwanese people's attitudes towards various language varieties: Taiwanese ethnic languages, Mandarin, and English. Attitudes towards languages were examined in terms of four categories: overall language attitudes, attitudes towards language use in different domains, attitudes towards the use of language for different functions (instrumental, communicative, and integrative), and over all attitudes of different age groups. Respondents were asked to rank on perceived functional values on the three language categories. There are eight functional values: (1)
marker expressing authority, (2) marker expressing solidarity, (3) marker expressing higher social status, (4) marker expressing internationalized views, (5) tool of upward mobility, (6) tool of communication, (7) status as an official language, (8) status as a language worthy of being transmitted cross-generationally (p. 97). Results indicated that Mandarin dominates the majority of perceived functions and this result shows that Taiwanese people have positive attitudes towards Mandarin. It was found that the most frequent expressed positive attitudes towards Mandarin were located in two functions: as a tool for communication and as a language worthy of cross-generational transmission. In terms of attitudes towards English, it was found that English dominates three particular functions: the expression of global views, to show social status and as a tool of upward mobility. On the other hand, when looking at attitudes towards Taiwanese ethnic languages, it was found that Taiwanese native languages did not dominate any function. However, the most frequent expressed positive attitudes towards Taiwanese native languages were located in two functions: to express group solidarity and as a language worthy of being transmitted cross-generationally. Chen (2010) explained that each language plays its own role in Taiwan. Mandarin is the lingua franca of the island and serves communicative functions. English is the international lingua franca and people in Taiwan generally have favorable attitudes towards English. English is perceived to have instrumental functions. Taiwanese ethnic languages are used to show group solidarity and have a strong link to ethnic identity, which serves integrative functions. The development of the language varieties in society and government's policy, which Chen considered as two salient factors influencing each other, have resulted in the current sociolinguistic situation in Taiwan.

Prior studies related to language attitudes in Taiwan are mostly involved in language varieties in Taiwan and there are not many studies focused on attitudes towards one particular language. Here we find two research studies, one explores attitudes towards Taiwanese ( Su , 2019) and the other investigates attitudes towards Austronesian languages (Lee, 2003). Lee's study has already been mentioned above. Su (2019) explored school students' attitudes towards

Taiwanese and their relationship to students' proficiency in Taiwanese. Data were collected from a total of 2973 school students studying in primary and secondary school from different parts of Taiwan. The educational level of Su's subjects ranged from third grade to ninth grade. Mandarin is the mother tongue to 48 percent of subjects while Taiwanese is the mother tongue to 43 percent of subjects. Results revealed that the relationship between language proficiency and language attitudes towards Taiwanese is linear. Students who have higher proficiency in Taiwanese also have more positive attitudes towards Taiwanese. In general, there is a high proportion of students who hold neutral attitudes towards Taiwanese. Even though more than half of the students have a high awareness of the decreasing use of Taiwanese in society and feel a sense of the need to preserve Taiwanese, the motives to learn Taiwanese are not very strong. More than half of the students reported that there is not much need to use Taiwanese in daily life including the home domain. The feeling of a sense of intimacy towards Taiwanese is also quite weak. According to Su (2019), the decreasing favorable attitudes towards Taiwanese result in students losing motivation towards learning Taiwanese. As a result, without the promotion from the government and the input of a well-designed curriculum, Taiwanese will continue to lose its ground.

When looking at the relationship between language and identity, there are many considerations to take into account. In the case of Taiwan, identity issues are often related to ethnic backgrounds and the development of society and politics. There have been debates on group identity, with "being Taiwanese" or "being Chinese", as people living in Taiwan have very different opinions on group identity as opposed to their ethnic identity. In the last two decades, several studies show an increasing interest in exploring Taiwanese people's identity in relation to language (Dupré, 2013; Huang, 2000; Hsiau, 2000; Scott and Tiun, 2007; Tse, 2000). Some studies discuss the sociohistorical situation in the context of Taiwan's political dynamics and suggest that legal legislation to protect mother tongues and the parallel institutional support are salient factors for the revitalization of mother tongues and the
development of people's self-identification towards the modern Taiwanese nationalism (Huang, 2000; Hsiau, 2000). In particular, Huang (2000) pointed out that Taiwanese people's language use pattern, such as mixing codes between Mandarin and Taiwanese, reflects not only that the majority Taiwanese residents are fluent in both languages but also that Taiwanese people's self-identification is no longer restricted to ethnicity (p. 144). Tse (2000) described the development of a sense of group identity among different ethnolinguistic groups of people. He reported several surveys conducted in the late 1990s investigating Taiwanese people's identity based on the identity spectrum of two ends: being Taiwanese as one and being Chinese as another. It was also found that in the case of some people, they had a "double-identity feeling" of being both Taiwanese and Chinese. Some tended to link their ethnic identity to the language of a certain ethnic group, while some others considered that being competent in a certain ethnic language is not a significant identification of one's ethnic identity. Apart from that, being born and living in Taiwan, having an ancestral connection, and self-identifying with Taiwan were considered as salient factors that influence Taiwanese people's "new identity". Based on the findings of these surveys, Tse (2000) further suggested that "language is not a very salient defining characteristic of the emergent sense of group identity in Taiwan today" (p. 160).

According to Scott and Tiun (2007), the link between language and ethnic identity is not as clear as before. Many people can speak another language of another ethnic group fluently but still identify themselves as their own ethnolinguistic group. Scott and Tiun (2007: 68) explained that "speaking Mandarin is no longer necessarily associated with being a waishengren (aka Mainlander) among the younger generation. It does not carry with it any necessary sign of allegiance with Mainland China. Mandarin has become a language of Taiwan". As Mandarin has become Taiwan's lingua franca, several of the studies we have already mentioned (Young, 1988; Sandel et al., 2006; Chen, 2010) reported that the language shift towards Mandarin appears across all ethnic groups. Nowadays, the situation is that even
when Mandarin may not be the mother tongue of a person, it is often spoken as his or her dominant language (Dupré, 2013: 433). An empirical study conducted by Dupré (2013), whose research is centered on linguistic, ethnic, and national identities in relation to politics, was to investigate the relationship between the language spoken at home and different aspects of identity, with a focus on the major Minnan ethnic group, whose mother tongue is Taiwanese. In the view of Dupré, due to language identity is often studied within ethnonationalism, it is often linked to the identities that are "politicised" and linked to "either ethnic or national identity" (p. 436). According to Dupré (2013), a person's language identity is related to how important a specific language is in relation to a particular ethnic group or political community. Results in Dupre's study showed that parents prefer to use a mother tongue at home, and people's support on enhancing mother tongue education has a strong link to Taiwanese citizens' ethnic identity. However, in the additional measurement of language in national identity, the majority of his respondents preferred having Mandarin as the only official language in Taiwan. Dupré (2013); therefore, concluded that in the private sector language is generally considered as an "ethnic" asset to preserve, while Mandarin, as the legitimate lingua franca and de facto official language in Taiwan, is linked to "civic Taiwanese identity" (p. 440). In sum, in modern Taiwan, people's identity recognition is no longer restricted to ethnicity per se but to more dynamic and complex identities.

Several studies, which were mentioned earlier in the subsection of language use and language behavior in Taiwan, tend to link identity with language use when discussing issues of exploring language shift across generations (Young, 1988; Sandel, Chao and Liang, 2006) and code-switching (Chen, 1996). Young (1988) found that there is a substantial language shift towards Mandarin among different ethnolinguistic groups. Similar findings were also found in Sandel and his colleagues' (2006) study who reported that the most common language use pattern across generations was to speak a mother tongue to older generations, mixed Mandarin and Taiwanese to parents and peers, and Mandarin dominant or mixed Mandarin
and Taiwanese to younger generations. Taiwanese people have ambiguous views on the relationship between language and identity. To some, being competent in a mother tongue is the marker of one's identity of being Taiwanese, and these people are mostly from the rural area. On the other hand, the majority of the people from urban areas do not regard the ability to speak a mother tongue as being Taiwanese (Sandel et al., 2006: 141). In addition to Chen's (1996) exploration on the use of code-switching in a university, it was found that switching codes between Chinese language varieties and English has become a part of Taiwanese people's communicative repertoire. Patterns of the use of code-switching found in Chen's study have various purposes, such as to show group solidarity, to show social distance, to show knowledge, to avoid negative expressions associated with a certain language, and to make jokes. According to Chen (1996), the intention of speakers' language behavior is closely tied to their social identity (p. 277). A language speaker's ideology in using languages is a vital communicative resource. The language user will switch to a certain language depending on the identity they want to express. The use of a particular language shows a speaker's attempt to feel that $\mathrm{s} / \mathrm{he}$ belongs to a certain group or is distant from another.

As it can be seen that most of the identity research conducted in the context of Taiwan is related to the relationship between the language and ethnolinguistic identity. The identity spectrum in the former studies used to see identity as fixed. However, several scholars (Tse, 2000; Scott and Tiun, 2007) pointed out that in today's Taiwan, language is not as tightly linked to the ethnic identity due to the new supra-ethnic Taiwanese identity is in process of developing and evolving. Viewing identity as constantly changing, fluid, and dynamic is a more appropriate approach that will be used in our study with a particular focus in investigating young Taiwanese people's identity in relation to their languages and the use of languages.

## CHAPTER 3. AIMS OF THE STUDY AND RESEARCH QUESTIONS

After nearly two decades of implementing local language in education along with English in education, it is necessary to understand the situation of language varieties at a deeper level in the current era of Taiwan. Ultimately, the goal is to obtain insights into how the sociolinguistic situation, which combines with the current language policies, will have maximum influences on the language varieties and further derive multilingual Taiwanese students' attitudes towards their identity recognition.

The general aim of this research study is to find out some features and characteristics of multilingual Taiwanese students and further explore the relationship between the current linguistic development and students' language practice in different contexts. As it has already been explained in the Introduction, the aims of this thesis are the following: (a) to explore students' use of languages in different social contexts, (b) to investigate students' linguistic identity and (c) to analyze students' attitudes towards different languages, bilingualism and multilingualism. The idea is that multilingual students' language behavior and linguistic proficiency will be the results of the development of students' linguistic attitudes.

The review of the literature on multilingualism on the situation of different languages in Taiwan and the theoretical background on multilingualism, identity and attitudes create the need to answer some research questions that are specific to analyze the situation of Taiwanese students. The specific research questions are the following:

Q1. How do Taiwanese students use all the languages in their linguistic repertoire?
Q1.1. How do Taiwanese students use languages in school?
Q1.2. How do Taiwanese students use languages outside school?
Q1.3. Is the use of languages related to age?
Q1.4. Is the use of languages related to language proficiency?

Q2. What is the linguistic identity of Taiwanese students?
Q2.1. Is linguistic identity related to the use of languages?
Q2.2. Is linguistic identity related to language proficiency?
Q2.3. Is linguistic identity related to age?
Q2.4. Are multilingual students' identities attached to a certain language or languages?

Q3. What are the attitudes of Taiwanese students?
Q3.1. What are students' attitudes towards each language?
Q3.2. What are students' attitudes towards bilingualism and multilingualism?
Q3.3. Are language attitudes related to the use of languages?
Q3.4. Are language attitudes related to language proficiency?
Q3.5 Are language attitudes related to age?

The methodological approach to answer these research questions is mixed methods combining quantitative and qualitative approaches. This approach uses a wide variety of instruments and can provide deep insights regarding language use, identities and attitudes towards languages of Taiwanese students.

## CHAPTER 4. METHODOLOGY

### 4.1 Participants

This study was carried out at the beginning of the second semester in 2019 in three different educational institutions: (1) an anchinban, (2) a buxiban, and (3) a private senior high school, locating in the same geographical district called Wuri (烏日) in Taichung city. There are six school levels of students participated in this study: primary school, Grade 5; primary school, Grade 6; junior high school, Grade 8; junior high school, Grade 9; senior high school, Grade 10 and senior high school, Grade 11. Students of primary school Grade 5 and Grade 6 were enrolled in the anchinban. Students of junior high school Grade 8 and Grade 9 were enrolled in the buxiban. Students of senior high school Grade 10 and Grade 11 were enrolled in the private high school. (School types were mentioned in Chapter 2.) Table 4.1 shows the characteristics of each of the three educational institutions including class schedules.

| Educational institution | The anchinban |  | The buxiban |  | The private senior high <br> school |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School level | Grade 5 | Grade 6 | Grade 8 | Grade 9 | Grade 10 | Grade 11 |
| Number of students in <br> class | 30 | 30 | 28 | 28 | 38 | 40 |
| Class schedule | Daily after 4 p.m. and can <br> be until nearly 8 p.m. | Once a week, a period of <br> 3 hours class, from 6 p.m. <br> to 9 p.m. | Daily from 8 a.m. to 5. <br> p.m. |  |  |  |
| Lesson breaks | Individual recess | One break of 10 to 15 <br> minutes every class | A total of 7 breaks daily: <br> 6 of 10-minute breaks <br> and 1 of 70-minute noon <br> break |  |  |  |

Table 4.1. Summary of sample characteristics for the three educational institutions

## (1) An anchinban

In this anchinban, there are six classrooms. Each classroom is for each grade level, from
primary Grade 1 to primary Grade 6 . The researcher was allowed to observe the class of Grade 5 and the class of Grade 6. There is a total number of 30 students in both classes of Grade 5 and Grade 6. Students go to this anchinban every day in the afternoon after regular schooling hours. Students can stay at the anchinban until their parents pick them up after work, and sometimes it can be as late as 8 p.m. Teachers of this anchinban ensure students finish homework and help students with their academic problems. Students complete their homework individually. When finishing homework, students can have an individual recess.
(2) Abuxiban

In this buxiban, they offer supplementary courses of three subjects: Mathematics, English and Physics and Chemistry, to each grade of Junior High School students. Parents enroll their children in this buxiban to help them get better grades. Depending on their children's academic needs, they can choose a certain subject course to attend. Normally, students enroll in a course according to their school grade level. With granted permission from the director of the buxiban, the researcher was allowed to visit a Grade 8 Physics and Chemistry class and a Grade 9 Physics and Chemistry class. Both classes are taught by the same teacher, who uses Mandarin as the language instruction. The Grade 8 Physics and Chemistry class has 28 students, who attend this class every Wednesday. A weekly class lasts three hours, from 6 p.m. to 9 p.m. Grade 9 Physics and Chemistry class also has 28 students, who attend this class every Tuesday. Each class has one lesson break. The length and the time to start a lesson break is up to the teacher to decide. Usually, a lesson break is allowed in the half-time of a 3-hour lesson for 10 to 15 minutes.

## (3) A private senior high school

School types are mentioned in Chapter 2. This private senior high school follows the same curriculum as public ones, and it is under the supervision of the state government. The daily schedule starts at 8 a.m. and finishes at 5 p.m. Each school day has eight classes and seven periods of lesson breaks. Each class has 50 minutes with a 10-minute break to the next class.

The seven periods of lesson breaks include three of 10 -minute in the morning, three of 10 -minute in the afternoon and one 70 -minute noon recess. The noon recess includes a period of 40 -minute lunchtime and a 30 -minute nap. In this private high school, different grade levels are located in different buildings. There is a total of 14 classes of Grade 10 in one building, and a total of 14 classes of Grade 11 in another building. A Grade 10 English class and a Grade 11 Mathematics class were assigned to visit by the academic director of this private senior high school. There are 38 students in the Grade 10 class and 40 students in the Grade 11 class. Both English and Mathematics subjects are given four classes per week.

The total number of students from all 6 school levels is 194 , and each of them was sent a questionnaire to complete. Among these, a sample of 150 questionnaires was selected. Twenty-five questionnaires from school level were selected excluding those that had many blanks and were not fully completed. These 150 subjects, including 62 males ( $41 \%$ ) and 88 females ( $59 \%$ ), are with ages between 11 to 17 years old ( $M=14.05, S D=2.01$ ). Table 4.2 shows that $42.7 \%$ of the participants $(N=64)$ have both Mandarin and Taiwanese as their mother tongues, while $41.3 \%$ of the participants $(N=62)$ have Mandarin as their first language (L1). Besides, there are six per cent of the participants ( $N=9$ ) have Taiwanese as L1 and some participants have other languages (Hakka, Polynesian or Vietnamese) as a mother tongue (See Table5.2). In addition, 143 (95\%) participants reported that they can speak two or more than two languages. The distribution of our 150 sample participants' mother tongue is shown in Table 4.2.

| Mother tongue | Number ( $N=150$ ) | Percentage |
| :---: | :---: | :---: |
| Taiwanese | 9 | $6 \%$ |
| Mandarin | 62 | $41.3 \%$ |
| English | 1 | $0.7 \%$ |
| Hakka | 1 | $0.7 \%$ |
| One Polynesian language | 1 | $0.7 \%$ |
| Mandarin and Taiwanese | 64 | $42.7 \%$ |
| Mandarin and Hakka | 1 | $0.7 \%$ |
| Mandarin and a Polynesian language | 2 | $1.3 \%$ |
| Mandarin and Vietnamese | 1 | $0.7 \%$ |
| Taiwanese and a Polynesian language | 1 | $0.7 \%$ |
| Taiwanese, Mandarin and English | 6 | $4 \%$ |
| More than four languages | 1 | $0.7 \%$ |
| Total | 150 | $100 \%$ |

Table 4.2. Participants' mother tongue(s)

### 4.2 Instruments

The instruments used in our study are (A) Questionnaire, (B) Language Portrait, (C) Observation in School, (D) Observation Outside School, (E) Individual Interview and (F) Group Discussion. Before explaining the characteristic and purpose of each instrument, Table 4.3 shows the exact number of collected data from each instrument used in this study.

| Educational stage and <br> Grade level | Primary School |  |  | Junior High School |  | Senior High School |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | Grade 5 | Grade 6 | Grade 8 | Grade 9 | Grade 10 | Grade 11 |  |
| (A) Questionnaire | 25 | 25 | 25 | 25 | 25 | 25 | 150 |
| (B) Language Portrait | 26 | 18 | 12 | 17 | 23 | 32 | 128 |
| (C) Personal Interview | 4 | 4 | 4 | 4 | 4 | 4 | 24 |
| (D) Group Discussion | 5 | 5 | 6 | 6 | 5 | 5 | 32 |

Table 4.3. Characteristics of the research data collection from each instrument

## (A) Questionnaire

The students' questionnaire contains five sections (see Appendix 7). It is used for the purpose of obtaining students' personal information about gender, age, family background, mother tongue, the frequency of language use, self-perceived language skills in English, Mandarin and Taiwanese, attitudes towards languages and attitudes towards multilingualism. Each section of the questionnaire is explained below.

Section 1 aims at collecting individual student's background information and self-perceived language proficiency in four skills (listening, speaking, reading and writing) in Mandarin, Taiwanese and English on a scale from 1 (none) to 10 (excellent).

Section 2 is mainly to investigate students' language use in different domains. This language background scale is a self-rating scale. Some items are adapted from Baker's (1992) questionnaire. Participants are asked to rate on a scale ranging from 1 (never) to 10 (always) in order to indicate their use of Mandarin, Taiwanese and English with different interlocutors in and outside school including the use at home and on social media. This part of the questionnaire is to measure the frequency of individual student's use of his or her languages and varieties.

Section 3 has two sub-sections. Subsection 3.1 has three items to elicit information about students' identities. Students are asked to rate on a scale ranging from 1 (not at all) to 10 (very much) on each statement. Examples of items are:

Item 1: I feel close to this language when I am using it.
Item 2: Being able to speak this language is part of who I am.
In this thesis we have followed Baker (1992: 55-56), who uses two different scales to investigate pupils' attitudes towards the Welsh language: the scale he refers to as "traditional attitudes scale" and the "use, value and status" attitudes scale. In our study, we administering a modified version of Baker's attitude towards language scales to elicit Taiwanese students' attitudes towards English, Mandarin and Taiwanese. The reason we use two different scales in two individual subsections (subsection 3.2 and subsection 4.1) to measure language attitudes is
in order to retrieve more concrete and reliable information about pupils' attitude to a language. Section 3.2 uses the "use, value and status" approach, and section 4.1 is used to measure the traditional attitude. Some items from Baker's questionnaire are adapted to the context of this research study in our questionnaire. In subsection 3.2, there are 19 items for each of the languages. These 19 items are concerned with the importance of the three languages and measure "use, value and status" attitudes. Students are required to rate on a scale ranging from 1 (not important) to 10 (important) on how important each language is to do the things listed. Some examples of the items are:

## Item 1: To make friends

Item 3: To get a job
Section 4 has two subsections, which contain a series of statements about attitudes towards each language varieties and multilingualism, by using a Likert scale. In subsection 4.1, there are 12 statements, regarding attitude to language from dimensions of social communicational importance, family and local consideration and personal ideology. Some statements in this section are adapted from Baker's general attitude items. Participants were requested to indicate the degree of their agreement with each statement towards Mandarin, Taiwanese and English, each language individually: 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree) to 5 (strongly agree). Some examples of the statements are:

Item 1: All people in Taiwan should know to speak this language.
Item 2: All schools should teach pupils to speak this language.
Subsection 4.2 has 36 items, which are used to measure pupils' attitudes towards multilingualism. Some items are adapted from Baker's attitudes to bilingualism questionnaire. Some examples of the statements in this section are as following:

Item 1: All people in Taiwan should know how to speak Mandarin and Taiwanese.
Item 10: Learning both English and Mandarin is useful.
Item 18: English and Mandarin are essential to be part of everyday life in Taiwan.

Section 5 has 12 questions including open-ended questions. This section is designed to obtain further information about individual student's personal feelings towards their languages and language learning experiences. Some examples are:

Item 1: Which language is the most important to you? and why?
Item 6: Do you like learning English? What is your purpose in learning English?

## (B) Language Portraits

We use language portrait as an instrument for two purposes. First, it's used to discover the full linguistic repertoire of our participants. Second, we use it to discover participants' identities and emotions towards their languages. We engage our participants in a drawing activity of a body silhouette (Figure 2.2), which is created by Busch (2006). The reason that we use Busch's original body silhouette instead of Prasad's method of using individual student's 2-dimensional self-portrait is to avoid the confidentiality violation of taking photos of students without their legal guardian's permission.

Each student was given a body silhouette (see Appendix 2) to complete anonymously. Students were asked to fill in colors and to write down narratives about their relationships with each of their languages on the side. The process of writing allows students to think and reconnect their relationship with different languages and their life experiences. In total, we collected 128 self-portraits (see Table 4.3). The exact instruction given is the following:
"First, think about the languages you speak that are important to you, the role of each language in your life and the connection between you and that specific language. Second, locate each language in the body part by using one color. Third, write the description of three things: the language that presents a certain color, with whom you speak in that language and the particular meaning and the reason you make the choice of the specific color and the certain body part."

## (C) Observation in the School Domain

Two contexts of observations in the school domain were used in this study: during lessons and during lesson breaks. In order to collect data from the school domain, we asked permission from each of the three institutions: the anchinban, the buxiban and the private senior high school in order to schedule a timetable for the researcher to carry out observations in and outside of the classroom. The purpose of in-class observation is to investigate the language interaction between teachers and students. In total, 25 audio recordings of in-class observation were obtained: 2 from anchinban, 12 from buxiban and 11 from the private senior high school. In addition to observations carried out during lesson breaks, the purpose is to investigate the use of language varieties among peers. During a lesson break, the researcher went to the corridor or in a corner of the classroom where students gathered and had conversation. A total of 17 audio recordings of lesson breaks are collected: 1 from anchinban, 8 from buxiban and 8 from the private senior high school. Observation templates were used by the researcher for note-taking during the observation. The template helped to identify features of language interaction between interlocutors, types of domains and the date of observation. The researcher took notes by using the observation scheme (see Appendix 5) and when possible by using a mobile phone to record.

## (D) Observation Outside School

Social media is a common communicational tool for students to keep in touch in an informal setting. Examples of popular online social platforms are Facebook, WhatsApp, LINE and Instagram. Students were encouraged to voluntarily provide chat messages between themselves and friends or family members from any online social media application. Handwritten notes or exchanged letters were also encouraged to provide. Students were told to screenshot or take a picture of the digital conversations and further to send them to the researcher. Students were also informed that their text messages are only collected for research purposes and that their
names will be kept confidential. In total, the researcher received conversation materials from 10 students: four Grade 8 students, one Grade 9 student, four Grade 10 students and one Grade 11 student. The received materials include conversations from Facebook messenger, LINE, 2 handwritten notes and 1 birthday card. The collected digital and written massages were used to find out how Taiwanese students use their languages in free time and whether translanguage can be identified from students' language practice.

## (E) Individual Interview

The main aim of the individual interview is to get a deeper insight into individual student's personal language experiences and feelings about languages and language varieties (see Appendix 3). Some examples of the questions are the following:

- Which language do you feel the closest to? Why?
- When and with whom do you use this language?
- In which language or languages do you wish to be more fluent?

In addition, five pictures of shop signs in the neighborhood are used in this activity (see Appendix 1). Pictures of five different places: a pharmacy, a street stand, a tea shop, a post office and a restaurant. The use of the linguistic landscape to ask questions in this activity has an aim, which is to investigate students' linguistic awareness around their neighborhood. Interviewees were asked to observe the same pictures of those five places for two minutes, and then the researcher asked them questions. Examples of the questions are:

- Do you recognize this place?
- Which language or languages in these pictures can you recognize?
- Which languages do you expect to hear in this place?
- Which language or languages would you use in this place?

In total, there are 24 individual interviews collected, four from each grade level (see Table 4.3). Participants from the anchinban were assigned to the researcher by the class teachers.

Four students of Grade 5 and four students of Grade 6 participated in individual interviews. In both the buxiban and the private senior high school, during a lesson break, the researcher asked students, who stayed in the classroom, if there is anyone who would be willing to take part in an individual interview. From those who would like to take part in the activity, the researcher randomly chose four of the willing respondents to complete the individual interviews. All individual interviews took place in the classroom and were audio-recorded.

## (F) Group discussion

The purpose of group discussions is to investigate the language interaction during a discussion and to explore students' opinions upon their language experiences about their home, school and social lives within a social context. The researcher asked questions by following a question guide (see Appendix 4) and controlled the dynamic of the discussion. During group discussion, the researcher also took notes of the language interaction between students. The duration of a group discussion takes about fifteen to twenty minutes. All 6 group discussions were audio-recorded. Some examples of questions are:

- Which language or languages do you think Taiwanese people should speak more?
- Which language or languages are important for Taiwanese students?
- Which do you wish yourself to be in the future, a monolingual speaker or a multilingual speaker?

Each grade level has one group discussion (see Table 4.3). There are six group discussions in total. In the anchinban, the teacher of Grade 5 class assigned five students from those, who had finished their homework, to the researcher. They were asked to sit in a close circle in a corner of the class, where a group discussion was carried out. Five participants from the Grade 6 class were assigned by the teacher through the same method. In the buxiban, during the lesson break of the Grade 8 Physics and Chemistry class, students were gathering in different groups in the classroom chatting. The researcher decided to randomly approach one of the groups and asked
them to take part in the activity of a group discussion. This group has six Grade 8 students. A group of six Grade 9 students took part in a group discussion through the same method that the researcher used in Grade 8. In the private senior high school, the researcher used the same method to approach students who stayed in the classroom chatting. A group of five Grade 10 students took part of a group discussion. A group of five Grade 11 students took part of another group discussion. Participants in the group discussion were told at the beginning of the activity that the whole duration of the group discussion would be audio-recorded and the purpose for that is for the researcher to use in the analysis. Hence, all personal information is confidential and the names of the students mentioned in this thesis are not the students' real names. There are two reasons that the researcher chose to stay in the classroom during lesson breaks to conduct group discussion in the buxiban and the private senior high school. One, considering that students from the class we visited might gather with other students from different classes in the corridor or a public space during lesson breaks, it is difficult to control the sample group of students and further to maintain the validity of the data. Two, the noise in the open space raises the difficulty in transcribing the auditory. Table 4.4 shows the instruments that are used to answer each research question.

| Research Questions |  | Instruments |
| :--- | :--- | :--- |
| Research Question 1. Language use | (A) Questionnaire |  |
|  |  | (C) \& (D) Observation in and outside school |
|  |  | (E) Individual interview |
|  | (F) Group discussion |  |
| Research Question 2. | Linguistic identity | (A) Questionnaire |
|  |  | (B) Language portrait |
|  |  | (E) Individual interview |
| Research Question 3. | Language attitude | (A) Questionnaire |
|  |  | (E) Individual interview |
|  | (F) Group discussion |  |

Table 4.4. Research questions linked to data collection instruments

### 4.3 Procedure

There are two phases of data collection. During the first phase, observations of in-class and during breaks were conducted between February to April in 2019, during the second half of the semester of the school year in Taiwan. The researcher was permitted to visit a total of six classes from three institutions, each class once a week.

The second phase, which started from the second last week of April and finished in the first week of May, was to collect data. The process of the data collection including giving out questionnaires and language portraits, conducting individual interviews and conducting group discussions was not in a particular order. The researcher was permitted 30 minutes in class to carry out two exercises: questionnaires and language portraits. Both questionnaires and body silhouettes were given out to all participants at the same time. Participants were requested to start with the questionnaire. The language of the questionnaire was Mandarin as it is the instructional language at school in Taiwan. Once participants finished the questionnaire, they proceeded to finish up their body silhouette. Due to the time constrain in class, most students continued to finish their body silhouette during a follow-up lesson break.

Both quantitative and qualitative data were analyzed by SPSS and ATLAS.ti program.

### 4.4 The Pilot Study

The purpose of the pilot study was to examine whether the questionnaire was appropriate to retrieve potential information from the participants and if the readers' response was a useful predictor of the survey's readability and context validity. In order to amend the questionnaire, it is crucial and helpful to carry out this preliminary experiment. Through a personal contact, the pilot study was able to be carried out in a Grade 6 class at a public elementary school in Taping District in Taichung city. The instrument was piloted in June of 2018 with 28 students, which include 13 males and 15 females. All participants were asked to complete the questionnaires, which include personal information such as their linguistic
backgrounds, frequent use of the languages and self-perceived language skills in three languages: Mandarin, Taiwanese and English. The age mean of the students is 12.25 ( $\mathrm{SD}=$ 0.70 ). The linguistic backgrounds of the participated students in this pilot study were $66.7 \%$ with only Mandarin as their mother tongue, while $22.2 \%$ with both Mandarin and Taiwanese as their mother tongues. Once the pilot study was analyzed, some changes were made to the questionnaire so as to solve some minor problems that were identified.

## CHAPTER 5. RESULTS

### 5.1 Taiwanese Students' Use of Languages

In this chapter, we present the results of the first research question and three sub-questions. The questions are the following:

Q1. How do Taiwanese students use all the languages in their linguistic repertoire?
Q1.1. How do Taiwanese students use languages in school?
Q1.2. How do Taiwanese students use languages outside school?
Q1.3. Is the use of languages related to age?
Q1.4. Is the use of languages related to language proficiency?

The results of each sub-question are presented in the following sub-sections. Both quantitative and qualitative data are used to answer the first two sub-questions, from the perspectives of two major domains: at school and outside school. To begin with, we first present quantitative data by running a frequency test through Statistical Package for the Social Science (SPSS) software to gather the statistic results. Then, we analyze the qualitative data including observations, text messages and hand written notes. In the last two sub-sections, statistic results will be used to answer sub-question 1.3 and 1.4.

### 5.1.1 Language Use at School

Both quantitative and qualitative data are presented respectively in this section in order to answer the first sub-question "Q1.1. How do Taiwanese students use languages in school?"

## Quantitative data on language use at school

The quantitative results of language use by 150 participants in the school domain is shown in Table 5.1, which can answer to the first sub-question (Q1.1. "How do Taiwanese students use
languages in school?").
Two types of interlocutors are included in the school domain. Firstly, when talking with teachers, Mandarin is the most frequently used language ( $M=9.79, S D=0.67$ ), English ( $M=$ 2.97, $S D=2.30$ ) comes the second, and then Taiwanese $(M=2.76, S D=2.39)$ is the least frequently used. Secondly, when talking to classmates in school, Mandarin $(M=9.78, S D=$ 0.75 ) is also the most dominant language. Although the frequent use of English ( $M=3.15, S D$ $=2.51)$ is higher than the use of Taiwanese $(M=2.69, S D=1.98)$, the frequent use of both languages is fairly low.

| Domain <br> $(N=150)$ | Interlocutors | Mandarin |  | Taiwanese |  | English |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | M | SD | M | SD | M | SD |
| At school | teachers | 9.79 | 0.67 | 2.97 | 2.30 | 2.76 | 2.39 |
| $(\max =10)$ | classmates | 9.78 | 0.75 | 2.69 | 1.98 | 3.15 | 2.51 |

Table 5.1. Results of language use in the school domain

## Qualitative data on language use at school

Next, we provide examples of students' language use at school both in class and during lesson breaks. The reasons for choosing these examples are that they involved the use of different languages and that the sound quality of the audios is good. The texts are the exact copy of the original conversation. The main language in the interaction is Mandarin, the curricular language. The following excerpts were transcribed in Mandarin with English translations in brackets. Mandarin has the regular font, English is in italic and bold, and Taiwanese utterances are underlined.

First of all, we provide five examples of in-class conversations. Excerpt 1 is an extract from a total duration of 12 minutes 21 seconds of observation in an eighth-grade science class at the academy on February $26^{\text {th }}$ in 2019. The topic of the class is polarity of magnets. The
sequence took place during the teacher was explaining one exercise from the textbook to the class．

## Excerpt 1 （26／02／2019）

1．［3：39］The Science Teacher：所以這邊呢？這邊就會變成 $\boldsymbol{S}$ 極。 $\boldsymbol{S}$ 極才會吸住它嘛。然後這邊就是 $N$極。那這裡勒？ $\boldsymbol{S}$ ，然後這裡 $\boldsymbol{N} \circ$（What about here？It becomes $\boldsymbol{S}$ pole． $\boldsymbol{S}$ pole can attach the object．And here？$S$ ，and then here is $N$ pole，and $S$ pole．So here is $N$ pole．）
2．［3：43］Student 1：那為什麼這裡不是 $\boldsymbol{S}$ 極？（Why is it not $\boldsymbol{S}$ pole？）
3．［3：44］The Science Teacher：蛤？A端啦。無勒看喔？！（Huh？［Because the question is asking about］the A point of the object．Aren＇t you looking？！）
［The teacher walked towards Student 1 and showed him the blank on his textbook．］
4．［3：54］The Science Teacher：這裡啦， $\boldsymbol{A}$ 端。所以這裡寫 $\boldsymbol{N}$ 極，空格寫 $\boldsymbol{N}$ 極。（Here， $\boldsymbol{A}$ point．So you need to write $N$ pole here in the blank．）
5．［3：55］The Science Teacher：欸，你們是不是都沒有寫？（Eeh，you didn’t write it，did you？）
［While asking the class，the teacher finger pointed at Student 2．］
6．［3：57］Student 2：蛤？有啊！（Huh？Yes，I did！）
7．［3：58］The Science Teacher：你有？（You did？）
［The teacher walked towards Student 2．］
8．［3：59］Student 2：我剛剛非常專注的focus 在你的白板上。（I was very focusing focus on the white board．）
［After answering the teacher，Student 2 smiled at the Science teacher．］
9．［4：02］Student 3：最好啦～聽你勒叭噗！（Yeah，you better．You are boasting！）
10．［4：06］The Science Teacher：好，再來。（Ok，let＇s continue．）
11．［4：07］Student 2：所以這裡是 $\boldsymbol{S}$ 極？（So，is here $\boldsymbol{S}$ pole？）
12．［4：08］many students in the class： $\boldsymbol{N}$ 極啦！（It is $\boldsymbol{N}$ pole！）
［ All pupils and the teacher screamed at Student 2 and then burst out laughing．］

The main language in this class is Mandarin．This is an example of translanguaging practice between the science teacher and students．An interesting feature from Excerpt 1 is how the science teacher answered Student 1 then commented on Student 1＇s behavior by switching from Mandarin to Taiwanese with a sarcastic tone（Turn 3）．This shift from Mandarin to Taiwanese shows that the science teacher＇s multilingual identity allows him to use the non－curriculum language and translanguage spontaneously to address the student＇s
＂lack of attention＂behavior．The flow of the class went on until the science teacher checked on students again whether they are following his instruction（Turn 5）．Then the teacher paid particular attention to Student 2 and asked him again with a doubtful tone（Turn 7）． Meanwhile，the teacher walked towards Student 2＇s direction and intended to find out the truth．With ease，Student 2 responded in Mandarin and suddenly switched to English and shifted back to Mandarin（Turn 8）：我剛剛非常專注的 focus 在你的白板上。（I was very focusing focus on your whiteboard．）Student 2 spoke particularly emphasizing on the English word＂focus＂with a humorous tone then smiled at the teacher．We see that Student 2 used the translanguaging strategy to ease tension and tried to induce laughter．Furthermore，Student 2 emphasized the word＂focus＂not only to show knowledge but also for the purpose of convincing the crowd into matching his classroom behavior．Student 2 accessed his linguistic repertoire and produced a sentence with the intention of creating a more comfortable space at that specific moment in class．Next，Student 3，raised her voice and commented on Student 2＇s response with a disapproval tone in Mandarin and finished in Taiwanese（Turn 9）：最好啦～聽你勒叭噗！（Yeah，you better．You are boasting！）The evidence of a multilingual linguistic practice of Mandarin，Taiwanese and English in this science class affirm to the purposes of translanguaging that scholars formerly suggested：to emphasize，to ease tension， to inject humor，to show knowledge，to mediate meaning（García et al．，2011；Baker and Wright，2017）．

The second example，Excerpt 2，presents a conversation taken place in a Math subject class of the eleventh grade at the Senior High school．

## Excerpt 2 （07／03／2019）

1．［1：44］The Math Teacher：來，我們找個同學上來寫一下。（Come on，let＇s find a student to come on tothe stage to write an answer to this question（on the blackboard．））
2．［1：50］The Math Teacher：那個沒穿制服的，沒有按照規定穿制服的。（The one doesn’t wear uniform． The one did not follow the school rules to wear uniform．）

3．［1：56］Student 4：Fei－Fei，Fei－Fei （Fei－Fei．Fei－Fei（a pseudo name）．
［After Student 4 called out Student 5＇s name，the Math teacher turned to Student 5，Fei－Fei．］
4．［1：58］The Math Teacher looked at Student 5，Fei－Fei，and asked him：會不會寫？（Do you know how to write it？）
5．［2：00］Student 5，Fei－Fei：會寫什麼？（Write what？）
6．［2：02］The Math Teacher：莫緊張。莫緊張。（Don’t be nervous．Don’t be nervous．）
7．［2：04］Students：哈哈哈哈。（Ha－ha－ha－ha．）
［Students burst into laughter．］

The Math teacher initiated the interaction in Excerpt 2 and asked for students＇input （Turn1）．First，Student 4 quickly shouted to propose Student 5 go on the stage（Turn 3）．The Math teacher then turned to Student 5 and asked him directly whether he knew the solution to the math problem．Next，Student 5 looked surprised and answered back to the math teacher with a rhetorical question（Turn 5）．The Math teacher saw Student 5 struggling，he then broke the language of the curriculum by switching to Taiwanese（Turn 6）and addressed Student 5 in a calm and even tone：＂莫緊張。莫緊張。＂（Don’t be nervous．Don’t be nervous．）．In the end，students all burst out laughing．The language shifting from Mandarin to Taiwanese by the Math teacher shows that the use of translanguaging strategy here is to ease the serious atmosphere and further to create a more comfortable space for pupils．Students＇laughter is the proof that the distant gap between the teacher and students diminished at this moment．

Excerpt 3 and Excerpt 4 are from the same class recording of an eleventh grade Mathematics class at the Senior High School．Some minutes of a total duration of 20 minutes of 14 seconds of observation are transcribed．The conversation presented in Excerpt 3 was at the beginning of the class．It is a negotiation between the Math teacher and students about having an exam．

## Excerpt 3 （18／04／2019）

1．［0：44］The Math Teacher：那個 • • •（That．．．）
2．［0：46］Student 6：今天不用考試喔？（Don＇t we have an exam today？）

3．［0：47］The Math Teacher：今天上完可能有點 • •（Today when we finish the chapter，it could be．．．）
4．［0：49］Student 7：媠啦。（Great．Hooray！）
5．［0：50］Student 8：媠啦。（Great．Hooray！）
6．［0：51］Student 9：媠啦。（Great．Hooray！
7．［0：51］Student 10：沒關係啦。不用討論，就直接這樣啦。（That＇s ok．No need to discuss．That＇s it（．．．no exam today）．）
［Noise in the classroom］
8．［0：53］The Math Teacher：參詳一下，好啦？（Let’s discuss about it，ok？）
9．［0：57］Student 10：不用參詳了啦。不用啦。（No，there is no need to discuss．No．）
10．［0：59］Student11：那下禮拜一再考啦。（Let＇s have the exam next Monday．）
11．［1：00］Student 12：免啦，免講啊啦。（No need．No need to talk more．）
12．［1：01］The Math Teacher：今天可能來不及，上不完啦。（Today we won’t have enough time，we won＇t be able to finish this unit．）
13．［1：03］Student 13：爽啦！（Yes，great！）
14．［1：05］The Math Teacher：所以 • • •（So．．．）
15．［1：06］Student 14：那上完再考啊。（Let＇s have the exam after you finish the unit．）
［Many students started chatting and made comments at the same time．］

The Math teacher began the class by initiating a conversation in Mandarin．Student 6 interrupted and asked the teacher if they would have an exam that day（Turn 2）．Just before the teacher finished the reply to Student 6，Student 10 attempted to finish the Math teacher＇s sentence by interrupting the flow in class（Turn 7）．The class was then filled with a hailing sound of excitement；meanwhile，Student 7，Student 8 and Student 9，raised their voice and cheered in Taiwanese：媠啦。（Great．Hooray！）（Turn 4， 5 and 6）．Next，the teacher shifted to Taiwanese and proposed to have a discussion about the exam with his students（Turn 8）：詳一下，好啦？（Let＇s discuss，ok？）As we see here，students expressed their exciting emotion in Taiwanese while the Math teacher shifted to Taiwanese for the purpose of initiating a negotiation with students．The function of the use of Taiwanese here can be explained as to lessen the social distance between students and the teacher（Baker and Wright，2017：101）． The Math teacher switching from non－curriculum language to the curriculum language invites a space for students to use their possible linguistic repertoire in the classroom．Several
students（Student 10，Student 11，Student 12 and Student 14）then joined the dialogue． Student 10 shifted between Mandarin and Taiwanese and emphasized on the word＂discuss＂． Student 12 tried to convince the teacher by solely using Taiwanese in the negotiation（Turn 11）．Students were aware of the role that Taiwanese played in this discussion，and they tried to accommodate themselves in using their possible bilingual skills to initiate a negotiation with the teacher by using Taiwanese．From this short conversation，we observe that the translanguaging strategy was used for different purposes．The Math teacher used it to solve a problem．Students used it to emphasize the negotiation，which is the central of the conversation，and to wish to change the relationship between themselves and the Math teacher． The purposes of using the translanguaging strategy here allude to the purposes of translanguaging proposed by Baker and Wright（2017：102）．

The conversation shown in Excerpt 4 happened during the lesson of the possibility topic． The teacher started off by reading a question from the textbook in Mandarin．It is a question about gambling and probability．Right after finishing to read－aloud the question，the Math teacher gave a comment on gambling．

## Excerpt 4 （18／04／2020）

1．［07：11］The Math teacher：這個賭博很不好蛤。（Gambling is very bad．）
2．［07：15］Student 15：你教我們賭博，你還說賭博不好！（You teach us gambling and you are saying that gambling is very bad！）
［Laughter among students in the classroom］
3．［07：18］The Math teacher：只是叫你們去了解賭博。你們沒有聽過閩南語一句話嗎？（I only teach you to understand gambling．Have you ever heard of a Taiwanese proverb？）
4．［07：24］Many students：沒有。（No．）
5．［07：26］The Math teacher：講到博賭…講到吃煙蓋母好，講到博賭人就去。（Speaking of gambling．．．Speaking of smoking，it＇s very bad．Speaking of gambling，people go directly（to gamble）．）
［While talking，the teacher wrote the Taiwanese proverb on the blackboard：「講到吃煙蓋母好，講到博賭
人就去。」（Speaking of smoking，it＇s very bad．Speaking of gambling，people go directly（to gamble）．）］
6．［07：33］Student 15：蛤？什麼？（Huh？What？）
7．［07：33］the Math teacher：按呢會不會翻譯？（Like that，do you know how to translate？）
［The teacher was pointing at the written proverb on the blackboard while asking．］
8．［07：35］Student 15：講中文！（Speak Mandarin！）
9．［07：36］Student 16：不會。（No．）
10．［07：36］Student 17：會。（Yes．）
［Noise in the classroom［Inaudible］］
11．［07：36］The Math teacher：會翻成中文嗎？還是英文？（Do you know to translate it to Mandarin？or to English？）

12．［07：40］Many students：英文。（English．）
［Laughter among students in the classroom］
13．［07：41］Student 18：你吃那個 $\boldsymbol{o k}$ 嗎？（Is it $\boldsymbol{o k}$［for your health］if you smoke？）
14．［07：44］Student 19：日文。（Japanese．）
15．［07：46］The Math teacher：其實這個理念這樣講有兩種含義：「講到吃煙蓋母好。」蓋母好呢，就是很不好啦。但是也可以講成改母好。講到吃煙改母好。（Actually，this proverb has two meanings． ＂Speaking of smoking，it is very bad．＂＂蓋丑好＂means extremely bad．But it can also be explained as＂to quit smoking is bad＂．＂Speaking of smoking，to quit smoking is bad＂．）
［While speaking，the teacher was writing and replacing the word＂蓋＂for＂改＂on the board：講到吃煙蓋（改）毋好。］

16．［08：05］Student 15：所以呢？（So？）
17．［08：06］Student 17：就是不能改啦。（So that means do not quit smoking．）
18．［08：07］The Math teacher：講到博賭人就去。（Speaking of gambling，people go directly（to gamble）．）
［While speaking，the teacher wrote a Mandarin word，＂氣＂，to replace＂去＂on the blackboard：講到博賭人就去（氣）．］

19．［08：10］Student 20：人就去喔？（People go directly（to gamble）？）
［Students discussed in a low voice［inaudible］accompanying with laughter．Meanwhile，the teacher wrote an additional word＂氣＂（to get pissed off）on the blackboard．］

20．［08：21］The Math teacher：講到吃煙蓋毋好，「蓋母好」就是比較不好啦。講到博賭人就去；人就氣，講到博賭人就氣，就是很生氣啦。有兩種含義。（Speaking of smoking，it is very bad．＂蓋母好＂means it＇s not very good．Speaking of gambling，people go directly＂去＂（to gamble）．But it can also mean to get pissed off，‘氣’．Speaking of gambling，people get pissed off．It means very angry．There are two meanings．）

21．［08：28］Student 21 looked the proverb on the blackboard and turned to ask the researcher，who was sitting next to him：「吃煙」是什麼？（What is＂吃煙＂？

22．［08：29］The researcher：抽煙。（Smoking．）
23．［08：42］The Math teacher：所以閩南語其實…（so Taiwanese is actually．．．）
24．［08：43］Student 22：很 cool．（Very cool．）
25．［08：44］The Math teacher：很好玩啦。（Very fun．）
26．［08：47］Student 17：難才好玩。（Difficult is fun．）
27．［08：48］Student 23：Hao－Hao 閩南語高手欸。（Hao－Hao（a pseudo name）is a master of Taiwanese．）
［a few exchanges between students．．．［inaudible］］
28．［08：55］The Math teacher：好啦，專心上課了喔。（Ok，pay attention in class now．）
29．［08：58］Student 18：Hao－Hao 閩南語很強欸。（Hao－Hao＇s Taiwanese is excellent．）
30．［09：00］The Math teacher：好啦，那第一個骰子出現 2，3，4，5 點，甲要給乙 120 元 $\cdots$（Ok，so if the first dice roll appears 2，3，4 or 5，甲 needs to give 乙 one hundred and twenty dollars．．．）
［The class continued．］

During the conversation in this class，the teacher made a Taiwanese homophones joke．The milieu in the classroom was at ease and a few exchanges involved with students＇laughter． The language interaction involved English，Mandarin，and Taiwanese．Before solving the question，the teacher switched to Taiwanese to tell a Taiwanese proverb：「講到吃煙蓋母好，講到博賭人就去」（Speaking of smoking，it＇s very bad．Speaking of gambling，people go directly［to gamble］）（Turn 5）．At the same time，the Math teacher wrote the proverb on the blackboard．

The first part of this Taiwanese proverb is：講到吃煙＂蓋＂母好（Speaking of smoking，it’s very bad．）The word＂蓋＂means＂very or extremely＂．The word＂蓋＂shares the same pronunciation with the word＂改＂，which has a completely different meaning：＂to quit＂．＂蓋＂ and＂改＂are Taiwanese homophones，which share the same pronunciation but have different characters and meanings．Therefore，when replaced＂蓋＂for＂改＂：講到吃煙改母好，the meaning becomes＂speaking of smoking，to quit smoking is bad＂．In addition，the second part of the Taiwanese proverb is 講到博賭人就＂去＂（Speaking of gambling，people go directly （to gamble）．）The word＂去＂means＂to go＂，and the word＂氣＂，which the teacher added on the side，means＂to get pissed off＂．＂去＂and＂氣＂are homophones．So，when replaced＂去＂ for＂氣＂，「講到博賭人就氣」 has a completely different meaning：＂Speaking of gambling， people get pissed off＂＇The teacher used Mandarin to clarify the meaning of each homophone when explaining the proverb（Turn 15－Turn 20）．The teacher repeated the proverb several times in both Taiwanese and Mandarin．The switches between codes are to reinforce and to
make sure students understand two different meanings completely（Baker and Wright，2017： 102）．

In addition，from the language interaction between the Math teacher and students，we notice that many students did not understand Taiwanese．In fact，Student 15 demanded the teacher to speak Mandarin（Turn 8）after the teacher asked a question to the class：按呢會不會翻譯？（Like that，do you know how to translate？）（Turn 7）．The teacher shifted from Taiwanese to Mandarin in the question，which is used to emphasize particularly on＂to translate＂（Baker and Wright，2017：101）．Turn 11 indicates that the Math teacher is aware of and acknowledges students＇linguistic and communicative repertoires and encouraging students to use what they know and can do in his instruction．Following a response by Student 19 （Turn 14），which implies that she is a multilingual speaker．Besides Mandarin，Taiwanese， and English，Japanese is also included in her whole linguistic repertoire and that she has proficiency in Japanese at a certain degree to be able to translate the proverb in Japanese．

It＇s common that in a language a word can contain many meanings．In the case of Chinese languages，many characters can share the same pronunciation．According to the Dictionary of Frequently－Used Taiwan Minnan commissioned by the Ministry of Education of Taiwan， today＇s Taiwanese spoken in Taiwan has seven tones while the tones of Mandarin are initially divided into four types．In the spoken form，listeners need to pay close attention to what the speaker is talking about and to understand the conversation in order to know which word the speaker is more likely to use．The homophones are often used in the wordplay in both written and spoken forms．To understand a meaning of a conversation，which includes homophones， the listeners need to have high proficiency in that language．In Excerpt 4，the proverb contains several Taiwanese homophones．Only the students，who have high proficiency in Taiwanese，can understand what the teacher said and are able to pick up the meanings created by the homophones（for example：Student 17）．Even though Mandarin and Taiwanese are not mutually intelligible in a spoken form，the two languages are written in the same Chinese
characters and it is possible for Mandarin speakers to read Taiwanese. However, it does not apply to all the cases. For instance, Student 21 looked at the written Taiwanese proverb on the blackboard but did not understand the meaning and turned to the researcher, who was sitting next to him. Student 21 further asked the researcher what "吃煙" (to smoke) means in Mandarin (Turn 21). This is an evidence to show that even though Taiwanese and Mandarin share some characters and keywords in the written form, the readers are not necessarily able to understand the different uses of vocabulary. The intelligibility of the written form between Mandarin and Taiwanese is similar to the written form between Mandarin and Cantonese (Fung and Lo, 1999).

An interesting feature from Excerpt 4 is that the Math teacher' shift of using a non-curriculum language (Taiwanese) also occurs in the other direction (from Taiwanese to Mandarin), and that did not interrupt nor stopped the flow of the classroom (such as students' feedback and response). We believe that the Math teacher's bilingual identity allows him to use translanguaging strategies to step out of a linguistic curricular frame. That creates a space for students to feel comfortable in using their languages freely in the classroom and in embracing their multilingual identities. This example also shows how multilingual students mix languages and use their whole linguistic repertoire for a wider communication and for different purposes. After finishing the explanation of the proverb, Student 17 and Student 22 made their comments on Taiwanese, which showed their positive attitudes towards Taiwanese (Turn 24 and Turn 26). Expressions are as such "Difficult is fun" (Turn 26) and "(Taiwanese is) very cool" (Turn 24).

Excerpt 5 is an extract of a part of a total duration of 24 minutes in-class observation in a tenth-grade English class at a senior high school. The English teacher began the class by introducing the topic from the textbook. Mandarin is the main language of instruction, and English is used in some interactions.

## Excerpt 5 （14／03／2019）

1．［07：18］The English teacher：Okay，let＇s turn to page $\mathbf{1 3 8}$ first．See the title page＂The Little Miss Fireman＂．There are six questions on this page。這裡有六個問題。有張圖片，有沒有？這個小朋友，穿著全身消防隊的服裝。 好，那下面有個 warm－up 的地方。好，今天這課主要就是小朋友他生病。那我們背個單字吧：leukemia。他有血癌，那他快要過世之前有些事情想完成。好，所以今天想像一下：What would you do if you had only three days left to live？（Okay，let＇s turn to page 138 first．See the title page＂The Little Miss Fireman＂．There are six questions on this page．There are six questions．There is a picture，isn＇t there？This is a child，who is wearing a fireman costume．Ok， there is a warm－up at the bottom of the page．The lesson today is about a child，who is sick．Let＇s memorize a vocabulary：leukemia．This child has leukemia and wants to accomplish some things before she passes away．Ok，so let＇s imagine：What would you do if you had only three days left to live？）
2．［08：02］Student 24：買樂透。（Buy a lottery．）
3．［08：03］The English teacher：Check the＂大樂透＂。（Check the＂大樂透＂．（＂大樂透＂is what the lottery is called in Taiwan．））
［The English teacher looked at Student 24 and continued speaking．．．］
4．［08：08］The English teacher：Okay．You want to win the lottery．好，買樂透。那你沒中呢？錢全部花光去買樂透。（Okay．You want to win the lottery．Okay，so you want to buy a lottery．What if you did not win the lottery and you spent all your money to buy one？）
5．［08：11］Student 24：那就 let it go 嘍。（Then，let it go．）
6．［08：13］The English teacher：好，let it goo 好就是…那中的話呢？那你錢要留給誰？（Okay，let it go． But what if，you won the lottery，what would you do？Who would you leave your money to？）
7．［08：17］Student 24：痾，留給…（eh，I will leave it to．．．）
8．［08：18］Student 25：他要娶 $\mathrm{xxx} \circ$（He wants to marry xxx．）
［While replying to the English teacher，Student 25 finger－pointed at Student 24．The English teacher then turned to Student 24 and asked him a question．］
9．［08：19］The English teacher：你要娶誰？（Who do you want to marry to？）
10．［08：20］Student 25：他要娶 xxx $\circ$（He wants to marry xxx．）
11．［08：21］The English teacher：就是留給你的未婚妻，女朋友或是留給家人。 $\boldsymbol{O} \boldsymbol{k}$ ，總之就是過世之前還可以留給家人不錯的東西，一大筆錢財。Very good！好，那有沒人覺得剩三天了，因為你也不知道你的明天會怎麼樣，要是真的只剩三天可以活，你最想做的事情是什麼？（You want to leave your money to your fiancé，your girlfriend or your family． $\boldsymbol{O} \boldsymbol{k}$ ，anyway，it is nice to leave something good to your family before you pass away，（such as）a lot of money．Very good！Is there anyone who feels that you only had three days left and you do not know how your tomorrow would be like？If you really had only three days to live，what is the thing you would like to do the most？）

12．［08：46］Student 26：熬夜。（Stay up late．）
13．［08：47］the English teacher：熬夜？熬夜做什麼？有人說要熬夜耶。你現在不就是在熬夜嗎？（Stay up late？Stay up late to do what？［the teacher turned to the class and said］Somebody said that he wants to stay up late．［The teacher then turned right back to Student 26 and asked him］Are you not staying up
late now？）
14．［08：50］Student 26：我十一點就睡覺了。（I go to sleep at eleven o＇clock．）
15．［08：51］the English teacher：你十一點就睡覺了？這麼標準！Okay．所以你從來沒有熬夜過的經驗？（You go to sleep at eleven o＇clock？How standard！Okay．So，you have never had an experience of staying up late？）
16．［08：56］Student 26：沒有，太不健康了。（No，that is very unhealthy．）
17．［08：58］the English teacher：太不健康了，哈哈。（Very unhealthy．Ha ha）
18．［09：00］the English teacher：好，還沒有想法的話，看一下下面有五個選項。我覺得有的都差不多。好，第一個：You want to spend all the money you have．把所有的錢花光好嗎？假如你剩三天可活，可是重點是你有錢嗎？你也沒有錢。你也沒有錢所以把錢花光。好，假裝你很有錢，把錢花光。好，第二個應該大家比較想做，對不對？Say I love you to whoever you love．好，所以就是跟周圍的人說 I love you 我愛你。趕快講一講。第三，oh，第三應該大家會想要。Do you want to see your idol in person？（Okay．If you have not got any idea，there are five options in the following．I think some of them are very similar．Okay，the first option：You want to spend all the money you have．Is it good to spend all the money if you only had three days to live？But the point is，do you have money？ You don＇t have money，so you spend all of it．Okay，let＇s pretend that you are rich and spend all the money．Okay，the second one，I supposed that people would like to do this more，right？Say I love you to whomever you love．Okay，say I love you I love you to the people surround you．Hurry up and say it． The third，oh，the third one I think people would want it．Do you want to see your idol in person？）

19．［09：44］Student 27：Of course．Why not？（Of course．Why not？）

The languages involved in Excerpt 5 are Mandarin and English．The switches between Mandarin and English throughout this conversation are observed between the English teacher and students．As Mandarin is the main language of instruction，the English teacher used Mandarin to give explanations and to enhance comprehension（Tien，2009）．To begin the class，the English teacher spoke English to give students an instruction to follow and switched to Mandarin to give an outline of the topic．In the middle of the introduction，the English teacher switched to English to highlight the vocabulary and then continued in Mandarin to finish the introduction of the main character from the textbook．The English teacher then asked a question in English in order to invite students to participate in a warm－up activity． From the interaction between the English teacher and Student 24，we can see that Student 24 felt comfortable in shuttling between Mandarin and English．The English teacher＇s use of translanguaging encouraged students＇participation and engagement with the learning content，
which is also found in Ke and Lin＇s（2017）study．When students＇use of languages became meaningful in the classroom，they were able to contribute more to the class．The English teacher validated the participation of Student 24 and Student 25 by giving a compliment in English（Turn 11）．Then，the English teacher turned to the class to encourage other students to endorse more participation by using the translation approach to repeat the same question she asked in Turn 1，but this time the question was asked in Mandarin．With a purpose of recruiting more participation，the English teacher turned attention back to the textbook．While the English teacher took the lead to read the content from the textbook，she switched between Mandarin and English in Turn 18．By pushing students to use more English in class，the teacher asked a question in English to invite more feedback from the class，and this is a similar strategy that she used in Turn 1．The frequent shifting between Mandarin and English in this English class is apparent．The teacher used the translanguaging strategy to emphasize， to clarify，to reinforce and to mediate understanding（Baker and Wright，2017：101；García， 2009：33），while students used it to show knowledge and to ease tension（Baker and Wright， 2017：101）．

In addition to the observation during lesson break，the main language for communication was Mandarin，and there were also switches observed between languages，such as Mandarin and English and Mandarin and Taiwanese．Two examples of switches between Mandarin and Taiwanese are presented below．The first one occurred during a recess of a Grade 9 Physics and Chemistry class．Students in this class gathered in small groups in different corners in the classroom．Two girls（Student 28 and Student 29）sat together gossiping．
（1）One of the girls said to the other：＂我們班有個人超白痴的，他那天 $\cdots$［continued in Mandarin］。＂（There is one person in our class who is very stupid．The other day he was．．．）

In this example we can see that the main language is Mandarin but one of the students used the word＂stupid＂in Taiwanese．

The second example was observed in a recess of a Grade 10 English class．Two students， Student 30 and Student 31，stood on the stage in front of the class chatting．
（2）Student 30：＂很多人都沒有交班費啊！＂（There are many people not paying the class expenses！）

Student 31：［replied with a high－pitched and heated tone］＂你就把他拉進學費裡看誰敢不繳。誰敢來撟我，單挑！＂（You then add the class expenses into the tuition，let＇s see who dare not to pay it．Who dares to scold me，we will go head to head！）
（11／03／2019）

The use of Taiwanese utterances in these two examples are to express emotions，to curse， and to gossip．In the meanwhile，the use of English in the dialogues were also observed，and they are presented in the following．The first interaction happened between two students discussing an issue upon the lunch fee．Although Student 30 initiated the conversation in Mandarin，Student 31 switched to English to reply the awkward＂money issue＂．Using translanguaging helps Student 31 to ease tension．

Next，the third example was also observed in the same tenth－grade English class as the second example during a recess．Student 32 approached Student 33 to start a dialogue．
（3）Student 32 asked：＂欸你可以付餐費嗎？＂（Hey，would you pay the lunch fee？）
Student 33 replied：＂Don＇t worry about it．I have pocket money．＂［While Student 33 reached into his schoolbag，he smiled at Student 32．］

Another language interaction that involves the use of English in a dialogue happened in a recess of a Grade 9 class．Student 34 asked help from Student 35 to solve a math question from the textbook．
（4）Student 34：我想是不是畫這樣，後來想說不是，就把它擦掉不畫了。（I was thinking whether it should be drawn this way，but then I thought not．I erased my answer and left it blank．）

Student 35：阿就是這個 $\boldsymbol{X}$ ，你找出頂點 $\cdots$（Ah，this is $\boldsymbol{X}$ ，and you have to find an apex．．．） ［continuing in Mandarin to explain the resolution of the math question］．Ok．結束。簡單 $\boldsymbol{e a s y}$ ． （Ok．Finished．Easy easy．）

The use of English utterances in this occasion is to show knowledge．Student 35 emphasized not only on his capacity on academic problem－solving but also his competences in English．

To sum up，from both in and out－of－class observations we can see that language interactions at school between teachers and students or among students are dynamic，even though Mandarin is the main language used for instruction of all subjects in school．The excerpts and examples provided above have illustrated instances of translanguaging at school． The alternate use of English and Taiwanese in a Mandarin dominant conversation shows multilingual competences of both the speakers and the listeners．Although students varied in how much they spoke in the observation period，both teachers and students did not use languages separately but mixed．The use of translanguaging during a lesson did not interrupt the flow in class．In addition，the teachers＇translanguaging approach＂empowered＂students and that invited students to use their linguistic and communicative repertoires more fluidly． As it can be seen，the teachers＇translanguaging approach sparked more participation and engagement from the students．Apart from that，switching between languages that observed
during lesson break also indicated that our participants use their entire linguistic repertoires flexibly. These dialogues show participants' multilingualism and their multilingual identities, and it indicates that participants used resources from their whole linguistic repertoire to achieve different goals.

### 5.1.2 The Use of Languages Outside School

In order to answer the second sub-question (Q1.2. "How do Taiwanese students use languages outside school?"), in the following we give explanations based on the type of data, quantitative and qualitative, accordingly. We use SPSS to analyze the quantitative data. For qualitative data, we present examples of the students, who took part of individual interviews, and focus on students' explanation on their use of languages outside school.

## Quantitative data on language use outside school

In our study, outside school domain includes several contexts: at home, outside school with friends, running outdoor errands and in free time doing entertainments. Table 5.2 shows the frequencies of the use of languages in outside school domains. We then discuss the use of languages in each domain individually.

Firstly, in the home domain, the highest use of Mandarin ( $M=9.62, S D=1.20$ ) and English $(M=2.79, S D=2.18)$ is when participants talk with their siblings. When talking with parents, Mandarin ( $M=9.45, S D=1.29$ ) is the main language used while as compared to the use of Taiwanese ( $M=5.12, S D=2.84$ ) or English ( $M=2.14, S D=1.69$ ). To be specific, the use of Taiwanese ( $M=7.23, S D=2.78$ ) is more frequent when talking with grandparents than with parents $(M=5.12, S D=2.84)$ and siblings $(M=3.89, S D=3.08)$. This shows that each language has its particular role when communicating with each family member.

Secondly, when looking at running outdoor errands, generally speaking Mandarin is the most frequently used language, while the use of Taiwanese and English are lower than the use
of Mandarin and both are at a similar level. However, when we look closely into specific activities and even though the dominant use of Mandarin is obvious, the use of Taiwanese in the traditional market $(M=4.32, S D=3.18)$ stands out as compared to other outdoor errands.

Thirdly, looking at how participants spend their free time, Mandarin is used dominantly in all activities listed. Specifically, the use of Mandarin appears to be the highest ( $M=9.63, S D$ $=1.30$ ) when hanging out with friends outside school. On the other hand, the use of Taiwanese in free time is reported low. Based on the descriptive data, it can be seen that participants watch TV in Taiwanese $(M=3.21, S D=2.61)$ more than doing other leisure activities in Taiwanese. In the case of English, the highest frequent contact with English is when participants are listening to music ( $M=7.11, S D=2.90$ ). Overall, Mandarin is the language most frequently used in leisure activities followed by English and Taiwanese is the least used language. Table 5.2 shows the results of the participants' frequent use of languages in different outside school domains.

| Outside school domain | Interlocutors ( $N=150$ ) | Mandarin |  | Taiwanese |  | English |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | SD | Mean | SD | Mean | SD |
| At home with | grandparents ( $\max =10$ ) | 7.23 | 2.87 | 7.23 | 2.78 | 1.21 | 0.66 |
|  | parents ( $\max =10$ ) | 9.45 | 1.29 | 5.12 | 2.84 | 2.14 | 1.69 |
|  | siblings ( $\mathrm{max}=10$ ) | 9.62 | 1.20 | 3.89 | 3.08 | 2.79 | 2.18 |
| Running <br> outdoor <br> errands | at street with strangers ( $\max =10$ ) | 8.91 | 2.52 | 2.30 | 2.15 | 1.67 | 1.44 |
|  | in a department store with shop keepers ( $\max =10$ ) | 9.69 | 1.24 | 1.61 | 1.64 | 1.48 | 1.26 |
|  | at a traditional market with venders $(\max =10)$ | 8.86 | 1.98 | 4.32 | 3.18 | 1.22 | 0.89 |
|  | at a governmental place with public officials ( $\max =10$ ) | 9.08 | 2.34 | 1.99 | 2.03 | 1.50 | 1.42 |
| In free time | surfing the Internet (max=10) | 9.21 | 1.83 | 1.53 | 1.15 | 4.89 | 2.96 |
|  | watching TV ( $\max =10$ ) | 9.19 | 1.79 | 3.21 | 2.61 | 4.26 | 2.96 |
|  | watching films ( $\max =10$ ) | 8.70 | 2.16 | 2.38 | 2.16 | 6.26 | 3.15 |
|  | listening to music ( $\max =10$ ) | 8.89 | 1.95 | 2.72 | 2.49 | 7.11 | 2.90 |
|  | listening to radio ( $\max =10$ ) | 8.23 | 3.02 | 2.74 | 2.49 | 3.01 | 2.73 |
|  | on social media ( $\max =10$ ) | 9.04 | 2.26 | 1.73 | 1.79 | 4.15 | 2.98 |
|  | outside school with friends $(\max =10)$ | 9.63 | 1.30 | 3.25 | 2.51 | 2.23 | 1.84 |

Table 5.2. Results of language use outside school domains

## Qualitative data on language use outside school

A total of 24 individual interviews from six different school levels were carried out. The researcher asked interviewees questions regarding their use of languages in different social domains. The majority of students revealed that the language they use with their siblings and parents at home is mainly Mandarin, and sometimes they switch between Mandarin and Taiwanese or between Mandarin and English. In the following, we provide some examples of individual interviews. As mentioned in the methodology, the names appearing in this thesis are pseudo names (see Appendix 6). The names are presented in bold. For example, Li, a Grade 10 student, told the researcher that at home Mandarin is the most dominant, and she often switches between Mandarin, Taiwanese, and English with her parents and sister.

Between Li＇s parents，Taiwanese is their language of communication，but when $\mathbf{L i}$ and her sister join the parents＇conversation，the parents switch to Mandarin．Sometimes $\mathbf{L i}$ finds it difficult to express herself in some words in Mandarin；therefore，she switches to Taiwanese to make sense of herself．When she is with her grandmother， $\mathbf{L i}$ uses mainly Taiwanese so as to bond a closer and more intimate relationship with her．However，she claimed that her Taiwanese is not fluent enough and sometimes inserts Mandarin utterances in a Taiwanese dominant conversation with her grandmother［04：15］．Li＇s switches between Mandarin and Taiwanese indicate some purposes of translanguaging，such as concepts without equivalences and changes of attitudes or relationship（Baker and Wright，2017：101）．On the other hand， when talking with her sister， $\mathbf{L i}$ often inserts English words to make the conversation more fun and exciting．Switching between Mandarin and English has become a special linguistic behavior between $\mathbf{L i}$ and her sister．She gave an example of that when her family is having dinner，she often asks her mom to＂給我一張 $\boldsymbol{t} \boldsymbol{i s s u e}$＂（give me a tissue）．Li claimed that even though in the beginning her parents did not understand the meaning of＂tissue＂，after $\mathbf{L i}$ explained it to them，her parents adopted Li＇s pattern of language use．Now，her parents often switch between Mandarin and English when talking with her and her sister．We can see that the purposes of using translanguaging at home domain are to change the mood in the conversation and to strengthen their familial relationship（Baker and Wright，2017：101）．

In addition，several students（e．g．，Shen（a Grade 9 student），Han（a Grade 9 student）， Zhang（a Grade 8 student）revealed that regardless the social contexts，they particularly insert English swear words in some circumstances because they think that cursing in Mandarin or Taiwanese is perceived to be bad－mannered．For instance，a Grade 8 student，Zhang，said that ［03：14］＂有時候為了不要用中文或台語動粗口，就會用英文，例如：shit 或是 damn it．因為我覺得用中文罵或用台語罵聽起來真的很粗魯，可是至少用英文罵就比較文雅了吧？！雖然我都輕輕小聲地罵，不敢大聲地罵。＂（Sometimes in order not to curse in Mandarin or Taiwanese，I use English，for example：shit or damn it．Because I feel that swearing in

Mandarin or Taiwanese is very rude．At least when I use English to curse，it seems much more elegant，even though I often keep my voice down when cursing．I do not dare to curse loudly．）Zhang switches to English to release the tension and to express his inhibited feelings． This expressive function of switching between Chinese language varieties and English is also found in Chen＇s（1996）study．Chen＇s participants used English words particularly to release their burden feelings and to show their affection．Chen further explained that the insertion of English swearing words or affectionate words in Chinese dominant interactions for such expressive functions is related to Confucius＇philosophy，which＂teaches an educated Chinese person should have strong control over emotion＂（p．271）．Another Grade 9 student，Yang， indicated that although he uses Mandarin dominantly，when gossiping with friends，he switches to Taiwanese because he feels that using Taiwanese to imitate a specific person，who he and his friends mutually know，is＂比較貼切＂（more appropriate）．Yang＇s switches between Mandarin and Taiwanese for the purpose of imitation in a specific scenario are examples of one of the translanguaging functions that Baker and Wright suggested（2017： 101）．Regarding the language use on social media，Yang claimed that when chatting with friends on Facebook Messenger，he uses more English than Mandarin．Apart from his favorable attitudes towards English，Yang also explained two other reasons of his language behavior：＂［07：27］一方面是想訓練自己的英文能力，令一方面是跟別人單挑。＂（On one hand，I want to improve my English．On the other hand，I would like to take on somebody（to see who is better in English）．）Yang clearly stated his purposeful way of using English on social media．A similar reason of wanting to improve English proficiency by using English on other social media platforms，such as Instagram and LINE，is also found in many other students（e．g．a Grade 8 student，Jia and a Grade 10 student，Xin．）In particular，Xin declared that even though most of the time she uses Mandarin on social media to chat with friends，she also switches to Taiwanese quite often especially when she cannot find a word in Mandarin that does not have an equivalent word in Taiwanese sharing the same meaning to express
herself. As Xin explained that due to the fact that she is not literate in Taiwanese, she often uses audio recording to send the message of her speaking Taiwanese to her friends. A Grade 9 student, Zhou not only shared the same language behavior with Xin but also mentioned that sending "stickers" is another option that allows him to send a message that contains Taiwanese words.

From the examples provided above, overall students have a good command of their languages, and their use of languages is dynamic and complex. Many students also explained in the interviews that their language choice depends on the language interlocutors initiated. Accommodating the preferred language of the speaker is apparently these Taiwanese students' habit in language use.

In what follows, we present two examples of conversations between friends outside school. A text message from Facebook Messenger between two friends and a signed birthday card show that translanguaging commonly occurs in peers' linguistic practices. Figure 5.1 is a screenshot of two Grade 10 students using Facebook messenger to keep in contact outside school. The conversation was carried out on January 25th in 2019. It is about rearranging a meet-up.


Figure 5．1．A social media chat between two tenth grade students

The following is the transcript with translation in English included in brackets．The main language in the interaction is Mandarin．Mandarin has the regular font，and English is in italic and bold．

## Translation of Figure 5.1

1．Student 36：我來傳達 bad news 了［3 emoticons］（I am sending bad news）
明天的話我沒辦法［2 emoticons］（Tomorrow I cannot（meet up with you））
2．Student 37：我們也沒辦法［2 emoticons］（We cannot either）
所以改時間［2 emoticons］（so（we need to）change time）
3．Student 36：喔尬真的嗎［3 emoticons］（oh god，really？）

Seeing from the transcript，Student 36 initiated a communication with Student 37 to talk about the arranged meeting．The use of the English word in the first sentence shows a purpose of emphasizing a particular point in a conservation（Baker and Wright，2017：101）．

The case of cross－linguistic influence at the lexical level was also observed．Cenoz（2001） reports several strategies that her subjects use while producing an oral production，which are interactional strategies，code－switching and transfer．Here in our examples，transfer strategies are considered．Cenoz（2001：13）following Poulisse（1990）specifically indicates two types of strategies in language transfer：borrowings and foreignizing．
－Borrowings refers to＂the use of an L1（or Ln）word without any phonological and／or morphological adaptation＂．
－Foreignizing refers to＂the use of an L1（or Ln）word with phonological and／or morphological adaptation＂．
（Cenoz，2001：13）

Foreignizing can be seen in Turn 3 used by Student 36：喔尬真的嗎（ oh god，really？）． The transfer from Student 36＇s target languages onto the source language is＂喔枪＂，which Student 36 uses Mandarin character with phonological adaptation from English＂oh，god＂． Cross－linguistic influence from Student 36 ＇s source and target languages are observed． Furthermore，this is also an example of the use of icons to express intimate expressions and emotions，which are integrated into the text．In each Turn in Figure 5．1，several icons are used． This is a common practice when teen students communicate among themselves．

Next，Figure 5.2 is a handwritten birthday card，which includes several languages in different types of fonts，colors and drawings．Figure 5.2 is provided by a Grade 11 student， Tsai，who received the card from her close friend，Hong．The main language of the birthday card is Mandarin．There are also English and Korean phrases in the text．See the following translation．Printed words on the card are presented in blue．


Figure 5．2．A handwritten birthday card

## Page 1

| Line | Original text | Translation |
| :---: | :---: | :---: |
|  | HAPPY | HAPPY |
| 1 | To：Tsai | To：Tsai |
|  | 開 | Live happily |
|  | 心 |  |
|  | 生 |  |
|  | 活 |  |
| 2 | Happy Birthday． | Happy Birthday． |
| 3 | 祝你校排進前一百 | Hope you rank the Top 100 （in the school academic performance）． |
| 4 | 不對～應該是一定要進前一百！ | No，I mean you must rank the Top 100. |
| 5 | 給我認真讀書！！！ | Study hard！！！ |
| 6 | 明天是模擬考！！！ | Tomorrow is the day of the practice university entrance exam（Note 1）！！！ |



Note 1: A practice university entrance exam is a test designated to get students ready for taking the actual university entrance exam. Practice exams usually are held during the second year of high school before the actual university entrance exam takes place in the following year.

Note 2: "脫魯" means to get a boyfriend or girlfriend and it is a modern slang used by young people in informal contexts.

Note 3: "XD" is an emoticon. An emoticon is an image, that is created through keyboard characters or symbols and put together in a certain way to present a specific emotion of a user (Resource from https://dictionary.cambridge.org/dictionary/english/emoticon).

The sender, Hong, began the message with a direct birthday greeting in English (Line 2). The main language used in this written message is Mandarin, and the use of English and

Korean is also observed. In Line 8, Hong used a teen slang, "脱魯", to describe an intention of finding a romantic partner. Unique slang terms that are popular used among young generations present what is going on in the modern teenage culture. We may explain that Hong used a specific language code in order to bond their friendship closer. By making fun of Xia, who they both know (Line 9), the function of the teen slang used here is to inject humor into the conversation. The representation of laughter in Line 10 is accompanied by a funny facial drawing icon after the actual language. This is an example of an icon integrated into the text, which is also found in Cenoz and Gorter's (2011) study.

On page 2, Hong started another paragraph by switching to Korean to express intimate feelings (Line 11), which shows that Hong tried to emphasize the special friendship she and Tsai possess. Then, Hong repeated the "happy birthday" greeting in Korean (Line 12). Here, Hong not only showed knowledge of Korean but also reinforced the birthday wish. The card receiver, Tsai, explained to the researcher that she and her friends have a mutual interest in Korean popular culture, so in their free time they often watch Korean TV dramas and listen to Korean pop music. By inserting some Korean words they learned from Korean TV dramas in the conversation with friends is more fun and interesting. Besides Mandarin, English, and Korean were used in this example, icons and the semiotic elements were also integrated into the text. It reflects that the popular culture has considerable influences on Taiwanese students' new way of literacy practice.

Apart from the communication out-of-school with friends, students also commented on their use of languages in various social domains with different people. In individual interviews, the researcher provided pictures of the street signages of five places in the neighborhood and asked interviewees which language or languages they would use in a specific place according to each picture. Places include a post office, a pharmacy, a restaurant, a local market, and a Japanese tea shop. The reason for choosing five signages from both governmental and non-governmental places was that the researcher considered those to be
where students might go or run errands. Pictures can be seen in Appendix 1. The signage of a post office contains two languages, Mandarin and English. The signage of a pharmacy contains Mandarin, English and Japanese. The signage of a restaurant contains Mandarin and Taiwanese. The handwritten sign of a vendor from a local market is in Taiwanese. The signage of a tea shop contains Mandarin, Japanese, and English. The majority of the students explained in the interview that they were able to recognize what languages were displayed and to understand the meaning of the signages. The researcher asked which language or languages he or she would use in each of the places, the majority of the students answered that speaking Mandarin is efficient enough to achieve communicational purposes in all social domains. However, in the local market and in the restaurant that sells Taiwanese traditional cuisine, the use of Taiwanese would appear to be used more or even dominant. Several students claimed that they would accommodate to the vendor and use Taiwanese if the vendor initiated a conversation by using Taiwanese. For example, in the opinion of a Grade 9 student, Yang, the dominant use of Taiwanese in the local market is because "the local market has existed a long history and most of the people who go to the local market are of the older generation" [14:18]. To a Grade 8 student, Zhang, "the local market is a place of warmness and friendliness" [12:23] because it is where Taiwanese people interact in Taiwanese very actively and also where the use of Taiwanese appears to be the most dominant. These students' responses correspond to the findings discovered by Van den Berg (1986). That is, the local markets are often seen as a more local and informal place, where money transactions and bargains take place in a face-to-face situation, and Van den Berg found that the use of Taiwanese and other vernaculars appears to have the highest function.

A Grade 10 student, $\mathbf{L i}$, also commented that the "vendors" intentional use of Taiwanese is because they want to be closer to the clients". In the case of the restaurant, where sells Taiwanese cuisines, it is the "representation of the Taiwanese culture" [13:44]; therefore, the
use of Taiwanese would be expected. Li further indicated that when talking to shop owners, her language choice depends on the initiative of an individual speaker. That is, when going to a shop if she is the one who initiates a conversation, Mandarin is her go-to language, but if the shop owner begins a conversation with her in Taiwanese, she would use the preferred language of the other [14:07]. On the other hand, a Grade 6 student, Wu pointed out that he is mindful of his linguistic competence in the vendor's preferred language. Wu would switch to Mandarin when he realizes that he is not competent enough to carry out a fluent conversation in Taiwanese [14:24].

In addition, a Grade 9 student, Zhou, indicated two factors that determine his language choice in different social domains: the age of the interlocutors and the language the interlocutors initiate. When going into a shop, at first Zhou would observe the age of appearance of a vendor in order to decide which language to speak with him or her. If a vendor is an elderly person, he would initiate the conversation by speaking Taiwanese to the vendor. On the other hand, if the shop owner seems young, Zhou would use Mandarin to carry out the purchasing process. As far as Zhou concerns that the majority of the shop businesses are now run by the young, Mandarin is used as the primary communicational language. As a result, Zhou uses Mandarin at making transaction deals most of the time. This only applies to the case when he is the initiator of the conversation. Vice versa, when the shop owner takes the initiative to carry out the conversation, Zhou would accommodate the preferred language of the shop owner.

In the case of the trilingual signage of the Japanese tea shop, a Grade 11 student, $\mathbf{L u}$, indicated that in Taiwan there are many shops or restaurants that sell Japanese goods. From his experiences, Lu often hears the shop owners or employees "greet customers in Japanese, but then they would switch to Mandarin to give a follow-up instruction to the customers" [08:27]. Lu, too, is like the majority of our interviewees, who use Mandarin for all
communicational purposes. During the interview, although the main language is Mandarin, many students also insert some Taiwanese utterances in the dialogue.

To conclude the results of the first two sub-questions in this chapter, our participants' language practices in and outside school show how multilinguals use different languages in creative ways not only in a spoken form but also in a written form. Mandarin is the most dominant language when compared to English and Taiwanese in all domains. Depending on the interaction with the interlocutor, the choice and the frequent use of each language would differ. Apart from the statistic results, which show that each of the languages is used at different degrees, the switches between different languages also occur commonly. Besides English, other foreign languages such as Japanese and Korean are also included in teen students' linguistic repertoire. In particular, the written messages and texts present teen students' new literacy practices, which are no longer limited to only language texts. Rather, they contain sound, visuals, icons, fonts and semiotic symbols. The communication is, therefore, multilingual and multimodal, which corresponds to Cenoz and Gorter's (2011) findings in trilingual writings of secondary school students from the Basque Country. Due to the development of the multimedia technology and communicational channels play an important role in modern communication, Taiwanese multilingual students' literacy practices have become innovative and dynamic. Popular culture is also considered to have broad influences on teen multilingual students' linguistic practices.

### 5.1.3 The Effect of Age on the Use of Languages

In this section, we report the statistical results to answer the third research question (Q1.3. "Is the use of languages related to age?"). As it has already been explained in the methodology, there were three age groups that were divided and named as the following: primary school level (primary $5^{\text {th }}$ grade and primary $6^{\text {th }}$ grade), junior high school level (junior high $8^{\text {th }}$ grade and junior high $9^{\text {th }}$ grade) and senior high school level (senior high $10^{\text {th }}$ grade and senior high
$11^{\text {th }}$ grade). Each of the school levels has 50 students. In order to compare the use of languages by three age groups, several Analyses of Variance (ANOVA) were carried out considering the use of three languages as the dependent variables. Here we looked at the language use as a whole instead of the language use in each domain independently. To do that, we firstly created three new variables: total Mandarin use, total Taiwanese use and total English use by adding up all 16 variables of language use in individual domains (a maximum of 160). Then, the one-way ANOVA analyses were conducted to explore the differences between three age groups on the three new variables.

Here, we report the results of each language accordingly. The descriptive statistics associated with total Mandarin use across three age groups are reported in Table 5.3. It can be seen that the senior high school level has the highest mean in total Mandarin use ( $M=146.94$, $S D=13.13)$ and the primary school level $(M=146.86, S D=13.42)$ has a similar mean as compared to the senior high school level $(M=139.98, S D=18.59)$. The junior high school level has the lowest mean of total Mandarin use. The level of the total use of Mandarin had a significant difference between groups, $F(2,147)=3.43, p=0.04$. A Tukey post hoc test revealed that the differences were only marginally significant between the primary school level and the junior high school level (0.07) and also between junior and senior high school level (0.06) but not between primary school level and senior high school.

| School Levels | $\mathbf{N}$ | Mean <br> $(\max =160)$ | SD | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\left({ }^{*} p<0.05, * * p<0.01\right)$ |  |  |  |  |  |
| Primary school level | 50 | 146.86 | 13.42 | 3.43 | $0.04 *$ |
| Junior high school level | 50 | 139.98 | 18.59 |  |  |
| Senior high school level | 50 | 146.94 | 13.13 |  |  |
| Total | 150 | 144.59 | 15.50 |  |  |

Table 5.3. Age differences and language use in Mandarin

The ANOVA analyses show that the differences between the means of total Taiwanese use corresponding to the three age groups are not significant: primary school level ( $M=51.60, S D$ $=23.63)$; junior high school level $(M=53.58, S D=31.04)$ and senior high school level ( $M=$ 43.62, $S D=17.82$ ). The junior high school level has the highest mean of total Mandarin use, and the senior high school level has the lowest mean of total Mandarin use. The results can be seen in Table 5.4.

| School Levels | $\mathbf{N}$ | Mean <br> $(\max =160)$ | SD | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\left({ }^{*} p<0.05,{ }^{* *} p<0.01\right)$ |  |  |  |  |  |
| Primary school level | 50 | 51.60 | 23.63 | 2.27 | 0.11 |
| Junior high school level | 50 | 53.58 | 31.04 |  |  |
| Senior high school level | 50 | 43.62 | 17.82 |  |  |
| Total | 150 | 49.60 | 24.97 |  |  |

Table 5.4. Age differences and language use in Taiwanese

When the results corresponding to the total use of English in Table 5.5, they indicated that there are significant differences between the three age groups, $F(2,147)=4.93, p=0.01$. The results of the frequent use of English in each level are: primary school level $(M=47.82, S D=$ 20.47), junior high school level ( $M=44.14, S D=20.09$ ) and senior high school level ( $M=$ 56.04, $S D=17.51$ ). The senior high school level has the highest use of English, then it is the primary school level and finally the junior high school level has the lowest use of English. A Tukey post hoc test revealed that there are significant differences in the use of English between the junior high school level and the senior high school level ( $S=0.01$ ). However, there are no significant differences between students in the primary school level and the junior high school level ( $S=0.61$ ) and the differences between the primary school level and the senior high school level are only marginally significant ( $S=0.09$ ).

| School Levels | N | Mean <br> $(\max =160)$ | SD | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\left({ }^{*} p<0.05,{ }^{* *} p<0.01\right)$ |  |  |  |  |  |
| Primary school level | 50 | 47.82 | 20.47 | 4.93 | $0.01^{* *}$ |
| Junior high school level | 50 | 44.14 | 20.09 |  |  |
| Senior high school level | 50 | 56.04 | 17.51 |  |  |
| Total | 150 | 49.33 | 19.91 |  |  |

Table 5.5. Age differences and language use in English

The results in this section above indicated that there are significant differences between the three age groups on the use of Mandarin and the use of English, but it is not the case of the use of Taiwanese.

### 5.1.4 Language Proficiency and the Use of Languages

In order to answer the fourth sub-research question (Q1.4. "Is the use of languages related to language proficiency?"), Pearson's correlation analyses were used to examine possible relations between the proficiency in the three languages and the use of languages. Before presenting the results of the correlation analyses, the descriptive data (mean and standard deviation) of the participants' self-perceived language proficiency in three languages will be given. First of all, participants were asked to rate their language proficiency on language varieties: Mandarin, Taiwanese and English. They had to rate their languages in the four skills: listening, reading, speaking, and writing on a scale from 1 to 10 . The means for each language overall can be seen in Table 5.6. Participants perceived their proficiency in Mandarin ( $M=$ 35.66, $S D=5.47$ ) higher than Taiwanese $(M=21.90, S D=7.95)$ and English $(M=22.23, S D$ $=7.39)$ in all four language skills. Their proficiency in English is similar to the proficiency in Taiwanese. Specifically, in writing and reading skills, participants perceived themselves to have higher competences in English than in Taiwanese. In terms of listening and speaking
language skills, participants perceived that they are more competent in Taiwanese than in English.

| Proficiency <br> $(N=150)$ | Mandarin |  | Taiwanese |  | English |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | SD | Mean | SD | Mean | SD |
| Listening $(\max =10)$ | 9.24 | 1.21 | 6.82 | 2.17 | 5.76 | 1.97 |
| Speaking $(\max =10)$ | 9.19 | 1.34 | 6.24 | 2.33 | 5.47 | 2.03 |
| Reading $(\max =10)$ | 8.85 | 1.61 | 5.13 | 2.52 | 5.91 | 2.15 |
| Writing $(\max =10)$ | 8.37 | 1.86 | 3.67 | 2.56 | 5.09 | 2.09 |
| Total $(\max =40)$ | 35.66 | 5.47 | 21.90 | 7.95 | 22.23 | 7.39 |

Table 5.6. Competence in Mandarin, Taiwanese and English

Next, we present the results of correlations between students' proficiency and the use of the three languages. Results in Table 5.7 indicate that all correlations between language proficiency and the use of the language were positive and statistically significant. In terms of the strength of relationships between language proficiency and the use of language overall, both Taiwanese ( $r=0.44, p=0.00$ ) and English ( $r=0.44, p=0.00$ ) show higher level of correlations than Mandarin ( $r=0.24, p=0.02$ ). These results tell that the higher competence Taiwanese students have in a language, the more frequent they use that language, and so does the other way around.

| Proficiency $(N=150)$ | Total use of Mandarin |  | Total use of Taiwanese |  | Total use of English |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\left({ }^{*} p<0.05, * * p<0.01\right)$ | r | Sig. | r | Sig. | r | Sig. |
| Mandarin proficiency | 0.24 | $0.00^{* *}$ | - | - | - | - |
| Taiwanese proficiency | - | - | 0.44 | $0.00^{* *}$ | - | - |
| English proficiency | - | - | - | - | 0.44 | $0.00^{* *}$ |

Table 5.7. Correlations between language proficiency and the use of the three languages

In addition, we give the descriptive statistics associated with language proficiency of our participants across three school levels. After that, we further ran several one-way ANOVAs to
explore whether there is a significant difference of language proficiency between three age groups of students. How we divided students into three school levels was already mentioned in the methodology. The three school levels were the following: primary school level (primary $5^{\text {th }}$ grade and primary $6^{\text {th }}$ grade), junior high school level (junior high $8^{\text {th }}$ grade and junior high $9^{\text {th }}$ grade) and senior high school level (senior high $10^{\text {th }}$ grade and senior high $11^{\text {th }}$ grade). Each of the school level has 50 students. Table 5.8 shows the results of language proficiency among three different school levels.

| School Levels <br> $(N=150)$ | Mandarin |  | Taiwanese |  | English |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | SD | Mean | SD | Mean | SD |
| Primary school level | 36.24 | 5.27 | 22.14 | 8.08 | 23.08 | 6.45 |
| Junior high school level | 34.70 | 6.54 | 22.18 | 8.35 | 20.36 | 8.89 |
| Senior high school level | 36.04 | 4.35 | 21.38 | 7.54 | 23.26 | 6.33 |
| Total (max=40) | 35.66 | 5.47 | 21.90 | 7.95 | 22.23 | 7.39 |

Table 5.8. Competence in three languages across three school levels

In the case of Mandarin proficiency, it can be seen that students of the primary school level perceived to have highest competence ( $M=36.24, S D=5.27$ ) followed by the senior high school level $(M=36.04, S D=4.35)$ and finally the junior high school level $(M=34.70, S D=$ 6.54). In terms of the proficiency of Taiwanese, the junior high school level had the highest perceived proficiency in Taiwanese $(M=22.18, S D=8.35)$ then the primary school level ( $M$ $=22.14, S D=8.08)$ and the senior high school level the least $(M=21.38, S D=7.54)$. Concerning the proficiency of English, the highest proficiency of English was perceived by the senior high school level ( $M=23.26, S D=6.33$ ), then the primary school level ( $M=23.08$, $S D=6.45)$ and the least the junior high school level ( $M=20.36, S D=8.89$ ). However, regarding the results of ANOVAs, there was no significant difference in the proficiency of each language between any pairs of the age groups. The result of Mandarin proficiency between three groups is $F(2,147)=1.17, p=0.31$. The result of Taiwanese proficiency
between three age groups is $F(2,146)=0.16, p=0.85$. The result of English proficiency between three groups is $F(2,147)=2.46, p=0.09$.

To sum up, the results indicate that language proficiency is significantly related to students' language use in the case of Mandarin and English but no significant effect of age is found on students' language proficiency.

### 5.2 Taiwanese Students' Linguistic Identity

In this chapter we present the results of the second research question and four sub-questions. The questions are the following:

Q2. What is the linguistic identity of Taiwanese students?
Q2.1. Is linguistic identity related to the use of languages?
Q2.2. Is linguistic identity related to language proficiency?
Q2.3. Is linguistic identity related to age?
Q2.4. Are multilingual students' identities attached to a certain language or languages?

### 5.2.1 Linguistic Identity and Language Use

In order to answer the first sub-research question (Q2.1. "Is linguistic identity related to the use of languages?"), the first step is to look at the possible relationship between the linguistic identity in three languages and the use of each language. Several Pearson correlation analyses were conducted through the use of the Statistical Package for the Social Science (SPSS) to examine the strength and direction of the linear relationship between variables.

A first step was to obtain the descriptive data which are given in Table 5.9. The descriptive data for individual variables on the use of languages at school was given in Table 5.1 and for outside school in Table 5.2. Here the variables corresponding to each of the domains have been merged so that the data are for each of the four domains in each of the three languages. The domains are: "at home", "at school", "running outdoor errands" and "in free time".

| The use of languages |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $(N=150)$ | Mean | SD | Mean | SD | Mean | SD |
|  | Mandarin | English |  |  |  |  |
| At home $(\max =30)$ | 25.71 | 4.65 | 16.01 | 7.33 | 5.97 | 3.72 |
| At school $(\max =20)$ | 19.57 | 1.09 | 5.91 | 4.42 | 5.64 | 3.80 |
| Running outdoor errands $(\max =40)$ | 36.54 | 5.32 | 10.17 | 6.95 | 5.87 | 4.14 |
| In free time $(\max =70)$ | 53.57 | 8.55 | 15.98 | 10.65 | 26.97 | 11.90 |
| Total Use $(\max =160)$ | 144.59 | 15.50 | 49.60 | 24.97 | 49.33 | 19.91 |

Table 5.9. The use of languages as a whole and in different domains

As it can be seen in Table 5.9, the frequency of using Mandarin ( $M=144.59, S D=15.50$ ) is ranked the highest in total use and in all domains. When comparing the total use of Taiwanese and English, both means are relatively low and close to each other with the use of Taiwanese $(M=49.60, S D=24.97)$ slightly higher than the use of English $(M=49.33, S D=$ 19.91). Next, we look at each domain individually. The use of Taiwanese is more frequent than the use of English at home. The use of Taiwanese and English is very limited at school and when running outdoor errands, and the use of Taiwanese is slightly higher than the use of English. On the other hand, participants reported to use English more frequent than Taiwanese in their free time, and this is the only domain that shows a higher use of English.

Next, the means and standard deviation of three identity items related to measuring identity from the questionnaire section 3.1 are reported Table 5.10. Three items designed to elicit participants' identity are described below.

Item 1. I feel close to this language when I am using it.
Item 2. Being able to speak this language is part of who I am.
Item 3. To me this language is important.
For each item, participants rated each of three languages (Mandarin, Taiwanese and English) from a scale 1 (not at all) to 10 (very much) to show the degree of their feeling towards the language. We first compared the means of the three items. Then we added up three identity items each language individually to create three new variables: "total score for

Mandarin linguistic identity", "total score for Taiwanese linguistic identity" and "total score for English linguistic identity". Scores for linguistic identity of the three languages are shown in Table 5.10.

| Identity Item 1 ( $N=150$ ) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 'I feel close using | when I am <br> 10) | 'I feel close to Taiwanese when I am using it.' $(\max =10)$ |  | 'I feel close to English when I am using it.' $(\max =10)$ |  |
| Mean | SD | Mean | SD | Mean | SD |
| 9.19 | 1.83 | 5.45 | 3.14 | 4.51 | 2.66 |


| Identity Item 2 ( $N=150$ ) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 'Being able to speak Mandarin is part of who I am.' $(\max =10)$ |  | 'Being able to speak Taiwanese is part of who I am.' $(\max =10)$ |  | 'Being able to speak English is part of who I am.' $(\max =10)$ |  |
| Mean | SD | Mean | SD | Mean | SD |
| 8.73 | 2.25 | 5.45 | 3.18 | 5.39 | 3.15 |


| Identity Item 3 ( $N=150$ ) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 'To me Mandarin is important.' $(\max =10)$ | 'To me $\mathbf{T}$ | portant.' | 'To me $\mathbf{E}$ | portant.' |
| Mean SD | Mean | SD | Mean | SD |
| 9.47 1.32 | 6.15 | 3.19 | 7.69 | 3.03 |
| Total Score for Linguistic Identity of the Three Languages ( $N=150$ ) |  |  |  |  |
| Total score for Mandarin linguistic identity $(\max =30)$ | Total score for Taiwanese linguistic identity$(\max =30)$ |  | Total score for English linguistic identity$(\max =30)$ |  |
| Mean SD | Mean | SD | Mean | SD |
| 27.39 4.31 | 17.04 | 8.03 | 17.53 | 7.76 |

Table 5.10. Scores for linguistic identity of the three languages

We look at each item individually by comparing the means of the three languages and to see whether each of the three means in the three items go in the similar direction. In Identity Item 1: "I feel close to this language when I am using it.", participants feel that the closest language is Mandarin ( $M=9.19, S D=1.83$ ), then Taiwanese ( $M=5.45, S D=3.14$ ) and the least English ( $M=4.51, S D=2.66$ ). In Identity Item 2: "Being able to speak this language is
part of who I am.", Mandarin has the highest mean $(M=8.73, S D=2.25)$. Although Taiwanese $(M=5.45, S D=3.18)$ comes the second and English $(M=5.39, S D=3.15)$ is the last, the means for English and Taiwanese are very close. In Identity Item 3: "To me this language is important.", Mandarin $(M=9.47, S D=1.32)$ is rated the most important, and English $(M=7.69, S D=3.03)$ is rated more important than Taiwanese $(M=6.15, S D=3.19)$. According to the means, we can see that the highest to the lowest ranking of three languages in Identity Item 1 and Identity Item 2 share a similar pattern. On the other hand, the comparison of the three means in item 3 goes in a different direction to Identity Item 1 and to Identity Item 2. The results indicate that students may feel close to Taiwanese and feel Taiwanese is part of who they are, but they also think that English is more important than Taiwanese. When adding up the three identity items, it can be seen that in general, participants feel the closest to Mandarin $(M=27.39, S D=4.31)$, then English $(M=17.53, S D$ $=7.76)$ and the least Taiwanese $(M=17.04, S D=8.03)$, although English and Taiwanese have a similar level of the means on the total sum of identity three items. The comparison between the means of the total score for linguistic identity of the three languages goes in the same direction as Identity Item 3 does.

In order to see the relationship between language use and linguistic identity, Pearson correlation analyses were computed to assess the relationship between the use of each language in different domains and three identity items for each of the three languages. A total of 150 participants responded in the survey about their linguistic identity for the three languages and the total use of each language. Based on the quantitative data shown in Table 5.10, it was found that participants felt the strongest and the closest to Mandarin, while the feelings towards English and Taiwanese were more moderate and closer to each other on each of the identity items. Therefore, in this section we begin to report the correlations between the use of Mandarin in different domains and Mandarin linguistic identity. Then, the correlation of the use of the other two languages and identity items will be reported after. The
correlations between the use of Mandarin in different domains and the Mandarin linguistic identity can be seen in Table 5.11.

| The use of Mandarin$(N=150)$$(* p<0.05, * * p<0.01)$ | Mandarin Linguistic Identity |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Identity Item 1: <br> "I feel close to <br> Mandarin when I am using it." |  | Identity Item 2: <br> "Being able to speak Mandarin is part of who I am." |  | Identity Item 3: <br> "To me Mandarin is important." |  | Total score for <br> Mandarin <br> linguistic identity |  |
|  | r | Sig. | r | Sig. | r | Sig. | r | Sig. |
| Mandarin use at home | 0.19 | 0.02* | 0.25 | 0.00** | 0.14 | 0.09 | 0.25 | 0.00** |
| Mandarin use at school | 0.33 | 0.00** | 0.22 | 0.01** | 0.14 | 0.10 | 0.29 | 0.00** |
| Mandarin use running outdoor errands | 0.12 | 0.14 | 0.18 | 0.03* | 0.22 | 0.01** | 0.21 | 0.01** |
| Mandarin use in free time | 0.34 | 0.00** | 0.27 | 0.00** | 0.28 | 0.00** | 0.37 | 0.00** |
| Total Mandarin use | 0.33 | 0.00** | 0.31 | 0.00** | 0.29 | 0.00** | 0.39 | 0.00** |

Table 5.11. The correlations between the use of Mandarin in different domains and Mandarin linguistic identity

The results of the correlation analysis in Table 5.11 indicate that there are statistically significant correlations ( $p$-value $<0.05$ ) between the three identity items and the use of Mandarin in most domains. In the following, we report the correlations between each identity item with each domain of Mandarin use individually. First of all, a positive, moderate in strength and statistically significant correlation was found between Identity Item 1: "I feel close to Mandarin when I am using it." and total Mandarin use ( $r=0.33, p=0.00$ ). The correlations between Identity Item 1 and other domains: Mandarin use at home ( $r=0.19, p=$ 0.02 ), Mandarin use at school ( $r=0.33, p=0.00$ ) and Mandarin use in free time situation ( $r=$ $0.34, p=0.00$ ) were also found positive and statistically significant. In addition to the correlations between Identity Item 2: "Being able to speak Mandarin is part of who I am." and Mandarin use in different domains, it was found that Identity Item 2 is positive and
statistically significant correlated with all domains: Mandarin use at home ( $r=0.25, p=0.00$ ), Mandarin use at school ( $r=0.22, p=0.01$ ), Mandarin use when running outdoor errands ( $r=$ $0.18, p=0.03$ ), Mandarin use in free time situation $(r=0.27, p=0.00)$ and total Mandarin use ( $r=0.31, p=0.00$ ). Thirdly, the Identity Item 3: "To me Mandarin is important." was found significantly and positively related to Mandarin use when running outdoor errands ( $r=$ $0.22, p=0.01)$, Mandarin use in free time situation $(r=0.28, p=0.00)$ and total Mandarin use ( $r=0.29, p=0.00$ ). Looking at correlations between the total score for Mandarin linguistic identity and the use of Mandarin in each domain, the results indicate that the correlations are positive and statistically significant in all domains: Mandarin use at home ( $r=$ $0.25, p=0.00$ ), Mandarin use at school ( $r=0.29, p=0.00$ ), Mandarin use when running outdoor errands ( $r=0.21, p=0.01$ ), Mandarin use in free time situation ( $r=0.37, p=0.00$ ) and total Mandarin use $(r=0.39, p=0.00)$. These results indicate that Mandarin use in different domains evaluated in the three Identity Items are related to each other. In fact, with three exceptions: Identity Item 1 and Mandarin use when running outdoor errands, Identity Item 3 and Mandarin use at home and Identity Item 3 and Mandarin at school, all other correlations are statistically significant. However, there is not a clear pattern indicating that the correlation between a specific identity item and any of the Mandarin use domains is stronger than other combinations.

Next, Table 5.12 presents the correlations between the use of Taiwanese and Taiwanese linguistic identity. The results of the correlation analysis indicate that there are statistically significant correlations between each domain of Taiwanese use and each Taiwanese identity item. The total use of Taiwanese and three identity items has significant and positive correlations. However, there is not a clear pattern indicating a correlation stronger than another.

| The use of Taiwanese$(N=150)$$\left({ }^{*} p<0.05, * * p<0.01\right)$ | Taiwanese Linguistic Identity |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Identity Item 1: <br> "I feel close to <br> Taiwanese when I am using it." |  | Identity Item 2: <br> "Being able to speak Taiwanese is part of who I am." |  | Identity Item 3: <br> "To me <br> Taiwanese is important." |  | Total score for Taiwanese linguistic identity |  |
|  | r | Sig. | r | Sig. | r | Sig. | r | Sig. |
| Taiwanese use at home | 0.51 | 0.00** | 0.39 | 0.00** | 0.41 | 0.00** | 0.52 | 0.00** |
| Taiwanese use at school | 0.36 | 0.00** | 0.33 | 0.00** | 0.32 | 0.00** | 0.40 | 0.00** |
| Taiwanese use running outdoor errands | 0.31 | 0.00** | 0.31 | 0.00** | 0.30 | 0.00** | 0.36 | 0.00** |
| Taiwanese use in free time | 0.52 | 0.00** | 0.47 | 0.00** | 0.44 | 0.00** | 0.57 | 0.00** |
| Total Taiwanese use | 0.53 | 0.00** | 0.48 | 0.00** | 0.46 | 0.00** | 0.58 | 0.00** |

Table 5.12. Correlations between the use of Taiwanese in different domains and Taiwanese linguistic identity

It was observed that there are positive and significant correlations between Taiwanese Identity Item 1: "I feel close to Taiwanese when I am using it." and Taiwanese use at home ( $r$ $=0.51, p=0.00)$, Taiwanese use at school $(r=0.36, p=0.00)$, Taiwanese use when running outdoor errands ( $r=0.31, p=0.00$ ), Taiwanese use in free time situation ( $r=0.52, p=0.00$ ) and total Taiwanese use ( $r=0.53, p=0.00$ ). As well, Taiwanese Identity Item 2: "Being able to speak Taiwanese is part of who I am." was found significantly related to Taiwanese use at home ( $r=0.39, p=0.00$ ), Taiwanese use at school ( $r=0.33, p=0.00$ ), Taiwanese use when running outdoor errands ( $r=0.31, p=0.00$ ), Taiwanese use in free time situation ( $r=0.47, p$ $=0.00$ ) and total Taiwanese use ( $r=0.48, p=0.00$ ). Finally, Taiwanese Identity Item 3: "To me Taiwanese is important." was also found to have positive and significant relations with Taiwanese use at home ( $r=0.41, p=0.00$ ), Taiwanese use at school ( $r=0.32, p=0.00$ ), Taiwanese use when running outdoor errands ( $r=0.30, p=0.00$ ), Taiwanese use in free time situation ( $r=0.44, p=0.00$ ) and total Taiwanese use ( $r=0.46, p=0.00$ ). When looking at the relationship between the total score for Taiwanese linguistic identity and each domain, it
was observed that the use of Taiwanese is significantly correlated to total score for Taiwanese identity in all domains: Taiwanese use at home ( $r=0.52, p=0.00$ ), Taiwanese use at school ( $r=0.40, p=0.00$ ), Taiwanese use when running outdoor errands $(r=0.36, p=0.00)$, Taiwanese use in free time situation $(r=0.57, p=0.00)$ and with total Taiwanese use ( $r=$ $0.58, p=0.00$ ). In particular, the use of Taiwanese at home and in free time situation showed a stronger correlation than the use of Taiwanese at school and when running outdoor errands. This indicates that a higher score in Taiwanese linguistic identity is strongly associated with the use of Taiwanese in the home domain and in free time situation.

Furthermore, the correlations between the use of English in different domains and English linguistic identity can be seen in Table 5.13. The results of the correlation analysis between English identity items and the use of English in different domains demonstrate that except for the running outdoor errands situation, all other domains have significant positive relations with all three of English identity items. Table 5.13 shows the results of a correlation analysis between each identity item and the use of English in different domains.

| The use of English$(N=150)$$(* p<0.05, * * p<0.01)$ | English Linguistic Identity |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Identity Item 1: <br> "I feel close to <br> English when I am using it." |  | Identity Item 2: <br> "Being able to speak English is part of who I am." |  | Identity Item 3: "To me English is important." |  | Total score for English linguistic identity |  |
|  | r | Sig. | r | Sig. | r | Sig. | r | Sig. |
| English use at home | 0.44 | 0.00** | 0.31 | 0.00** | 0.30 | 0.00** | 0.39 | 0.00** |
| English use at school | 0.33 | 0.00** | 0.28 | 0.00** | 0.22 | 0.01* | 0.30 | 0.00** |
| English use running outdoor errands | 0.11 | 0.18 | 0.12 | 0.16 | 0.05 | 0.55 | 0.08 | 0.31 |
| English use in free time | 0.58 | 0.00** | 0.45 | 0.00** | 0.51 | 0.00** | 0.57 | 0.00** |
| Total English use | 0.59 | 0.00** | 0.46 | 0.00** | 0.48 | 0.00** | 0.56 | 0.00** |

Table 5.13. Correlations between the use of English in different domains and English linguistic

## identity

Positive and statistically significant correlations were found between English identity item 1: "I feel close to English when I am using it." and English use at home ( $r=0.44, p=0.00$ ), English use at school ( $r=0.33, p=0.00$ ), English use in free time situation ( $r=0.58, p=0.00$ ) and total English use ( $r=0.59, p=0.00$ ). In addition, English identity item 2: "Being able to speak English is part of who I am." was also found to have significant correlations with English use at home ( $r=0.31, p=0.00$ ), English use at school ( $r=0.28, p=0.00$ ), English use in free time situation ( $r=0.45, p=0.00$ ) and total English use ( $r=0.46, p=0.00$ ). English identity item 3 was observed to have significantly positive correlations with English use at home ( $r=0.30, p=0.00$ ), English use at school ( $r=0.22, p=0.01$ ), English use in free time situation ( $r=0.51, p=0.00$ ) and total English use ( $r=0.48, p=0.00$ ). When looking at the correlations between the total score for English identity and the use of English in each domain, significant positive correlations were found in English use at home ( $r=0.39, p=$ 0.00 ), English use at school ( $r=0.30, p=0.00$ ), English use in free time situation ( $r=0.57, p$ $=0.00)$ and total English use $(r=0.56, p=0.00)$. The results demonstrate that all three identity items and the total score for English linguistic identity share a similar pattern except for the use of English when running outdoor errands, they are significantly positive correlated to the use of English in general, the use of English in the home domain, in the school domain, in free time situation.

To sum up, when looking at the language use as a whole, the results indicate that the use of the three languages are significantly related to participants' linguistic identity towards each of the three languages. Then, taking a closer look at the individual domain, Taiwanese is the only language that has significant positive relations between identity towards Taiwanese and the use of Taiwanese in each domain: at home, at school, when running outdoor errands and in free time situation. Participants' English linguistic identity is only significantly associated with the use of English at home, at school and in free time. As for Mandarin, the use of Mandarin is significantly related to all three identity items in free time situation. Consider in
greater depth, the correlations between the total use of the language and the total score for linguistic identity show that Taiwanese $(r=0.58, p=0.00)$ has the strongest positive significance, then English $(r=0.56, p=0.00)$ and the least Mandarin $(r=0.39, p=0.00)$. These results point out that although participants felt the closest to Mandarin among the three languages, the relation between Mandarin linguistic identity and the use of Mandarin, in general, is weaker than the correlations between language use and the linguistic identity in the case of the other two languages. It can also be said that participants who had a strong Taiwanese linguistic identity tended to use more Taiwanese particularly in the home domain and in free time situation. In the case of English, the results showed that participants had strong connections to English when using English in free time situation.

### 5.2.2 Linguistic Identity and Language Proficiency

In order to answer the second sub-research question (Q2.2. "Is linguistic identity related to language proficiency?"), we begin to report the descriptive data of participants' language proficiency in three languages. Then, we run several correlation analyses to find out the possible relationships between the linguistic identity in three languages and the proficiency of each of the three languages.

Participants' perceived language competence in three languages were reported in the last sub-section (see Table 5.6). The degree of perceived competence attained by the participants in three languages, the highest competence is found in Mandarin ( $M=35.66, S D=5.47$ ), followed by English ( $M=22.23, S D=7.39$ ) and finally Taiwanese ( $M=21.90, S D=7.95$ ).

Next, the results of correlation analyses shown in Table 5.14 demonstrate that language proficiency of each of the three languages has statistically significant correlations with all identity items and with their total sum. First of all, significant positive correlations were found between Mandarin proficiency and Mandarin Identity Item 1: "I feel close to Taiwanese when I am using it." ( $r=0.25, p=0.00$ ), Mandarin Identity Item 2: "Being able to
speak Mandarin is part of who I am." $(r=0.29, p=0.00)$ and Mandarin Identity Item 3: "To me Mandarin is important." $(r=0.23, p=0.00)$. Secondly, significant positive correlations were found between Taiwanese proficiency and Taiwanese Identity Item 1: "I feel close to Taiwanese when I am using it." ( $r=0.44, p=0.00$ ), Taiwanese Identity Item 2 : "Being able to speak Taiwanese is part of who I am." $(r=0.49, p=0.00)$ and Taiwanese Identity Item 3: "To me Taiwanese is important." ( $r=0.43, p=0.00$ ). In the case of English, significant positive correlations were found between English proficiency and English Identity Item 1: "I feel close to English when I am using it." ( $r=0.64, p=0.00$ ), English Identity Item 2: "Being able to speak English is part of who I am." $(r=0.61, p=0.00)$ and English Identity Item 3: "To me English is important." $(r=0.54, p=0.00)$. Lastly, looking at the relationship between the total score for linguistic identity and proficiency of the language, it can be seen that the correlations of each pair were positively significant: identity towards Mandarin total sum and Mandarin proficiency ( $r=0.33, p=0.00$ ), identity towards Taiwanese total sum and Taiwanese proficiency ( $r=0.54, p=0.00$ ) and identity towards English total sum and English proficiency ( $r=0.66, p=0.00$ ). Table 5.14 shows the results of a multiple correlation analysis between language proficiency and linguistic identity items ( ${ }^{*} p<0.05,{ }^{* *} p<0.01$ ).

| ( $N=150$ ) | Mandarin Linguistic Identity |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Identity Item 1: <br> 'I feel close to Mandarin when I am using it.' |  | Identity Item 2: <br> 'Being able to speak <br> Mandarin is part of who I am.' |  | Identity Item 3: <br> 'To me Mandarin is important.' |  | Total score for <br> Mandarin <br> linguistic identity |  |
|  | r | Sig. | r | Sig. | r | Sig. | r | Sig. |
| Mandarin proficiency | 0.25 | 0.00** | 0.29 | 0.00** | 0.23 | 0.00** | 0.33 | 0.00** |
| ( $N=150$ ) | Taiwanese Linguistic Identity |  |  |  |  |  |  |  |
|  | Identity Item 1: <br> 'I feel close to <br> Taiwanese when I am using it.' |  | Identity Item 2: <br> 'Being able to speak <br> Taiwanese is part of who I am.' |  | Identity Item 3: <br> 'To me Taiwanese is important.' |  | Total score for <br> Taiwanese <br> linguistic identity |  |
|  | r | Sig. | r | Sig. | r | Sig. | r | Sig. |
| Taiwanese proficiency | 0.44 | 0.00** | 0.49 | 0.00** | 0.43 | 0.00** | 0.54 | 0.00** |
| ( $N=150$ ) | English Linguistic Identity |  |  |  |  |  |  |  |
|  | Identity Item 1: <br> 'I feel close to English when I am using it.' |  | Identity Item 2: <br> 'Being able to speak <br> English is part of who I am.' |  | Identity Item 3: <br> 'To me English is important.' |  | Total score for English linguistic identity |  |
|  | r | Sig. | r | Sig. | r | Sig. | r | Sig. |
| English proficiency | 0.64 | 0.00** | 0.61 | 0.00** | 0.54 | 0.00** | 0.66 | 0.00** |

Table 5.14. Correlations between language proficiency and linguistic identity items

These results indicate that the proficiency in three languages was all found positively, statistically and significantly related to each linguistic identity item and total sum. In terms of the strength of relationships overall, we observed a pattern when comparing the relationships between linguistic identity and language proficiency. That is, English proficiency and English linguistic identity has the highest level of correlation, followed by the correlation between Taiwanese proficiency and Taiwanese linguistic identity and finally the correlation between Mandarin proficiency and Mandarin linguistic identity.

### 5.2.3 Linguistic Identity and Age

The third sub-research question (Q2.3 "Is linguistic identity related to age?") was to find out whether there are any differences between three school levels on linguistic identity towards three different languages. The three school levels were divided as primary school level (primary $5^{\text {th }}$ grade and primary $6^{\text {th }}$ grade), junior high school level (junior high $8^{\text {th }}$ grade and junior high $9^{\text {th }}$ grade) and senior high school level (senior high $10^{\text {th }}$ grade and senior high $11^{\text {th }}$ grade). Each of the school level has 50 students. In this section we use the three new variables created earlier in this chapter to run further analyses: the total scores for Mandarin linguistic identity, Taiwanese linguistic identity and English linguistic identity. Several one-way ANOVA analyses were carried out to establish the differences between students across different school levels. The reason to only compare the impact of age on the total scores of linguistic identity instead of looking at each linguistic item individually is that we want to see a more general and complete picture of the participants' linguistic identity. In the following, we report the ANOVA results of each for the three languages. Firstly, the results associated with Mandarin linguistic identity across three school levels are reported in Table 5.15. There was not a significant difference on identity towards Mandarin between the three school levels: $F(2,147)$ $=1.60, p=0.21$. It can be seen that the senior high school level has the highest mean of identity towards Mandarin $(M=28.04, S D=3.99)$, then the primary school level $(M=27.58, S D=$ 3.96) and the least the junior high school level ( $M=26.54, S D=4.87$ ) but the differences were not significant.

| School Levels | $\mathbf{N}$ | $\mathbf{M}$ | SD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $(\max =30)$ |  |  |  |

Table 5.15. Results of the Mandarin linguistic identity between school levels

Next, the results of Taiwanese linguistic identity across three school levels are shown in Table 5.16. There was not a significant effect of age on identity towards Taiwanese in three school levels, $F(2,147)=1.81, p=0.17$. It can be seen that the junior high school level has the highest mean on identity towards Taiwanese ( $M=18.10, S D=9.20$ ) following by the senior high school level ( $M=17.72, S D=7.72$ ) and finally the primary school level ( $M=$ $15.30, S D=6.85$ ) but the differences were not significant.

| School Levels | $\mathbf{N}$ | $\mathbf{M}$ <br> $(\max =30)$ | SD | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\left({ }^{*} p<0.05,{ }^{* *} p<0.01\right)$ |  |  |  |  |  |
| Primary school level | 50 | 15.30 | 6.85 | 1.81 | 0.17 |
| Junior high school level | 50 | 18.10 | 9.20 |  |  |
| Senior high school level | 50 | 17.72 | 7.72 |  |  |
| Total | 150 | 17.04 | 8.03 |  |  |

Table 5.16. Results of the Taiwanese linguistic identity between school levels

Lastly, we continue to report the results concerning participants' English linguistic identity across three school levels. It was found that the effect of age on identity towards English was not significant, $F(2,147)=1.75, p=0.18$. It can be seen that the senior high school level has the highest mean ( $M=19.20, S D=7.17$ ), then the primary school level ( $M=$ 16.78, $S D=7.37$ ) and the least the junior high school level $(M=16.62, S D=8.54)$. However, the differences between the means among three age groups were not significant. The results
of ANOVA on identity towards English total sum across three school levels can be seen in Table 5.17.

| School Levels | $\mathbf{N}$ | M <br> $(\max =30)$ | SD | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\left({ }^{*} p<0.05,{ }^{* *} p<0.01\right)$ |  |  |  |  |  |
| Primary school level | 50 | 16.78 | 7.37 | 1.75 | 0.18 |
| Junior high school level | 50 | 16.62 | 8.54 |  |  |
| Senior high school level | 50 | 19.20 | 7.17 |  |  |
| Total | 150 | 17.53 | 7.76 |  |  |

Table 5.17. Results of the English linguistic identity between school levels

Findings in this section reveal that the effect of age on participants' linguistic identity was not significant for any of the languages.

### 5.2.4 Linguistic Identity Portraits

After looking at the quantitative data on Taiwanese pupils' linguistic identity, we are going to focus on qualitative data in order to answer the fourth sub-research question (Q2.4. "Are multilingual students' identities attached to a certain language or languages?"). Here we present ten languages self-portraits created by participants anonymously. The selections of students' self-portraits are made by the following three criteria. First, the self-portraits have to show at least two different colors. Second, when encountering a category of the same number of colors, the portraits including a wider variety of languages were chosen. Third, in the portraits selected, the descriptions of each color, which are identified as linguistic and cultural connections to the student, were described clearly. Students' portraits demonstrate and highlight the identities that embody in themselves visually. Before discussing the identity results per se, a brief explanation of the ten participants' identities is given. We use the
common social understanding of identity, which is seen as dynamic, constantly changing and always evolving, as a base to link with elements, such as ethnicity, age, gender, culture, language and so forth, that shape identity. In this study, we follow Dressler's (2015) analysis on examining how multilingual students make meaning of their expression of their linguistic identity through three aspects: expertise, affiliation, and inheritance. Regarding expertise, it is the aspect of linguistic skills of a multilingual individual, and in the case of children, it is often about how much of a language they know. In terms of affiliation, Dressler described that children expressed their attachment to a language based on how much they "like" a language, the placement of the degree of "liking of the language", the symbols or flags to match the color on their language portrait silhouette (p. 47). Inheritance refers to having a connection to a family member and to an aspect of culture passed down to children. We focus on several identical aspects, such as the use of color, facial expression, national flag and the range of drawing in and outside the body silhouette to demonstrate how Taiwanese students illustrate their language grouping. We discuss ten selected examples exclusively and individually so as to show the diversity of our collected linguistic profiles. Below are ten selected examples of different language portraits that are accompanied by interpretative narratives. According to the total amount of colors accounted, the language portraits are then presented in four categories: two languages, three languages, four languages and more than four languages. The names of the portrait examples here were given in alphabet order. Table 5.18 shows the characteristics of a total of ten selected examples from four categories.

| Category |  | Names of <br> examples | Languages in the language portrait silhouette |
| :--- | :--- | :--- | :--- |
| Category 1 | Two languages | Student A | English and Mandarin |
| Category 2 | Three languages | Student B | English, Mandarin and an Austronesian language |
|  |  | Student C | English, Mandarin and Taiwanese |
|  | Student D | English, Mandarin and Taiwanese |  |
|  | Student E | English, Mandarin and Taiwanese |  |
| Category 3 | Four languages | Student F | Cantonese, English, Hakka and Mandarin |
|  |  | Student G | English, Japanese, Mandarin and Taiwanese |
|  |  | Student H | English, Japanese, Mandarin and Taiwanese |
|  |  | Student I | English, Korean, Mandarin and Taiwanese |
| Category 4 | More than four languages | Student J | English, German, Korean, Mandarin and |
|  |  | Taiwanese |  |

Table 5.18. A summary of the characteristics of the ten selected language portrait examples

In the following, we go on and describe each selected language portrait by the order of each category.

## －Category 1．Two languages

## Student A



Figure 5．3．Student A＇s language portrait

| Student A |
| :--- |
| Original narrative |
| （頭部）英文，現在最想駕馭的語言，只要學好它，就可以暢遊全世界，最常在跟同 <br> 學或老師對話時使用，感覺很難。 <br> （身體）中文，從小到大的語言，與生活密不可分，家人，同學，老師，都是我溝通 <br> 的對象，感覺很麻煩。 <br> Translation of the original narrative <br> The head in yellow presents English．It is the language that I want to acquire the most at <br> the moment．As long as I learn it well，I can travel around the world．I use English mostly <br> with teachers and classmates．I feel that learning English is very difficult． <br> The rest of the body parts are in blue and it presents Mandarin．Mandarin is the language <br> that I have been using since I was little and it is inseparable from my life．Family， <br> classmates and teachers are the people I use Mandarin to communicate with．I feel that <br> Mandarin is very annoying and complicated． |

Student A saw him／herself as a bilingual speaker．The portion of Mandarin in Student A＇s portrait demonstrates that the relationship between his／her daily life and Mandarin are closely intertwined．Mandarin is Student A＇s most intimate language．English，on the other hand，as an additional language provides him／her future opportunities to connect with the world． However，Student A shared negative attitudes towards both languages．

## －Category 2．Three languages

## Student B



Figure 5．4．Student B＇s language portrait

| Student B |
| :--- |
| Original narrative |
| （頭部）原住民語，用太陽跟紅色是表示我們的族人很熱情，跟媽媽偶爾會講，但通 |
| 常我講原住民語的時候，是為了考試跟比賽。 |
| （手部與上半身）「中文」，一出生第一個學會的語言，也是自己講的最有自信，最 |
| 擅長的語言，這種語言可以跟許多人說，除了家人，連路上的陌生人都行。 |

## （雙腳）後天學習的語言「English」，橘色的筆有種新穎的感覺，剛開始學是為了應付學校課業，不過長大之後是為了與其他外國人溝通。

## Translation of the original narrative

The head presents a Austronesian language．I use the sun symbol and the red color to show that our tribal people are very welcoming，warm and passionate．I sometimes speak the tribal language with my mother，but most of the time I use it to pass exams and to compete in competitions．

Both hands and the upper body represent Mandarin，which is the first language I learned．Mandarin is also the language that I feel the most confident when speaking．I am best at speaking Mandarin than any other language．I can use Mandarin to talk with a lot of people，such as my family and even strangers in the street．English is on both feet．

Using orange to present English is because orange gives me a fresh and modern feeling． I first learn English for the purpose of passing school exams and following the academic curriculum．But now I am older，my purpose in learning English is to communicate with foreigners．

Student B made three distinctions in languages in the portrait．First of all，Student B made the head covered in red and drew a symbol of the sun in the center to show how passionate ＂their＂tribal people are：＂用太陽跟紅色事表示我們的族人很熱情＂（ I use sun and the red color to show that our tribal people are very welcoming，warm and passionate）．Student B felt very proud of being Austronesian and had a strong sense of belonging to his／her inherited Austronesian root．Even though Student B did not mention which specific tribal language is， it is the language that s／he uses with his／her mother，a repertoire of intimacy．Student B connected the Polynesian language to his／her inherited identity．Moreover，the placement of Mandarin in the upper body and both hands is to show the degree of usefulness of Mandarin in daily life．Mandarin is not only Student B＇s first learned language but also the most frequent language used in his／her entire linguistic repertoire．Being proficient in Mandarin provides Student B great confidence when communicating with others．Student B＇s identity towards Mandarin is associated with expertise．In addition to English，the use of orange color is to show Student B＇s exciting feeling towards learning English．By connecting the color to the language，Student B shared positive attitudes towards English．

## Student C



Figure 5．5．Student C＇s language portrait

| Student C |
| :--- |
| Original narrative |
| 黃色是英文，雖然不是很喜歡它，但也因為它的束縛，能讓我好好地靠它活著，他很 |
| 有用，但不是我願意的。 |
| （紅色是）國文，手腳語言，常用話語的語言。做什麼事都需要它，以後如果被統一 |
| 也是得靠它活著。 |
| 黑色是台語，跟顏色一樣，我不喜歡它，但它是是構成我的要件。 |
| 白色是沒用的我，需要被填滿。 |

## Translation of the original narrative

Yellow is English．Although I do not like English very much，I am tied to learn English because of its importance．Having competence in English is very useful and helps me to live a good life，but I am not willing to learn it．

Red is Mandarin．I locate Mandarin in both hands and feet to present that Mandarin is a survival language for daily use．We need Mandarin to do everything．Even if in the future Taiwan is forced to be part of China，I have to rely on this language to continue to live．

Black represents Taiwanese．The way I feel about Taiwanese is just like the color．I do not like Taiwanese，but it is an essential element of who I am．

The rest in white color is the empty space inside of me that will be filled in the future.

Student C used black color to show Taiwanese in the upper body, which includes the heart and the head. Even though Taiwanese is associated with Student C's root and is a vital element to shape him/herself, Student C's facial expression in the portrait and the dislike of the black color indicate his/her unfavorable attitudes towards Taiwanese. The placement of Mandarin on Student C's portrait shows that Mandarin functions like hands and feet, a symbol of the ability to manage life experience on a day-to-day basis. From Student C's narrative on Mandarin, we notice that Student C was highly aware of the political conflicts and issues that Taiwan has been facing with China. Student C revealed that $\mathrm{s} / \mathrm{he}$ had no alternative regarding the current nor future circumstances of Taiwan; therefore, being proficient in Mandarin plays an important role as a functional language. That is to say that Student C associated Mandarin with the expertise. In addition to Student C's use of yellow, which represents English, the yellow strings drawn on the body template make his/her silhouette look like a puppet manipulated by wires. In other words, English forcefully controls the functions of Student C's world, and that also adds up the difficulties in expressing emotions. The awkward facial expression highlights Student C's feelings and negative attitudes towards English. Even though it is not easy to tell whether Student C was happy or crying in the self-portrait, this illustration is a closer reflection of him/herself. Apart from that, Student C draws attention to the white part that was left empty. Student C expresses his/her desire to be filled up with other languages and cultures and this is something Prasad (2014: 63) also observes in his participants' self-portrait. The space in the white part in the self-portrait reveals that the possibility of plurilingualism and pluricultural competence can be expanded in the future. Student C was highly aware of the linguistic tools that can provide him/her an advantage in the future especially with the purpose of conducting wider communication.

## Student D

|  |  |
| :---: | :---: |
| 普遍束説，大家部到已程崌层的教課美都是要使用中文，我們的生活垁＂中文 <br>  |  |
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| 有韋諳貄。不窝梳台語的我只好 |  |
|  |  |
|  |  |
|  |  |

Figure 5．6．Student D＇s language portrait

## Student D

## Original narrative

白色：閩南語， $5 \%$ 。閩南語是身為台灣人不能不會的語言。而，為什麼現在普遍來說，大家都對它不是這麼的熟悉，沒有和國語一樣能對答如流？我外公說：「小時候根本沒有台語課，講了會被罰錢。」這和命令你不要說國語一樣，根本＂天方夜譚＂。然而，現今能把國語和台語講得順暢的人是少之又少，所以現在才會有台語課。不常說台語的我只好和外公外婆說話時多加以練習。正確來說，台語才是台灣人的母語，我一定要學好它！！
紅色：中文， $75 \%$ 。猶記得，從小到大第一個接觸的語言就是中文。與同學聊天，向老師請教課業都是要使用中文。我們的生活與＂中文＂習習相關。當我試著用英文和其他人溝通，講不到三句就破功，除了體悟到中文的重要性，也理解當你要請一個以中文為母語的人試著用英文和他人溝通，除非是常和外國人交談的人外，很少人能達到吧！台語有句俗語「冊讀對背後」是白讀的意思。假設你不識你的母語，再看許多中文書也是白讀。所以中文在生活中擔任一個很重要的角色。
藍色：英文， $20 \%$ 。雖然在台灣不常用到英文，不過應問卻是全世界通用的！去年七月，我去參加國際性的藝術節。由於我在外面的補習班有加強英文，所以我不論在學

校的考試，升學考都能拿到佳績。自從去年返台後，我徹底明白了，原來我的英文程度是多麼的差，在對談時，人家霹哩啪拉講了一堆，而我卻只能頻頻對頭，我不禁默默悲嘆，「原來世界是如此的大！」英文，真的很重要。

## Translation of the original narrative

Both feet in white present Taiwanese．My daily frequent use of Taiwanese is $5 \%$ ． Taiwanese is the language that being Taiwanese one must know．Generally speaking， nowadays why people are not familiar with Taiwanese and why don＇t they speak Taiwanese fluently as Mandarin Chinese？My grandfather said＂when I was little，there wasn＇t Taiwanese language as a subject at school．If anyone spoke Taiwanese，he or she would be fined．＂This is like ordering you not to speak Mandarin．The situation is＂a flying pig＂．However，today there are fewer and fewer people who can speak both Mandarin and Taiwanese fluently．That is the reason that we have got Taiwanese language class at school now．And I，who often do not speak Taiwanese，have to practice speaking Taiwanese whenever I am with my grandparents．To be precise，Taiwanese is the mother tongue of Taiwanese people．I must learn it well．

The red part presents Mandarin．It is used $75 \%$ of the day．I remember that ever since I was little，Mandarin is the first language I learned．In order to chat with classmates or consult schoolwork with teachers，I need to use Mandarin．Our life is very much associated with＂Mandarin＂．When I tried to communicate with my classmates in English，I was not able to say more than three sentences．As a result，I realize the importance of Mandarin．I also understand that when you ask a person who has Mandarin as a mother tongue to communicate with other people in English，he or she would be unable to do that unless the person has often contact with foreigners．A Taiwanese proverb goes＂study to the back＂， which means＂you must make sense of whatever you are studying，otherwise it is just a waste．＂If you do not know your mother tongue even if you read tons of Mandarin books，it is no use after all．Therefore，Mandarin plays an important role in our life．

The blue part，which contains both arms and head，presents English，（the daily usage of English is $25 \%$ ）．Although English is not commonly used in Taiwan，it is the common language to use in the world．Last July I attended an international art festival in a foreign country．As I have gone to an English academy to reinforce my English for years，I am able to obtain good grades in all academic exams．However，during a conversation with people from different countries at the festival，I realized how bad my proficient level of English is． Other people were able to speak fluent English，but I was not able to and could only nod my head．I can＇t help myself but lament that＂How big the world is！＂Since I got back to Taiwan from the festival，I realize that English is very important．

In the portrait，Student D clearly demonstrated his／her close ties with two languages， Mandarin and Taiwanese，and both languages are linked to Student D＇s cultural and linguistic roots．Although Student D had limited use of Taiwanese in daily life，s／he had a strong sense of belonging associated with Taiwan．As Student D explained：＂閩南語是身為台灣人不能不會的語言＂（Taiwanese is the language that being Taiwanese one must know）．By providing the grandfather＇s childhood experience when it was forbidden to speak Taiwanese in public as an example，Student D addressed the current issue of the younger generation not being able to speak fluent Taiwanese，which is the result of the government＇s imposition on Mandarin monolingual policy over decades．Student D not only shared a deep connection to Taiwanese but also held up a motivational attitude to speaking Taiwanese with the grandparents，whom Student D referred to as＂Taiwanese people＂：＂正確來說，台語才是台灣人的母語，我一定要學好它！！＂（To be precise，Taiwanese is the mother tongue of Taiwanese people．I must learn it well！！）．To Student D ，a person＇s competence in Taiwanese determines whether $\mathrm{s} / \mathrm{he}$ is ＂more＂or＂less＂Taiwanese．The sense of belonging motivates Student D to master the language in order to become＂more Taiwanese＂．From Student D＇s narrative on explaining his／her feelings towards Taiwanese，we know that Student D linked his／her identity to Taiwanese in all three aspects：linguistic expertise，familial inheritance and geographical affiliation．

On the other hand，Student D also shared a close relationship with Mandarin，which is his／her mother tongue and largely associated with everything in his／her social and academic experiences．The feeling of attachment towards Mandarin for Student D；therefore，is linked to linguistic expertise and geographical affiliation．The fact that Student D used a Taiwanese proverb to describe the important role Mandarin plays in his／her daily life shows Student D＇s capacity in both languages．Student D＇s translanguaging from Mandarin to Taiwanese and from Taiwanese back to Mandarin in a written sentence seems to show not only Student D＇s habitual use of both languages but also shows the way Student D makes sense of him／herself．

Taking into account that Student D referred "mother tongue" to both Mandarin and Taiwanese and his/her sense of belonging towards the two languages are apparent, we can explain that Student D holds an identity overlapping with Mandarin and Taiwanese.

In spite of the fact that English is largely related to academic performance, the function of English allows Student D to move internationally and to communicate with people from different countries. The globe in the back of the silhouette explains the advantages that being competent in English can provide. By sharing his/her prior traveling experience and engaging with foreign speakers, Student D drew attention to the importance of English, which is not solely associated with academic achievements but for wider communication. Student D saw English as a vehicle to provide him/her international mobility.

Last but not least, Student D matched the colors of the flag to the colors on the language portrait silhouette. The proportion of each color on the Taiwanese flag not only corresponds to Student D's frequent use of each language but also reflects Student D's point of view on the most important languages in Taiwan: Mandarin, Taiwanese and English. Student D's strong attachment to Taiwan where the languages were most frequently spoken makes up an aspect of his/her linguistic identity. Adding the Taiwanese flag onto the portrait symbolizes Student D's authenticity of being a "Taiwanese" and the way s/he saw and explained him/herself to the readers.

## Student E



Figure 5．7．Student E＇s language portrait

| Student E |
| :--- |
| Original narrative |
| 把英文放在頭上是因為我常常都用頭腦去思考英文，各種英文考試也都耗盡我的腦 |
| 力，我跟學校外師講英文比較多，每跟外師溝通一次，就有英文進步的感覺，很快哉。 |
| （雙手以及上半身）台灣（中文），這是我的母語，常常都在用，所以畫在我的身體 |
| 裡，就像我們的左右手一樣時常在使用，我總是跟我生活週遭的人講中文，老師，同 |
| 學，爸媽等，講起來的感覺很輕快，不像英文要想個 1，2秒。 |
| 台語放在腳部，因為只有到奶奶家時，我才會使用台語，不太常用到。但講起來使我 |
| 感覺最有溫暖感，因為跟奶奶都使用台語聊事，談天說地。 |

## Translation of the original narrative

I put English in my head because I often use my brain to think in English．All the English exams exhaust me．I speak English with the native English teacher at school．Every time when I speak with a native English teacher，I have got a feeling that my English has improved．And that makes me happy．
The yellow part is located in the upper body and both arms．Taiwan（Mandarin）is my mother tongue．I use it very often，so I draw it in my body．Mandarin is like our both hands．

We use our hands all the time. I always speak Mandarin with people around me, such as teachers, classmates, parents and so on. I feel very relaxed when speaking Mandarin. Unlike when speaking English, I have to think for 1 or 2 seconds.

I put Taiwanese in the legs because I only use Taiwanese when I go to my grandmother's. I do not use Taiwanese often, but it is the language I feel the warmest when I speak it because I always use Taiwanese to express my intimate feelings and to discuss everything under the sun with my grandmother.

In Student E's language portrait silhouette, the proportions of Mandarin and Taiwanese were quite evenly divided to the upper body and the lower body. Mandarin is Student E's mother tongue and also his/her most frequently used and the language $\mathrm{s} / \mathrm{he}$ is most competent in. Student E used Mandarin for the majority of his/her daily purposes and for building up connections with family and friends. The fact that Student E particularly labeled "臺灣" (Taiwan) in the upper body, where s/he located Mandarin, indicates that the country and the language are tied up together. Mandarin for Student E is associated with his/her linguistic expertise and social and cultural affiliation. Although Student E did not use Taiwanese as much as Mandarin, the portion of Taiwanese on his silhouette shows otherwise. To Student E, Taiwanese yields him/her to bond with his/her grandmother intimately. Student E's special bond with his/her grandmother is based on his/her competence in Taiwanese and when they actually carried out conversations through Taiwanese, Student E's linguistic identity towards Taiwanese is associated with linguistic expertise and familial inheritance. Student E shared a dual identity towards Taiwanese and Mandarin by having affiliation towards Taiwanese and at the same time having expertise in Mandarin. Regarding English, despite the fact that English is largely related to academic performances and there is a lack of exposure to English in social contexts, Student E expressed a positive attitude towards learning English.

## －Category 3．Four languages

## Student F



Figure 5．8．Student $\boldsymbol{F}$＇s language portrait

| Student F |
| :--- |
| Original narrative |
| 粉紅色：客語，我跟爸爸，表弟講，因為我是客家人，但我從小都是在用國語溝通， |
| 現在客語非常不流利，所以他們現在在訓練我，我覺得客語算是快失傳的語言，所以 |
| 會講客語的我都覺得很厲害。 |
| 黑色：國語，我跟所有人都說國語，我覺得說國語很方便，因為我在一個中華文化的 |
| 國家。 |
| 橘色：廣東話，我跟爺爺講，因為他是廣東人，但我只會一點點，我覺得廣東話口音 |
| 很酷。 |
| 藍色：English，跟老師朋友說，現在英文是個強勢語言，希望我可以 say 很流利。 |
| Translation of the original narrative |
| Pink：Hakka language．I speak Hakka with my father and my cousins because I am <br> Hakka－ren（客家人，a Hakka person）．However，I do not speak Hakka fluently because I <br> have always been speaking Mandarin since I was little．That is why my family is training |

me to speak Hakka now．In my opinion，Hakka is going to be extinct，and the fact that I am able to speak Hakka is very impressive．

Black：Mandarin．I speak Mandarin with everyone．To me，speaking Mandarin is very convenient because I live in a country immersed in Chinese culture．

Orange：Cantonese．Cantonese is the language I speak with my grandfather from my father＇s side．He is Cantonese，but I can only speak a little Cantonese．The Cantonese accent sounds so cool．

Blue：English，which I speak with my teachers and friends．Now English is a very powerful language，so I hope I can say（speak）it very fluently．

Student F＇s visual representation and narrative reveal that s／he is not only a multilingual speaker but also that $\mathrm{s} /$ he has some level of attachment to different cultural and linguistic communities．The presence of Mandarin in Student F＇s illustration is dominant．Student F＇s expertise in Mandarin is convenient to communicate with people in social contexts．The proportion of Mandarin in the portrait also demonstrates that Student F lives in a nation， which is largely embedded in Chinese culture．Although a certain degree of social and cultural influence from Mandarin is considered to play a big part in shaping Student F＇s identity while growing up，Student F has a strong and intimate sense of belonging towards Hakka as s／he referred him／herself as＂Hakka－ren＂（客家人，a Hakka person）．Student F purposefully located Hakka in his／her heart and in pink in order to demonstrate his／her family connection to Hakka＇s inherited heritage．Student F was aware of the current status of Hakka in Taiwan becoming endangered；therefore，being able to speak Hakka makes him／her feel proud of his／her Hakka heritage．To Student F，the rapport of the ability to speak Hakka and the Hakka ethnic identity is closely intertwined．On the other hand，although Student F also had an inherited connection to Cantonese，his／her proficiency and the use of Cantonese are limited．Student 6 held positive attitudes towards both Hakka and Cantonese．

In addition，Student F placed English in both hands to show his／her awareness of the important role English plays in the world：＂現在英文是個強勢語言，希望我可以 $s a y$ 很流

利。＂（Now English is a very powerful language，so I hope I can say（speak）it very fluent．）．
The insertion of an English word in the sentence indicates Student F＇s purpose of emphasizing a particular linguistic skill that Student F aims to achieve in the future．As we can see，Student F＇s strong attachment to languages makes up of his／her linguistic identity， and in expressing the affiliation，Student F drew upon the familial connection to Hakka and Cantonese and the environmental and cultural association to Mandarin and English．

## Student G



Figure 5．9．Student G＇s language portrait

| Student G |
| :--- | :--- |
| Original narrative |
| 橘色：英語 1．一個全世界通用的工具。2．外國人，老師。3．很帥。 |
| 黃色：台語 1．台灣人的證明，文化的資產，被中文侵入。2．和家人。3．很開心。 |
| 綠色：國語 1．最常使用，區域最大 $\circ 2$ 2和家人，朋友等台灣人。3．很普通，沒拘束。 |
| 監色：日語 1．一個工具，一個興趣。2．出國時使用。3．很爽。 |

## Translation of the original narrative

Orange presents English．English is a tool to connect the whole world．I speak it with foreigners and teachers．Speaking English is cool．

Light green presents Taiwanese．Taiwanese is the proof of Taiwanese people．It is an asset to our culture．Taiwanese is invaded by Mandarin．I use Taiwanese with my family and I feel happy when I am using it．

Dark green presents Mandarin．Mandarin is the language I use the most，so it has the biggest portion in this picture．I use Mandarin with family，friends and all Taiwanese people．When I use Mandarin，I feel normal and unrestrained．

Blue presents Japanese．To me，Japanese is not only a tool but also an interest．I only use it when I travel abroad．I feel great when I speak Japanese．

Student G＇s intention in coloring each of his／her languages in different proportions is according to the amount and frequent practices of each language in his／her whole linguistic repertoire．Student G showed his／her intimate sense of belonging towards Taiwanese by connecting the language to the family and the inherited culture．By showing a strong attachment to Taiwanese，Student G referred Taiwanese language as：＂台灣人的證明，文化的資產＂（the proof of Taiwanese people．It is the asset of our culture）．However，Student G drew attention to the overlapping part of two colors：dark green and light green．Dark green represents Mandarin，and light green represents Taiwanese．The part of dark green has an extended hook embedded in the part of light green．Student G＇s explanation not only revealed his／her nuanced attachments to his／her bilingual identities of Mandarin and Taiwanese： Taiwanese＂被中文侵入＂（is invaded by Mandarin）but also highlighted Student G’s views on the complex and conflicted linguistic realities of both languages．The linguistic realities are described as following．First，Mandarin and Taiwanese coexist culturally and linguistically in Taiwan．Second，the influence of Mandarin on Taiwanese is forced and obvious．Third， Mandarin holds a stronger power and status than Taiwanese does in the current society of Taiwan．Apart from that，the portion of Mandarin on Student G＇s silhouette is the largest comparing to other languages and it shows the dominant use of Mandarin in Student G＇s daily
life. The attachment to Mandarin for Student G is massively associated with family and friends although s/he did not have a specific nor an intimate feeling towards Mandarin. In addition to the other two foreign languages placed in the silhouette, for Student G, English and Japanese are the languages that s/he used "like a tool". Regarding the use of English and Japanese, the difference is that English is used at school and with people from different origins while Japanese is restricted to use only when traveling abroad. Even though Student G did not mention that the country s/he travels requires him/her to use Japanese, we know that for many Taiwanese people Japan is a popular vacation destination. Besides the fact that learning Japanese is for communication purposes, Student G also pointed out that the reason for learning Japanese is out of his/her personal interest. Regardless of the limited use of English and Japanese, they both are linked to international mobility and wider communication.

## Student H



Figure 5．10．Student H＇s language portrait

## Student H

## Original narrative

（綠色）台語：講中文時都混雜一些台語，罵人的時候也會用，讓我自己有真正是台灣人的感覺，很台，很酷。
（笽色）日文：我非常喜歡的動漫，所以目前學了一點點，看漫畫，動漫，日劇的時候都看得懂一些。我想考到 N4，以後去日本留學。
（淡綠色）國文：我和父母平常都是講國文的，聽說國文事世界上前幾名難學的語言，能以這一種語言為母語，我很幸運。
（黃色）英文：我會用英文跟學校的外師聊天，還有一些國外的朋友。也曾經用英文問路。因為是世界通用的語言，所以感覺很好用，在國外也可以跟外國人聊天，我想更精進我的英文，以後環遊世界，交到各國朋友。

## Translation of the original narrative

Green is Taiwanese．I always insert some Taiwanese words whenever I speak Mandarin． I also use Taiwanese to insult people because it makes me feel like I am a real Taiwanese． When using Taiwanese，I feel so authentic and so cool．

Blue presents Japanese．I like Japanese anime and manga very much，so I learn Japanese by myself in order to understand Japanese comic books，anime and TV dramas．I want to
pass an N4 Japanese language proficiency exam，so that I can study abroad in Japan in the future．

Light green presents Mandarin Chinese．I usually speak with my parents in Mandarin．I heard that Mandarin Chinese is one of the most difficult languages to learn in the world．So， I feel lucky to have Mandarin as my mother tongue．

Yellow is English．I often chat with native English teachers in our school and sometimes with friends from other countries．I also have asked for directions in English．English is the global language，so it is very useful．I can chat with foreigners when I am in a foreign country．I want to improve my English in order to travel around the world and make friends with people from different countries．

Student H provided a brief description of his／her self－portrait．Mandarin as Student H＇s mother tongue represents a connection of the inheritance to the family．Student H＇s linguistic identity towards Mandarin is linked to linguistic expertise and familial inheritance． Particularly，Student H highlighted his／her mixed use of two languages，Mandarin and Taiwanese，in daily conversations．Student H＇s intentional and habitual ways of linguistic practice revealed his／her bilingual linguistic identity of Mandarin and Taiwanese．By showing knowledge of Taiwanese in a Mandarin dominant conversation allows Student H to present who he／she is and to identify him／herself as＂真正是台灣人＂（a real Taiwanese）．Student H’s attachment to Taiwanese is represented through its use．In expressing affiliation，Student H used＂很台，很酷＂（so authentic and so cool）to show his／her identification in relation to Taiwanese．

Also，Student H had a strong tendency of yearning towards Japanese culture by addressing his／her personal interest in Japanese＂anime＂and＂manga＂in the narrative．According to the definitions Cambridge Dictionary provides，＂anime＂refers to Japanese cartoons or films that are made of drawing image characters，and＂manga＂refers to Japanese comics．Due to favoring Japanese culture and aiming to pursue a higher education degree in the near future， Student H was motivated to self－learn Japanese．On the other hand，Student H＇s association with English is largely related to international mobility：s／he located English on both legs．

Being aware of English as the world's lingua franca, Student H knew that mastering English will provide him/her chances to create possible international friendships and traveling advantages. Even though both Japanese and English are essential in assisting Student H to achieve international mobility, the future goal orientations of the two languages are different. Japanese is associated with academic achievements and the trendy Japanese popular culture while English is largely related to socializing with people from different origins. Overall, Student H showed positive attitudes towards all languages from his/her whole linguistic repertoire. This activity helps Student H to conceptualize his/her plurilingual and pluricultural competence. Student H made a clear distinction between culture and language through the use of different colors.

## Student I



Figure 5.11. Student I's language portrait

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Student I
Original narrative
橘色:台語, }80%\mathrm{ ,只要跟台灣老一輩的就會使用。親切。
紫色:英文, 30%,在課堂上以及和外國人溝通。很重要。因為夢想需要。
紅色:韓文, 20%,唱歌以及追星會使用到。有趣。
黃色:中文, 100%,日常生活溝通一定會使用到。文青,古代感。
```


## Translation of the original narrative

Orange presents Taiwanese and it is used 80 percent of the time in my daily life．I always use Taiwanese when I am with Taiwanese elderly people．Speaking Taiwanese gives me an intimate feeling．

Purple presents English．My frequent use of English is 30 percent．Normally I only use English in class and to communicate with foreigners．English is very important because I need it to achieve my dreams．

Red is Korean．The percentage of my frequent use of Korean is twenty．I only use it to sing and follow Korean celebrities．To me，speaking Korean is fun and interesting．

Yellow presents Mandarin．The frequency of Mandarin use is 100 percent．In everyday communication，we must use Mandarin．When I speak Mandarin，I feel that I am knowledgeable and connected with ancient times．When speaking Mandarin，I feel knowledgeable and a sense of antiquity to connect with ancient times．

In Student I＇s portrait，the upper half of the body representing Taiwanese appears as an orange area while the bottom half of the body coloring in yellow represents Mandarin．There is not a clear boundary between the two colors．When taking a closer look at the main torso of the silhouette，we observed that there is an area where both colors，orange and yellow were blended．It is clear that Student I＇s relationships with Mandarin and with Taiwanese are intertwined and cannot be separated．Mandarin and Taiwanese together make up the full of Student 9＇s oneself．Even if the percentages of the languages go higher than 100 percent，the portrait still reveals the proportion of the use of each language．It can be seen that Mandarin and Taiwanese have a similar proportion in the portrait．From Student I＇s narrative，we know that for him／her Mandarin is a necessary and dominant used language，while the use of Taiwanese is mainly with elderly people but with a high frequency．In explaining his／her feelings towards Mandarin，Student I emphasized the connection to ancient history and
culture. Student I's expertise in and attachment to Mandarin is referring to a part of his/her linguistic identification. On the other hand, Student I's attachment to Taiwanese as a part of his/her linguistic identification is expressed through his/her "intimate feeling" towards the use of Taiwanese. That is also to say that Mandarin is the language for Student I to connect to the past, while Taiwanese opens a communicational channel for Student I to interact with the present. Regardless of the little use of Korean, Student I represented favorable attitudes towards Korean in heart. The degree of "liking" Korean is expressed through the placement of the language on Student I's silhouette and also his/her interest in Korean popular culture. According to Huang (2011), the influence of Korean popular culture in music and TV dramas, the presence of Korean commodities and Korean food in Taiwan has impacted on young people's daily life regarding lifestyle. Because of Student I's strong attachment to Korean, the role Korean plays in Student I's life at present is very important in forming Student I's on-growing identity. In addition to the use of purple, which represents English, is randomly and proportionally situated all over Student I's language portrait silhouette. Student I's association with English is largely linked to the school and for wider communication. In particular, for Student I English is an important tool to assist him/her to achieve his/her dreams and to shape his/her future self. From a holistic view to look at Student I's language portrait and narrative, the silhouette shows Student I's plurilingual and pluricultural identities. In other words, Student I saw him/herself as a multilingual person, who is a combination of multiple languages. Each language is important to consist his/her sense of self and identity.

## －Category 4．More than four languages

## Student J



Figure 5．12．Student J＇s language portrait

| Student J |
| :--- |
| Original narrative |
| 黑色：Chinese。這是最平常用到的語言，完全不用思考。用的時候沒有太多的想法。 |
| 紫色：English。全世界共通的語言，學會是一定要的。如果可以順利跟外國人溝通 |
| 的話，感覺自己變成神人等級。 |
| 紅色：台語。雖然阿公阿嫲也講的不多，但還是要會聽。想法：用的時候感覺自己 |
| 很像老人家，但假如要跟鄉下老人通話的話，台語是必備的。 |
| 藍色（右腳）：德文。在學校（第）二外（語課）上課用到，雖然已經忘得差不多 |
| 了。心裡只有一個想法，超級難。 |
| 韓文（左腳）：韓文。看韓劇，聽歌。想法：如果會講的話就感覺離那些偶像更進 |
| 一步。 |
| Translation of the original narrative |
| The head in black presents Mandarin．This is my most commonly used language．I do |
| not need to think nor have much thought about Mandarin when I am using it． |
| Both arms in pink present English．English is the global language，so we must learn it |

well．I would feel like I am a man of God if I could use English to communicate with foreigners without making any misunderstandings．

The heart presents Taiwanese．Although my grandparents do not speak much Taiwanese，I still need to be able to understand it．When I speak Taiwanese，I feel like an old person．But if we want to communicate with elderly people in the countryside， Taiwanese is necessary．

The right foot in blue presents German．I learn German as a second foreign language at school．I almost forget everything I learned．I only have one thought about German，and that is German is super difficult．

The left foot in purple presents Korean．I watch Korean TV dramas and listen to Korean music．If I am able to speak Korean，I feel I am closer to those Korean celebrities （who I adore）．

Student J made a clear distinction between different languages throughout the color choices and placements．All of Student J＇s languages were separated and settled individually in different parts of the body in the silhouette．In Dressler＇s（2015）study on analyzing Canadian multilingual children＇s language portrait silhouettes，many children used the head or brain to refer to having knowledge of a language and other body parts being far away from the head to represent the lack of knowledge of another language or languages．In expressing expertise，Student J focused on his／her oral competence as a measurement to show his／her linguistic identity．Student J demonstrated how much s／he knew about Mandarin by locating Mandarin in the head and commented on his／her feelings when using Mandarin：＂完全不用思考。用的時候沒有太多的想法。＂（I do not need to think nor have much thought about it when using it．）．Student J＇s attachment to Mandarin referring to a part of his／her identification is therefore intently linked to expertise．Vice versa，Student J showed an intimate sense of belonging to Taiwanese through the placement of a red heart in expressing his／her inherited roots from the grandparents．Even though Student $\mathbf{J}$ had limited competence in Taiwanese and felt old－fashioned when using Taiwanese，the longing to connect with the older generation showed Student J＇s strong affiliation towards Taiwanese，in expressing to refer a part of
his／her linguistic identity．In other words，Student J feels in Taiwanese and thinks in Mandarin and both languages play essential parts of Student J＇s identifications．

In addition，English，German and Korean as additional learning languages are placed far from the head were used to demonstrate Student J＇s shortage of knowledge in these languages． From Student J＇s narrative，we noticed that Student J was aware that English is the world lingua franca and being able to speak fluent English allows him／her to pursue wider communication internationally．Considering German is learned as a second foreign language and restricted to use only in the classroom，Student J had very little competence in German as s／he confessed to＂忘得差不多了＂（almost forget everything）．Interestingly，Student J＇s autonomy learning and use of Korean is due to a personal interest dwelled in Korean popular culture．As it has already been said in the case of Student I，the influence of Korean popular culture has impacted on Taiwanese youngsters＇lifestyles（Huang，2011）．In hoping to become closer to certain Korean idols Student J adores，the motivation of learning Korean through the exposure to Korean media consumption has become a part of Student J＇s self－exploration and future self－development．In the process of creating a language portrait and reflecting on the activity，Student J recognized the role each language plays in his／her life．By leaving the core of the silhouette white，Student J shows his／her willingness and desire to learn other languages and cultures．Student J＇s visual representation helped to conceptualize his／her plurilingual and pluricultural competence more holistically．

## Summary of the selected ten language portraits

The portraits indicate that individuals＇identity paths are not the same and rather distinct． The influences that direct the differences in identity in our participants vary from one another． Participants＇portraits depict that their linguistic and social practices in everyday lives and also their rapport to identity，language and culture are complex．Overall，participants displayed the relationship they had with their languages through the placement of different
colors in the silhouette in various ways. For example, grouping languages inside and outside the body silhouette, blending two languages, isolating languages in different parts of the body, marking symbols and drawing facial expressions. Coffey (2015) investigates bilingual teachers' language portraits and finds a pattern of core-to-periphery. The more significant languages are located in the heart or chest, while the least used languages are placed further from the center as a sign of perceived distance. In another study carried out in Australia, Singer and Harris (2016) investigated the degree of multilingualism and roles that languages play in the lives of indigenous people, who use a range of languages on a daily basis. They found a pattern that the more important language associates with the head and torso.

In our study, participants arranged their languages in language portrait silhouettes in myriad ways. Many selected examples had their most important language placed in their core (such as Student A, Student C, Student E, Student F, Student H, Student I and Student J). Some others located their first language in the legs or in the head to connect their roots (for example Student B, Student C, Student G and Student I). In some examples, we also observed the white space located in the head, the main torso and the lower body (for instance Student C, Student H and Student J). Thus, some of our selected examples made a clear boundary between languages, while some others viewed that languages are intertwined and inseparable. Through the color choice and the placement of the languages and written narratives, the results reveal that Taiwanese students have creative and unique linguistic practices. At the same time, they have complex and unique linguistic identities, which are not solely linked to one language. Nearly all the participants wrote in Mandarin as it is the instructional language in Taiwan. A few students wrote their narratives in English. Also, translanguaging was used by some students to insert Taiwanese or English words and phrases in written texts. Based on the language portrait examples we provided here, the writing direction is horizontal and from left to right. However, each student has his/her authentic writing pattern, and because of that,
we do not know for sure which language was explained in the script prior to which other language or languages.

### 5.3 Taiwanese Students' Language Attitudes

In this chapter, we explore Taiwanese students' attitudes towards three languages:
Mandarin, Taiwanese and English. The main research question is Q3. "What are the attitudes of Taiwanese students?". It includes additional five sub-research questions, which are the following:

Q3.1. What are students' attitudes towards each language?
Q3.2. What are students' attitudes towards bilingualism and multilingualism?
Q3.3. Are language attitudes related to the use of languages?
Q3.4. Are language attitudes related to language proficiency?
Q3.5 Are language attitudes related to age?
We then answer each sub-research question according to its order.

### 5.3.1 Language Attitudes towards Three Languages

In order to answer the first sub-research question (Q3.1. "What are students' attitudes towards each language?'), two sections from the questionnaire are used to elicit participants' general attitudes towards the language (Section 4.1) and the attitudes towards the purposes of the language (Section 3.2). Two types of data are used to answer this sub-question: quantitative and qualitative data. First, we report the descriptive data on both sections relating to attitudes towards languages. As we wanted to see whether there is a relationship between attitudes towards the three languages and the first language (L1), independent $t$-tests were then carried out to find out whether there are significant differences between two groups of students with different mother tongues regarding their attitudes towards languages. We then further explain which two groups were selected and why we were interested in seeing the differences in these
particular two groups. After that, group discussions are used to present as qualitative data.

## Quantitative data

To begin with, we start to report the descriptive data on students' attitudes on the purposes of using the languages, which contain 19 items from the questionnaire Section 3.2. Participants had to rank the importance of doing activities by using a specific language on a scale 1 (not important) to 10 (very important). Table 5.19 shows the comparison across three languages on the means and standard deviation in each item.

| Items ( $N=150$ ) | Mandarin$(\max =10)$ |  | Taiwanese$(\max =10)$ |  | $\begin{gathered} \text { English } \\ (\max =10) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | SD | Mean | SD | Mean | SD |
| 1. To make friends | 9.38 | 1.26 | 4.47 | 2.86 | 6.09 | 3.09 |
| 2. To earn plenty of money | 9.17 | 1.42 | 5.30 | 3.00 | 8.89 | 2.21 |
| 3. To get a job | 9.50 | 1.11 | 5.48 | 3.08 | 9.32 | 1.71 |
| 4. To read | 9.57 | 1.03 | 4.51 | 3.03 | 8.18 | 2.85 |
| 5. To understand | 9.54 | 1.11 | 6.36 | 3.01 | 8.27 | 2.66 |
| 6. To be able to speak | 9.66 | 1.12 | 6.75 | 2.80 | 8.28 | 2.57 |
| 7. To write | 9.47 | 1.24 | 3.70 | 2.66 | 7.79 | 2.81 |
| 8. To be liked | 8.81 | 1.94 | 5.15 | 2.94 | 7.19 | 2.79 |
| 9. To talk to people | 9.59 | 1.04 | 5.35 | 3.00 | 6.68 | 3.05 |
| 10. To pass exams | 9.46 | 1.16 | 4.33 | 3.03 | 8.97 | 2.13 |
| 11. To live in Taiwan | 9.80 | 0.62 | 7.35 | 2.67 | 6.74 | 2.75 |
| 12. To travel outside Taiwan | 7.13 | 2.55 | 2.97 | 2.56 | 9.60 | 1.42 |
| 13. To travel within Taiwan | 9.79 | 0.71 | 7.57 | 2.50 | 5.42 | 2.72 |
| 14. To read street signs | 9.57 | 1.06 | 4.11 | 3.11 | 7.71 | 2.91 |
| 15. To surf the Internet | 9.52 | 1.13 | 3.31 | 2.72 | 8.10 | 2.65 |
| 16. To watch TV | 9.53 | 1.13 | 4.86 | 2.95 | 6.99 | 2.90 |
| 17. To watch films | 9.39 | 1.48 | 4.32 | 2.91 | 7.97 | 2.70 |
| 18. To listen to radio | 8.97 | 2.05 | 4.74 | 3.08 | 6.52 | 3.09 |
| 19. To listen to music | 9.39 | 1.27 | 4.53 | 3.09 | 8.47 | 2.19 |

Table 5.19. Purposes of the languages

Results in Table 5.19 reveal that overall Mandarin is perceived the most important language to use in all the activities listed. At the same time, English is perceived slightly more important than Taiwanese in most of the items except for item 11: "To live in Taiwan" and item 13: "To travel within Taiwan". Regarding the use of Mandarin for different purposes, the items reported to be the most important were: item 11: "to live in Taiwan" $(M=9.80, S D=$ 0.62 ), item 13: "to travel within Taiwan" $(M=9.79, S D=0.71)$ and item 6: "to be able to speak" ( $M=9.66, S D=1.12$ ). On the other hand, item 12: "to travel outside Taiwan" ( $M=$ 7.13, $S D=2.55$ ) has the lowest mean, although it is still seen as important. Concerning using Taiwanese for achieving purposes, items that were perceived the most important were: item 13: "to travel within Taiwan" ( $M=7.57, S D=2.50$ ), item 11: "to live in Taiwan" ( $M=7.35$, $S D=2.67$ ), and item 6: "to be able to speak" $(M=6.75, S D=2.80)$. Participants perceived that using Taiwanese to achieve item 12: "to travel outside Taiwan" ( $M=2.97, S D=2.56$ ) to be the least important among all 12 items. Here we can see that, both when using Mandarin and using Taiwanese for different purposes, the most and the least important items appeared to be the same. With regard to using English to achieve purposes, the most important were reported to be item 12: "to travel outside Taiwan" ( $M=9.60, S D=1.42$ ), item 3: "to get a job" ( $M=9.32, S D=1.71$ ) and item 10: "to pass exams" ( $M=8.97, S D=2.13$ ). In contrast, using English to achieve item 13: "when traveling within Taiwan" has the lowest mean ( $M=5.42$, $S D=2.72) . "$

Next, we continue to report the descriptive data on participants' general attitudes towards languages from the questionnaire Section 4.1. Results of participants' general attitudes towards languages can be seen in Table 5.20. In the case of the whole sample, the results suggest that the dominant attitude is favorable towards Mandarin. The mean score of the total sum of all items reveals that Mandarin $(M=56.56, S D=4.19)$ has the highest mean followed by English $(M=48.84, S D=7.92)$ and finally Taiwanese $(M=42.49, S D=9.51)$. We then look at the mean scores in each of the three languages individually. With regard to the
attitudes towards Mandarin, participants agreed on all of the items. The items with the highest scores were item 7: "This language is essential to be part of everyday life." $(M=4.90, S D=$ 0.34 ), item 6: "It is important for pupils in Taiwan to be able to speak this language." ( $M=$ 4.87, $S D=0.42$ ) and item 4: "Learning this language is useful." ( $M=4.85, S D=0.39$ ). In contrast, the lowest scores were obtained by item 9: "Being Taiwanese must know to speak this language." $(M=4.39, S D=1.07)$ and item 8: "I think it is a good idea that subject teachers use this language as a medium to teach." $(M=4.58, S D=0.85)$. As for the participants' attitudes towards Taiwanese, the items with the highest scores were item 10: "I think Taiwanese people should speak this language more." $(M=3.94, S D=1.08)$, item 11 : "When I become an adult, I would like to be considered as a speaker of this language" ( $M=$ 3.89, $S D=1.19$ ) and item 4: "Learning this language is useful." $(M=3.75, S D=1.25)$, whereas the lowest mean scores were item 12: "In the public area, this language should be shown on the signs." ( $M=2.83, S D=1.21$ )" and item 8: "I think it is a good idea that subject teachers use this language as a medium to teach." $(M=2.75, S D=1.27)$. When looking at participants' attitudes towards English, they agreed on most of the items except for item 9. Participants gave the highest scores to item 4: "Learning this language is useful." ( $M=4.79$, $S D=0.69)$, item 5: "This language is an important language to learn." $(M=4.76, S D=0.68)$ and item 11: "When I become an adult, I would like to be considered as a speaker of this language." ( $M=4.64, S D=0.85$ ), whereas the scores were lower for item 9: "Being Taiwanese must know to speak this language." $(M=2.85, S D=1.22)$, which had the lowest mean among the 12 items. Table 5.20 shows the means and standard deviation of the three languages on the statements relating to general attitudes.

| $\text { Items }(N=150)$ | Mandarin$(\max =5)$ |  | Taiwanese$(\max =5)$ |  | $\begin{gathered} \text { English } \\ (\max =5) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | SD | Mean | SD | Mean | SD |
| Item 1. All people in Taiwan should know to speak this language | 4.71 | 0.66 | 3.69 | 1.08 | 3.32 | 1.08 |
| Item 2. All schools should teach pupils to speak this language. | 4.75 | 0.53 | 3.68 | 1.23 | 4.45 | 0.97 |
| Item 3. All schools should teach pupils to speak this language as early as possible. | 4.69 | 0.63 | 3.66 | 1.24 | 4.40 | 1.03 |
| Item 4. Learning this language is useful. | 4.85 | 0.39 | 3.75 | 1.25 | 4.79 | 0.69 |
| Item 5. This language is an important language to learn. | 4.77 | 0.54 | 3.46 | 1.26 | 4.76 | 0.68 |
| Item 6. It is important for pupils in Taiwan to be able to speak this language. | 4.87 | 0.42 | 3.75 | 1.23 | 4.46 | 0.89 |
| Item 7. This language is essential to be part of everyday life. | 4.90 | 0.34 | 3.63 | 1.18 | 3.58 | 1.31 |
| Item 8. I think it is a good idea that subject teachers use this language as a medium to teach. | 4.58 | 0.85 | 2.75 | 1.27 | 3.44 | 1.41 |
| Item 9. Being Taiwanese must know to speak this language. | 4.39 | 1.07 | 3.49 | 1.37 | 2.85 | 1.22 |
| Item 10. I think Taiwanese people should speak this language more. | 4.62 | 0.69 | 3.94 | 1.08 | 3.95 | 1.06 |
| Item 11. When I become an adult, I would like to be considered as a speaker of this language. | 4.75 | 0.64 | 3.89 | 1.19 | 4.64 | 0.85 |
| Item 12. In the public area, this language should be shown on the signs. | 4.74 | 0.63 | 2.83 | 1.21 | 4.28 | 1.04 |
| Total (max=60) | 56.56 | 4.19 | 42.49 | 9.51 | 48.84 | 7.92 |

Table 5.20. Attitudes towards the three languages

Furthermore, we wanted to see whether there is a relationship between students' attitudes towards three languages and their mother tongue or mother tongues. It was decided to compare the attitudes between two groups that have different mother tongues: Mandarin only (41.3\%) and Mandarin and Taiwanese ( $42.7 \%$ ). The percentage of participants with different mother tongues can be seen in Table 4.2. The reason to choose these two groups is that together they make up the majority of the sample ( $84 \%$ ) in this study. As the number of participants with
other mother tongues is small and their linguistic profiles are diverse, we do not include them in this comparison. Therefore, in order to see whether there is a difference between attitudes based on the mother tongue, we used t-tests to carry out the analysis. In the following, we present the results of several independent t -tests on the comparisons between two groups and students' attitudes towards each of the three languages. The order of the languages that we are going to report here is followed by Mandarin, then Taiwanese and English last. An overall attitude index towards each of the three languages was obtained by adding the scores corresponding to the 12 items shown in Table 5.20. The dependent variables used in this analysis are the total sum of the 12 items for each language: attitudes towards Mandarin total sum, attitudes towards Taiwanese total sum and attitudes towards English total sum. The results of t -tests are shown in Table 5.21. Concerning the attitudes towards Mandarin, the results indicate that although both groups present favorable attitudes towards Mandarin, but there is no significant difference between the two groups ( $S=0.16$ ). In the case of attitudes towards Taiwanese, a statistically significant difference was found ( $p<0.01$ ). The students with Mandarin and Taiwanese as mother tongues ( $M=45.56, S D=8.34$ ) obtained a higher mean than the students with Mandarin only as L1 ( $M$ $=39.21, S D=9.82$ ). That is to say that the group of students with Mandarin and Taiwanese as mother tongues showed significantly more positive attitudes towards Taiwanese than the group of students with Mandarin only as L1. With regard to attitudes towards English, it can be seen that there is not a significant difference between the two groups ( $\mathrm{S}=0.74$ ). Although the group of students with Mandarin only as a mother tongue ( $M=49.66, S D=6.99$ ) has a higher mean than the group of students with Mandarin and Taiwanese as mother tongues ( $M=49.16$, $S D=7.87$ ), the means of both groups are at a similar level. Table 5.21 shows the results of t -tests on participants' general attitudes towards three languages between two groups of students with different mother tongues ( ${ }^{*} p<0.05,{ }^{* *} p<0.01$ ).

|  | Attitude towards Mandarin |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mother tongue(s) | $\mathbf{N}$ | Mean (max = 60) | SD | $\mathbf{T}$ | Sig. |
| Mandarin only | 62 | 57.55 | 3.25 | 1.405 | 0.16 |
| Mandarin and Taiwanese | 64 | 56.63 | 4.06 |  |  |
| Attitude towards Taiwanese |  |  |  |  |  |
| Mother tongue(s) | $\mathbf{N}$ | Mean (max =60) | SD | T | Sig. |
| Mandarin only | 62 | 39.21 | 9.82 | -3.918 | $0.00^{* *}$ |
| Mandarin and Taiwanese | 64 | 45.56 | 8.34 |  |  |
|  |  | Attitude towards English |  |  |  |
| Mother tongue(s) | $\mathbf{N}$ | Mean (max =60) | SD | $\mathbf{T}$ | Sig. |
| Mandarin only | 62 | 49.66 | 6.99 | 0.380 | 0.74 |
| Mandarin and Taiwanese | 64 | 49.16 | 7.87 |  |  |

Table 5.21. First language and attitude towards three languages

As a whole, we can see that participants showed positive attitudes towards all three languages. In particular, participants reported having more favorable attitudes towards Mandarin than towards Taiwanese and towards English. Regarding the relationships between L1 and attitudes, the significant differences between two different mother tongue groups only appeared in the case of the attitudes towards Taiwanese. The group of students with Mandarin and Taiwanese as mother tongues has significantly more positive attitudes towards Taiwanese.

## Qualitative data

In the following, we present examples of group discussions according to the questions asked in the excerpts shown below. The examples were chosen for two reasons. One, excerpts were chosen when the discussions involved more conversation exchanges between students. Two, in order to show the conversation dynamics across different age groups, at least two examples of group discussions were presented. As it has already been mentioned in the
methodology，a total of six group discussions were audio－recorded．Group discussions were carried out during ten－minute lesson breaks．The main language in the interaction is Mandarin， the curricular language．The following excerpts were transcribed in Mandarin with English translations in brackets．Mandarin has a regular font，and Taiwanese utterances are underlined． The questions relating to students＇attitudes towards languages are（see Appendix 4）：

Question 1．Which language or languages do you think Taiwanese people must know to speak？

Question 2．Which language or languages do you think Taiwanese people should speak more？
Question 3．Which language or languages are important for Taiwanese students？
Question 4．Do you agree that all schools should teach students to speak Taiwanese？
Question 5．Do you agree that all schools should teach students to speak English？
In spite of the fact that the questions above also appeared in the questionnaire，we asked these questions in group discussions in order to retrieve deeper insights about students＇ opinions on these questions and also to observe the interactions between students．Excerpts will be presented according to the order of the questions．As it was already mentioned in the methodology，the names shown in the excerpts are pseudo names．Names are presented in bold（see Appendix 6）．To start with，Excerpt 6 shows the interaction between students from three age groups regarding Question 1：＂What languages do you think Taiwanese people must know to speak？＂

## Excerpt 6．Group discussions about Question 1

[^0]franca．）
（A group of the $9^{\text {th }}$ graders：Shen，Han，Yang，Zhou，Tang and Lou）
［02：06］Tang：中文。台語不需要，因為我不會講。（Mandarin．Taiwanese is not necessary because I do not know how to speak Taiwanese．）
［03：00］Zhou：台語，比較親民。因為看到那些候選人拜票都用台語。哈哈。比較親民啊，對啊。比較本土 ${ }^{\circ}$（Taiwanese．It is closer to local people．Because when election candidates solicit votes from the locals in a campaign rally，they speak Taiwanese．Haha．It gives an impression of suavity to get closer to the masses．Yeah．It is more local．）
（A group of the $10^{\text {th }}$ graders：Li，Huang，Peng，Fan and Xie．）
［00：33］Huang：英文。（English．）
［00：35］Fan：台語。（Taiwanese．）
［00：35］Xie：中文。（Mandarin．）
［00：37］Li：台語不需要。（Taiwanese is not needed．）
［00：38］Fan：需要啦。（Yes．It（Taiwanese）is necessary．）
［00：39］Peng：台語要啦。（Taiwanese is necessary．）
［00：39］Huang：中文和英文。（Mandarin and English．）
［00：45］Li：中文。（Mandarin）
［00：50］The researcher：那 $\mathbf{L i}$ 覺得為什麼中文一定要會？（What about you，Li？Why do you think Taiwanese people must know Mandarin？）
［00：52］Li：因為在台灣我們要用中文溝通，就是主要都是用中文。（Because in Taiwan we need to use Mandarin to communicate．Mandarin is mainly used（for communication）．）
［00：56］The researcher：那 Huang 呢？（What about Huang？）
［00：57］Huang：英文，因為和世界的人溝通，不然只在台灣沒什麼好玩的。（English．Because we need to communicate with people from different places of the world，otherwise only staying in Taiwan is not fun．）
［00：58］The researcher：那 Fan 覺得為什麼台語重要？（And why do you think Taiwanese is important， Fan？）
［01：02］Fan：因為老一輩的都講台語。（Because the older generation speaks Taiwanese．）

In Excerpt 6 we can see that Mandarin，Taiwanese and English were the languages that the participated students perceived being Taiwanese must know．While Mandarin is related to its dominant use for effective communication on a daily basis in Taiwan，English is associated with students＇desire to communicate with foreigners．Regarding Taiwanese，students held opposite opinions on the necessity of Taiwanese．Although several students disagreed on the necessity of knowing Taiwanese due to their lack of proficiency in Taiwanese，some other
students expressed the opposite．The reason in favor of the necessity of knowing Taiwanese is to connect with the elderly and the local people．In fact，it is interesting to see that a Grade 9 student，Zhou，was following political events and viewed speaking Taiwanese as a tool for election candidates to build a closer connection with Taiwanese people．

Next，we continue to present students＇responses to Question 2．Excerpt 7 demonstrates two group discussions answering the second question：＂Which language or languages do you think Taiwanese people should speak more？＂

Excerpt 7．Group discussions about Question 2
（A group of the $5^{\text {th }}$ graders：Zhou，Liu，Zheng，Wang and Meng．）
［06：07］Zhou：英文。因為你才會更大膽的跟外國人講話。（English．Because you will be braver and more confident to speak with foreigners．）
［06：26］Liu：台語。因為台語本身就是台灣的母語，可是現在很少人在講台語，都是阿公，阿㨩在講。所以我們要更常講台語，把台語傳承下去。（Taiwanese．Because Taiwanese is Taiwan＇s mother tongue．However，nowadays very few people speak Taiwanese，only grandpas and grandmas do． Therefore，we have to speak Taiwanese more often in order to pass on Taiwanese（to a future generation）．）
（A group of the $10^{\text {th }}$ graders：Li，Huang，Peng，Fan and Xie．）
［01：30］Fan：應該常講台語，因為那才是台灣本土的語言。（We should speak Taiwanese more often because it is Taiwan＇s local language．）
［01：43］Li：我覺得也是應該要更常講台語，因為最一開始都是講台語。就是老人家也是講台語的，然後現在年輕人都不太講台語，就是（台語）可能會不見，所以我們應該要更常講。講台語才能保留，傳承文化。（I also think that we should speak Taiwanese more often because Taiwanese was spoken at the very beginning（of history）．Nowadays the elderly speak Taiwanese，but the youngsters do not speak it often．Taiwanese might disappear，so we should speak Taiwanese more often．By speaking Taiwanese，the culture can be preserved and passed down．）

Based on the conversation exchanges above，we observed that many students agreed on speaking more of Taiwanese．Students were aware of the fact that Taiwanese is becoming endangered and a younger generation speaks a language that is no longer able to communicate in their mother tongue especially when talking with their older family members．For these
students，speaking Taiwanese is linked to their intimate connection with Taiwanese culture， and the only way they knew to prevent Taiwanese from becoming extinct is by speaking Taiwanese more often．In that way，Taiwan＇s native language and culture would be able to be passed on from generation to generation．

Then，Excerpt 8 presents students＇responses to Question 3：＂Which language or languages are important to Taiwanese students？＂

| Excerpt 8．Group discussions about Question 3 |
| :--- |
| （A group discussion of the $5^{\text {th }}$ graders：Zhou，Liu，Zheng，Wang and Meng．） |
| ［07：18］Zhou：中，英文。（Mandarin and English．） |
| ［07：19］Wang：中文和英文吧。中文在台灣要溝通時會用到。英文的話，你在國外像在英國，你跟人家 |
| 溝通的時候就會用的到。（Mandarin and English．Mandarin is used when communicating with other |
| people in Taiwan．As for English，when you are abroad，for example：in England，you need to speak |
| English with others．） |

（A group discussion of the $8^{\text {th }}$ graders：Zhang，Jin，Du，Tao，Jiang and Feng．）
［07：18］Zhang：中文和英文。因為中國目前來說有許多大型考試，而且中國市場很大，和中國商人往來他們與不一定會說英文，所以（我們）要會講中文。（Mandarin and English．In the current state of China，there are many large－scale exams and the business market in China is large．When engaging with Chinese business men，they may not know to speak English，so we must know to speak Mandarin．）
［07：29］Tao：英文，因為是國際語言。（English．It is an international language．）
［08：38］Jiang：對啊，中文目前是國際第二大語言，所以也是滿重要的。（Yes，I agree．Currently，Mandarin is the second largest language in the world，so it is also very important．）

As we can see in Excerpt 8，Mandarin and English were seen as important languages and were perceived as communicational tools．The only difference between the two languages for communicational purposes here is the linguistic background of the interlocutor．Students understood the influential status of English in the world．Having good competence in English not only provides international mobility but also achieves efficient communication outside Taiwan with non－Mandarin speakers．In the case of Mandarin，a Grade 8 student，Zhang， highlighted the importance of having competence in Mandarin for the purpose of
communicating with Chinese people．In fact，Zhang had a clear understanding of the demand of doing business with China resulting from the rapid growth of China＇s economy is inevitable．Apart from that，to Zhang，the need of having high competence in Mandarin is also related to achieving academic success in China．Zhang＇s viewpoint on the functions of Mandarin indicates that Mandarin is no longer limited to use in Taiwan，and it also serves as a lingua franca in China to communicate with people with different mother tongues．

In the following lines，we continue to present students＇opinions from four different grade levels on Question 4：＂Do you agree that all schools should teach students to speak Taiwanese？＂

## Excerpt 9．Group discussions about Question 4

（A group discussion of the $5^{\text {th }}$ graders：Zhou，Liu，Zheng，Wang and Meng．）
［03：02］Zhou：台語在別的地方也用不到。不需要。（Taiwanese is not used in other places．Schools do not need to teach Taiwanese．）
［04：00］Wang：我覺得不一定。台灣人要看你的母語是什麼，就應要學那個語言。（Not necessarily，it depends．In my opinion，for an individual Taiwanese person，s／he should learn his／her own mother tongue．）
（A group discussion of the $6^{\text {th }}$ graders：Chen，Wu，Ding，Wei and Shi．）
［08：53］Wu：不同意。因為學校可能有學生來自不同國家或種族，他們應該學習他們的語言。（I disagree． Because there might be students coming from different countries or ethnicities at school，and they should learn their language or languages．）
［09：26］Chen：我覺得不一定。因為可能之後未來台語不太會用到。（Not necessarily．Because in the future Taiwanese might not be much used．）
（a group of the $8^{\text {th }}$ graders：Zhang，Jin，Du，Tao，Jiang and Feng．）
［03：54］Tao：部分同意，部份不同意。（I partly agree and partly disagree．）
［03：56］Zhang：看情況吧。現在的時代在改變，像以前的時代要求要復古，那就要教。如果是現在這個時代，是可以不用再教了啦。（It depends on the situation．Now，the time has changed．In the old times，schools should have taught Taiwanese．However，in the current era，it is not necessary for schools to teach Taiwanese anymore．）
［04：10］Jin：不一定。有特教學校，那就不太需要（教台語）了。（Not necessarily．If there are special schools （aiming at teaching Taiwanese），then schools do not need to teach Taiwanese．）
［04：29］Zhang：現在這個時代應該是不用再教了，因為現在一堆人都在講中文了。但，還是多多少少要

教到，因為現在會講台語的人越來越少了。最好還是要教一下（台語）。每天花個二十分鐘教也好，就是都不要不教。（In this current era，it is not necessary to teach Taiwanese because there are many people speaking Mandarin．However，I think that schools should at least teach basic Taiwanese because fewer and fewer people can speak it．It is better that schools teach Taiwanese．Twenty minutes a day is better than nothing．）
［04：57］Jiang：因為要文化傳承。（In order to pass down tradition．）
［05：07］The researched asked：那 Tao 呢？你剛剛說部份同意，部份不同意。（What about Tao？You have just said that you partly agreed and partly disagreed．）
［05：18］Tao：想法一樣。一個是時代。不同意學校教，是因為要跟上時代進步，而應該教國語。同意的部分是因為還是要保留一點文化。（I have the same thought．It is about the era．I disagree with schools teaching Taiwanese because we need to keep up with the advancements of the modern era and schools should teach Mandarin．On the other hand，the reason why I agree with schools teaching Taiwanese is that we need to preserve（the Taiwanese）culture．）

According to the excerpt shown above，students＇answers to Question 4 did not seem to be on the same page．Students，who agreed that schools should teach Taiwanese，drew attention to the importance of passing down Taiwanese traditions，whereas a Grade 8 student，Tao， viewed Taiwanese as an old－fashioned and outdated language and disagreed that schools should teach Taiwanese．At the same time，two students from the primary school level，Wang and $\mathbf{W u}$ ，were aware of the diverse linguistic backgrounds of students．Instead of limiting the focus to teaching Taiwanese，they suggested that students should learn the language in accordance with their mother tongue．

Last but not least，regarding Question 5：＂Do you agree that all schools should teach students to speak English？＂，students agreed that all schools should teach students to speak English because＂English is an international language and it is very important＂as a Grade 6 student，Wei，and a Grade 8 student，Tao，explained．However，some students expressed their dislike of learning English．A reason gave by a Grader 6，Chen，is that＂the English teacher focuses on grammatical teaching and it is difficult．Because of that I often do not pay attention in the English class．＂

In summary, although students held positive attitudes towards all three languages, each language was regarded as important for different reasons. When comparing attitudes of students with different mother tongues, it is interesting to see a significant difference found particularly in attitudes towards Taiwanese.

### 5.3.2 Attitudes towards Bilingualism and Multilingualism

In this section, we answer the second research question (Q3.2. "What are students' attitudes towards bilingualism and multilingualism?"). Two types of data, quantitative data and qualitative data, will be used to answer this sub-question. We begin to report the descriptive data on the whole sample and then compare the attitudes towards bilingualism and multilingualism between two groups, that have different mother tongues: Mandarin only and Mandarin and Taiwanese. After that, group discussions will be presented as qualitative data.

## Quantitative data

Items from the questionnaire Section 4.2 contain 36 statements relating to bilingualism and multilingualism. In order to look at students' attitudes towards bilingualism and towards multilingualism independently.

Regarding the attitudes towards bilingualism, there are three combinations of languages in this study: attitudes towards Mandarin and Taiwanese, attitudes towards Mandarin and English and attitudes towards Taiwanese and English. There are 9 items in each of the combinations of attitudes towards bilingualism. Items relating to attitudes towards Mandarin and Taiwanese are the following: item1, item5, item 9, item 13, item 17, item 21, item 25, item 29 and item 33. Items relating to attitudes towards Mandarin and English are item 2, item 6, item 10, item 14, item 18, item 22, item 26, item 30 and item 34. Items relating to attitudes towards Taiwanese and English are item 3, item 7, item 11, item 15, item 19, item 23, item 27, item 31 and item 35. Table 5.22 shows the descriptive data on attitudes towards bilingualism of three combinations.

| $(N=150)$ | Mandarin and <br> Taiwanese $(\max =5)$ |  | Mandarin and English$(\max =5)$ |  | Taiwanese and English $(\max =5)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | SD | Mean | SD | Mean | SD |
| 1. All people in Taiwan should know to speak ... | 3.52 | 1.20 | 3.39 | 1.19 | 2.83 | 1.15 |
| 2. All schools should teach pupils to speak both in | 3.63 | 1.16 | 4.15 | 1.04 | 3.46 | 1.15 |
| 3. Learning both ... is useful. | 4.05 | 1.00 | 4.55 | 0.71 | 3.89 | 1.03 |
| 4. It is important for pupils in Taiwan to be able to speak ... | 3.93 | 1.03 | 4.29 | 0.87 | 3.52 | 1.09 |
| 5. ...are essential to be part of everyday life in Taiwan. | 4.05 | 1.03 | 3.69 | 1.02 | 3.19 | 1.11 |
| 6. Being Taiwanese must know to speak ... | 3.46 | 1.24 | 3.03 | 1.12 | 2.73 | 1.00 |
| 7. Being able to speak ... helps to get a job. | 3.57 | 1.05 | 4.58 | 0.81 | 3.54 | 1.06 |
| 8. When I become an adult, I would like to be considered as a speaker of ... | 4.04 | 0.99 | 4.48 | 0.88 | 3.87 | 1.05 |
| 9. Both ... should be shown on the signs in the public area. | 3.31 | 1.10 | 4.10 | 1.12 | 3.16 | 1.12 |
| Total (max $=45$ ) | 33.43 | 6.11 | 36.19 | 5.75 | 30.11 | 6.20 |

Table 5.22. Attitudes towards bilingualism

Results in Table 5.22 on participants' attitudes towards bilingualism reveal that as a whole, participants had the most favorable attitudes towards Mandarin and English $(M=36.19, S D=$ 5.75) then Mandarin and Taiwanese $(M=33.43, S D=6.11)$ and finally Taiwanese and English $(M=30.11, S D=6.20)$. The majority of the items follow the same pattern, except for item 1, item 5 and item 6. With regard to the attitudes towards Mandarin and Taiwanese, the most favorable attitudes were held in item 3: "Learning both Mandarin and Taiwanese is useful." (M $=4.05, S D=1.00$ ), item 5: "Mandarin and Taiwanese are essential to be part of everyday life in Taiwan." $(M=4.05, S D=1.03)$ and item 8 : "When I become an adult, I would like to be considered as a speaker of Mandarin and Taiwanese." $(M=4.04, S D=0.99)$, whereas item 9:
"Both Mandarin and Taiwanese should be shown on the signs in the public area." $(M=3.31, S D$ $=1.10)$ has the lowest mean. Concerning the attitudes towards Mandarin and English, participants reported to have the most favorable attitudes on item 7: "Being able to speak Mandarin and English helps to get a job." $(M=4.58, S D=0.81)$, item 3: "Learning both Mandarin and English is useful." $(M=4.55, S D=0.71)$ and item 8: "When I become an adult, I would like to be considered as a speaker of Mandarin and English." $(M=4.48, S D=0.88)$, whereas the lowest scores were on item 6: "Being Taiwanese one must know to speak Mandarin and English." ( $M=3.03, S D=1.12$ ). In the case of students' attitudes towards Taiwanese and English, the more positive attitudes were shown towards item 3: "Learning both Taiwanese and English is useful." $(M=3.89, S D=1.03)$, item 8: "When I become an adult, I would like to be considered as a speaker of Taiwanese and English." $(M=3.87, S D=1.05)$ and item 7: "Being able to speak Taiwanese and English helps to get a job." $(M=3.54, S D=1.06)$, whereas the least favorable attitudes were held in item 6: "Being Taiwanese one must know to speak Taiwanese and English." $(M=2.73, S D=1.00)$ and item 1: "All people in Taiwan should know to speak Taiwanese and English." $(M=2.83, S D=1.15)$.

Regarding attitudes towards multilingualism, which concerns all three languages: Mandarin, Taiwanese and English, there are 9 items: item 4, item 8, item 12, item 16, item 20, item 24, item 28, item 32 and item 36. Table 5.23 includes the results corresponding to each of the items in the questionnaire on attitudes towards multilingualism.

| ( $N=150$ ) | Mandarin, Taiwanese and English$(\max =5)$ |  |
| :---: | :---: | :---: |
|  | Mean | SD |
| 1. All people in Taiwan should know to speak ... | 3.32 | 1.24 |
| 2. All schools should teach pupils to speak both in ... | 3.99 | 1.05 |
| 3. Learning both ... is useful. | 4.34 | 0.83 |
| 4. It is important for pupils in Taiwan to be able to speak ... | 4.13 | 0.97 |
| 5. ...are essential to be part of everyday life in Taiwan. | 3.89 | 1.03 |
| 6. Being Taiwanese one must know to speak... | 3.13 | 1.16 |
| 7. Being able to speak ... helps to get a job. | 4.40 | 0.86 |
| 8. When I become an adult, I would like to be considered as a speaker of ... | 4.33 | 0.99 |
| $9 . . .$. should be shown on the signs in the public area. | 3.72 | 1.08 |
| Total ( $\max =45$ ) | 34.96 | 5.97 |

Table 5.23. Attitudes towards multilingualism

Results corresponding to the total sum of nine items indicate that participants held positive attitudes towards multilingualism. In particular, participants held the most favorable attitudes on item 7: "Being able to speak Mandarin, Taiwanese and English helps to get a job." ( $M=4.40$, $S D=0.86)$ item 3: "Learning both Mandarin, Taiwanese and English is useful." ( $M=4.34, S D$ $=0.83)$ and item 8: "When I become an adult, I would like to be considered as a speaker of Mandarin, Taiwanese and English." $(M=4.33, S D=0.99)$, whereas item 6: "Being Taiwanese one must know to speak Mandarin, Taiwanese and English." ( $M=3.13, S D=1.16$ ) had the lowest mean.

Next, in order to compare the attitudes presented by two groups of different mother tongues, several t -tests were carried out considering attitudes towards each combination of bilingualism and attitudes towards multilingualism as dependent variables. Table 5.24 presents the results of t -tests on two groups of students concerning their attitudes towards bilingualism ( ${ }^{*} p<0.05,{ }^{*} p$
< 0.01).

|  | Attitude towards Mandarin and Taiwanese |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mother tongue(s) | $\mathbf{N}$ | Mean (max = 45) | SD | $\mathbf{T}$ | Sig. |
| Mandarin only | 62 | 32.00 | 6.36 | -2.805 | $0.01^{*}$ |
| Mandarin and Taiwanese | 64 | 34.95 | 5.43 |  |  |
|  | Attitude towards Mandarin and English |  |  |  |  |
| Mother tongue(s) | $\mathbf{N}$ | Mean (max = 45) | SD | $\mathbf{T}$ | Sig. |
| Mandarin only | 62 | 37.29 | 5.35 | 1.355 | 0.18 |
| Mandarin and Taiwanese | 64 | 35.94 | 5.84 |  |  |
|  | Attitude towards Taiwanese and English |  |  |  |  |
| Mother tongue(s) | $\mathbf{N}$ | Mean (max $=45)$ | SD | $\mathbf{T}$ | Sig. |
| Mandarin only | 62 | 28.60 | 6.61 | -2.519 | $0.01^{*}$ |
| Mandarin and Taiwanese | 64 | 31.39 | 5.82 |  |  |

Table 5.24. Attitudes towards bilingualism according to mother tongue

The differences between the means corresponding to the two groups are significant for the two combinations: attitudes towards Mandarin and Taiwanese ( $S=0.01$ ) and attitudes towards Taiwanese and English ( $S=0.01$ ). The more positive attitudes towards Mandarin and Taiwanese and towards Taiwanese and English are both held by the students with Mandarin and Taiwanese as mother tongues. On the other hand, there is not a significant difference between the two groups regarding attitudes towards Mandarin and English. The results concerning general attitudes towards multilingualism between two groups are presented in Table 5.25.

| Attitude towards multilingualism |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mother tongue(s) | $\mathbf{N}$ | Mean (max = 45) | $\mathbf{S D}$ | $\mathbf{T}$ | Sig. |
| Mandarin only | 62 | 34.27 | 6.23 | -1.315 | 0.19 |
| Mandarin and Taiwanese | 64 | 35.72 | 6.10 |  |  |

Table 5.25. Attitudes towards multilingualism according to mother tongue

Results in Table 5.25 can be seen that there is not a significant difference between the two groups（ $S=0.19$ ）．

To sum up，the comparison of the two groups with different mother tongues on the attitudes towards bilingualism showed significant differences．We found that students with bilingual mother tongues held more positive attitudes towards Mandarin and Taiwanese and also towards Taiwanese and English when comparing with the students with a monolingual mother tongue． On the contrary，the comparison between the two groups on attitudes towards multilingualism did not show a significant difference．

## Qualitative data

We then continue to present qualitative data．The questions relating to attitudes towards multilingualism were asked in group discussions，and they are as the following：

Question 6．Do you think that in Taiwan it is enough to only know Mandarin？
Question 7．What do you wish yourself to be in the future，a monolingual speaker or a multilingual speaker？And why？

In the following，we present group discussions according to the order of the questions． First，Excerpt 10 presents group discussions across three school grades regarding Question 6： ＂Do you think that in Taiwan it is enough to only know Mandarin？＂

## Excerpt 10．Group discussions about Question 6

（A group discussion of the $6^{\text {th }}$ graders：Chen，Wu，Ding，Wei and Shi．）
［03：34］Chen：不夠，因為有些人聽不懂中文•會講客語或台語的有些人不會中文。（No，it is not enough． Because there are people who do not understand Mandarin．Some people，who know to speak Hakka or Taiwanese，do not know to speak Mandarin．）
［04：07］Wei：不夠。英文也要會。（No，it is not enough．We also need to know English．）
［04：15］Wu：不夠。因為其他國家來台灣的人不一定都會講中文，除非有特定去學中文的人才會講。（No， it is not enough．Because people from other countries，who come to Taiwan，do not necessarily know to speak Mandarin except for those who have learned Mandarin．）
［04：33］Ding：不夠。（要會）台語，在家裡只會講台語不會中文的家人講。（No，it is not enough．We need
to know Taiwanese in order to speak with relatives，who only know to speak Taiwanese but do not know Mandarin．）
（A group discussion of the $10^{\text {th }}$ graders：Li，Huang，Peng，Fan and Xie．）
［02：13］Fan：不夠吧。還要會英文。（No，it is not enough．We need to know English．）
［02：14］Peng：菜市場賣菜還有阿嬤不會講中文。（At the local markets，there are grandmas（the vendors） who do not know to speak Mandarin．）
［02：18］Fan：都講台語。（They（the grandmas at the local markets）all speak Taiwanese．）

According to the information we collected through the group discussion，it is obvious that knowing only Mandarin does not serve all social purposes in Taiwan．In fact，having competence in both English and Taiwanese was also considered necessary．In particular，a Grade 6 student，Chen，pointed out that not all Taiwanese people are able to comprehend Mandarin because the ethnic background of the population in Taiwan is linguistically diverse．

In addition to Question 7，which was also included in the questionnaire，the descriptive result shows that $72.7 \%$ of the participants reported wishing to be multilingual speakers．In group discussions，students gave reasons for preferring to be multilingual．Examples are as such：a Grade 6 student，Chen，said：＂交朋友或到其他國家發展＂（to make friends or move to another country to develop a career）．A Grade 9 student，Zhou，replied＂全球化，而且找工作會比較有優勢。＂（Globalization．We will have more advantages when searching for jobs．）．

To conclude the results above here，we found that overall participants held positive and favorable attitudes towards bilingualism and multilingualism．Students were aware of the fact that they are living in a multilingual society，having competence in two or more languages to live in the present state of Taiwan is necessary．At the same time，students understood that being multilingual can potentially provide certain advantages in their future career－wise and in terms of international mobility．

### 5.3.3 Language Attitudes and Language Use

In order to answer the third sub-research question (Q3.3 "Are language attitudes related to the use of languages?"), Pearson correlation analyses were carried out to find out whether there is an association between students' language attitudes and the use of languages in different domains. Attitudes towards languages we used in the correlation analyses are the total sum of the 12 language attitude items from Section 4.1 of the questionnaire as was already mentioned in the previous sections. The three variables of attitudes are attitudes towards Mandarin, attitudes towards Taiwanese and attitudes towards English. Table 5.26 shows the results of the correlations between the use of language in different domains and attitudes towards three languages: Mandarin, Taiwanese and English.

| $(N=150)$ | Attitudes towards |  | Attitudes towards |  | Attitudes towards |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mandarin |  | Taiwanese | English |  |  |
| $\left({ }^{*} p<0.05,{ }^{* *} p<0.01\right)$ | r | Sig. | r | Sig. | r | Sig. |
| Use at home | 0.07 | 0.38 | 0.27 | $0.00^{* *}$ | 0.18 | $0.03^{*}$ |
| Use at school | 0.22 | $0.01^{* *}$ | 0.20 | $0.02^{*}$ | 0.16 | $0.05^{*}$ |
| Use when running outdoor errands | 0.29 | $0.00^{* *}$ | 0.18 | $0.03^{*}$ | 0.01 | 0.94 |
| Use in free time | 0.13 | 0.12 | 0.30 | $0.00^{* *}$ | 0.38 | $0.00^{* *}$ |
| Total use | 0.22 | $0.01^{* *}$ | 0.29 | $0.00^{* *}$ | 0.34 | $0.00^{* *}$ |

Table 5.26. Correlations between the use of languages in different domains and attitudes towards the three languages

The results of the correlation analysis in Table 5.26 indicate that there are statistically significant correlations between attitudes towards a language and the use of a language in most domains. It can be seen that participants' attitudes towards Mandarin are significantly related to the use of Mandarin at school ( $r=0.22, p=0.01$ ), when running outdoor errands ( $r$ $=0.29, p=0.00)$ and the total use of Mandarin in general $(r=0.22, p=0.01)$. In the case of Taiwanese, significant correlations were found between attitudes towards Taiwanese and the
use of languages in all of the domains: at home ( $r=0.27, \mathrm{p}=0.00$ ), at school $(r=0.20, \mathrm{p}=$ 0.02 ), when running outdoor errands ( $r=0.18, \mathrm{p}=0.03$ ), in free time situation $(r=0.30, \mathrm{p}=$ $0.00)$ and total use in general $(r=0.29, \mathrm{p}=0.00)$. With regard to the correlations between attitudes towards English and the use of English, results indicate that participants' attitudes towards English are significantly related to their use of English at home ( $r=0.18, \mathrm{p}=0.03$ ), at school ( $r=0.16, \mathrm{p}=0.05$ ), in free time situation $(r=0.38, \mathrm{p}=0.00)$ and total English use in general $(r=0.34, \mathrm{p}=0.00)$.

In brief, positive and significant relations were found between each pair of languages for most domains. In fact, only the attitudes towards Taiwanese were found significantly related to the use of Taiwanese in all domains. In terms of the strength of correlations, there is no clear pattern indicating that the correlation between attitudes towards a specific language and an individual domain is much stronger than between other pairs.

### 5.3.4 Language Attitudes and Language Proficiency

Pearson's correlation analyses were conducted to answer the fourth research question (Q3.4. "Are language attitudes related to language proficiency?") so as to look at the possible relationships between the proficiency in the three languages and students' attitudes towards Mandarin, Taiwanese and English. Following what has already been mentioned in the last section, the three variables of attitudes toward languages were used here to carry out further analysis: attitudes towards Mandarin, attitudes towards Taiwanese and attitudes towards English. The participants' proficiency in the three languages can be seen in Table 5.6 in the previous section. The highest competence is found in Mandarin ( $M=35.66, S D=5.47$ ), followed by English ( $M=22.23, S D=7.39$ ) and finally Taiwanese ( $M=21.90, S D=7.95$ ). Table 5.27 shows the results of correlations between students' language proficiency and attitudes towards three languages.

| $(N=150)$ | Attitudes towards |  | Attitudes towards |  | Attitudes towards |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mandarin |  | Taiwanese |  | English |  |
| $\left({ }^{*} p<0.05,{ }^{* *} p<0.01\right)$ | r | Sig. | r | Sig. | r | Sig. |
| Mandarin proficiency | 0.31 | $0.00^{* *}$ | - | - | - | - |
| Taiwanese proficiency | - | - | 0.26 | $0.00^{* *}$ | - | - |
| English proficiency | - | - | - | - | 0.44 | $0.00^{* *}$ |

Table 5.27. Correlations between language proficiency and attitudes towards Mandarin, Taiwanese and English

Results in Table 5.27 indicate that all the correlations between language proficiency and attitudes towards the language were positive and statistically significant. In particular, the correlation between participants' attitudes towards English and English proficiency ( $r=0.44$, $p=0.00)$ is the highest, then the correlation between attitudes towards Mandarin and Mandarin proficiency ( $r=0.31, p=0.00$ ) and finally the correlation between attitudes towards Taiwanese and Taiwanese proficiency ( $r=0.26, p=0.00$ ). These results reveal that the higher competence Taiwanese students have in a language, the more positive attitudes they have towards that language and vice versa.

### 5.3.5 Language Attitudes and Age

In order to answer the fifth sub-research question (Q3.5 "Are language attitudes related to age?"), several one-way ANOVAs were conducted to explore the possible differences between three age groups of students regarding their attitudes towards three languages: Mandarin, Taiwanese and English. Before running analyses, the first step is to divide students into three age groups, which was already mentioned in the methodology. There were three school levels: primary school level (primary $5^{\text {th }}$ grade and primary $6^{\text {th }}$ grade), junior high school level (junior high $8^{\text {th }}$ grade and junior high $9^{\text {th }}$ grade) and senior high school level (senior high $10^{\text {th }}$ grade and senior high $11^{\text {th }}$ grade). Each of the school levels has 50 students. Next, ANOVAs were carried
out considering attitudes towards three languages as dependent variables.
In the following, we report the results of students' attitudes towards each of the three languages accordingly. The descriptive statistics associated with students' attitudes towards Mandarin across three age groups are shown in Table 5.28. It can be seen that students of the senior high school level held the most positive attitudes towards Mandarin $(M=57.54, S D=$ 3.87) followed by the primary school level $(M=56.58, S D=3.49)$ and finally the junior high school level ( $M=55.56, S D=4.92$ ). Looking closely into the differences between mean scores of attitudes towards Mandarin, a statistically significant difference between groups was found, $F(2,147)=2.86, p=0.06$. A Tukey post hoc test revealed that the differences were only marginally significant between the junior high school level and senior high school level (0.05) but not between primary school level and junior high school level or between primary school level and senior high school level.

| School Levels | $\mathbf{N}$ | M <br> $(\max =60)$ | SD | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\left({ }^{*} p<0.05,{ }^{* *} p<0.01\right)$ |  |  |  |  |  |
| Primary school level | 50 | 56.58 | 3.49 | 2.86 | 0.06 |
| Junior high school level | 50 | $55.56^{*}$ | 4.92 |  |  |
| Senior high school level | 50 | $57.54^{*}$ | 3.87 |  |  |
| Total | 150 | 56.56 | 4.19 |  |  |

Table 5.28. Age differences and attitudes towards Mandarin

In the case of attitudes towards Taiwanese, the differences between the means of the three age groups are not significant. There is not a statistically significant difference between groups. The highest mean of attitudes towards Taiwanese were held by the senior high school level $(M=43.10, S D=9.77)$, then the junior high school level $(M=42.48, S D=10.44)$ and the least the primary school level $(M=41.88, S D=8.37)$. Table 5.29 demonstrates the results of a one-way ANOVA regarding attitudes towards Taiwanese across three age groups.

| School Levels | $\mathbf{N}$ | $\mathbf{M}$ <br> $(\max =60)$ | SD | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\left(* p<0.05,{ }^{* *} p<0.01\right)$ |  |  |  |  |  |
| Primary school level | 50 | 41.88 | 8.37 | 0.20 | 0.82 |
| Junior high school level | 50 | 42.48 | 10.44 |  |  |
| Senior high school level | 50 | 43.10 | 9.77 |  |  |
| Total | 150 | 42.49 | 9.51 |  |  |

Table 5.29. Age differences and attitudes towards Taiwanese

Concerning attitudes towards English, the results in Table 5.30 indicate that there is a statistically significant difference between groups, $F(2,147)=5.00, p=0.01$. A Tukey post hoc test revealed that the significant differences were between junior and senior high school level (0.06). There was no statistically significant difference between the primary school level and the junior high school level nor between primary school level and senior high. In particular, the senior high school level held the highest favorable attitudes towards English ( $M$ $=51.08, S D=5.76)$, followed by the primary school level $(M=49.20, S D=6.64)$ and finally the junior high school level $(M=46.24, S D=10.07)$.

| School Levels | $\mathbf{N}$ | $\mathbf{M}$ <br> $(\max =60)$ | SD | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $(* p<0.05, * * p<0.01)$ |  |  |  |  |  |
| Primary school level | 50 | 49.20 | 6.64 | 5.00 | $0.01^{* *}$ |
| Junior high school level | 50 | 46.24 | 10.07 |  |  |
| Senior high school level | 50 | 51.08 | 5.76 |  |  |
| Total | 150 | 48.84 | 7.92 |  |  |

Table 5.30. Age differences and attitudes towards English

Regarding attitudes towards bilingualism and multilingualism, our analyses indicated that age has a significant effect only in the case of attitudes towards Mandarin and English but not the other two combinations and neither in the case of multilingualism. Results in Table 5.31
show that there is a significant difference between groups, $F(2,147)=4.90, p=0.01$. A Tukey post hoc test revealed that the significant differences were between the primary school and the senior high school level ( 0.02 ) and between junior and senior high school level ( 0.02 ). There was no statistically significant difference between the primary school level and the junior high school level. Students in the senior high school level presented more positive attitudes towards Mandarin and English $(M=38.22, S D=4.05)$ than the other two levels.

| School Levels | N |  | SD | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $(\max =45)$ |  |  |  |
| (*p<0.05, **p<0.01) |  |  |  |  |  |
| Primary school level | 50 | 35.18* | 5.64 | 4.90 | 0.01** |
| Junior high school level | 50 | 35.18* | 6.78 |  |  |
| Senior high school level | 50 | 38.22* | 4.05 |  |  |
| Total | 150 | 36.19 | 5.75 |  |  |

Table 5.31. Age differences and attitudes towards bilingualism (Mandarin and English)

To summarize, the effect of age on students' attitudes towards languages was found significant in the cases of attitudes towards Mandarin, attitudes towards English and attitudes towards bilingualism in a particular combination of Mandarin and English. Overall, attitudes presented by students in the senior high school are the most positive among the three school levels. In the case of attitudes towards Mandarin and attitudes towards English, mean scores of the attitudes drop between the primary school and the junior high school level, and there is a significant rise between the junior high school level and the senior high school level. On the other hand, concerning attitudes towards bilingualism, a significant rise was found between the primary and senior high school levels and between the junior high and senior high school levels.

## CHAPTER 6. DISCUSSION, CONCLUSIONS AND LIMITATIONS

The structure of this chapter will be divided into three sections: conclusion of the findings, limitations of this study and pedagogical implications. We begin with the conclusion by summarizing the main findings from Chapter 5 and then will discuss the key findings in relation to the objectives of this research, as well as to the previous literature. Secondly, drawing from these discussions, the potential limitations of this study will be noted. Finally, the contributions of this thesis and different pedagogical implications will be suggested in the last section. Each of the three sections will be presented respectively.

### 6.1 Taiwanese Students' Use of Languages, Identities and Attitudes

The research objective of this study is three-folded: (a) to investigate Taiwanese students' linguistic practices in different social situations, (b) to explore Taiwanese students' linguistic identity and (c) to examine Taiwanese students' attitudes towards languages, attitudes towards bilingualism and attitudes towards multilingualism. In addition, we further explored whether students' language proficiency and age have possible relationships with the above three aims. Our study was situated in the context of Taiwan, where Mandarin, Taiwanese, English and other languages are used in communication at the societal level as well as at an individual level. A total of 150 students of three school levels: primary, junior high and senior high school, took part in this study. This discussion is organized into three subsections drawing from the findings of each research question accordingly.

### 6.1.1 Taiwanese Students' Use of Languages

In order to answer our exploratory research question 1 about students' linguistic practices in and outside school, we have used a research approach based on "Focus on

Multilingualism" (Cenoz and Gorter, 2011). The approach is holistic because it not only looks at several languages at the same time instead of focusing on one language at a time but also explores the relationships between the languages. The linguistic practice of a multilingual speaker is complex as we look at different dimensions of an individual, such as their linguistic competence, their personal experiences and their understanding of the wider social context.

The main findings indicate that across the three languages, Mandarin is used most dominantly in all domains, and the use of Taiwanese appears to have the highest functions in the home domain especially when grandparents are included in the interactions. In the case of English, the more frequent use of English was reported in the free time situation than in the other domains. Our analyses provide evidence of translanguaging practices, which show Taiwanese students using their entire linguistic repertoire flexibly. In fact, Taiwanese young students' literacy practices are not only multilingual but also multimodal. The use of images, icons, symbols and audio extends the complexity of youngsters' literacy practices. In particular, our study highlights a significant impact of age on the use of Mandarin and the use of English. The results indicate that there is a decline between the primary and the junior high school levels and a significant rise between the junior high school and the senior high school levels.

Our findings on the frequent use of languages are broadly in line with the findings in a previous study conducted by Chen (2010), although our focuses on the targets were rather different. Chen collected a larger scale of data, which included participants of all ages, and our focus was directed to students from different school levels. Taking into account that the participants in this study are young and spend most of their time at school, where Mandarin is the sole medium for instruction in education Mandarin is used the most frequently in the school domain. Mandarin, at the same time, is the official language and the lingua franca for wider communication in Taiwan. In fact, having competence in Mandarin allows Taiwanese people to achieve all social functions and to easily engage in communicative interactions
regardless of the sociolinguistic backgrounds of the interlocutors. Furthermore, our discovery on the increasing use of Taiwanese when conversations were engaged with the elderly in the home domain and at the traditional market confirms the findings reported by Sandel, Chao and Liang (2006) and Van den Berg (1986). It is necessary to keep in mind that in the current era of Taiwan, there is still a considerable amount of Taiwanese elderly who lack proficiency in Mandarin. Due to the fact that the elderly were born into the Japanese occupation era, they spoke one of the local languages (Taiwanese, Hakka or Austronesian languages) as the first language and Japanese was learned as a second language. After nearly four decades of the imposition of Mandarin and the banning of mother tongue speaking in public, the habitual use of language in the domestic domain has changed across three generations. The parents' generation has become fluent bilingual speakers of Mandarin and Taiwanese. According to Young's (1988) findings, nowadays the home language has gradually shifted to Mandarin and many children do not speak fluent Taiwanese. Such language shift was associated with parents' accommodation to children's language choice (Sandel, Chao and Liang, 2006). As children do not understand when the conversation is carried out in Taiwanese, parents shift the use of language from Taiwanese to Mandarin. As a result, the presence of the elderly alters the young generation's language choice and plays a major role in the young generation's use of Taiwanese. This can explain our results regarding participants' frequent use of Taiwanese. In terms of the frequent use of English in free time, our results confirm Chen's (1996) findings. We consider that students' use of English is highly linked to the consumption of English popular culture and the accessibility to English entertainment, such as TV programs, movies and music. We can explain that globalization has increased the use of English in people's lives all around the world through different channels. For instance, in Taiwan movies and foreign TV programs are shown with the original audio and subtitled in Mandarin except for the animated media productions, which are dubbed in Mandarin. Another alternative explanation can be that because of the advent of the internet, linguistic digital
resources in cyberspace are easily and instantly accessible to everyone. The chances are that people have more opportunities to be in contact with English consciously and unconsciously.

Furthermore, by using a combination of the observation of students' multilingual practices and metalanguage commentaries, this study was able to demonstrate Taiwanese students' dynamic linguistic practices. Apart from the traditional communication such as letters and handwritten notes, we have also witnessed new digital communication, which involves the use of multimedia and technology, as it can be seen in everyday literacy practices among youngsters. In this way, the combination of multimodal semiotic resources was used to convey meaning. In the current digital era, the habitual use of digital devices for communicational purposes has evolved across generations. Digital communication allows human interactions to be more instant, convenient and interactive. The accessibility to the Internet and mass communication channels has provided youngsters to freely select any media consumptions in whichever language they prefer to receive. At the same time, the use of semiotic digital recourses in cyberspace has become popular. The literacy practices are, therefore, becoming more extensive and constantly transforming due to the social interaction changes. Our study indicates that Taiwanese multilingual students' linguistic practices no longer limit to languages but include languages. A similar conclusion was reached by Cenoz and Gorter (2011).

Our analyses draw upon how Taiwanese multilingual students use languages in a more integrated manner instead of a separated one, and that results in translanguaging practices. The linguistic resources include not only Mandarin, Taiwanese and English but also other foreign languages. The use of elements from Japanese and Korean in communication can be attributed to the influences of Japanese and Korean popular culture on Taiwanese people's daily cultural and linguistic practices (Huang, 2011). The influence of popular culture is not only in media consumption but also in commercial consumption. Foreign goods imports, fashion and tourism are considered a part of popular culture. Urban spaces in Taiwan also
provide evidence on the display of different languages at the societal level (Curtin, 2015; Chern and Dooley, 2014). The fact that our participants were able to recognize and understand the meanings of different street signs highlights their awareness of multilingual languages in the environmental prints.

Moreover, multilinguals' translanguaging practices can be traced from different discourses, which predominantly include academic discourse, personal discourse and domestic discourse, that relate to Taiwanese students' everyday communication in and outside school. Examples analyzed here suggest that Taiwanese students have different tendencies in the use of translanguaging across different social domains. At school, students adopted translanguaging strategies to negotiate power in the classroom, whereas teachers opted to use translanguaging to deepen students' understanding and to invite a more diverse translingual interaction. In the free time situation, the textual and multimodal communication in the digital space demonstrates that multilingual young people are constantly making sense of themselves in order to materialize their social relationships with friends. In the home domain, translanguaging is used largely to enhance interpersonal relationships within family members. Conversations that involve translanguaging enable communication more efficient and successful. Thus, the translanguaging practices presented in this study are to demonstrate the nature of multilingual young people making meaning and processing their languages. The focus is, therefore, on the multilingual person instead of his/her languages. This is aligned with what Cenoz and Gorter (2011) propose that multilinguals use languages as resources to communicate, and the boundaries between the languages of a multilingual are soft. A multilingual individual needs both linguistic and non-linguistic resources to express themselves to the maximum end. In particular, analyses of this study exemplify how the multilingual youth is progressively expanding their translanguaging scope. As multilingual students navigate throughout their day and engage with different interlocutors, different elements of the languages will be occasionally added into the conversation. This shows that
multilinguals have a fluid linguistic communicative repertoire. According to Ushioda (2017: 479), multilinguals have translanguaging competence for navigating communication in interactive multilingual spaces, and this translanguaging competence will grow because multilinguals' linguistic and cultural repertoires are continuously expanding.

In terms of the differences between the frequent use of languages across the three age groups, we can explain the results from three dimensions: language proficiency, linguistic identity and language attitudes. It is interesting to see that the results of language use and the results of the three dimensions go in the same direction. When a multilingual student lacks proficiency in one language, s/he might switch to another language for support. A student with lower proficiency in a language might reduce his/her confidence in using the language, and that might further have influences on his/her attitudes towards that language. As well as, because of owning a fear of making mistakes, the frequent use of the language might become lower. On the other hand, when being in a conversation with different interlocutors, a multilingual speaker might switch to another language to show solidarity to the speakers of a specific linguistic group or to present his/her identity to others, and that is linked to a multilingual speaker's personal preferences in language choice in a certain social context. In addition, when the effect of age is concerned, we must point out that besides the first two dimensions, language attitudes is the only dimension that demonstrates a significant effect of age, particularly in the attitudes towards Mandarin and attitudes towards English. Because of that, we considered that the results of language attitudes can explain better the results of language use between different age groups. In general terms, learners in the senior high school level are the ones who presented more positive attitudes. Attitudes presented by students in junior high school are the least positive, whereas attitudes presented by primary school students are between the other two groups. These results are related to our findings on the significant differences in terms of the use of Mandarin and English. In fact, our findings on the age effect on language use cannot be compared to similar studies because previous
studies have different focuses in terms of the subjects they collected. Two studies in which relationships between language use, age, and proficiency were investigated have indicated that when age decreases, the proficiency and the use of their mother tongues decrease (Yeh, Chan and Cheng, 2004), and the proficiency and the use of English increases (Chen, 2003). The subjects in both studies are of all ages, whereas the focus of our study is on young students. Therefore, we are not able to compare our findings with the findings of the two studies conducted in Taiwan. However, we must point out that our results go beyond previous reports because we provide an important update on the features of Taiwanese multilingual pupils' linguistic interactions in the current era of Taiwan. It could be interesting to conduct more larger-scale studies in the future regarding such topics in-depth, for instance, to analyze whether age has potential effects on language use and language proficiency comparing pupils from the cities and rural places.

### 6.1.2 Taiwanese Students' Linguistic Identities

In our study of investigating language learners' identities, we adopted poststructural understandings of identities as fluid, multifaceted and not fixed (Norton, 2010). We also considered that the relationship between language and identity is closely intertwined (Norton, 2013). Our analyses on the items from the questionnaire relating to identity reveal that Taiwanese students' linguistic identity is significantly and positively correlated to language proficiency and the use of languages. Regarding the effect of age, no significant difference in the linguistic identity of the three languages was found across three school levels. The examples in the study demonstrate how multilingual students depict their linguistic repertoires and feelings towards their languages. In this thesis, we use language portraits for two-folded purposes. On the one hand, it is used as a research method to elicit multilinguals' linguistic repertoires and to explore the relationships between multilinguals and their languages. On the other hand, the activity of language portrait assists students to raise their language awareness
and to understand their personal experiences with their use of languages. The language portrait provides individual perspectives on their personal perceptions and desires of the languages. Drawing on the examples of language portrait provided, our analyses demonstrate that our participants have different ways to group their languages on the silhouette and to configure the relationships between languages. For instance, some isolated different languages in separate parts of the body are used to indicate the boundaries between languages. Some grouped languages side by side show language contact within a social context. Some languages placed inside and outside the figure indicate external influences of a certain language and the expanding self-growth. Some added facial expressions or national flags seem to demonstrate attachments to certain languages or connections to particular geographical territories. The blending of two languages through the use of different colors shows their integration. Three aspects, which can be associated with linguistic identity, are expertise, affiliation, and inheritance. They are proposed by Dressler (2015) and we used these three aspects to interpret how Taiwanese students make meaning of their linguistic identities. Our analyses demonstrate several dimensions of linguistic identities of Taiwanese students according to their affiliations with different languages.

First of all, some students showed dual affiliations with Mandarin and Taiwanese and made clear boundaries of their intimate connections between the two languages. Taiwanese students' affiliation with Mandarin is largely associated with academic, cultural and national attachments, whereas their affiliation with Taiwanese is tightly linked to family connections. In particular cases, students intentionally used the translanguaging strategy to shift between Mandarin and Taiwanese in order to show their authenticity of being Taiwanese. To these students, being able to speak Taiwanese is, therefore, identified as a distinct characteristic of "being Taiwanese". On the contrary, based on the data gathered through the group discussion, some others did not regard having competence in Taiwanese as an identity marker of "being Taiwanese". These two disparate findings show that to identify oneself as a "Taiwanese" is
not clearly associated with one's ability to speak Taiwanese or not. This result is consistent with what has been found in a previous study conducted by Sandel, Chao and Liang (2006).

Furthermore, some participants reveal a strong affiliation with a specific ethnic language, such as Hakka or an Austronesian language. The strong connection to an ethnic language is linked to familial inheritance. Having competence in their ethnic language is seen as an important factor to bond the relationship between family members closer.

Concerning the dimension relating to affiliation with English, and taking into account that our participants have been English learners since a young age, learning English is closely linked to three distinct goals: academic achievement, international communication and international mobility. These findings are directly in line with previous findings in Japanese learners of English as a foreign language (Yashima, Zenuk-Nishide and Shimizu, 2004). The role that English plays in students' identity formation in the current state and future situation is vital and continuously growing.

In addition to the dimension of affiliation with other foreign languages, Japanese and Korean were also included in several participants' linguistic repertoires. Students' personal interests and intensive engagement in cultural consumption were originated from the rise of Japanese and Korean popular culture in Taiwan. According to Huang (2011) and Rawnsley (2014), the Japanese and Korean waves firstly hit Taiwan in the 1990s and they cover different cultural products and activities including TV drama series, music, fashion and tourism. Many Taiwanese people become "star chasing fans" due to the desire of getting closer to the popularized Japanese and Korean TV casts and musicians. In fact, the phenomenon of "star chasing fans" was also observed in our results. That leads us to conclude that in a process of identity discovering on "self" in free time, Japanese and Korean play important parts of some Taiwanese young students' identity formation.

Under the dimension of white space, some participants intentionally left parts of the portrait blank. That is to present multilingual speakers' desire to develop openness in bridging
themselves with other cultures and languages. The white space provides participants the possibility to access creative imaginations about their future and look forward to their possible future selves, which is ever changing depending on their cultural and linguistic experiences. Moreover, the white space demonstrates that one's plurilingualism and pluricultural competence are constantly growing. Similar results were obtained in Prasad's (2014) study.

Overall, our study was able to demonstrate the diverse linguistic biography of the Taiwanese youth. Every participant's language portrait is unique and different from that of others, and that also implies individual students have distinctive linguistic identities. Through the process of completing their language portraits, the activity enables multilinguals to understand their perceptions and relationships with their languages. Not only that, but the language portrait activity also allows multilinguals to give in full creativity in expressing themselves in writing, which includes multimodal texts, symbols, colors and drawing expressions. The language portrait along with written narratives has given us a holistic view of multilinguals' self-representations. Joseph (2016: 30) has argued that "our identities are indexed in the languages we speak and write and in how we speak and write them". As individuals use languages as a tool to present parts of themselves, their linguistic practices are, therefore, largely linked to their life trajectories and personal preference in choosing a language to communicate with certain interlocutors or in a particular space of communication.

On the other side of the coin, in the era of globalization, the increased international mobility and advanced digital development have provided an innovative space of communication for youth, where they are embraced in and easy to dive into a diverse cultural and linguistic environment. Modern human interactions are no longer limited to face-to-face situations but carried out in cyberspace. While the youth navigate throughout their daily life, alternative ways of making meaning of themselves to a wider social context through the use of their linguistic and semiotic resources have emerged innovatively and creatively. Our
analyses suggest that multilingual Taiwanese students' linguistic repertoires are expanding. When a multilingual's linguistic repertoire expands, the formation of his/her linguistic identity becomes more complex and dynamic (Joseph, 2016: 30).

Our study cannot be easily compared to previous research carried out in Taiwan because most of the identity research conducted in Taiwan tends to link language to ethnolinguistic identity, which is to see identity as fixed. The findings of our study, however, are very much in line with the conclusion made by two previous identity studies (Scott and Tiun, 2007; Tse, 2000). That is, in the present state of Taiwan, languages do not have a direct link to people's ethnic identity because the new Taiwanese identity is constantly evolving. Additionally, we must point out that political dynamics may play a potential factor to influence Taiwanese people's linguistic identity. Dupré (2013) points out two distinctive perspectives on "being Taiwanese". On the one hand, the use of ancestral languages is an important element to reinforce people's ethnic identity of "being Taiwanese". That is also to show the diversity of Taiwan's multicultural makeups. On the other hand, the use of Mandarin is linked to people's national identity of "being Taiwanese" because Mandarin is the lingua franca and the official language in Taiwan. In fact, in the current state of Taiwan, even though Mandarin may not be the mother tongue of an individual, it is often spoken as one's first language. These patterns of results found by Dupré are similar to ours. With a specific case in mind, in a group discussion, a Grade 9 participant, Zhou, revealed his notice on the use of Taiwanese in political rallies by politicians in order to call for votes and to show solidarity specifically to people who speak Taiwanese as a mother tongue. Studies investigating the use of languages in the political context in Taiwan found switches between Mandarin and Taiwanese (Wei, 2003; Tang, 2008). Translanguaging in legislative and presidential elections was found to be used as a strategy to achieve a speaker's political purposes, and, as well as, to create interpersonal boundaries between politicians and the locals. By the same token, the implementation of local languages in education is considered as another salient factor for the
revitalization of Taiwanese people's mother tongues and also has influences on the development of people's self-identification towards modern Taiwanese nationalism (Huang, 2000; Hsiau, 2000).

Taking a different perspective, we also consider that the future development of digital technology has a possible impact on transforming multilinguals' linguistic behaviors in cyberspace and that will further influence their future identity formation. When people have access to different digital tools, which regulate people's communication in virtual space, along with their linguistic resources, the way they understand and represent themselves expands in order to adjust to the wider world changes. Understanding people's linguistic identities in-depth in relation to their linguistic behavior will then require more constructive and multidiscipline investigation and analyses to explore such a topic.

All in all, our analyses on identities confirm Norton's (2010) ideology about identity being flexible and ever-changing. It is worth pointing out that we stand on the same viewpoint with Joseph (2016: 24), who argues that "identity is something constructed rather than essential, and performed rather than possessed". Language learners are constantly negotiating and renegotiating their sense of selves to a wider social context. As a result, an individual is possible to possess more than one identity (Omoniyi and White, 2006: 2). Our results cast a new light on the hybridity and fluid nature of Taiwanese multilingual youth's linguistic identities.

### 6.1.3 Taiwanese Students' Language Attitudes

Results of our analyses indicate that overall students hold positive attitudes towards Mandarin, Taiwanese and English and towards bilingualism and multilingualism. When comparing two groups of different mother tongues, significant differences in attitudes towards languages were only found in Taiwanese and attitudes towards bilingualism. The group with Mandarin and Taiwanese mother tongues presented significantly more positive attitudes than
the group with only Mandarin as a mother tongue. In addition to the results of correlations, language attitudes were found significantly correlated to language use and language proficiency. Our results indicate that in general terms when a student holds a more positive attitude towards a language $s / h e$ uses the language more frequently and has higher competence in that language as well. Regarding the effect of age on language attitudes, significant differences were found in the cases of attitudes towards Mandarin, attitudes towards English and attitudes towards bilingualism. In general terms, students at the senior high school level presented the most favorable attitudes across the three age groups. In the cases of attitudes towards Mandarin and attitudes towards English, there is a significant rise between the junior high school level and the senior high school level. Students at the junior high school level are the ones who present the least favorable attitudes, and the attitudes presented by students at the primary school level are between the other two groups. Concerning attitudes towards bilingualism, students at the senior high school level are the ones presenting the most positive attitudes, and the attitudes presented by both the primary school and the junior high school are at a similar level. A significant rise in attitudes was found between the primary school and the senior high school levels and between the junior high and the senior high school levels.

Several conclusions can be drawn from the results obtained in this study. First of all, our participants presented positive attitudes towards Mandarin, Taiwanese, and English, and these findings are broadly in line with a previous study conducted by Chen (2010). Findings in Chen's large-scale study suggest that in Taiwan each language plays its own role. Mandarin serves as a communicational tool and Taiwanese ethnic languages are used to show solidarity and an individual's ethnolinguistic identity, whereas English is linked to the expression of global view and is perceived to have instrumental functions. However, we must point out that our study goes beyond what Chen has found in terms of factors that are associated with positive attitudes towards languages. In the case of Mandarin, our students generally
presented more positive attitudes in Mandarin than the other two languages. This can be related to the fact that in the context of Taiwan, Mandarin is the language of instruction. For our participants, Mandarin is used as the most dominant language that can serve all functions in their daily life. Traditionally speaking, Mandarin serves as means of mediation when conversations are involved with different ethnolinguistic groups of people. However, the function of Mandarin is no longer restricted to be the lingua franca of Taiwan. In fact, in the current state of Taiwan due to the fact that Mandarin is spoken as one of the youth's mother tongues, Taiwanese youth's connection to Mandarin is also linked to the students' identities as it has already been mentioned earlier in the identity chapter. Apart from that, the functions of Mandarin in a wider social context are expanding for the Taiwanese young generation. Positive attitudes towards Mandarin presented by some of our participants are linked to their future goals to achieve in China, either for migration purposes, for academic or career-wise achievements. For instance, in a group discussion, a Grade 8 student, Zhang, clearly showed his interest in going to China to pursue a higher educational degree and understood that having high competence in Mandarin would assist him to achieve academic success. This is not surprising and it has been reported that in the last decade, China has become a popular destination to seek higher education for Taiwanese students and the number of Taiwanese students, who migrated to China to study in universities, has risen rapidly (Lan and Wu , 2016).

Positive attitudes towards Taiwanese can be related to group solidarity but they are also associated with the youth's desire to maintain intimate cross-generational relationships with grandparents and their awareness of preserving Taiwanese culture. When comparing positive attitudes towards the three languages, it was observed that attitudes towards Taiwanese were less positive than attitudes towards the other two languages. This result could be related to students' low proficiency in Taiwanese, the limited need to learn Taiwanese, and the limited exposure to Taiwanese. These findings are in accordance with findings reported by Su (2019),
who argues that decreasing favorable attitudes towards Taiwanese is strongly linked to students' low motivation for learning Taiwanese.

In the case of English, favorable attitudes presented by our students are largely related to the access to international mobility, the desire to interact with people and communities from different cultures and also the role English plays in the exam-centered meritocracy system in Taiwan. Taiwanese students' relationships with English are shaped and exist as related to an individual's personal development. Our findings are broadly in line with previous findings of a study conducted in Japan, where students are also learning English as a foreign language (Ryan, 2009).

It is interesting to see that our students hold more favorable attitudes towards English than towards Taiwanese. This can be explained as related to different factors. First of all, overall, our students perceived English as more important than Taiwanese and highly agreed that schools should teach English as early as possible. This can be related to the imbalanced implementations of governmental policies on language in education. The comparison between two policies of language in education has already been discussed by Chen (2010). According to Chen's results, the local language in education policy is not effectively implemented and has been facing challenges, whereas the policy on English in education was successfully carried out. In fact, the heavy weighing on English teaching is surpassing the local languages teaching in reality. Schools provide extra hours of English teaching and most students go to English academies after regular schooling hours. Moreover, the Taiwan government has recently been promoting English to be the second official language and plans to use English as an additional language of instruction in the Taiwanese educational system. All this shows a strong policy favoring English teaching situation, and we consider that may have a positive influence on youth's attitudes towards English. Furthermore, as a result of globalization, the spread of English has reached different parts of the world. The growing status of English in Taiwan is also undoubtedly important. The demand for English proficiency is not only in the
governmental and educational arenas but also in the private job sectors. In the long run, an individual having competence in English can receive a wider range of future opportunities. Vice versa, having competence in Taiwanese does not grant the youth benefits to use outside Taiwan. Another dimension concerns the spread of English popular culture. Our analyses reveal that positive attitudes towards English tend to be associated with students' engagement in English popular culture of music, films, and the use of social media for communication with peer groups. Although our results show that the use of English is generally limited, the most frequent use of English appears to be in free time situation. Apart from that, the presence of English in the public space in Taiwan is also commonly seen. In fact, besides English, other languages are saliently displayed on the signages in the street of Taiwan. Taiwan's increasing internationalization has made the nation itself a popular international business destination. Linguistic landscaping practices are a demonstration of Taiwan's diverse and fluid multiculturalism and multilingualism (Curtin, 2009).

Moreover, our results on language proficiency and our results on attitudes go in the same direction. A similar pattern of results was obtained in two previous studies conducted in Taiwan (Lee, 2003; Su, 2019). Findings in both studies indicate that the subjects who obtained better results in their mother tongue also presented more positive attitudes. However, when comparing our results to those of older studies, it must be pointed out that our participants were younger pupils, while Lee targeted Taiwanese aborigines and Su had a larger age range of subjects. Traditionally, language attitudes and motivations are linked to the development of a foreign language (Gardner, 1985), but Dörnyei (1998) has argued that they do not necessarily influence one another directly when considering the involvements of other factors. According to Cenoz (2001), multilingual acquisition is a complex and complicated process, and it is related to many other individual and contextual factors. Therefore, a language leaner's proficiency and attitudes are constantly growing and developing.

In terms of the comparison between the two groups with different mother tongues backgrounds, our analyses indicate that students with bilingual mother tongues hold significantly more favorable attitudes towards Taiwanese and bilingualism than students with a monolingual mother tongue. Notwithstanding, there is not a particular prior study conducted in Taiwan that we can compare regarding the differences in attitudes between people with different mother tongues, these results are as we expected. In fact, our findings are in a similar vein to Baker's (1992) findings on teens' attitudes towards languages in Wales. Baker found that the more Welsh the language background an individual has, the more favorable attitudes towards Welsh one presents. The language of the home was expected to have a strong influence on attitudes. Such explanations can also be applied to our results. The engagement in a more Taiwanese cultural household or a social context, where the use of Taiwanese is more frequent, has a potential and positive effect on language attitudes.

Last but not least, we found a strong effect of age on language attitudes. Our results demonstrate a decline in attitudes between the primary and the junior high school levels. These findings support the findings of the two previous studies conducted in Wales by Baker (1992) and in the Basque Country by Cenoz (2001). Findings in both studies are aligned, and that is when age increases, attitudes decrease. Additionally, younger students present more favorable attitudes and the change of attitudes appears particularly when students enter the teenage period. Such results can be linked to psychological and educational factors as Cenoz (2001) suggests in her study. Psychological factors can be related to stressful experiences students may encounter when moving from primary school to junior high school. In Taiwan, students change schools between different school levels. When primary students enter a junior high school, they go through a transitory period from being the most senior to being the most junior in an entirely new learning environment. At the same time, their social circle of friends changes. While young learners are re-introducing themselves to a new academic milieu, they are also constantly developing their sense of selves at a personal pace within a new peer group.

In terms of educational factors, we can explain that it is associated with the change of the focus in the curriculum in junior high school. Teachers' teaching methods become more exam-oriented and students' study load increases. Junior high school students are subjected to the higher academic scrutiny and many of them but also attend extra-curricular subject-reinforced classes in buxibans or after-school academies. Due to the transition from primary to junior high school in Taiwan might seem intimidating, we speculate that it could have possible negative impacts on students' attitudes towards learning in general.

On the other side of the coin, a significant increase in positive attitudes from junior to senior high school is also an interesting finding. Although these results do not confirm a particular language attitude study, we can still relate the more positive attitudes presented by the senior high school students to several reasons. One reason could be that senior high school students had already gone through a prior emotional roller coaster experience in terms of changing schools, they are more likely to have the ability to adopt another transition. In fact, the data of our senior high school students were collected in a private senior high school, where the majority of the students typically attend the same school during their junior high school stage. Our senior high school students are not new to their school environment, the change in the group of friends is rather minor. Of course, it is possible that friends might not study in the same class, but they can still get together at school during the breaks. In a logical sense, psychological factors seem to have a less negative impact on students' attitudes towards learning in this particular transitory period from junior to senior high school level. Furthermore, senior high school students might take studying more seriously than they did before. It is because passing the university entrance exams and getting accepted into a top university are generally seen as a golden ticket to get a better life and a more successful career in the future. Students in Taiwan are educated to study hard from a very young age due to Taiwan's education system heavily focuses on pursuing scores and ranking. Such a form of utilitarianism is deeply rooted in society. On top of that, we must highlight that Taiwan has
been standing out in the Program for International Student Assessment (PISA), which is to examine 15 -year-old students' academic performances, and is one of the highest-performing countries in the world (Lin, Tzou, Lu, and Hung, 2021). Needless to say, the evidence of Taiwan's high performances in PISA can possibly paint a general picture of Taiwanese teen students devoting a large amount of time studying to do well in the tests. We consider that Taiwanese pupils' diligent learning styles are related to the educational environment and the cultural and societal expectations. To find out whether cultural factors have potential effects on students' attitudes, we suggest that further investigations must be carried out. All in all, the explanations discussed here can be used to explain the more positive attitudes our senior high school students presented.

In brief, our study provides valuable insight into Taiwanese multilingual pupils' language attitudes in the current state of Taiwan. We have discussed attitudes from different directions in relation to the development of multilingualism at an individual and a societal level, the implementation of the language policies and the spread of English as the result of globalization. It is important to continue carrying out studies considering potential impacts from the future reformation of language in education policies on pupils' attitudes. Expanding the scope of language attitudes from narrow to wider age-range pupils will be necessary. Taiwanese students not only start learning English at a very young age but also grow up in a multicultural and multilingual society. Multilinguals' language proficiency and attitudes are very likely to grow and change depending on an individual's personal experiences with his/her languages. It could be very interesting to analyze whether favorable attitudes are maintained in younger learners and the changes in attitudes are taking place at different school levels.

### 6.2 Difficulties and Limitations of the Research Study

To begin with, there are difficulties we encountered when applying instruments to collect the data. Due to privacy concerns, we were not granted the access to observe language
interactions between pupils and their family members. Therefore, we were not able to provide qualitative data on language interactions within the family. Another difficulty is associated with the time constraints for participants to finish both tasks of the survey and the language portrait. Many students commented that they wished to bring the portrait task home to complete, so that they would have more time to giving thought to their connections with languages and could also write in more details. However, this was not allowed because the idea was to give all students the same time to complete their portraits.

In addition, the findings of this study have to be seen in light of some limitations. The primary concern is methodological limitations. This study was carried out in a city and the sample size is small. In order to avoid generalizing our findings, it is necessary to further carry out a study with a larger sample size and also to include samples from both rural places and cities.

Another limitation concerns the presence of the researcher in the classroom, which can inadvertently influence the interactive dynamics between the teacher and students. We consider that the interactions between the teacher and students might be less vivid and restricted to some degree. Students might feel nervous or anxious about being watched and that might stop them from opening up or rather shut down. In addition, the involvement of the researcher during the observation period should have been avoided. As it was mentioned in Chapter 5.1.1, a class observation (see Excerpt 4) has shown that Student 21 asked for help from the researcher, who sat next to him. The researcher was seen to play the role of being a mediator between the teacher and pupils. In fact, the researcher was not a mediator but only an observer. Now re-thinking the situation, instead of answering the student, the researcher could have handled it in a different way. For instance, the researcher could have suggested the student to discuss with his classmates, who sat nearby, or to ask the teacher directly.

An important limitation of this study is the size of the sample. The results obtained in this thesis provide relevant information about Taiwanese students and their languages but cannot
possibly represent all Taiwanese students. Students in our sample were 150 and from some specific educational institutions in one area of Taiwan. It is necessary to conduct more research studies to see if our findings can be confirmed for other educational institutions and areas.

### 6.3 Significance and Implications

Three main focuses of this dissertation have been discussed from sociolinguistic and psycholinguistic perspectives in order to enrich our understanding of these interrelated constructs in the light of empirical data from Taiwan. This dissertation is a significant contribution for different reasons.

At the outset, our findings on language interactions among Taiwanese multilinguals provide an important and valuable update on the degree of multilingualism that exists in Taiwan nowadays. As it was explained more than a decade ago in Chen's (2010) research in this area is much needed. The evidence on features of Taiwanese students' linguistic practices reveals that multilinguals' linguistic repertoires are constantly expanding. The use of linguistic and non-linguistic resources and translanguaging adds to the diversity of multilinguals' discourse practices.

In addition to our findings on Taiwanese pupils' linguistic identity, the qualitative approach enables us to demonstrate the fluid and constantly changing nature of the identity of an individual. In contrast to previous studies (Dupré, 2013; Huang, 2000; Hsiau, 1997, 2000), which tied up identity with ethnolinguistic backgrounds, our study takes a different turn. Our empirical evidence on the discovery of linguistic identities not only opens new avenues for future research but also may serve as a resource for further qualitative research on Taiwanese multilingual pupils' linguistic identity.

Moreover, our results on language attitudes suggest that while favorable attitudes towards English are related to future opportunities, favorable attitudes towards Taiwanese are linked
to having a crucial familial connection. The government's recent decision to have English as an additional language of instruction at school and as the second official language at the national level aims to achieve international mobility and to develop Taiwan's economic status within the global markets. On the other hand, promoting Taiwanese and other local languages teaching is for the purposes of raising awareness and the preservation of heritage culture. There is a concern that the strong favoring for English teaching and the growing importance of English in Taiwan's society could be a threat to applying Taiwanese teaching in Taiwan's educational system. Due to the fact that almost all Taiwanese speakers also know Mandarin and the importance English has gained in Taiwan's society, we argue that the status of Taiwanese will be gradually losing its ground.

Noteworthy, one important issue that we identified when looking at the level of an individual is the lack of reference to attitude change when age increases. Our argument is aligned with Baker's (1992) and that is an individual's attitudes are stemmed from social interactions with others in a community and attitudes can change throughout the modification of personal trajectories and experiences with their languages. Some interesting findings related to attitudes have emerged in this thesis. For example, the importance of psychological factors such as the pressure for academic success and the intense competitions in education admission. A related educational factor is the teachers' pedagogy and the test-oriented educational system. However, the influential degree of these factors on individual attitudes can differ because of the way an individual has his/her way to cope with challenges and react to them. We shall not give a stereotype on the pattern of attitudes that all Taiwanese pupils present. That is why locating causes of attitude change is not simple and could be complex. Identifying these possible causes of attitude change is not just limited to theoretical or research problems, but it is also related to the incongruity between language policies and practices. Then, under these circumstances, what happens at the beginning and during the
teenage period to cause attitude change in Taiwanese pupils? Will rural-urban disparity increase in terms of growing inequality in educational resources and trained teachers?

This research study suggests that language use, linguistic identity and language attitudes are closely intertwined. We urge education practitioners, teachers and policymakers to take a long, hard look at the concerns mentioned above. Several implications are suggested in the following. The change of language policies is indeed necessary as what Chen (2010) has called for. Yet, it is necessary that policymakers, first and foremost, clarify and identify what type of multilingual education Taiwan currently has. Then, we could go from there to develop a more suitable model of language education. Of course, the model should be flexible so that it can fit different schools. That is why it is necessary to get more information about language interactions in classrooms in order to adjust the designed curriculum to the needs. Additionally, setting up regular teacher training will ultimately help the policy to be put into practice.

For teachers, we suggest that carrying out the language portrait activity can provide them with a clear understanding of the diversity in pupils' expanding linguistic identity and repertoire. Teachers' validation of pupils' linguistic repertoire can benefit the youth in terms of their development in different aspects, such as education, social interactions and self-concept (Dressler, 2015). In addition, the language portrait activity might also provide teachers an opportunity to reflect on their own linguistic identity and repertoire. If teachers put in use of their whole linguistic repertoire through translanguaging practices in the classroom, pupils might feel encouraged and motivated to incorporate their languages in learning and engaging in different social contexts. More importantly, pupils would appreciate the authentic linguistic identity and linguistic skills of one another.

Based on the limitations and implications we have discussed, hereby we provide suggestions for future research efforts. Firstly, as our research is just an initial exploration, follow-up investigations on our pupils in two or more years could be interesting so as to see
whether changes appear in their use of languages, linguistic identity and language attitudes. Secondly, the scale of the sample size will need to expand, as well as, require samples varying in age and contexts. Thirdly, further investigation on anxiety in language learning among pupils from different school levels could serve to link psychological factors to our findings of attitude change.

Another line of research could focus on teachers. Exploring teachers' attitudes and beliefs about language teaching, bi/multilingualism, the use of translanguaging in the classroom and language policies can help policymakers to make adjustments to the curriculum design and perhaps provide further support to teachers. Also, the comparison between teachers and students can merit further investigations.

In closing, this dissertation provides an expanded scope of multilingual Taiwanese pupils' linguistic practices. It also aims at exploring linguistic identity and language attitudes from an objective perspective. We know for a fact that both constructs at an individual level can change over time. Our goal is to unwrap some key elements and contribute them to the existing literature. Significant findings in our research ought to be of great interest to teachers and policymakers in Taiwan and give rise to further investigations.

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## APPENDICES

## Appendix 1 Street Signages

This appendix consists of the signages of five different places in the neighborhood where this study was conducted.

Picture A: A post office


The signage includes Mandarin and English texts (translation: "Post office").

Picture B: A pharmacy


This signage consists Mandarin, English and Japanese texts (translation: "a pharmacy that sells prescription drugs").

Picture C: A restaurant


This signage is presents in Taiwanese and Mandarin texts（translation：＂vegetarian tube－shape sticky rice cooked in bamboo．Eating full and fine＂）．

Picture D：A street stand in a local market


This signage is presented in Taiwanese and Mandarin texts（translation：＂cheap sell，many bitter melons for fifty Taiwanese dollars＂）．

Picture E：A tea shop


This signage contains Japanese and English texts（translation：＂a shop named ‘八曜和茶’ sells Japanese tea＂）．

## Appendix 2

## Language Portrait Silhouette

Greetings to all. We have prepared an activity and would like you to complete it by following the instruction. First, think about the languages you speak that are important to you, the role of each language in your life and the connection between you and that specific language. Second, locate each language in the body part by using one color. Third, write the description of three things: the language that presents a certain color, with whom you speak in that language and the particular meaning and the reason you make the choice of the specific color and the certain body part.


## Appendix 3 <br> Individual Interview Scheme

- Language use
- What languages do you often speak? With whom do you use these languages?
- Do you mix use of some languages? When do you mix use of languages and with whom? What are you talking about when you mix use languages?
- What language or languages do you usually reply to people? Is there a reason you use a certain language with some people? And why?
- What languages do you use on social media to chat with friends? And why?
- Linguistic identity
- Which language do you feel the closest to? Why?
- When and with whom do you use this language?
- Attitudes towards languages
- Which languages are important to you? Why?
- In which language or languages do you wish to be more fluent?
- Do you like learning English? Why?
- Do you like learning Taiwanese? Why?


## - Languages in the public space

Pictures in Appendix 1 were used in the individual interview to ask participants the following questions.

- Do you recognize these places? Where are these places?
- Which language or languages in these pictures can you recognize?
- What is the meaning of each of these signages?
- Which language or languages do you expect to hear in this place?
- Which language or languages would you use in this place?


## Appendix 4

## Group Discussion Question Guide

Participants were gathered and told that they were going to discuss some questions and there is no right or wrong answers.

- The questions relating to students' attitudes towards languages are:

Question 1. Which language or languages do you think Taiwanese people must know to speak?

Question 2. Which language or languages do you think Taiwanese people should speak more?
Question 3. Which language or languages are important for Taiwanese students? Question 4. Do you agree that all schools should teach students to speak Taiwanese?

Question 5. Do you agree that all schools should teach students to speak English?

- The questions relating to attitudes towards multilingualism are:

Question 6. Do you think that in Taiwan it is enough to only know Mandarin?
Question 7. Which do you wish yourself to be in the future, a monolingual speaker or a multilingual speaker? And why?

## Appendix 5

## In and Outside Classroom Observations Scheme

- In-Class Observation


## School

## Grade level

## Subject

Date

## (A) Language use

- What languages are used in this classroom?
- What languages does the teacher use in this class?
- What languages do students use in this class?
- What languages do students use to interact with the teacher? What is the topic during the interaction?
- Are there interactions between students? What languages do students use between themselves?
(B) Classroom atmosphere
- Is students' participation active?
- Is the classroom atmosphere warm, open and accepting?
- Lesson Break Observation
- Where are the students?
- What languages do students use to interact with each other?
- What are the topics of the interactions?
- Who is interacting with whom?
- Are students interacting with the teacher during the lesson break? What languages do they use? What are they talking about?


## Appendix 6

## Pseudo Names Guide

- A list of the students who participated in individual interviews (only the ones used in this thesis):

| Grade level | Pseudo names of the students and their gender |
| :---: | :---: |
| Grade 6 | Male: Wu |
| Grade 8 | Male: Jia, Zhang |
| Grade 9 | Female: Han, Shen |
| Male: Zhou, Yang |  |
| Grade 10 | Female: Li, Xin |
| Grade 11 | Male: Lu |

- A list of the students who participated in group discussions:

| Grade levels | Pseudo names of the participants and their gender |
| :---: | :---: |
| Grade 5 | Female: Zhou, Liu, Wang <br> Male: Zheng, Meng |
| Grade 6 | Female: Chen, Ding, Shi |
| Male: Wu, Wei |  |
| Grade 8 | Female: Jin, Du, Tao, Jiang |
| Male: Zhang, Feng |  |
| Grade 9 | Female: Shen, Han |
| Male: Yang, Zhou, Tang, Lou |  |
| Grade 10 | Female: Li, Huang, Peng, Fan, Xie |
| Grade 11 | Male: Lu, Jian, Xu, Hua, Zhu |

Note: Students from the list above who took part in both activities are Wu (Grade 6), Zhang (Grade 8), Shen (Grade 9), Han (Grade 9), Yang (Grade 9), Zhou (Grade 9), Li (Grade 10) and Lu (Grade 11).

- Names appeared on the Birthday card (see Figure 5.2):

| Birthday card | Pseudo names and gender |
| :---: | :---: |
| The sender | Female: Hong |
| The receiver | Female: Tsai |
| A mutual friend | Female: Xia |

## Appendix 7

## Questionnaire

Dear students,
I am conducting a survey to investigate that in Taiwan how languages are used by people in different domains and people's attitudes towards languages. This questionnaire will be a part of data collecting for my doctoral research at the University of the Basque Country. Please take some time to fill in the questionnaire and share your opinions, be as honest as possible. Remember, there is no right or wrong answer. All information obtained in this survey will remain confidential. I sincerely appreciate your cooperation. Thank you!

## Section 1: Personal background information

1.1 Please fill in the columns.

| School: |  |
| :---: | :---: |
| Name: | Gender: $\square$ Male $\square$ Female |
| Grade: | Nationality: |
| Age: | Place of birth: |
| Father's profession: | Mother's profession: |
| Father's educational level: Secondary High school University Other | Mother's educational level: |
| Do you live with grandparents? $\square$ Yes $\square$ No |  |

1.2 Please tick (v) in the column.

| Mother tongue | Mandarin | Taiwanese | English | Hakka | Austronesian | Other(s) <br> (indicate) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Languages |  |  |  |  |  |  |
| Of yours |  |  |  |  |  |  |
| Of your father's |  |  |  |  |  |  |
| Of your mother's |  |  |  |  |  |  |
| Of |  |  |  |  |  |  |
| grandparents' |  |  |  |  |  |  |$\quad$|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Able to speak |  |  |  |  |  |
| You |  |  |  |  |  |
| Your father |  |  |  |  |  |
| Your mother |  |  |  |  |  |
| Your siblings |  |  |  |  |  |

1.3 How good are you in these languages? Please circle a number from 1 to 10 ( $1=$ not at all, $10=$ excellent $)$.

| Mandarin |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Skills | $\begin{gathered} 1 \\ \text { not a } \end{gathered}$ |  |  |  |  |  |  |  |  | $\begin{gathered} 10 \\ \text { cellent } \end{gathered}$ |
| Listening | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Reading | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Writing | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Speaking | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Taiwanese |  |  |  |  |  |  |  |  |  |  |
| Skills | 1 <br> not <br> exce |  |  |  |  |  |  |  |  | 10 |
| Listening | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Reading | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Writing | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Speaking | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| English |  |  |  |  |  |  |  |  |  |  |
| Skills | 1 <br> not <br> exce |  |  |  |  |  |  |  |  | 10 |
| Listening | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Reading | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Writing | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Speaking | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Section 2: How do you use these languages in different places and with different people?
Please circle a number from 1 to 10 ( $1=$ never, $10=$ always ).

|  |  | Language | 1 never |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| At home with | grandparents | Mandarin | 111 | 222 | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ | 4 <br> 4 <br> 4 | 555 | 666 | 777 | 888 | 999 | $\begin{aligned} & 10 \\ & 10 \\ & 10 \end{aligned}$ |
|  |  | Taiwanese |  |  |  |  |  |  |  |  |  |  |
|  |  | English |  |  |  |  |  |  |  |  |  |  |
|  | parents | Mandarin |  | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ | $\begin{aligned} & 4 \\ & 4 \\ & 4 \end{aligned}$ | 5 <br> 5 <br> 5 | 666 | 777 | 8 <br> 8 <br> 8 | 999 | $\begin{aligned} & 10 \\ & 10 \\ & 10 \end{aligned}$ |
|  |  | Taiwanese |  |  |  |  |  |  |  |  |  |  |
|  |  | English |  |  |  |  |  |  |  |  |  |  |
|  | siblings | Mandarin |  | $\begin{array}{ll} 1 & 2 \\ 1 & 2 \\ 1 & 2 \end{array}$ | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ | $\begin{aligned} & 4 \\ & 4 \\ & 4 \end{aligned}$ | 555 | $\begin{aligned} & 6 \\ & 6 \\ & 6 \end{aligned}$ | 777 | $8$$8$$8$ | 999 | $\begin{aligned} & 10 \\ & 10 \\ & 10 \end{aligned}$ |
|  |  | Taiwanese |  |  |  |  |  |  |  |  |  |  |
|  |  | English |  |  |  |  |  |  |  |  |  |  |
| At school with | teachers in class | Mandarin |  | $\begin{array}{ll}1 & 2 \\ 1 & 2 \\ 1 & 2\end{array}$ | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ | 4 <br> 4 <br> 4 | 555 | $\begin{aligned} & 6 \\ & 6 \\ & 6 \end{aligned}$ | 777 | 8 <br> 8 <br> 8 | 999 | $\begin{aligned} & 10 \\ & 10 \\ & 10 \end{aligned}$ |
|  |  | Taiwanese |  |  |  |  |  |  |  |  |  |  |
|  |  | English |  |  |  |  |  |  |  |  |  |  |
|  | friends | Mandarin |  | $\begin{array}{ll}1 & 2 \\ 1 & 2 \\ 1 & 2\end{array}$ | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ | 4 <br> 4 <br> 4 | 555 | $\begin{aligned} & 6 \\ & 6 \\ & 6 \end{aligned}$ | 777 | 888 | 999 | 101010 |
|  |  | Taiwanese |  |  |  |  |  |  |  |  |  |  |
|  |  | English |  |  |  |  |  |  |  |  |  |  |
| Outside school with | friends | Mandarin |  |  | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ | 4 <br> 4 <br> 4 | 555 | 666 | 777 | 888 | 999 | 101010 |
|  |  | Taiwanese |  |  |  |  |  |  |  |  |  |  |
|  |  | English |  |  |  |  |  |  |  |  |  |  |
| At street with | strangers | Mandarin | $\begin{array}{ll}1 & 2 \\ 1 & 2 \\ 1 & 2\end{array}$ |  | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ | 4 <br> 4 <br> 4 | 555 | 666 | 777 | 888 | 999 | 101010 |
|  |  | Taiwanese |  |  |  |  |  |  |  |  |  |  |  |
|  |  | English |  |  |  |  |  |  |  |  |  |  |  |
| In a department store with | shop keepers | Mandarin |  | $\begin{array}{ll}1 & 2 \\ 1 & 2 \\ 1 & 2\end{array}$ | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ | $\begin{aligned} & 4 \\ & 4 \\ & 4 \end{aligned}$ | 555 | 666 | 777 | 888 | 999 | 101010 |
|  |  | Taiwanese |  |  |  |  |  |  |  |  |  |  |
|  |  | English |  |  |  |  |  |  |  |  |  |  |
| At a traditional market with | venders | Mandarin |  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese | 1 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| At a <br> governmental <br> agency with | public officials | Mandarin | $\left\lvert\, \begin{aligned} & 1 \\ & 1 \\ & 1\end{aligned}\right.$ | 222 | 333 | 444 | 555 | 666 | 777 | 8 | 9 | 10 |
|  |  | Taiwanese |  |  |  |  |  |  |  | 8 | 9 | 10 |
|  |  | English |  |  |  |  |  |  |  | 8 | 9 | 10 |

Please circle a number from 1 to 10 ( $1=$ never, $10=$ always $)$.

| Social context |  | Language | 1 never |  |  |  |  |  |  | 10always |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| In free time | surfing the <br> Internet | Mandarin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  | watching TV | Mandarin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  | watching films | Mandarin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  | listening to music | Mandarin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  | listening to radio | Mandarin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  | on social media | Mandarin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## Section 3. How do you feel about these languages?

3.1 Please circle a number from 1 to $10(1=$ not at all, $10=$ very much $)$.

| Domains |  |  | $1$ <br> not at all |  |  |  |  |  |  | $\begin{array}{r} 10 \\ \text { very much } \end{array}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. | I feel close to this language when I am using it. | Mandarin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2. | Being able to speak this language is part of who I am. | Mandarin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 3. | To me this language is important. | Mandarin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

3.2 In your opinion, how important are Mandarin and Taiwanese and English for pupils in Taiwan to do the following? There is no right or wrong answer. Please circle a number from 1 to 10 ( $1=$ not important, $10=$ important).


Please circle a number from 1 to 10 ( $1=$ not important, $10=$ important $)$.

| Items |  | Language <br> Mandarin | $1$ <br> not important |  |  |  |  |  |  | $\begin{array}{r} 10 \\ \text { important } \end{array}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11. | To live in Taiwan |  | 111 | $\begin{array}{ll} 1 & 2 \\ 1 & 2 \\ 1 & 2 \end{array}$ | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ | 444 | 555 | 666 | 777 | 8 <br> 8 <br> 8 | 999 | $\begin{aligned} & 10 \\ & 10 \\ & 10 \end{aligned}$ |
|  |  | Taiwanese |  |  |  |  |  |  |  |  |  |  |
|  |  | English |  |  |  |  |  |  |  |  |  |  |
| 12. | To travel outside Taiwan | Mandarin |  | $\begin{array}{ll} 1 & 2 \\ 1 & 2 \\ 1 & 2 \end{array}$ | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ | 444 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 |
| 13. | To travel within Taiwan | Mandarin | 111 | $\begin{aligned} & 2 \\ & 2 \\ & 2 \end{aligned}$ | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ |  | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 |
| 14. | To read street signs | Mandarin | 111 | $\begin{aligned} & 2 \\ & 2 \\ & 2 \end{aligned}$ | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ |  | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 |
| 15. | To surf the Internet | Mandarin | 111 | $\begin{aligned} & 2 \\ & 2 \\ & 2 \end{aligned}$ | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ |  | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 |
| 16. | To watch TV | Mandarin | 111 | $\begin{aligned} & 2 \\ & 2 \\ & 2 \end{aligned}$ | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ |  | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 |
| 17. | To watch films | Mandarin | 111 | $2$$2$$2$ | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ |  | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 |
| 18. | To listen to radio | Mandarin | 111 | $\begin{aligned} & 2 \\ & 2 \\ & 2 \end{aligned}$ | $\begin{aligned} & 3 \\ & 3 \\ & 3 \end{aligned}$ |  | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English |  |  |  |  | 5 | 6 | 7 | 8 | 9 | 10 |
| 19. | To listen to music | Mandarin | 12 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  | English | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## Section 4. Share your opinions on the statements about these languages.

4.1 Here are statements about Mandarin and Taiwanese and English. Please circle a number individually according to each language. There are no right or wrong answers. Please be as honest as possible.
(1= Strongly Disagree (SD), 2 Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree (SA))

| Statements about each language |  |  | 1 <br> SD |  |  | SA |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| 1. | All people in Taiwan should know to speak this language. | Mandarin | 1 | 2 | 3 | 4 | 5 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 |
|  |  | English | 1 | 2 | 3 | 4 | 5 |
| 2. | All schools should teach pupils to speak this language. | Mandarin | 1 | 2 | 3 | 4 | 5 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 |
|  |  | English | 1 | 2 | 3 | 4 | 5 |
| 3. | All schools should teach pupils to speak this language as early as possible. | Mandarin | 1 | 2 | 3 | 4 | 5 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 |
|  |  | English | 1 | 2 | 3 | 4 | 5 |
| 4. | Learning this language is useful. | Mandarin | 1 | 2 | 3 | 4 | 5 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 |
|  |  | English | 1 | 2 | 3 | 4 | 5 |
| 5. | This language is an important language to learn. | Mandarin | 1 | 2 | 3 | 4 | 5 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 |
|  |  | English | 1 | 2 | 3 | 4 | 5 |
| 6. | It is important for pupils in Taiwan to be able to speak this language. | Mandarin | 1 | 2 | 3 | 4 | 5 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 |
|  |  | English | 1 | 2 | 3 | 4 | 5 |
| 7. | This language is essential to be part of everyday life. | Mandarin | 1 | 2 | 3 | 4 | 5 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 |
|  |  | English | 1 | 2 | 3 | 4 | 5 |
| 8. | I think it is a good idea that subject teachers use this language as a medium to teach. | Mandarin | 1 | 2 | 3 | 4 | 5 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 |
|  |  | English | 1 | 2 | 3 | 4 | 5 |
| 9. | Being Taiwanese must know to speak this language. | Mandarin | 1 | 2 | 3 | 4 | 5 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 |
|  |  | English | 1 | 2 | 3 | 4 | 5 |
| 10. | I think Taiwanese people should speak this language more. | Mandarin | 1 | 2 | 3 | 4 | 5 |
|  |  | Taiwanese | 1 | 2 | 3 | 4 | 5 |
|  |  | English | 1 | 2 | 3 | 4 | 5 |

(1= Strongly Disagree (SD), 2 Disagree, $3=$ Neutral, 4= Agree, $5=$ Strongly Agree (SA))

| Statements about each language |  | $\mathbf{1}$ |  |  |  |  |
| :--- | :--- | :---: | :--- | :--- | :--- | :--- | :--- |

4.2 Here are statements about languages. Please circle a number to share your opinions about these statements.

There are no right or wrong answers. Please be as honest as possible.
( $1=$ Strongly Disagree (SD), 2 Disagree, $3=$ Neutral, $4=$ Agree, $5=$ Strongly Agree (SA))

| Statements about languages |  | 1 <br> SD |  |  |  | 5SA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 1. | All people in Taiwan should know how to speak Mandarin and Taiwanese. |  | 1 | 2 | 3 | 4 | 5 |
| 2. | All people in Taiwan should know how to speak English and Mandarin. | 1 | 2 | 3 | 4 | 5 |
| 3. | All people in Taiwan should know how to speak English and Taiwanese. | 1 | 2 | 3 | 4 | 5 |
| 4. | All people in Taiwan should know how to speak English, Mandarin and Taiwanese. | 1 | 2 | 3 | 4 | 5 |
| 5. | All schools should teach pupils to speak both in Mandarin and Taiwanese. | 1 | 2 | 3 | 4 | 5 |
| 6. | All schools should teach pupils to speak both in English and Mandarin. | 1 | 2 | 3 | 4 | 5 |
| 7. | All schools should teach pupils to speak both in English and Taiwanese. | 1 | 2 | 3 | 4 | 5 |
| 8. | All schools should teach pupils to speak in English, Mandarin and Taiwanese. | 1 | 2 | 3 | 4 | 5 |
| 9. | Learning both Mandarin and Taiwanese is useful. | 1 | 2 | 3 | 4 | 5 |
| 10. | Learning both English and Mandarin is useful. | 1 | 2 | 3 | 4 | 5 |
| 11. | Learning both English and Taiwanese is useful. | 1 | 2 | 3 | 4 | 5 |
| 12. | Learning English, Mandarin and Taiwanese is useful. | 1 | 2 | 3 | 4 | 5 |
| 13. | It is important for pupils in Taiwan to be able to speak Mandarin and Taiwanese. | 1 | 2 | 3 | 4 | 5 |
| 14. | It is important for pupils in Taiwan to be able to speak English and Mandarin. | 1 | 2 | 3 | 4 | 5 |
| 15. | It is important for pupils in Taiwan to be able to speak English and Taiwanese. | 1 | 2 | 3 | 4 | 5 |
| 16. | It is important for pupils in Taiwan to be able to speak English, Mandarin and Taiwanese. | 1 | 2 | 3 | 4 | 5 |
| 17. | Mandarin and Taiwanese are essential to be part of everyday life in Taiwan. | 1 | 2 | 3 | 4 | 5 |
| 18. | English and Mandarin are essential to be part of everyday life in Taiwan. | 1 | 2 | 3 | 4 | 5 |
| 19. | English and Taiwanese are essential to be part of everyday life in Taiwan. | 1 | 2 | 3 | 4 | 5 |
| 20. | English, Mandarin and Taiwanese are essential to be part of everyday life in Taiwan. | 1 | 2 | 3 | 4 | 5 |
| 21. | Being Taiwanese one must know to speak Mandarin and Taiwanese. | 1 | 2 | 3 | 4 | 5 |
| 22. | Being Taiwanese one must know to speak English and Mandarin. | 1 | 2 | 3 | 4 | 5 |
| 23. | Being Taiwanese one must know to speak English and Taiwanese. | 1 | 2 | 3 | 4 | 5 |
| 24. | Being Taiwanese one must know to speak English, Mandarin and Taiwanese. | 1 | 2 | 3 | 4 | 5 |
| 25. | Being able to speak Mandarin and Taiwanese helps to get a job. | 1 | 2 | 3 | 4 | 5 |
| 26. | Being able to speak English and Mandarin helps to get a job. | 1 | 2 | 3 | 4 | 5 |

(1= Strongly Disagree (SD), 2 Disagree, $3=$ Neutral, $4=$ Agree, $5=$ Strongly Agree (SA))

| Statements about languages |  | 1 <br> SD |  |  |  | SA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| 27. | Being able to speak English and Taiwanese helps to get a job. | 1 | 2 | 3 | 4 | 5 |
| 28. | Being able to speak English, Mandarin and Taiwanese helps to get a job. | 1 | 2 |  | 4 | 5 |
| 29. | When I become an adult, I would like to be considered as a speaker of Mandarin and Taiwanese. | 1 | 2 |  | 4 | 5 |
| 30. | When I become an adult, I would like to be considered as a speaker of English and Mandarin. | 1 | 2 | 3 | 4 | 5 |
| 31. | When I become an adult, I would like to be considered as a speaker of English and Taiwanese. | 1 | 2 | 3 | 4 | 5 |
| 32. | When I become an adult, I would like to be considered as a speaker of English, Mandarin and Taiwanese. | 1 | 2 | 3 | 4 | 5 |
| 33. | Both Mandarin and Taiwanese should be shown on the signs in the public area. | 1 | 2 | 3 | 4 | 5 |
| 34. | Both English and Mandarin should be shown on the signs in the public area. | 1 | 2 | 3 | 4 | 5 |
| 35. | Both English and Taiwanese should be shown on the signs in the public area. | 1 | 2 | 3 | 4 | 5 |
| 36. | English, Mandarin and Taiwanese should be shown on the signs in the public area. |  | 2 | 3 | 4 | 5 |

## Section 5. Tell me more about you.

Please tick your answer and describe when necessary.

1. Which language is the most important to you?
$\qquad$
Why?
2. At the moment are you learning any local language at school? Which one?

3. When have you started learning Taiwanese at school? Since $\qquad$
4. When have you started learning English? Since $\qquad$
5. Do you learn English outside school (at an English academy or with a tutor)?

$\square$Yes, where? $\qquad$ , $\qquad$ hours/week. And when did you start learning English outside school? $\qquad$
No.
6. Do you like learning English? $\square$ Yes. $\square$ No. $\square$ I don't know.

Why? $\qquad$
What is your purpose in learning English? $\qquad$
7. Do you like learning Taiwanese? $\square$ Yes. $\square$ No. $\square$ I don't know.

Why? $\qquad$
What is your purpose in learning Taiwanese? $\qquad$
8. How many hours do you study English a week outside school (homework and going to an English academy)?
$\square$
$0 \quad \square 1$ $\square$ $\square 3$ $\square 4$
$\square 5$ $\square$ $\square 7$ $\square$ 8 $\square$ more than 8 hours.
9. How many hours do you study Taiwanese a week outside school (homework)?0 $\square$ 1 $\square_{2}$ $\square 3$ $\square$ 4 $\square 5$$\square 7$ $\square 8$ $\square$ more than 8 hours.

Please tick your answer and describe when necessary.
10. If English was not taught in the school, I would probablyNot bother learning English at all.Try to obtain English lesson somewhere else.Pick up English in everyday situation, self- learned.None of these.
11. If Taiwanese was not taught in the school, I would probably
$\square$ Not bother learning Taiwanese at all.Try to obtain Taiwanese lesson somewhere else.Pick up Taiwanese in everyday situation, self- learned.None of these.
12. Which do you wish to be?


Why? $\qquad$

## RESUMEN EXTENSO

## Introducción y antecedentes

El multilingüismo es un fenómeno mundial. El aprendizaje de dos o más lenguas en el contexto escolar es cada vez más común en diferentes partes del mundo. Hoy en día cada vez hay más interés en la investigación que explora las prácticas lingüísticas de hablantes multilingües. La interacción comunicativa está relacionada con factores personales y contextuales y es dinámica y compleja. Es importante comprender que una persona multilingüe puede tener diferentes niveles de competencia en las lenguas que utiliza y que también puede realizar discursos lingüísticos con diferentes fines. De este modo, los hablantes utilizan sus lenguas para cumplir funciones sociales, para darse significado a sí mismos y para presentarse en un contexto social más amplio. El repertorio lingüístico de los hablantes multilingües puede ir creciendo continuamente y la identidad de estos hablantes también cambia al aprender nuevas lenguas e integrarse en otras culturas. En otras palabras, la identidad de una persona no es fija, sino que posee una naturaleza dinámica y cambiante. Además, los hablantes multilingües pueden presentar diferentes actitudes hacia el aprendizaje de otras lenguas y este aprendizaje también puede suponer cambios en su uso habitual de las lenguas. Es decir, las actitudes hacia las lenguas pueden cambiar a lo largo del tiempo en relación a las trayectorias personales de un individuo.

El enfoque principal de esta tesis se sitúa en el contexto de Taiwán, un país que ha sufrido diferentes ocupaciones coloniales en el pasado y que cuenta con una población étnica diversa. En las últimas décadas, Taiwán ha pasado de promover el monolingüismo al multilingüismo. Diariamente, el uso de diferentes lenguas como el mandarín, el taiwanés, el inglés y otras variedades de lenguas locales, tiene lugar tanto a nivel social como individual. En Taiwán, el mandarín no es solo la lengua oficial sino también una lengua franca para que personas de diferentes orígenes étnicos lleven a cabo una comunicación efectiva. El taiwanés es una de las lenguas locales y es hablada como primera lengua por una parte importante de la
población. En la escuela, el taiwanés se enseña como asignatura de lengua. Es muy frecuente que las generaciones jóvenes aprendan mandarín junto con su primera lengua. Además, el gobierno de Taiwán ha comenzado recientemente a promover el inglés como segunda lengua oficial y lengua vehicular adicional. Después de décadas de promover el multilingüismo tanto a nivel social como educativo, es necesario analizar la situación de las lenguas a un nivel más profundo en la era actual de Taiwán. La mayor parte de la investigación lingüística hasta el momento en Taiwán se centra en muestras con participantes con un rango de edad amplio. Este estudio da un giro diferente y necesario y se centra en alumnos de diferentes niveles escolares.

## Objetivos

Los tres objetivos principales de esta tesis son: (a) explorar el uso de lenguas por parte de los estudiantes en diferentes contextos sociales, (b) investigar la identidad lingüística de los estudiantes y (c) analizar las actitudes de los estudiantes hacia diferentes lenguas, bilingüismo y multilingüismo. Las preguntas de investigación se formulan de la siguiente manera:

Q1. ¿Cómo usan los estudiantes taiwaneses todas las lenguas de su repertorio linguístico?
Q1.1. ¿Cómo usan los estudiantes taiwaneses las lenguas en la escuela?
Q1.2. ¿Cómo usan los estudiantes taiwaneses las lenguas fuera de la escuela?
Q 1.3. ¿Está el uso de lenguas relacionado con la edad?
Q1.4. ¿Está el uso de lenguas relacionado con el nivel en cada lengua?
Q2. ¿Cuál es la identidad lingüística de los estudiantes taiwaneses?
Q2.1. ¿Está la identidad lingüística relacionada con el uso de lenguas?
Q2.2. ¿Está la identidad lingüística relacionada con la competencia en la(s) lengua(s)?
Q2.3. ¿Está la identidad lingǘstica relacionada con la edad?

Q2.4. ¿Están vinculadas las identidades de los estudiantes multilingües a una lengua o lenguas específica(s)?

Q3. ¿Cuáles son las actitudes de los estudiantes taiwaneses?
Q3.1. ¿Cuáles son las actitudes de los estudiantes hacia cada lengua?
Q3.2. ¿Cuáles son las actitudes de los estudiantes hacia el bilingüismo y el multilingüismo?

Q3.3. ¿Están las actitudes lingüísticas relacionadas con el uso de lenguas?
Q3.4. ¿Están las actitudes lingüísticas relacionadas con la competencia en la(s) lengua(s)?
Q3.5 ¿Están las actitudes lingüísticas relacionadas con la edad?

## Metodología

El enfoque metodológico para responder a las preguntas de investigación está basado en métodos mixtos que combinan enfoques cuantitativos y cualitativos. Este enfoque utiliza una amplia variedad de instrumentos: cuestionarios, retratos lingüísticos, observaciones dentro y fuera de la escuela, entrevistas individuales y discusiones grupales. Un total de 150 participantes participaron en este estudio. El $95 \%$ de los participantes puede hablar dos o más lenguas. El 42,7 por ciento de los participantes tienen el mandarín y el taiwanés como primeras lenguas y el 41,3 por ciento de los participantes solo tiene el mandarín como primera lengua.

La recopilación de datos consta de dos fases. Durante la primera fase, se realizaron observaciones en clase; y durante la segunda fase, se realizaron observaciones en los recreos entre febrero y abril de 2019, que es la segunda mitad del semestre del año escolar en Taiwán. La investigadora tuvo acceso durante 30 minutos en cada clase para realizar dos ejercicios: el cuestionario y el retrato lingüístico. Se entregó el cuestionario y el retrato lingüístico a todos los participantes al mismo tiempo y se les pidió que comenzaran con el cuestionario. La lengua utilizada en el cuestionario fue el mandarín, ya que es la lengua de instrucción en la
escuela en Taiwán. Una vez que los participantes terminaron el cuestionario, procedieron a completar su retrato lingüístico. Debido a la limitación de tiempo en clase, la mayoría de los estudiantes continuaron terminando su retrato de lenguaje durante el recreo.

Tanto los datos cuantitativos como cualitativos fueron analizados por el programa SPSS y ATLAS.ti.

## Resultados

En primer lugar, utilizamos un enfoque de investigación holístico basado en "Focus on Multiligualism" (Cenoz \& Gorter, 2011), que analiza varias lenguas al mismo tiempo y explora las relaciones entre las lenguas, para analizar las prácticas lingüísticas de los estudiantes en diferentes dominios sociales. Los principales hallazgos indican que de las tres lenguas es el mandarín la que se usa predominantemente en todos los dominios, y el uso del taiwanés se usa preferentemente el dominio del hogar, especialmente cuando los abuelos están incluidos en las interacciones. En el caso del inglés, se observó que su uso es más frecuente en la situación de tiempo libre que en los otros dominios. Además, los análisis proporcionan evidencia de prácticas de translanguaging, que muestran que los estudiantes taiwaneses utilizan todo su repertorio lingüístico de manera flexible. De hecho, las prácticas de lingüísticas de los jóvenes estudiantes taiwaneses no solo son multilingües sino también multimodales. El uso de imágenes, iconos, símbolos y audio amplía la complejidad de las prácticas de alfabetización de los jóvenes. Aparte de eso, este estudio destaca un impacto significativo de la edad en el uso del mandarín y el inglés. Los resultados muestran que existen diferencias entre los niveles escolares y que el nivel superior es el que presenta actitudes más favorables hacia las lenguas que los niveles inferiores. Se considera que dichos resultados están asociados a tres dimensiones: competencia en la lengua, identidad lingüística y actitudes lingüísticas.

En segundo lugar, los análisis sobre las identidades lingüísticas de los estudiantes muestran que las identidades son fluidas, multifacéticas y no fijas (Norton, 2010). También se observó que la relación entre el lenguaje y la identidad está estrechamente entrelazada (Norton, 2013). En general, este estudio demostró la diversa biografía lingüística de la juventud taiwanesa. El retrato lingüístico de cada participante es único y diferente del de los demás, y eso también implica que cada estudiante tiene una identidad lingüística distintiva. Como se mencionó anteriormente, los individuos usan sus lenguas como una herramienta para presentarse a sí mismos. Sus prácticas lingüísticas están, por tanto, ligadas en gran medida a sus trayectorias de vida y preferencia personal a la hora de elegir una lengua para comunicarse con determinados interlocutores o en un determinado espacio de comunicación.

Además, en la era de la globalización, el aumento de la movilidad internacional y el desarrollo digital han proporcionado un espacio innovador de comunicación para los jóvenes. Las interacciones humanas modernas ya no se limitan a situaciones presenciales, sino que tienen lugar en el ciberespacio. Cuando las personas tienen acceso a diferentes herramientas digitales, que regulan su comunicación en el espacio virtual junto con sus recursos lingǘsticos, la forma en que se entienden y se representan a sí mismos se expande. Por lo tanto, consideramos que el futuro desarrollo de la tecnología digital tiene un posible impacto en la transformación de los comportamientos lingüísticos de los multilingües en el ciberespacio y eso influirá aún más en la formación de su identidad en el futuro. En conjunto, nuestros análisis sugieren que a medida que crecen los repertorios lingüísticos de los estudiantes multilingües taiwaneses, sus identidades lingüísticas se expanden.

En tercer lugar, los resultados de los análisis indican que los estudiantes en general tienen actitudes positivas hacia el mandarín, el taiwanés, el inglés, el bilingüismo y el multilingüismo. Se considera que las actitudes positivas hacia cada una de las tres lenguas están relacionadas con un factor diferente. Por ejemplo, las actitudes positivas hacia el mandarín están relacionadas con el papel que desempeña el mandarín como la principal
herramienta de comunicación en la sociedad de Taiwán. Se considera que las actitudes positivas hacia el taiwanés se asocian con la solidaridad grupal, el deseo de comunicar entre generaciones, sobre todo con los abuelos y la conciencia de preservar la cultura taiwanesa. En el caso del inglés, las actitudes favorables de los estudiantes están relacionadas en gran medida con el acceso a la movilidad internacional, el deseo de interactuar con personas y comunidades de diferentes culturas y también el papel que juega el inglés en el sistema de meritocracia centrado en los exámenes en Taiwán. Cuando se comparan las actitudes hacia las tres lenguas, se observa que los estudiantes presentaron las actitudes más favorables hacia el mandarín, luego hacia el inglés, y por el último, hacia el taiwanés. Es interesante ver que nuestros estudiantes tienen actitudes más favorables hacia el inglés que hacia el taiwanés. Para explicar estos resultados, se consideran varios factores posibles: el creciente estatus y la importancia del inglés, el importante apoyo del gobierno a la enseñanza del inglés, la demanda de un alto dominio del inglés en el sector laboral y la difusión de la cultura popular inglesa. Al comparar las actitudes entre dos grupos con primeras lenguas diferentes, se observó que los estudiantes que son bilingües tempranos tienen actitudes significativamente más favorables que los estudiantes con una sola primera lengua. Además, los resultados de los análisis sobre las variables que pueden influir en las actitudes indican que las actitudes lingüísticas están significativamente correlacionadas con el uso de la lengua y la competencia lingüística. En particular, también encontramos un efecto significativo de la edad sobre las actitudes hacia el mandarín, el inglés y el bilingüismo. Estos resultados se pueden vincular a factores psicológicos, educativos y culturales.

## Conclusión

Esta tesis es una contribución significativa a los estudios de multilingüismo en contextos escolares por diferentes razones. En primer lugar, presentamos información sobre las prácticas lingüísticas de los alumnos multilingües taiwaneses. Los análisis de este estudio
ejemplifican cómo los jóvenes multilingües utilizan sus lenguas, realizan prácticas de translanguaging y tienen un repertorio comunicativo lingüístico fluido. Con respecto a las identidades linguísticas, los análisis demuestran que los estudiantes están constantemente negociando y renegociando su sentido de identidad en un contexto social más amplio. Además, indican que cada individuo puede poseer más de una identidad. Nuestros resultados arrojan una nueva luz sobre la naturaleza híbrida y fluida de las identidades lingüísticas de los jóvenes multilingües taiwaneses. Por último, comentamos las actitudes desde diferentes perspectivas y direcciones en relación con el desarrollo del multilingüismo a nivel individual y social, la implementación de las políticas linguísticas y la difusión del inglés como resultado de la globalización. Nuestro estudio proporciona un conocimiento valioso sobre el uso de las lenguas, las identidades y las actitudes lingüísticas de los alumnos multilingües taiwaneses en el estado actual de Taiwán.

## Referencias del resumen

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[^0]:    （A group of the $6^{\text {th }}$ graders：Chen，Wu，Ding，Wei and Shi．）
    ［00：45］two students，Wei and Chen，replied at the same time：中文。（Mandarin．）
    ［00：46］Ding：台語。（Taiwanese．）
    ［01：08］Chen：我覺得台語不一定，因為很多人不會講。（I think Taiwanese is not necessary because there are many people who do not know to speak Taiwanese．）
    ［01：42］Wu：中文和英文，因為中文是台灣人的國語。英文是世界通用的語言。（Mandarin and English． Because Mandarin is the national language of Taiwanese people and English is the world＇s lingua

