Cross-lingual Transfer of Literacy Skills Among Pupils Speaking Same and Different Home and School Languages

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This study sought to (1) investigate whether crosslingual transfer occurs in the vocabulary knowledge (VK) and listening comprehension (LC) skills of pupils with the same home and school language (SHSL) and pupils with different home and school languages (DHSL) and (2) identify which skills are transferable across languages.

Quantitative data were collected through the Vocabulary Knowledge Test (VKT) and Listening Comprehension Test (LCT) in Hiligaynon, Filipino, and English. These were pilot tested with two groups of Grade 1 pupils comparable with the actual participants. Data gathering covered three grading periods following the Department of Education academic calendar. The t-test was used to determine which group performed better in the VKT and LCT in MT-Hiligaynon, Filipino, and English.

Data analysis revealed that VK sub-concepts and LC skills can be transferred across languages. The SHSL group performed better than the DHSL group in MT- Hiligaynon and English VK while DHSL pupils performed better than the SHSL pupils in Filipino VK. In the LCT, the SHSL pupils performed better than the DHSL pupils when the data were treated inferentially. Based on these findings, it can be inferred that home language is not the only major variable in learning other languages after the L1.

Keywords: cross-lingual transfer, MTB-MLE, Literacy Skills

Introduction

The local language of the community may positively or negatively impact the language education of beginning learners thus, lifelong planning will be achieved when it is planned using the local language and culture (UNESCO, 2002). The emphasis on using the local language or language of the community is backed up by studies which claim that "students tend to understand more when instruction is in the language that they know better and when the text they are reading deals with culturally recognizable content" (Rueda, 2011, as cited in Kamil et al., 2011). When the mother tongue is promoted in school, the concepts, language, and literacy skills in the majority language can be transferred to the home language (Benson, 2004; Cummins, 2001). More recent research studies on the use of mother tongue yield positive results in understanding concepts and learning another language (Dekker & Walter, 2008; Villalba, 2013).

Recognizing the advantages and effectiveness of using one's mother tongue as a medium of instruction at the basic education level, the Department of Education issued DepEd Order No.74, s. 2009, otherwise known as Institutionalizing the Mother Tongue-Based Multilingual Education. This educational reform recognizes the use of the child's mother tongue (MT) as an effective medium of instruction in the primary grades and affirms the role it plays in learning other languages. Along with the implementation of the MTB-MLE program, the Department of Education came up with partial recommendations which currently acknowledges 19 official MTs for the program.

However, Nolasco (2013) reiterated that most of the Filipino learners will be at a disadvantage since there are 170 documented languages in the Philippines compared to the number of languages used as media of instructions in schools. With the current 19 official languages being used as media of instruction in a linguistically diverse country like the Philippines, some learners are put at a disadvantage when they go to school because they do not speak the prescribed language of instruction. This implies that there are Filipino learners who may need to take the longer path in order to achieve the competencies in the primary grades because of the language mismatch. Thus, this study aimed to examine how Grade 1 pupils with the same home and school language (SHSL) and with different home and school languages (DHSL) transfer their vocabulary and listening comprehension skills from their mother tongue to other languages.

In Grade 1, the common skills that cut across the three languages are vocabulary development and listening comprehension. Vocabulary knowledge is associated with comprehension-- "it is the glue that holds stories, ideas and content together... making comprehension accessible for children." (Rupley, et. al, 1998-1999, p. 117). It influences listening comprehension. As soon as learners hear a word, phrase or sentence, they associate the word/s that they recognize to its intended meaning which leads to comprehension. However, if learners have insufficient vocabulary knowledge, they are likely to encounter difficulties in putting meaning to the word/s they hear, thus hampering comprehension. Sufficient vocabulary knowledge promotes proficiency that can be developed through participation in explicit visual and aural vocabulary activities that familiarize and build the learners' vocabulary in the target language.

The implementation of the MTB-MLE in Philippine schools encourages the use of the child's mother tongue as a medium of instruction in the primary grades with the assumption that one's proficiency in L1 can become a good bridge in learning other languages. This means that the learners can take advantage of the literacy skills that they have in their L1, specifically word decoding, spelling, reading comprehension, phonological awareness, receptive vocabulary, and listening comprehension (Sparks et. al, 2009) which will contribute to their L2 written and spoken literacy abilities.

According to Koda (1998, p.9) "The central assumption underlying the cross-linguistic approach is that L1 experience embeds habits of mind, instilling specific processing mechanisms, which

frequently kick in during L2 reading." Thus, transfer can take place from L1 to L2 provided that the learners have sufficient literacy skills, established background knowledge and authentic experiences, and adequate vocabulary knowledge. Conversely, the learners' lack of those basic skills may impede transfer. Therefore, one's proficiency in L1 influences their proficiency in L2 or the other way around.

The SHSL and the DHSL pupils in this study were assumed to most likely achieve the same learning competencies but through different paths. This assumption is made more comprehensible by Malone and Malone (2011) through a visual representation of learners. Those who speak the language of instruction at the beginning of schooling is represented by a straight line which means that learners may engage and learn faster in the learning environment because they are familiar with the language. On the other hand, learners who do not speak the language of instruction when they begin school is represented by a step-by-step, stair-like path. This suggests that learners who are familiar with the language of instruction learn faster and better than those who are not familiar with the language. Thus, the familiarity with the mother tongue/home language gives the learners the access to learn another language faster. This is confirmed by an article published by UNESCO (2002), which emphasizes the importance of having one's primary language as the language of instruction in schools and reports that children who have mismatched home and school languages are likely to drop out of school or fail in the early grades.

Review of Related Literature

Theoretical Framework

This study drew theoretical support from Cummins' Developmental Interdependence Hypothesis and Threshold Theory.

The Developmental Interdependence Hypothesis acknowledges that learning other languages (aside from one's mother tongue) is possible because of a Common Underlying Proficiency (CUP). There are proficiencies in L1 and L2 that overlap and are common across languages. Thus, any development of CUP in any language can have a valuable effect on other languages. Cummins (2000) adds that knowledge of ideas and concepts in one's first language builds up the transfer of the same knowledge to another language.

The Threshold Theory, on the other hand, suggests that learners must reach a certain point of competence in their first language for them to learn another language. Therefore, the transfer of skills from L1 to L2 happens only when the learner reaches a certain proficiency threshold.

Cross-lingual Transfer of Literacy Skills

The most effective language for early literacy and content area instruction is the child's first language which is the most familiar language to them (Dutcher, 1994; Benson, 2002). Research has shown that children's first language is the optimal language for literacy and learning throughout primary school (UNESCO, 2003). However, Ball (2011) reports that the majority of young children learn different languages at home and in school. Children whose primary language is not the language of instruction in school are more likely to drop out of school or fail in early grades. This linguistic disparity may hinder or facilitate their learning of another language. The World Bank (2005) recognizes the status of the child's first language as the language of learning and believes that when there is a mismatch in the language of learning and language of instruction, surely, learning difficulties follow.

The key to learning another language or any content material depends on the child's understanding of the language. Cummins (2000) states that "children with a solid foundation in their mother tongue develop stronger literacy abilities in the school language. Children's knowledge and skill transfer across language from the mother tongue to the school language."

The child's first language influences the learning of another language. Hence, languages

which display lexical similarities with the first language can be learned easily. In like manner, second language learners are more confident and driven if they recognize something familiar in the new language (Mingorance, 2010). This is consistent with Yanilla-Aquino's (2005) research findings which support the transfer of literacy skills from L1 to L2. This also finds support in Cummins's hypothesis that "a student's L1 is a powerful resource for learning other languages."

Liu (2000) defines linguistic transfer as what learners have grasped from their native language which will support them to learn and use a target language. Cross-linguistic transfer can take place from the first language (L1) to the second language (L2). Previous research has shown that linguistic transfer is dependent on the levels of proficiency in the two languages as well as the distance between the languages and orthographies under consideration (Verhoeven, 2011).

This idea is anchored on the developmental interdependence hypothesis developed by Cummins which states that "some aspects of linguistic proficiency are cross-lingual. This means that for those aspects of literacy which are interdependent across languages, instruction in one language will benefit both languages" (Cummins & Swain, 1986 p. XVII). Furthermore, with adequate exposure to the target language and sufficient motivation to learn the language, L1 proficiency may transfer to L2.

School Performance of Children with Mismatched Home and School Language

Language, being the mediator of the learning process, holds a significant role in the school performance of learners, as human activities occurring within cultural contexts are mediated through language (Steiner & Mahn, 1996). Although most research on second language acquisition found a direct causal relationship between home language and poor academic performance, Agirdag and Vanlaar (2016) claim that the amount of exposure to the school/target language and ethnicity can also be considered as factors. Thus, the quality of education does not depend on language of instruction alone.

Trudell (2016) enumerates a few elements to accomplishing quality instruction that can prompt better scholarly execution of multilingual students in rudimentary grades. These parts are: (1) instructor related parts, like actual presence in the classrooms and capability in both instructional method and content; (2) educational program related factors, for example, the quantity of subjects to be implemented in a given year, the time given to the various subjects, and the length of the school day and school year; (3) compelling school authority; (4) learning spaces such as conducive classrooms, tables and seats; (5) appropriate instructional materials are given to educators and students, and are accessible at different levels; (6) the physical, mental and passionate wellbeing of the learning climate; and (7) financial variables influencing parental wellbeing, nourishment and backing.

A study conducted by Craig et al. (2009) reveals that students who use a different home language but learned to use the school language in literacy activities performed better than the members of the other group who have not developed their linguistic skills. Thus, when students with a different home language learn to use and comprehend the school language which is used in assessment, they will perform better.

It is necessary then for teachers to be aware that their spoken and written competence in one or more languages may influence their learners' performance. The teacher's power in the classroom acknowledges the importance of recognizing various home languages used by the learners in order to avoid potential mismatches.

Role of Vocabulary Knowledge and Listening Comprehension in Literacy Development and Cross-lingual Transfer

One's vocabulary knowledge predicts their written and spoken performance. One cannot comprehend texts without knowing the meaning of words (Lesaux, et al., 2010). Vocabulary learning is not only cultivated in formal instruction. It is enhanced through reading and interacting with a more skilled adult during language use in informal situations such as playing, eating, doing chores, and participating in other social events (Beals & Tabors, 1995).

Listening is the initial medium of learning and serves as a foundation for speaking, reading, and writing. It is the foundation of reading comprehension because both share the same skills, processes, and principles. "Listeners and readers use both schema and experience, and text information to construct meaning" (Wray & Medwell, 1991, p. 100). Vandergrift and Goh (2009) argue that when listening, people draw on the following knowledge sources: linguistic knowledge, pragmatic knowledge, and prior (experiential) knowledge. The linguistic source, represented by semantic, phonological, and syntactic knowledge of the target language, is the fundamental source which enables the listeners to assign meaning to the sound stream of the connected speech.

Various studies have established the relationship between vocabulary knowledge and literacy development. According to these studies, a text becomes incomprehensible when the reader lacks enough vocabulary knowledge to make sense of what it means. Hoff (2001) identifies two factors that affect a child's vocabulary: (1) the amount of speech addressed to them by adults during natural situations and (2) the child's phonological memory skill.

A large vocabulary size is required for language use. However, second language learners do not need to have the same amount of vocabulary as the native speakers. They only need a considerable amount of vocabulary in order to communicate. An ample amount of vocabulary to be used in communicating with their classmates, parents, or someone they meet is what second language learners need such as basic greetings, common verbs, nouns, and adjectives. Anderson and Freebody (1981) identify two types of vocabulary knowledge. These are breadth of knowledge and depth of understanding. The former is defined as the quantity of words a person knows and the significant aspects of its meaning while the latter is the quality of understanding the given words.

Aside from vocabulary knowledge, listening comprehension is an important skill to develop in the early years. It is an active process which involves interpretation and construction of meaning based on one's schema on a topic (Dymock, 2007). It is a "unique concurrent predictor of reading comprehension and word recognition than semantic composite" (Nation & Snowling, 2004, p. 354). Word meaning and reasoning with verbal concepts are processes involved in listening comprehension. For children to enhance their listening comprehension skills, they need to participate in meaningful listening activities.

Listening models based on L1 argue that there is just one aim in listening: understanding the aural message. However, the L2 model must recognize that L2 listeners may have another purpose in mind as they listen: learning. L2 listeners want to grasp the message, but they also want to use listening to improve their listening skills and overall language competency (Richards, 2015).

As listening becomes a more active activity for second language learners, they are more likely to pay attention to communications. Although L2 listeners' processes are similar to L1 listeners', there are impediments to comprehension. There are also additional processes that L2 listeners must perform, making listening in a second language a tough undertaking (Richards, 2015).

According to O'Malley and Chamot, there are significant differences between effective and poor listeners in terms of checking understanding, embellishing, and inferencing (1990). They claim that effective listeners use both top-down and bottom-up approaches. Ineffective listeners, on the other hand, employ the bottom-up technique.

Alonzo et al. (2016) reports that vocabulary size and the ability to repeat phrases and sentences listened to are predictors of listening comprehension in Grade 2. Since vocabulary is a strong predictor of listening comprehension (Florit et al., 2014; Kim, 2015), having a broad vocabulary knowledge would significantly advance one's listening comprehension performance. The learners' ability to accurately repeat phrases in kindergarten confirms the findings that sentence imitation at a young age is one of the indicators of reading comprehension. (Adlof et al., 2010; Alloway & Gathercole, 2005; Badian, 1982; Scarborough, 1998).

As Nation (2001) points out, the relationship between reading comprehension and vocabulary is bidirectional and intertwined. As a result, L1 vocabulary may have a major impact on L2 (Ringbom, 2007; Swan & Goswami, 1997). The learners' amount of vocabulary knowledge in their mother tongue may support or hamper their ability in learning additional language/s. In addition, Swan and Goswami (1997, p.197) state that "the mother tongue can influence the way second language is learned, the way it is recalled for use, and the way the learners compensate for lack of knowledge by attempting to construct complex lexical items."

Consequently, vocabulary knowledge influences better listening comprehension and eventually leads to better reading comprehension performance. Highlighting the importance of vocabulary knowledge and listening comprehension in obtaining other literacy skills together with the formal and informal teaching of these should start in the pre-kindergarten stage.

Methods

Participants

A total of 197 pupils participated in this study: 96 (49 male and 47 female) from the Hiligaynon-speaking group; 101 (51 male and 50 female) from the Kinaray-a-speaking group. Random sampling was used to select the 20 pupil-participants from each participating school to form the two groups of pupils. From this number, 160 pupils were randomly chosen to be part of the study. Community A had 42 boys and 38 girls while Community B had 37 boys and 43 girls. Although the study only needed 80 pupils for each community, all the Grade 1 pupils were given the Vocabulary Knowledge Test (VKT) and Listening Comprehension Test (LCT) for three grading periods in order to maintain the natural classroom routine and avoid discrimination issues among pupils and parents.

Research Instruments

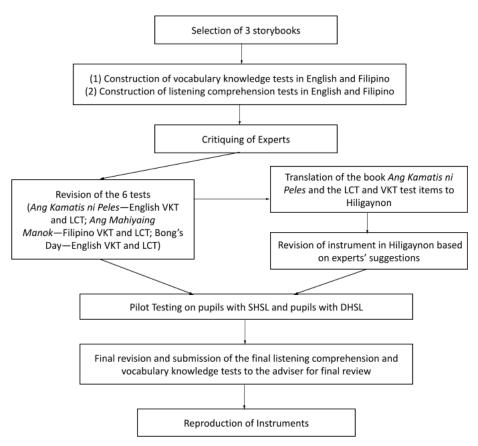
To identify which group of pupils performed better in vocabulary knowledge in Hiligaynon, Filipino, and English, a ten-item Vocabulary Knowledge Test (VKT) was developed by the researcher. Another 15-item Listening Comprehension Test (LCT) in Hiligaynon, Filipino, and English was developed by the researcher to gauge which group of pupils performed better in the said literacy skill. Both tests were taken by all the 160 Grade 1 pupil-participants every ninth week of the first, second, and third grading periods, respectively.

In the MTB-MLE Curriculum, vocabulary knowledge assesses the pupils' knowledge in knowing the meaning of a given word (noun, verb, adjective, or preposition) as it is used in a particular context. Listening comprehension test evaluates the pupils' ability to understand a statement or a story heard by accurately responding to the questions given by the teachers or their fellow pupils.

Figure 1 shows the process in constructing the vocabulary and comprehension tests in three languages that were used at the end of each quarter. It began with securing the approval of the Division Superintendent, the principal of the respective schools for pilot testing and data gathering as well as test construction, translation to Hiligaynon, revisions and printing of the final instruments for data gathering.

Figure 1

Process in Constructing the Vocabulary and Listening Comprehension Tests



Note: This figure shows the process of constructing the three sets (in Hiligaynon, Filipino, and English) of vocabulary and listening comprehension tests.

Data Gathering

The Grade 1 teachers themselves conducted the storytelling sessions and administered the tests as suggested by the district supervisors of the two communities and to ensure a natural classroom set-up. An orientation on how to conduct the listening comprehension and vocabulary knowledge tests was done by the researcher to ensure the validity and reliability of the tests. A written procedure was also prepared and made available as a guide for the teachers. This served as an avenue for the teachers to ask questions in relation to storytelling procedures and come up with a uniform approach using the big book. A big book is a bigger version of a storybook used in storytelling for bigger groups or a class. The researcher served as the teacher's assistant during the actual test administration.

Data Analysis Procedure

The quantitative data which included the listening comprehension and vocabulary knowledge test results were analyzed by computing the mean scores and the standard deviations of a particular

category in the Vocabulary Knowledge Tests and Listening Comprehension Tests in Hiligaynon, Filipino, and English. The vocabulary concepts common across the three languages such as people, objects, animals, and environment were coded and paired with the number of correct and incorrect responses of the Grade 1 pupils from Communities A and B. The same procedure was followed in processing the results of the Listening Comprehension Tests covering five common skills namely: noting details, predicting outcomes, sequencing events, relating one's own experience, and inferring traits.

The mean scores of each group in the three grading periods were compared and analyzed. Transfer was assumed when the pupils' performance in the second grading period was better than the first grading period and their performance in the third grading period was better than the first and the second grading periods. Differences in this observation were used as bases for inferences made in relation to the assumed cross-lingual transfer or "gain" (Lambert & Freed, 1982; Maher, 1991).

Findings

To answer the research question on the vocabulary knowledge and listening comprehension skills transferred by (1) pupils with same home and school languages (SHSL) and (2) pupils with different home and school languages, a total of 197 Grade 1 pupils took the Vocabulary Knowledge Test (VKT) and Listening Comprehension Test (LCT) administered on the ninth week of the first three quarters in order to maintain the natural classroom routine and avoid discrimination issues among pupils and parents.

Vocabulary Knowledge Transfer in Three Languages

Both groups of pupils indicated transfer of vocabulary knowledge in the sub-concepts *animals* and *environment* from MT-Hiligaynon to Filipino, *people* from Filipino to English, and environment from MT- Hiligaynon to English. In other words, the same pattern was observed in the two groups' transfer of vocabulary knowledge concepts in all the word categories (animal, people, object, and environment). According to Swan and Goswami (1997), learners can recall the equivalent words from their L1 to L2 when they grasp the meaning of the new vocabulary and use it in context, thus helping them remember the term. This means that vocabulary learning is not only cultivated in formal instruction. It can be enhanced through reading and interacting in informal situations such as playing, eating, doing chores, and participating in other social events (Beals & Tabors, 1995).

Moreover, pupils with same home and school language were able to transfer the following listening comprehension sub skills: inferring traits from MT-Hiligaynon to Filipino; noting details, predicting, relating to one's experience, and sequencing events from Filipino to English; and noting details from MT-Hiligaynon to English. However, none of the subskills were transferred across the three languages.

On the other hand, pupils with different home and school languages showed transfer of the following listening comprehension subskills in three languages: noting details and relating to one's experience from MT-Hiligaynon to Filipino; predicting, relating to one's experience, and sequencing events from Filipino to English; and noting details and relating to one's experience from MT-Hiligaynon to English. It is interesting to note that the DHSL pupils consistently transferred the relating to one's experience subskill across the three languages, that is, from L1 (Mother Tongue-Hiligaynon) to L2a (Filipino), from L1 (Mother Tongue-Hiligaynon) to L2b (English), from L2a (Filipino) to L2b (English), and from L1 (Mother Tongue-Hiligaynon) to L2a (Filipino) to L2b (English).

These results are consistent with Cummins' (2000) position that knowledge of ideas and concepts in one's first language builds up the transfer of the same knowledge to another language. Certain aspects of what is learned in one language can be passed on to another language. For instance, the transfer of the same skills (predicting, sequencing events, and relating to one's experience) from L2a (Filipino) to L2b (English) in both the SHSL and DSHL groups may be attributed to what they know in Filipino. This is a confirmation that the learning of other languages is possible because of a Common Underlying Proficiency (CUP). According to Cummins' view, literacy-related skills involved in the CUP include conceptual knowledge, subject matter knowledge, reading skills, and composition writing skills. These skills may be developed through transfer from L1 to L2 when students are given sufficient exposure and motivation.

The most interesting finding shown is the strong non-transfer of listening comprehension subskills across the three languages by the SHSL pupils. This can be attributed to their level of proficiency in MT- Hiligaynon, Filipino and English. Although the group has an advantage because they are familiar with the school's language of instruction, it is possible that they have not yet reached the needed linguistic proficiency in their mother tongue in order for the subskill to be transferred to Filipino and English. In addition, their familiarity with MT-Hiligaynon could have limited their motivation to learn the language more.

On the contrary, the consistent transfer of relating to one's experience subskill across MT-Hiligaynon, Filipino, and English by the DHSL pupils may be partly attributed to their strong foundation in Kinaray-a, their mother tongue. The orthography and the proximity of the language distance between Kinaray-a and Hiligaynon as well as the learners' exposure, attitude, and motivation toward learning other languages may also be regarded as contributory factors.

Table 1

Comparison of Vocabulary Knowledge Test Scores of SHSL and DHSL Pupils

Languages	DHSL				SHSL		t	df	p
	М	SD	Ν	М	SD	Ν	_		
MT-Hiligaynon	7.862	1.847	80	8.175	1.448	80	1.191	158	0.235
Filipino	8.138	1.628	80	7.488	1.493	80	2.632**	158	*0.009
English	6.912	2.268	80	7.262	2.055	80	1.023	158	0.308

* *p* < .05

As reflected in the table, only the Filipino vocabulary test has a p-value of less than 0.05 (p = .009). This means that the DHSL pupils performed better in the Filipino-VKT compared to the SHSL pupils. On the other hand, the MT-Hiligaynon and English vocabulary tests had p-values higher than 0.05 (MT- Hiligaynon, p = 0.235, English, p = .308) which means that on the basis of the MT-Hiligaynon and English vocabulary knowledge concept tests, the SHSL pupils did better than the DHSL pupils.

Specifically, the better performance of the pupils in the SHSL community is reflected by their vocabulary knowledge concepts test mean scores in MT-Hiligaynon (SHSL = 8.175; DHSL = 7.862) and English (SHSL = 7.262; DHSL = 6.912). The results are consistent with those of other studies (Dumatog & Dekker, 2003; Nolasco, 2013; Dekker & Walter, 2008) indicating that having the same home and school languages leads to effective learning outcomes and eventually becomes a strong foundation in learning another language. This knowledge of ideas and concepts in a child's L1 builds up the transfer of the same knowledge to another language (Cummins, 2000).

The findings in the MT-Hiligaynon VKT suggest that pupils from the SHSL community have an advantage since Hiligaynon is their home language

and is also the language of their community. New Hiligaynon vocabulary may be acquired by these learners through their daily interactions not only in school but also at home.

Another significant finding of the study is that pupils in the SHSL community obtained a higher mean score in the English VKT compared to the DHSL students. To some extent, this can be attributed to the former group of pupils' exposure to English during their pre-school years which could have helped improve their vocabulary knowledge in English. Moreover, the prestige associated by parents with the use of English stays strong despite the implementation of the MTB-MLE program in the primary grades. A good command of the English language remains associated with good and highpaying jobs, thus making it a preferred language among parents. Interestingly, the SHSL pupils' English VKT mean score is higher than their Filipino score which means that they have a richer English than Filipino vocabulary.

A possible explanation to this is the fewer syllables used to form words that accomplish certain communicative intents in English. For example, counting and naming words in the English language are short and therefore easy to remember. Children often count in English since there are fewer syllables and pronunciation is easier. Common nouns and verbs in the said language also have shorter syllables than their Hiligaynon or Filipino counterparts, aside from the fact that children have gotten used to using some English terms since they started speaking.

Listening Comprehension Skills Transfer in Three Languages

A closer examination of the data presented in Table 2 shows that DHSL pupils performed better than the SHSL pupils in the Filipino Listening Comprehension Test (LCT).

Table 2

Languages	DHSL				SHSL		t	df	р
	М	SD	Ν	М	SD	Ν			
MT-Hiligaynon	8.96	2.415	80	9.138	2.115	80	0.488	158	0.627
Filipino	8.75	2.185	80	8.138	2.282	80	-1.734	158	0.085
English	8.65	2.29	80	8.062	2.388	80	-1.588	158	0.143

Listening Comprehension T-Test Results by Type of Pupils.

* *p* < .05

The DHSL pupils had a mean score of 8.750 while the SHSL pupils had 8.138 or a difference of 0.61. These data, when compared with the data in Table 1, show that the DHSL learners performed better than the SHSL learners in the Filipino Vocabulary Knowledge Tests. A difference of 0.65 in the average mean scores of the DHSL (8.138) and the SHSL (7.488) may be noted.

The DHSL learners whose L1 is Kinaray-a may have acquired sufficient L1 experiences that paved the way for their L2 vocabulary knowledge proficiency as seen in their performance in the Filipino VKT test. However, it cannot be purely attributed to their L1 literacy experiences since their familiarity and exposure to Filipino and Hiligaynon also occurred at a young age. The results of the Filipino LCT and VKT point to a possible connection between vocabulary and listening comprehension skills. According to Stanovich (1986), children are able to understand what they hear or read if they know more vocabulary words. The results may also be due to the DHSL learners' familiarity with the Filipino language because of their fondness of watching television shows dubbed in Filipino. The children's frequent exposure to the target language enables them to learn new words that facilitate their comprehension of the shows they watch. The DHSL pupils' remarkable performance in the Filipino test also suggests that it is easier to learn and understand Filipino as it is a syllabic language like Hiligaynon and Kinaray-a.

Looking closely at the data, it can be noted that the mean score of the SHSL pupils (9.138) is higher than that of the DHSL pupils (8.962) by 0.176. This can be attributed to the SHSL pupils' familiarity and exposure to Hiligaynon because they use the language at home, in school, and in the community. This replicates the findings of the Aguilar Experiment in 1952, indicating that students who were taught in their L1 (Hiligaynon) outperformed students who were taught in their L2 (English). Nevertheless, with only a minimal difference of 0.176, it is probable that the DHSL learners who speak Kinaray-a at home and in their immediate community can easily learn and use Hiligaynon through frequent exposure to local television, radio programs, and community newspapers that use the language.

The Kinaray-a speaking Grade 1 pupils' active participation in their MT-Hiligaynon classes was possibly facilitated by the lexical similarities of the two languages since L2 learners' ability to learn and use another language depends much on the resemblance between their first language and the target language (Best & Strange,1992; Flege, 1995).

In the English Listening Comprehension Test, the DHSL pupils performed better than the SHSL pupils. The difference of 0.588 in their mean scores shows that pupils from the DHSL group obtained a higher mean score (8.650) than the SHSL pupils who registered a mean score of 8.062. These findings are contrary to those of numerous studies (Villalba, 2013; Dekker & Walter, 2008; Benson, 2004; Cummins, 2001) on the significance of one's mother tongue in learning other languages. According to these studies, pupils who learned to read and write in their first language learn to speak, read, and write in a second and third language more quickly than those who were taught in a second or third language first. However, based on current data, it is

possible for pupils with different home and school languages to perform better than pupils who have the same home and school language if they are given sufficient exposure to the target language, proper motivation to learn the language, and a positive home literacy environment with dependable adults.

Conclusion and Recommendations

Based on the preceding findings, the following conclusions and recommendations are advanced:

1. Home language *is not the only major variable* in learning other languages after L1. Expanding the learners' vocabulary knowledge and engaging them in shared literacy activities are vital in achieving a strong L1 foundation which is necessary for skills to transfer across languages. Therefore, intensive training designed for parents and/or other adults at home, who can provide home literacy activities to children, seems to be necessary. It is important for the parents to realize that the home literacy environment they create for their children impacts their school performance.

2. In Grade 1, very limited vocabulary knowledge may be successfully transferred from Mother Tongue to L2a to L2b or L2c. A pattern may be observed in the vocabulary transfer of both groups. It seems that pupils first learned the animals and environment categories from MT-Hiligaynon to Filipino, people categories from Filipino to English, and environment categories from MT-Hiligaynon to English. Hence, if children read about things and activities that they are familiar with, they can easily connect with them based on their experiences and mastery of the language. Bilingual (in Hiligaynon and Kinaray-a) and multilingual books must be developed since these will be useful in developing the learners' interest in reading.

3. Prior to formal schooling, Grade 1 learners already have a vocabulary database in the language/s they are most comfortable with. With a minimum length of exposure to another

language aside from their own Mother Tongue, vocabulary knowledge transfer is possible from L1 to L2a, L2b or L2c. Consequently, the use of different social media platforms must be an avenue to the learners at home such as listening to local, national, and international news, reading and listening to stories in online and printed modalities, and other educational apps.

4. The amount of story reading adults and children engage in, as well as the story discussion that happens afterwards contributes to the development of the latter's listening comprehension skills. The exchange of ideas allows children to clarify and make associations between events and enriches their proficiency in vocabulary and listening comprehension. Thus, teachers, parents, and other adults in the family have to expose the learners to narratives at an early age that not only makes them familiar with basic story elements but also develops their listening comprehension skills. In addition, shared experiences such as discussion of the plot, characters, and events by the members of the family may contribute to the learners' vocabulary development in order for them to make connections between old and new information being presented to them.

5. Cross-language transfer among learners who have different home and school languages is possible if their parents and other adults at home assume an active role in literacy

References

Adlof, S. M., Catts, H. W., & Lee, J. (2010). Kindergarten predictors of second versus eighth grade reading comprehension impairments. *Journal of Learning Disabilities*, 43(4), 332–345. https://doi.org/10.1177/0022219410369067

Agirdag, O., & Vanlaar, G. (2016). Does more exposure to the language of instruction lead to higher academic achievement? A cross-national examination. *International Journal of Bilingualism*. https://journals.sagepub.comdoi/10.1177/ 1367006916658711 development such as providing literacy materials, creating avenues for literacy events such as storytelling and reading aloud, and becoming literacy models inside and outside their homes. Thus, having a positive literacy environment like providing books and other literacy materials, talking to them after school, and simply asking for their lessons may contribute to a pupil's good academic performance.

6. Aside from vocabulary knowledge, children also bring with them varied experiences as they enter the classroom. This study highlights the importance of prior knowledge/schema in listening comprehension through the DHSL pupils' transfer of the relating to one's experience skills from MT-Hiligaynon to Filipino to English. To such a degree, regular capability building and updating must be given to language teachers and teachers in the early grades through seminars and workshops that can help them become more effective inside the classroom especially in teaching MT-Hiligaynon, Filipino, and English. Various teaching strategies must also be taught in workshops and seminars on bridging the child's mother tongue and other languages. They must understand the objective behind the use of MT in the lower grades; it should be a "bridge" from home to school in order to better understand the concepts and learn the basic skills and gradually introduce the pupils to the L2 languages.

Aguilar, J. (1961). The language situation in the Philippines: Facts and prospects. *Philippine Journal of Education,* 46(6), 412-470. https://perj.wordpress.com/2010/09/10/v10001

 Alonzo, C. N., Yeomans-Maldonado, G., Murphy, K. A., Bevens, B., & Language, & Reading Research Consortium (LARRC) (2016). Predicting second grade listening comprehension using prekindergarten measures. *Topics in Language Disorders, 36*(4), 312. https://doi.org/10.1097/TLD.00000000000102

Alloway, T. P., & Gathercole, S. E. (2005). The role of sentence recall in reading and language skills of children with learning difficulties. *Learning and Individual Differences*, 15(4), 271–282. https://doi.org/10.1016/j.lindif.2005.05.001

Anderson, R. C., & Freebody, P. (1981). Vocabulary knowledge. In J. Guthrie (Ed.), *Comprehension and Teaching: Research Reviews* (pp. 77-117). International Reading Association.

Badian, N. A. (1982). The prediction of good and poor reading before kindergarten entry: A 4-year follow-up. *The Journal of Special Education*, 16(3), 309–318. https://doi.org/10.1177/002246698201600306

Ball, J. (2011). Promoting children's rights to use their mother tongue in early education [Paper Presentation]. Southeast Asia Ministers of Education Organization Conference on Education, Bangkok, Thailand.

Beals, D. E., & Tabors, P. O. (1995). Arboretum, bureaucratic and carbohydrates: Preschoolers' exposure to rare vocabulary at home. *First Language*, 15(43, Pt 1), 57–76.

Benson, C. (2002). Real and potential benefits of bilingual programs in developing countries. *International Journal* of Bilingual Education and Bilingualism, 5(6), 303-317.

Benson, C. (2004). The importance of mother tongue-based schooling for educational quality. UNESCO.

Best, C. T., & Strange, W. (1992). Effects of phonological and phonetic factors on cross-language perception of approximants. *Journal of Phonetics*, 20, 305-330.

Craig, H. K., Zhang, L., Hensel, S. L., & Quinn, E. J. (2009). African American English speaking students: An examination of the relationship between dialect shifting and reading outcomes. *Journal of Speech, Language and Hearing Research*, *52*(4), 839.

Cummins, J. (2000). Language, power, and pedagogy: Bilingual children in the crossfire. Multilingual Matters.

Cummins, J. (2001). Bilingual Children's Mother Tongue: Why is it important for Education? *Research Gate*. https://www.researchgate.net/publication/238698400

Cummins, J., & Swain, M. (1986). Bilingualism in Education. Aspects of Research, Theory and Practice (1st ed.). https://doi.org/10.4324/9781315835877

Dekker, D. E., & Walter, S. (2008, August 27). The Lubuagan Multilingual Education Program. [Paper presentation] Philippine House of Representatives, Sub-Committee on Basic Education, Sandiganbayan Complex, Batasan, Quezon City, Philippines. Dumatog, R. C., & Dekker, D. E. (2003, November 6-8). First language education in Lubuagan, Northern Philippines. [Paper presentation]. Conference on Language Development, Language Revitalization and Multilingual Education in Minority Communities in Asia, Bangkok, Thailand. https://www.sil.org/resources/archives/4909

Dutcher, N. (1994). The Use of First and Second Languages in Education: A Review of International Experience. World Bank.

Dutcher, N. (2003). Promise and perils of mother tongue education. Center for Applied Linguistics. http://www.eprpinformation.org/files/searching-forsolutions/language-education/promise-and-perils-ofmother-tongue-education.pdf

Dymock, S. (2007). Comprehension strategy instruction: Teaching narrative text structure awareness. *The Reading Teacher*, *61*(2), 161-167. https://www.csun.edu/~bashforth/305_PDF/305_ FinalProj/TeachingNarrativeStructureAwareness_RT_ Oct2007.pdf

Flege, J. E. (1995). Second language speech learning: Theory, findings, and problems. In W. Strange (Ed.), Speech perception and linguistic experience: Issues in cross-language research (pp. 233-276). York Press

Florit, E., Roch, M., & Levorato, M. C. (2014). Listening text comprehension in preschoolers: A longitudinal study on the role of semantic components. Reading and Writing, 27(5), 793–817. https://doi.org/10.1007/s11145-013-9464-1

Institutionalizing the Mother Tongue Based Multilingual Education (MLE). DepEd Order No. 74. Department of Education. (2009).

Kamil, M. L., Pearson, P. D., Moje, E. B., & Afflerbach, P. P. (Eds.)(2011). Handbook of Reading Research, Volume IV. Routledge.

Kim, H. S. (2015). Using Authentic Videos to Improve EFL Students' Listening Comprehension. International Journal of Contents, 11(4), 15-24. https://doi.org/10.5392/IJoC.2015.11.4.015

Koda, K. (1998). The Role of Phonemic Awareness in Second Language Reading. Second Language Research, 14, 194-215.

Lambert, R.D., & Freed, B. (1982). The Loss of Language Skills. Newbury House.

Hoff, E. (2001). Language and development (2nd ed.). Wadsworth.

Lesaux, N. K., Crosson, A. C., Kieffer, M. J., & Pierce, M. (2010). Uneven profiles: Language minority learners' word reading, vocabulary, and reading comprehension skills. *Journal of Applied Developmental Psychology*, 31(6), 475–483. https://doi.org/10.1016/j.appdev.2010.09.004

Liu, M. Y. (2000). Language development in the early years (ED446336).ERIC. https://files.eric.ed.gov/fulltext/ED446336.pdf

Maher, J. (1991). A crosslinguistic study of language contact and language attrition. In H. Seliger & R. Vago (Eds.), First language attrition (pp. 67-84). Cambridge University Press.

Malone, D. & Malone, S. (2011). Teacher Education for Mother -Tongue-Based Education Programs. Electronic Workpapers. SIL International.

Mingorance, A. Y. (2010). How to Deal with Language Transfer in the English Classroom. https://vdocuments.net/download/how-to-deal-withlanguage-transfer-in-the-english-

Nation, I. S. P. (2001). Learning vocabulary in another language. Cambridge University. http://catdir.loc.gov/catdir/samples/ cam031/2001269892.pdf

Nation, K., & Snowling, M. (2004). Beyond phonological skills: A broader language skills contribute to the development of reading. *Journal of Research in Reading*. 27(4), 342-356.

Nolasco, R. M. D. (2013, September 14). 'Castrated' MTB-MLE. INQUIRER.Net. https://opinion.inquirer.net/61025/castrated-mtb-mle

O'Malley, J. M., & Chamot, A. U. (1990). Learning strategies in second language acquisition. Cambridge University Press.

Richards, J. C. (2015). *Key Issues in Language Teaching*. Cambridge University Press.

Ringbom, H. (2007). Cross-linguistic similarity in foreign language learning. Multilingual Matters.

Rupley, W. H. Logan, J. W. & Nichols, W. D. (1998-1999). Vocabulary instruction in a balanced reading program. *The Reading Teacher*, 52(4).

Scarborough, H. S. (1998a). Early Identification of Children at Risk for Reading Disabilities: Phonological Awareness and Some Other Promising Predictors. In B. K. Shapiro, P. J. Accardo, & A. J. Capute (Eds.), Specific Reading Disability: A View of the Spectrum (pp. 75-119). York Press. Sparks, R., Patton, J., Ganschow, L., & Humbach, N. (2009). Long-Term Crosslinguistic Transfer of Skills from L1 to L2, Language Learning, 59, 203–243.

Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21(4), 360–407. https://www.researchgate.net/publication/230853161

Steiner, J. V. & Mahn, H, (1996). Sociocultural Approaches to Learning and Development: A Vygotskian Framework. *Educational Psychologist*. 31(3-4), 191-206. https://doi.org/10.1207/s15326985ep3103&4_4

Swan, D. & Goswami, U. (1997). Picture naming deficits in the developmental dyslexia: The phonological representations hypothesis. *Brain and Language*, 56, 334-353.

Swain, M. & Deters, P. (2007). 'New' Mainstream SLA Theory: Expanded and enriched. *Modern Language Journal* - MOD LANG J. 91, 820-836

UNESCO. (2003). Education in a multilingual world. UNESCO Education Position Paper. Paris: UNESCO. UNESDOC. https://unesdoc.unesco.org/ark:/48223/pf0000129728

Vandergrift, L., & Goh, C. (2009). Teaching and testing listening comprehension. In M. Long & C. Doughty (Eds.), *The Handbook of Language Teaching* (pp. 395-411). Wiley-Blackwell.

Verhoeven, L. (2011). Second language reading acquisition. Handbook of Reading Research.

Villalba, V. L. (2013). Mother Tongue as Medium of Instruction: Parents' and Teachers' Attitudes and Pupils' Listening Comprehension. [Unpublished master's thesis]. University of the Philippines.

World Bank. (2004). Philippines - Education policy reforms in action: A review of progress since PESS and PCER (English). World Bank.

World Bank. (2005). In Their Own Language: Education for All. The World Bank.

Wray, D., & Medwell, J. (1991). Literacy and Language in the Primary Years. Routledge.

Yanilla-Aquino, L. F. (2005). The Effects of Language Instruction on Preschoolers' Acquisition of Literacy Skills. The RAP Journal, 24-31.

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