

Unequal Adjustments: The Effect of “Unequal Englishes” on the Adjustment of 7th Grade Students to a STEM High School and its Implications on the STEM Curriculum

Filbert Joseph A. Ubanos

Philippine Science High School - Main Campus, Philippines

E-mail: filbertubanos0220@gmail.com

Cite this article as: Ubanos, F. J. A. (2021). Unequal Adjustments: The Effect of “Unequal Englishes” on the Adjustment of 7th Grade Students to a STEM High School and its Implications on the STEM Curriculum. *International Journal of Second and Foreign Language Education*, 1(3), 42-55. <https://doi.org/10.33422/ijlsfle.v1i3.208>

Abstract

Mother Tongue-Based Multilingual Education (MTB-MLE), however effective for English learning, may have a negative effect on students' English proficiency over time. This could also increase the difficulty for students transitioning to STEM-based high schools that prioritize a more English-oriented pedagogy. It may lead to “Unequal Englishes”, where social class affects English skills. Current studies lack an in-depth discussion on the effect of “Unequal Englishes” on students' adjustment to an English-oriented curriculum. Through interview and content analysis, data was collected to analyze the students' adjustment period and methods to ease their transition to an English-oriented pedagogy. The students had different levels of English demonstrating “Unequal Englishes” and experienced challenges due to limited vocabulary. Increased exposure to English and online sources aided in understanding technical English words. STEM-based schools worldwide that use an English-oriented pedagogy can use the results to create an English curriculum more inclusive, fair, and liberating for all students.

Keywords: education, experience, foundation, learning, pedagogy

1. Introduction

1.1. Philippine Science High School

The Philippine Science High School System (PSHSS) is a system of schools that started in 1963 through Republic Act 3661, which aims to provide a scholarship to students aspiring to Science, Technology, Engineering, or Mathematics (STEM) careers. Currently, there are 16 campuses across the Philippines, with its Main Campus (MC) located along Agham Road, Quezon City (“About the PSHS System,” n.d.). PSHS Students study from Grades 7 to 12. The curriculum is oriented toward teaching the students the basic concepts of science, math, technology, research, and their real-world applications. Subjects like Mathematics, Physics, Chemistry, and Biology are English-oriented, meaning they are only taught in English. However, grade school students looking to study in PSHS are taught using a Mother Tongue-Based Multilingual Education (MTB-MLE) system, due to the K-12 curriculum implemented in the Philippines since 2012.



1.2. Mother Tongue-Based Multilingual Education

Foreign language learning can be challenging when handled incorrectly, especially for those who only speak their native language (Ganschow & Sparks, 2009). Since the 1950s, the United Nations Educational, Scientific and Cultural Organization (UNESCO) has been advocating for a system for children to learn using the language they know best (UNESCO, 1953). This came with the introduction of MTB-MLE, in which students are taught using their mother tongue (Trammel, 2016).

MTB-MLE promotes better preservation of a country's native languages while also allowing equal opportunities for its students to learn more effectively in reading, writing, and speaking (UNESCO, 1953). It also allows the students to integrate their language learning better or learn a different language. Studies show that foreign language learning may be directly linked to native language learning (Javorsky et al., 1998). This is important for students learning English, the language used in international relations, and multiple research articles (Cabigon, 2015). MTB-MLE is the system used for elementary education in the Philippines, according to the Enhanced Basic Education Act of 2013 or Republic Act No. 10533.

This does not mean that the system is foolproof. Studies have shown that MTB-MLE, while with its benefits, can harm its students' education due to inadequate implementation or ideological constraints (Tupas, 2014). One study showed that MTB-MLE might harm its students by reducing the students' amount of exposure to the English language and consequently decreasing their English proficiency over time (Namanya, 2017). Furthermore, studies show that the overall reception toward MTB-MLE is lukewarm at best, as some parents seem to prefer that their students are taught in English rather than their mother tongue (Burton, 2013). Still, it does not matter what system is preferred since the students would have to experience an adjustment period when transitioning to another school.

1.3. Adjustment Period

There are many transitions a student experiences when transitioning between educational levels (kindergarten, elementary, high school, and college), and their adaptation to the new pedagogy is their "adjustment period" (Sekar & Lawrence, 2016). There are many different instances where the student can adapt quickly, but multiple studies have shown that there can be adverse effects on a student's academic, social, and emotional performance when transitioning to college (Alipio, 2020; Sekar & Lawrence, 2016). One study found that a sudden pedagogical shift can negatively affect students' motivation (Courtney, 2017). Another stated that non-native English speakers could have a more manageable adjustment period if they had better English language proficiency (Andrade, 2009). However, the notion of "Unequal Englishes" challenges Andrade's study, where not all non-native English speakers will have the same English proficiency.

1.4. Unequal Englishes

"Unequal Englishes" refers to how various levels of English in the world are different from what is referred to as perfect English (Tupas & Salonga, 2016). Many factors, such as location, social class, and education, affect an English's ideologies or structure. A person with a privileged background may have more educated English than someone from a lower social class.

There may even be a correlation between "Unequal Englishes" and MTB-MLE regarding education as a possible factor. Since MTB-MLE uses the native language of the student to teach subjects, the method used to relate native words to English terms can be different based on the

language used. For example, a language like Hiligaynon may not fully explain words related to astrology compared to aquaculture and fishing (Joaquin & Suatengco, 2019). This means that the students may not properly understand some concepts due to their native language, leading to “Unequal Englishes.” These “Unequal Englishes” could be hard for students when adjusting to their new school’s pedagogy, especially in a science-oriented institution such as PSHSS, which requires students to understand complex scientific concepts.

The PSHSS uses an English-oriented approach to teach different subjects, such as Integrated Science. Instead of adopting an MTB-MLE approach, most topics are taught in English. According to some studies, there is a correlation between English proficiency and the academic performance and adjustment period of international students (Martiosyan et al., 2015; Andrade, 2009). This can be a problem for students from different backgrounds who might have a weaker performance due to their “Unequal Englishes.” Also, the abrupt shift from an MTB-MLE approach to an English-oriented approach for the students can cause them to experience some difficulties with adjusting to their new curriculum, especially when there are no implemented bridging programs to help the students (McGrath & Bailey, 2009).

In an attempt to understand these problems, some studies aimed to analyze the factors of the students’ adjustment period, but no study has focused yet on Philippine Science High School students or the transition to high school in general. Furthermore, these studies do not consider the effect of “Unequal Englishes” as a possible factor in the students’ difficulties.

1.5. Statement of Objectives

To address the problems mentioned above, this study aims to document the different levels of English represented within PSHS-MC SY 2021-2022’s 7th-grade batch (Batch 2027) and identify its effect on the students’ adjustment to the school’s curriculum. The students’ welfare, perception, and performance in English-oriented subjects were analyzed. Additionally, the study aims to examine the difficulties experienced by 7th-grade students with different social and economic backgrounds while adjusting to PSHS-MC. It also aims to identify the methods used by the students to better adjust to the English-oriented curriculum in PSHS-MC. Finally, the study aims to distinguish the English-oriented subjects in the curriculum that are most difficult to adjust to within the PSHS-MC adjustment period.

1.6. Significance of the Study

This study can be seen as significant to the overall curriculum of the Philippine Science High School System, especially regarding the student performance of 7th-grade students. The results obtained will give insight into the difficulties experienced by 7th-grade students adjusting to the curriculum by aligning it with the concept of “Unequal Englishes.” As stated earlier, there might be a problem in which students from PSHS-MC have difficulty adjusting to the curriculum based on their social or economic backgrounds. The results from this study can be used as a call to action for the PSHS-System to improve the current curriculum, allowing for a curriculum that creates an equal learning experience for all students, or even for other schools in the Philippines that use an English-oriented pedagogy. Teachers from the PSHS System might use the results in developing their teaching methods if they learn that an English-oriented class is less effective. Students from the batch interviewed for the study will understand the issues present in the curriculum to develop a plan to adapt more effectively. Future students of the PSHS System can also plan to adapt to the curriculum through further studies if they understand the difficulties and solutions experienced by the batch in question.

2. Previous Related Studies

However, there are some studies that do intend to understand the effect of the adjustment on a student's academic performance. As quoted by Sekar and Lawrence (2015), "Adjustment is the process of finding and adopting modes of behavior suitable to the environment or the changes in the environment". One of the most important adjustments for children is how they transition to different pedagogies of teaching styles. Relating to this, Evans et al. (2018) stated that the transition for high school students to a college setting may cause negative psychological effects on the student, such as anxiety. They aimed to properly analyze the effects of these adjustments, as "the students who can adapt or adjust to the needs of changing conditions can achieve high, while others lead miserable lives or prove as a menace to the society" (Sekar & Lawrence, 2015, p. 2). While both studies discussed adjustment and its effect on student performance, the mode of investigation was different. Evans et al. (2018) did not integrate investigative methods in their study, only utilizing previous research in a systematic review. Sekar and Lawrence (2015) aimed to analyze more commonly understood factors such as emotional, social, and educational adjustment using a survey. Evans et al., (2018) discovered that previous research already points towards anxiety or uneasiness being a factor in stunting the students' academic performance, while Sekar and Lawrence (2015) discovered that high school student's performance in their new curriculum is positively affected by how they adjust to it, whether emotionally, socially or educationally. For a curriculum such as the one used by PSHSS that puts importance on academic performance, these studies prove that there is a need for the school to integrate how their students adjust to their new pedagogy.

However, adjustment is not the only factor affecting academic performance, since English proficiency can also be a factor. Hwang et al. (2015) stated that students from different countries could have difficulty understanding their lessons due to their English proficiency. Thus, they suggested that there was a relationship between academic performance and language proficiency. They distributed a questionnaire to students in a university in Louisiana based on their interpretations of their English proficiency and academic performance and used statistical analysis to find a correlation between the two. Results showed that there was a positive correlation between academic performance and their perceived English proficiency, which affected how international students interact with others and their teachers. This may support an English-oriented approach, but the study also found that students who spoke more languages had better academic performances. However, there are important details that the study could not define. The study glossed over the research design and did not justify using a Likert Scale or a questionnaire in its methodology. In discussing the results, the researcher did not consider the students' previous learning styles compared to the college's curriculum in their performance.

While Hwang et al. (2015) used a population with multiple backgrounds and pedagogies before transitioning to college, one study standardized it using MTB-MLE. Namanya (2017) stated that MTB-MLE aims to improve the literacy rate of students from developing countries while also improving the fluency of multiple ethnic languages between people. Using the languages they already know helps them integrate their previously known concepts to better understand what they are learning. Furthermore, it can also help students become closer to their ethnic identity and appreciate their roots. However, this does not mean that MTB-MLE always benefits its students. Since MTB-MLE primarily uses mother languages when teaching, it can also decrease the students' exposure to English (Namanya, 2017). To better understand the effects of MTB-MLE on students, they used a standardized test between students taught in English and students taught in Tagalog and used inferential statistics to analyze the data. The results of the study concluded that there was indeed a negative effect of MTB-MLE on the English proficiency of students in the area. This notion of MTB-MLE's negative effect on

English proficiency may be one of the reasons why PSHSS wants to integrate more English use into its curriculum rather than adopt MTB-MLE better to prepare its students for the more international language.

Additionally, one study can connect the effect of different educations on English proficiency. Tupas and Salonga (2016) challenged the idea of “world Englishes” on the spread of English in the world by saying that the idea of “Unequal Englishes” is a more comprehensive and clearer concept to use. They stated that, even if English seems to be similar through different international contexts, “some Englishes are still more acceptable and privileged than others, thus reaffirming different forms of inequality between speakers of Englishes” (Tupas & Salonga, 2016, p. 2). They aimed to understand how people, specifically call center workers, interpret their use of language and how it relates to “Unequal Englishes.” Through interviewing the population in question, they discovered that the success of call-center agents in the Philippines could be attributed to their privilege in education. Because of their privilege, the call center agents are more used to other countries’ cultures and mannerisms, allowing them to utilize different types of English to adapt to the consumer base becoming more international. They stated that the previously stated privilege was due to American imperialism, in which “Philippine education was being re-engineered as the center of training for cheap labor” (Tupas & Salonga, 2016, p. 8). The study results support the idea that there might be some differences between language proficiency between public and private schools, as all the schools mentioned by the interviewee are usually considered elitist or private. Also, the discussion results align with how the PSHSS system allows students from different social classes and education to enroll in their schools, which means that other students may have different levels of privilege and “Unequal Englishes.” However, as the paper was only the first to show “Unequal Englishes,” it is still incomplete with its data. The study focused only on how adult Filipinos approach English, and while they did touch on educational privilege as a factor in “Unequal Englishes,” they did not include students’ perceptions of their English proficiency. Their sample size of 20 agents also might not have sufficiently represented call center agents in the Philippines.

While the studies were able to discover new ideas about student academic performance and English proficiency, they could not integrate their results into a particular curriculum, especially with the transition from grade school to high school education in mind. This is important since no current studies aim to understand this. Also, there is the underlying fact that the PSHSS curriculum has no current understanding or studies on the effect of different social and educational classes in “Unequal Englishes” on student performance and adjustment. Some studies were only focused on debunking contradictory claims on adjustment or did not hone in on a specific previous type of pedagogy to compare to current results. Another study that utilized a specific previous pedagogy could not properly isolate the factors that affected English proficiency. The studies could also not give sufficient backing to the methods used to collect data or were not transparent with the survey questions used. They could have benefitted by showing the list of questions to help the readers understand their approach. Finally, the studies that used statistical analysis could not present the data properly, lacking charts and graphs.

3. Methods

A qualitative research approach was more appropriate to implement in the study than a quantitative approach. Qualitative research methods can get the informants’ personal beliefs, opinions, and experiences better than quantitative methods (Hammarberg et al., 2016, p. 113). These methods were beneficial for the study since it aims to understand better how the students adjust to the PSHSS curriculum and how they perceive their English proficiency in their new

pedagogy; thus, there was a focus on experiences rather than a measurement of their academic performance, such as grades. Using these methods, the study was able to pinpoint the students' "Unequal Englishes" effect on their adjustment to the PSHSS curriculum. The results also functioned as feedback for PSHSS for adjusting their curriculum to suit the needs of their students better.

3.1. Research Questions

The study aims to understand how the students are affected and how they react to a change in their pedagogy, from an elementary school setting to the PSHSS curriculum, in regard to their English use. In line with this, the study asked interviewees about their experiences in their transition to studying at PSHS-MC:

- How do the students perceive the different schools' approach to English compared to PSHSS?
- What possible issues can a student experience when transitioning to a more English-oriented pedagogy?
- What possible solutions could be implemented to help the students adjust to the school more smoothly?

3.2. Research Procedures

The study used interviews and content analysis to gather qualitative data.

Interview. An interview involves communication between the interviewer and the interviewee to gather data (Hunn et al., 2000). They effectively get in-depth information about the interviewees' insights and experiences on a specific topic (Virginia Tech, n.d.). For the study, the interviews were held with current 7th-grade (Batch 2027) students of SY 2021-2022 or students who already experienced their 7th-grade adjustment period. The approach to the interview was semi-structured, where there were no direct questions, allowing the students to be more comfortable with answering more personally.

Specifically, the criteria for interviewees were that the students must be (1) from the main branch of the PSHSS or PSHS-MC and be in the 7th grade at the time of the interview, (2) from a lower-income household, characterized by Full Scholarship recipients, and (3) experienced difficulties adjusting to the PSHSS curriculum due to their language use. Students were purposively sampled from the eight 7th-grade sections of PSHS-MC through the use of an online survey. Purposive sampling is a form where the researcher will choose and contact possible data samples based on a set of criteria, usually through surveys (Alchemer, n.d.). It was used instead of systematic or random sampling since it is most effective in looking for data samples that fit a research objective, especially when said data is hard to find. The survey consisted of an online form that asks the students whether they fit the criteria above and if they consent to an interview.

The interviews were conducted through online video calling platforms like Google Meet and Zoom, depending on the preferences of the interviewees. They were asked about their experiences, troubles, and opinions on the effect of their English proficiency in their transition and adjustment to the PSHSS curriculum.

An interview guide was created to ensure that the conversation between the interviewer and interviewee is focused on gathering their experiences and opinions based on the research objectives, which included a set number of questions needed for initial data collection, and possible follow-up questions for a more integrated answer. Before the interview, a letter for the

request to be an interviewee and a consent form were sent to prospective 7th-grade students. Students from the 11th-Grade batch replaced students who did not consent to the interview. For students who consented to the interview, the video call platform and schedule for the interview were agreed upon based on the student's preference, and the video call meeting was to be recorded using the website's built-in recording function. During the interview itself, field notes were written based on their answers to the initial and follow-up questions. Finally, the recorded interview was transcribed, and the field notes were used as the basis to write the expanded field notes.

Due to how interviews are conducted, there is no guarantee that the data collected is kept confidential. To ensure that the data was protected as much as possible, the participants were reminded first that the data would only be used in the studies. Each participant had a distinct code name used in the expanded field notes and the content analysis. Lastly, all digital data was kept in an online file storage application that only the researcher could access. The data was deleted at the end of the study.

Content Analysis. Content analysis is a qualitative research method that looks for patterns of different concepts in a given set of qualitative data (Columbia Public Health, n.d.). This method allows the study to analyze the concepts' relationships and draw conclusions. For the study, the transcripts served as qualitative data, given that the 7th-grade students consent to using these papers for research.

A coding schedule consisting of key concepts was prepared to group parts of the qualitative data and connect them with each other to form an analysis of any patterns obtained (See Figure 1). It also included evidence to suggest its inclusion from the use of quotes from the transcripts. The general themes in the study were based on the three main factors in "Unequal Englishes" according to Tupas and Salonga (2016): location, social environment, and education. The study also had two main sections for their experiences, which were for before and during their transition and stay in PSHS-MC. This dichotomy would allow the study to get an idea of the transition period of the students. Both sections had the same themes for a consistent review.

Coding Schedule				
Code	No. of Appearances	Code names	Quotes	Notes
Previous School/Pedagogy				
Private School	4	A, B, C, D	A - "My previous school was a private school, yes." B - "As you know, we were from Elizabeth Seton School, which was a private school"	Private schools were more represented here due to time constraints Maybe it is because of the inherent bias towards English users, especially with the NCE? This also encompasses being a student in the first place, as that wasn't as important for the study
Public School	1	E	E - "Okay, so my elementary school was Manuel Luis Quezon. It was a public school located at Commonwealth, Quezon City"	Public school interviewees not present, but the answers for all are similar
English as a social status	3	B, D, E	B - "There is a Filipino mindset that you have to know English well so that, for example, you can get a good job. It can help you in your school din. After your academic life, there's an expectation that it helps you in your job, your career."	Connection between social status and English Proficiency in the Philippines
Globalization of English	3	A, B, E	A - "ESS is a business-oriented school, so they want the students to use English more to prepare them for the global market." E - "They want us to speak with the world-wide English."	Global Englishes vs Unequal Englishes idea from Tupas & Salonga Use of English in the global market, or schools wanting the best for their students?
Enforced english policy	3	A, B, D	B - "Even in preschool, they already used, like, English as the only language at that time in the	Present through most of the private school

Figure 1. Sample of the Coding Schedule

For the first coding cycle, initial coding was implemented first to group segments of the transcripts with each other (Saldaña, 2013). The study implemented affective methods such as emotion and values coding to better understand the students' personal experiences, such as using personal concepts like their experience of uneasiness as labels. Other concepts that may serve as the labels include the difference in English use, difficulty in adjusting to PSHSS, privilege, and "Unequal Englishes." As it was the Initial Coding cycle, however, some of the codes were specific, and some did not add to the study, which is why they were removed for the second cycle of coding.

For the second cycle of coding, pattern coding was used. Pattern coding uses the initial coding codes and groups them into more cohesive themes (Saldaña, 2013). That way, the study could identify the patterns supporting the research question. As stated earlier, codes which were irrelevant to the main themes were removed. They were then grouped into the themes of "Unequal Englishes" previously mentioned. The coding schedule was used to analyze all transcripts for more cohesive results.

Then, a coding sheet was used to tabulate the occurrences of each of the codes from the coding schedule. The codes were further categorized into general themes to simplify the data. From this analysis, the study inferred the patterns and interpretations of the results.

4. Results and Discussion

Five participants were chosen for the interview from those who answered the online survey forms and accomplished the consent form. Due to time constraints, and the lack of willing 7th-grade students, students from the 11th-grade batch were also included in the study. 11th-grade students were chosen since they were of the same batch as the primary researcher, and have also experienced adjustment problems in PSHS. Furthermore, some follow-up questions were formulated only for the 11th-grade students regarding interaction with other batchmates, as the 7th-grade batch could not experience face-to-face interactions with each other. Considering the data set's composition, two students were sourced from the 7th-grade batch, and three from the 11th-grade batch.

4.1. Differences Between Pre-STEM High School English and STEM High School English

One of the major differences experienced by all the students is that PSHSS's curriculum is English-oriented. All students stated that most of the subjects are taught using English. Whereas the students' previous schools had a wider presence of Filipino use, even former Filipino-based subjects, such as "Araling Panlipunan", were changed to English as the instruction medium. As the so-called "Premier High School," there was reason to believe the school is English-dominant to follow the more globalized English. Many students of PSHS plan to take college courses abroad, which means that a good knowledge of English is advantageous. This aligns with Namaya's (2017) study on English exposure results.

However, the sudden change to using globalized English came with the participants feeling that there was a wide gap between the previous level of English use and PSHS's English. They described it as more educated and complex English, with increased technical STEM terms used in the curriculum. Furthermore, the students felt like there was an inherent bias towards English skills even in the entrance examinations, as there were no native language-based exams, and used English instead.

While the subjects are taught mainly using English and are strict with globalized English in academic outputs, the use of different forms of English was said to be more lenient with its students compared to their previous schools. Some of the students in the interview stated that

their previous schools enforced English-only policies while using some Filipino words in teaching is tolerated. This can be seen as an implemented adjustment method for its students also, allowing them to be more comfortable with speaking and getting them slowly used to the level of English required in the curriculum. Another reason is that PSHS accepts students nationwide, showing diverse Englishes from around the country.

4.2. The Students' Problems During the Transition Period and Unequal Englishes

One of the main problems experienced by the students during their transition was alienation from their batch. This could stem from the notion that is shared by some of the participants that Filipinos view using English as beneficial to their social status, possibly reinforcing that alienation. Other students also stated that their language use outside of their schools, which were mostly Filipino and Taglish-based (a combination of English and Tagalog used by younger Filipinos), gave them "culture shock," leading to difficult conversations between students. A student even said that since they were more used to speaking Filipino at home and before PSHS, they could not really speak to the students who only use English:

"I can add that as someone who had [a] difficulty in English, I was intimidated with the other students because of the stigma of English Users. I can't compete in English essay competitions currently due to some insecurities which made me lose confidence and affected my academic performance." (Student E, personal communication, June 27, 2022)

Students also experienced difficulties with tasks due to the hifalutin STEM words.

The fact of the students experiencing difficulties with conversing with other students and taking their examinations shows Unequal Englishes. Students who experienced a difficult adjustment period were represented mostly by students who live in provinces, have a "Full Scholarship," and come from private schools, which aligns with Tupas and Salonga's (2016) idea of culture, location, social classes, and education affecting the English of a student. Consequently, the level of English experienced by the students also affected how they adjusted to the curriculum, which aligns with Hwang et al.'s (2015) study.

One defining feature of the study was the effect of education on students' adjustment. Most of the students described PSHS-MC as a private school-dominant, composed primarily of students from private schools. One student added that this dominance affected the curriculum to "cater to the majority." One reason for this bias is due to private schools having more funding to give the students a better background in English beforehand, using globalized English in their curriculums and giving them a better adjustment period to PSHS-MC, while public school students experienced basic level of English and experienced more difficulties adjusting:

"I think that a lot of us are from private (schools). We had a pilot face-to-face class, and when I was going down from my car, I saw a lot of other students from my batch having really expensive cars and luxury bags. My parents commented that there were many private school students as well... Maybe because of the background or the way the previous teachers taught? Maybe their private school was teaching around the same level of English as Pisay. I heard some students studied at UP or LaSalle, so they had an equal level of English that gave them an easier time adjusting." (Student C, personal communication, June 27, 2022)

However, there are already plans in place to even the field for all PSHS-MC students. PSHS-MC implements the Entry Directions for Growth in Education (EDGE) program for 7th-grade students, a bridging program that focuses on catching everyone up to the level of academia PSHS-MC uses. Still, the EDGE program has only been implemented for two years, and the participants who experienced EDGE stated that there was more focus on science and math instead of the level of English use needed to survive the STEM high school curriculum.

4.3. Adjustment Methods and Possible Curriculum Improvements

Three main adjustment methods were stated for 7th-grade students currently trying to adjust to their curriculum. All students used credible resources such as the internet or books as their main adjustment method. The students also stated that continuous exposure to English through conversing with others allowed them to understand concepts much easier, and helped them get used to speaking the PSHS's level of English better. Al-Zoubi's (2018) study on exposure to English supported this idea, as they discovered that continuous exposure to English allows people to select the common phrases and words used around them.

Four solutions were addressed when asked how PSHS could minimize a difficult adjustment period for future students. First, the school could implement another bridging program such as the aforementioned EDGE that focuses on English use, to give the students a better idea of the required English level. Four participants also mentioned an entrance exam system incorporating the Filipino language, similar to the entrance exams in Philippine colleges:

"If we want to be [fairer], maybe it would be nice to actually have a Filipino portion in the National Competitive Exam [PSHS Entrance Examination]. I'm thinking of like, in UP, where the entrance exam has a Filipino portion too, so if Philippine Science High School is supposed to be one of the premier high schools of the Philippines, then why not follow in what the national university is doing? There is an inherent bias to those skilled in English." (Student B, personal communication, June 27, 2022)

For students already admitted to the system, the students recommended that the school hold supplemental classes for those experiencing difficulties, and to be more lenient with English use in the classrooms.

The leniency on English also extended to decreasing the weight of English in the overall grade for 7th-grade students. One participant expressed this concept brilliantly:

"From a nationalistic perspective, Filipino is part of our identity, and even in Grade 7, we see a bias toward English. In the grade weight, English has 1.3 units while Filipino has 1 unit. It makes you think that there's no "Philippines" in the "Philippine Science High School," no [right]?" (Student E, personal communication, June 27, 2022)

5. Conclusion and Recommendations

Based on the content analysis, there is evidence to suggest that Unequal Englishes play a role in the adjustment period of 7th-grade students, alienating themselves from their classmates and affecting their academic performance. Evidence also suggests that there is a need to implement more avenues for students to adjust to the school environment through bridging programs and supplemental classes. Thus, this study recommends that a larger sample size be used to understand better the study's population. Furthermore, it is suggested to further the study by discussing other possible factors of adjustment or perspectives of 7th-grade STEM high school English teachers on their students' adjustment situation and mechanisms, not only to improve the curriculum for its students, but for all of the school's constituents.

References

- Alchemer. (n.d.). *What is purposive sampling?* <https://www.alchemer.com/resources/blog/purposive-sampling-101/>
- Al-Zoubi, S. (2018). The impact of exposure to English language on language acquisition. *Journal of Applied Linguistics and Language Research*, 5(4). pp. 151-162.
- Andrade, M. (2009). The effects of English language proficiency on adjustment to university life. *International Multilingual Research Journal*, 3(1), pp. 16-34. <https://doi.org/10.1080/19313150802668249>
- Bailey, S., & McGrath, I. (2009). *Bridging programmes: Preparation for undergraduate study through the medium of English*. CfBT Education Trust. <https://www.educationdevelopmenttrust.com/EducationDevelopmentTrust/files/9f/9f81a69e-4af6-4f89-9cb3-3b924cf43314.pdf>
- Blokhin, A. (2021). *Simple random vs. systematic sampling?* Investopedia. <https://www.investopedia.com/ask/answers/071615/when-it-better-use-systematic-over-simple-random-sampling.asp>
- Burton, L. (2013). *Mother tongue-based multilingual education in the Philippines: Studying top-down policy implementation from the bottom up* [Doctoral dissertation, University of Minnesota]. University of Minnesota Digital Conservancy. <https://hdl.handle.net/11299/152603>
- Cabigon, M. (2015). *State of English in the Philippines: Should we be concerned?* British Council. <https://www.britishcouncil.ph/teach/state-english-philippines-should-we-be-concerned-2>
- Colombia Public Health. (n.d.). *Content analysis*. <https://www.publichealth.columbia.edu/research/population-health-methods/content-analysis#:~:text=Courses-,Overview,words%2C%20themes%2C%20or%20concepts>
- Courtney, L. (2017). Transition in modern foreign languages: A longitudinal study of motivation for language learning and second language proficiency. *Oxford Review of Education*, 43(4), pp. 462-481. <https://doi.org/10.1080/03054985.2017.1329721>
- Evans, D., Boriello, G., & Field, A. (2018) A review of the academic and psychological impact of the transition to secondary education. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2018.01482>
- Ganschow, L., & Sparks, R. (2001). Learning difficulties and foreign language learning: A review of research and instruction. *Language Teaching*, 34(2), pp. 79-98. <https://doi.org/10.1017/S0261444800015895>
- Ganschow, L., Javorsky, J., & Sparks, R. (1998). Foreign language learning difficulties: An historical perspective. *Journal of Learning Disabilities*, 31(3), pp. 248-258. <https://doi.org/10.1177/002221949803100304>
- Hammarberg, K., Kirkman, M., & De Lacy, S. (2016). Qualitative research methods: When to use them and how to judge them. *Human Reproduction*, 31(3). pp. 498-501. <https://doi.org/10.1093/humrep/dev334>
- Hunn, A., Fox, N., & Mathers, N. (2000). Using interviews in a research project. In Fox, N. (Ed.), *Research Approaches in Primary Care* (pp. 113-134). Radcliffe Medical Press; Trent Focus. https://www.researchgate.net/publication/253117832_Using_Interviews_in_a_Research_Project

- Hwang, E., Martirosyan, N., & Wanjohi, R. (2015). Impact of English proficiency on academic performance of international students. *Journal of International Students*, 5(1), pp. 60-71. <https://doi.org/10.32674/jis.v5i1.443>
- Joaquin, H. & Suatengco, R. (2019). Eco-translation of local knowledge in developing a trilingual glossary of fishing and aquaculture. *The Philippine Journal of Fisheries*, 26(1), pp. 44-54. <https://doi.org/10.31398/tpjf/26.1.2018-0003>
- Lawrence, A., & Sekar, J. (2016). Emotional, social, educational adjustment of higher secondary school students in relation to academic achievement. *I-manager's Journal on Educational Psychology*, 10(1). <https://doi.org/10.26634/jpsy.10.1.7070>
- Namanya, S. (2017). The effects of mother tongue-based multilingual education on the English literacy of children in Silang, Philippines. *International Forum*, 20(2), pp. 160-177. https://www.researchgate.net/publication/337855312_THE_EFFECTS_OF_MOTHER_TONGUE-BASED_MULTILINGUAL_EDUCATION_ON_THE_ENGLISH_LITERACY_OF_CHILDREN_IN_SILANG_PHILIPPINES
- Philippine Science High School System (n.d.). *About the PSHS system*. <http://www.pshs.edu.ph/transparency-seal/about-us/the-pshs-system>
- Saldaña, J. (2013). *The coding manual for qualitative researchers*. SAGE Publications.
- Salonga, A., & Tupas, R. (2016). Unequal Englishes in the Philippines. *Journal of Sociolinguistics*, 20(3), pp. 367-381. <https://doi.org/10.1111/josl.12185>
- Trammel, K. (2016). What approaches have been proven effective for managing the use of two or more languages in a bilingual/multilingual curriculum? In B. Truddel & C. Young (Eds.), *Good answers to tough questions in mother tongue-based multilingual education* (pp. 39-45). SIL International. https://www.sil.org/sites/default/files/files/sil_2016_good_answers_to_tough_questions_0.pdf
- Tupas, R. (2014). Inequalities of multilingualism: Challenges to mother tongue-based multilingual education. *Language and Education*, 29(2), pp. 112-124. <https://doi.org/10.1080/09500782.2014.977295>
- UNESCO. (1953). *The use of the vernacular languages in education* (Vol. 8). UNESCO.
- Virginia Tech. (n.d.). *Research methods guide: Interview Research*. <https://guides.lib.vt.edu/researchmethods/interviews>

Appendix A*7th Graders (B2027) Philippine Science High School Main Campus Interview Guide*

Archival #:

Site: Online Chat Platform (Zoom)

Interviewer: Filbert Joseph A. Ubanos

Interviewee:

Date:

Start:

End:

Opening Statement: Start: Good (Morning/Afternoon), (name)! Thank you so much for your interest in my study. Please do not hesitate to tell me if some of my questions are uncomfortable for you. This is a safe space and I will make sure that the interview process goes smoothly.

(Question 1)

Tell me about your experiences learning English in your previous school. How was English used for your curriculum, other than the Filipino language subjects? How would you describe your language use with your classmates outside of the class? How did those experiences differ when studying at PSHS-MC?

(Question 2)

What problems with language use and “fitting in” adjusting did you face when you were transitioning to PSHS-MC? Was there any moment in which you felt alienated from the batch or the curriculum due to your language use? How did you deal with those problems?

(Question 3)

How different was the English used in your school compared to how it was used in PSHS-MC? What are some patterns in English use you noticed with the subjects, teachers, and other students between these schools?

(Question 4)

Let's go back again to your answers in the Google Form. I see that for the first question, you rated yourself as _____. Why is this the case? (Repeat for the second rating question)

(Question 5)

What do you think this school could have done differently in its curriculum to better help its students adjust to PSHS-MC's English-oriented curriculum?

Appendix B*Completed Coding Sheet*

Coding Sheet			
Unequal Englishes	Initial Codes	Description	Number of Occurrences
LSC	NEA	Most participants did not use as much English away from school	4
	PRO	Students who experienced Difficulties were more likely to be in Provinces	2
	PUB	Represented by public school students	2
SCS	ESS	Culture for Filipinos to see English use as a “social status”	3
	FSC	Full Scholarship represented when students had some difficulties	3
EDU	PSHS CURRICULUM AND APPLICATION PROCESS		
	CPE	Apparent complexity in the English use of PSHS	5
	GLE	“Gap” between the levels of English at the previous school and PSHS	5
	EOS	English-oriented curriculum	5
	LFR	Less Filipino Representation in the curriculum	5
	LEU	Leniency with English use in the classes	4
	BNT	Biased Entrance examinations to English skill	4
	DOM	Private-school dominant	4
	DEU	Diverse Englishes in the curriculum due to the nature of the school itself	2
	PHS	PSHS considered as a “Premier High School”	2
	PRIVATE SCHOOL STUDENTS’ ADVANTAGES		
	BAC	Good background in English beforehand	4
	ENF	Enforced English Policies in Curriculum	4
	EAS	Easy transition to the PSHS curriculum	3
	RIC	“Richified” or educated English	3
	GLO	Use of Globalized English in curriculum	3
	NAL	No alienation due to higher representation	3
	PUBLIC SCHOOL STUDENTS AT A DISADVANTAGE		
	NOE	Noticed difficulties in students who were also in public schools previously	4
	MUF	Students are more used to using Filipino in school	4
	DIF	Difficult transition to the PSHS curriculum	3
	BSO	Use of basic Englishes only when teaching	3
	ALI	Alienation due to English skills	3
ADJ	EMPLOYED ADJUSTMENT METHODS DURING SCHOOL YEAR		
	CRE	The use of credible resources such as the Internet or books	5
	EXP	Continuous exposure to the language of English	4
	PRO	Consulting different professionals, such as teachers or classmates	4
	SUGGESTED WAYS TO EASE ADJUSTMENT		
	BRD	Implementing Bridging programs such as EDGE that focus on English use	4
	FEN	Filipino-based Entrance exams for those out of NCR to make it more equal for the students, like in the UPCAT	4
	LWE	Leniency with English use in the classrooms	4
	SUP	Supplemental Classes for students having difficulties	3