

## Exploring the Lexical and Syntactic Features of the Learners' Narratives

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### Abstract

This study investigates the lexical and syntactic features of the pupils' narratives using a discourse analytic method. The narratives written by 60 randomly selected pupils were used as subject for analysis. The writing of the narratives was prompted by allowing pupils to view the film "Papa, Please Get the Moon for Me". The findings revealed that the narratives steadily increase in complexity as pupils advance by grade level. This steady increase manifests that pupils' linguistic ability improves as they mature linguistically.

*Keywords:* learner's narratives, lexical features, syntactic features

### Introduction

Apart from learner's interest (Cecil, 1984; Bugel & Buunk, 1996), topic familiarity (Al-Issa, 2006; Long, Johns, & Morris, 2006; Hudson, 2007), cultural background (Pritchard, 1990; Malik, 1995; Chen & Donin, 1997; Droop & Verhoeven, 1998; Barry & Lazarte, 1998), decoding skills (Al-Issa, 2006), and linguistic knowledge (Carrell, 1991; Bernhardt & Kamil, 1995; Vandergrift, 2006), another major contributory factor to text readability is the linguistic complexity of the texts. Linguistic complexity refers to the properties of language features (patterns, rules, and items) or systems (phonological, syntactic, lexical, and morphological) (Housen & Kuiken, 2009).

One of the constituents of linguistic complexity is lexical complexity which refers to the complex composition of a lexicon or word denoting the total number of morphemes, the total number of different words, and the number of words that are unfamiliar to readers. It is believed that word frequency influences reading comprehension (NICHD, 2000); that is, long and infrequent words

can be expected to cause problems for a larger proportion of pupils. Studies on vocabulary reveal that there is a great possibility that learners will understand concepts more if very few rare words are present in a text (Qian, 2002; Vellutino, 2003). But this intuition has always been subject to serious question among researchers. In fact, Anderson and Davison (1986, p. 19) argued that lexical complexity does not seem to directly cause text difficulty because “most long, infrequent words are transparent derivatives and compounds that would not be expected to be difficult for the typical student by the time he/she reaches the middle grades”. Even words that are unfamiliar to learners do not appear to adversely affect their comprehension, unless the text is dense with such words (Schmitt, Jiang, & Grabe, 2011).

Another component of linguistic complexity is syntactic complexity which relates to the number and type of transformations used in a sentence (Distefano & Valencia, 1980). Some researchers have maintained that a sentence becomes more complex as more transformations are added or as different types of transformations are adjoined. If syntactic complexity does influence the difficulty of the sentence, then it should follow that syntactic complexity influences the comprehension level of subjects reading complex sentences. However, Wolfe-Quintero, Inagaki and Kim (1998) argued that the length of sentences is not a sole predictor of complexity because there are long sentences that are easier to understand and there are short sentences that are difficult to comprehend. For instance, the complex sentence ‘Two workers have strong hands which help them lift baggage and push carts’ is easier to understand than saying a series of simple sentences ‘Two workers have hands. These hands are strong. These hands help them lift the baggage. They help them push carts’ (Arya, Hiebert, & Pearson, 2011). Moreover, Agnihotri and Khanna (1991) claimed that several studies in syntax show that simple declarative and active sentences are easier than complex and passive sentences; however, derivational complexity of a sentence may have little bearing on comprehension. Davison, Wilson, and Herman (1986) also asserted that sentence length does not greatly influence the readability of texts. This is based on their study on the effects of syntactic connectives and organizing cues on text comprehension. Results revealed that seventh grade readers (except

the poor readers) comprehended long texts as much as they comprehended short texts.

Though readability formulas such as Fog formula and Flesch-Kincaid grade level have been generally accepted by the educational community as a tool for measuring readability, L1 and L2 researchers have criticized them for not taking into account other essential variables such as cohesion, rhetorical organization, propositional density, and syntactic complexity resulting in weak construct validity (Crossley, Greenfield, & McNamara, 2008).

Given these issues, the present study investigates the lexical and syntactic features of the pupils' narratives. The aim of this exploratory study is to better understand the production level of the participants as to lexical and syntactic features which will guide the teachers and textbook writers for selecting and preparing reading materials for second language learners.

## **Method**

### **Population and Sampling**

The present study employed a discourse analytic method which has the purpose of describing, analyzing, and interpreting data (Talja, 1999). Narratives written by 60 randomly selected pupils (20 pupils from each grade level: Grade 2, 4, and 6) from two private elementary schools in Metro Manila were used as subject for analysis. Only Grades 2, 4, and 6 were selected because Grades 1, 3, and 5 are assumed to bear lexical and syntactic knowledge similar or nearly similar to Grades 2, 4, and 6, respectively (Mendiola, 1978).

### **Instruments**

A narrative film was selected for viewing for two reasons: (a) it is the most frequent discourse among young learners (Preece, 1987) and (b) the realities of children are largely organized around narratives (Ghosn, 2002). The film "Papa, Please Get the Moon for Me" by Eric Carle was used to elicit the narratives from the subjects. It was also evaluated by two experts to ensure that the film contains

no detrimental content and is within the pupils' schema which will ensure better understanding of the text (Armbruster, 1986). Before the narrative elicitation, the participants were also surveyed to ensure that they have not watched the film to level off familiarity among the participants.

### **Procedure**

Data gathering involved film viewing (i.e. without audio and subtitle) and subsequently retelling of the movie in writing. Film viewing was done twice for retention and comprehension purposes. The first viewing took the subjects more than seven minutes; hence, watching the film twice took them a little over 14 minutes. After viewing the film, the pupils were asked to write about the story according to how they understood it. Pupils were not given limits as to time and number of words, for them to be relaxed in their narrative production. After which, the narratives were collected and subjected to textual analysis by the researcher.

The analysis of syntactic features focused on the total number of T-units or LENGTH (raw number of T-units in the pupils' narratives), mean length of T-units in words or MLT-W (average length of T-units in the pupils' narratives), total number of complex T-units or COMPLEX (total number of T-units containing an independent clause and one or more dependent clauses in the pupils' narratives), total number of coordinating conjunctions or COORD (frequency of coordinating conjunctions (*for, and, nor, but, or, yet, so*) and conjunctive adverbs when used to coordinate independent clauses), total number of subordinating conjunctions or SUBORD (frequency of subordinating conjunctions when used to coordinate independent clauses), and proportion of complex T-units or PROPCOMPLEX (COMPLEX divided by LENGTH). The analysis of lexical features, on the other hand, focused on the total number or words or TNW (total number of content words in the pupils' narratives), total number of different words or NDW (total number of different content words in the pupils' narratives), and total number of morphemes or TNM (total number of morphemes in the pupils' narrative).

## Results and Discussion

### Lexical Features of Pupils' Narratives

The notion of lexical features includes the total number of words (TNW), the total number of morphemes (TNM), and the total number of different words (NDW) in the narratives of pupils.

Table 1

*Means of Lexical Features in Pupils' Narratives*

Grade Level	TNW <i>Mean</i>	TNM <i>Mean</i>	NDW <i>Mean</i>
Grade 2	83.40	97.50	42.65
Grade 4	97.35	117.05	48.90
Grade 6	141.15	180.55	77.35

As shown in Table 1, a linear increase in the means for all lexical features exists with a small variation between Grades 2 and 4 and high for Grade 6. Results revealed that lexical output increases steadily with grade level.

From the given TNW mean of 83.40 for Grade 2 and 97.35 for Grade 4, the midpoint value between the two levels can be assumed as the lexical level that Grade 3 pupils can handle; consequently, the lexical level below the Grade 2 means implies the lexical features that Grade 1 pupils can manage. Similarly, the midpoint value between the lexical means of Grade 4 and Grade 6 can be assumed as the lexical level manageable for the Grade 5 pupils.

However, the statistical description of the lexical features may not bear complete descriptions without exemplifying the specific words, morphemes, and varied words used by the pupils. Qualitative factors are, therefore, considered. The words used by the pupils in their narratives are classified as high-frequency words or familiar words. These are basic general English words that belong to first 1,000 most frequently used words (Laufer & Nation, 1999). Some words become more common for higher grades as they must have been exposed to such high-frequency words in their younger years.

In addition, inflectional morphemes are added to nouns: -s for the plural number and -'s for possession; to main verbs: -s for the

third person singular present tense, *-d* for the past tense of regular verbs, *-ing* for the present participle form, and *-en* for the past participle form; and to adjective: *-er* for the comparative degree and *-est* for the superlative degree were included in pupils' lexical repertoire. Dominant suffixes in the narratives of all pupils are *-ed* and *-ing* which comprise inflectional morphemes for familiar words. Also added as a morpheme for familiar words is *-s* (third person singular) to denote a singular main verb. A few instances of its use per grade level were noted because the pupils tried to be consistent in narrating using the past form of the verb. Likewise, *-s* to denote plural nouns was also minimally activated in pupils' narratives which may be attributed to the type of stimulus used.

Additionally, words using inflectional morphemes increase in density as the grade level steps up chronologically except for the inflectional morphemes *-er* which has a minimal decreasing number of samples and *-est* with a lower frequency in Grade 2. Since there is a minimal decrease of adjectival morphemes, this does not affect the notion that lexical output increases in number and use with chronological grade level. Likewise, the list shows that the words used by the pupils are familiar ones because it is dominated with the inflectional morphemes *-ed* and *-ing* which, according to Gunning (2003), are morphemes that denote familiar words in any linguistic output. The increasing density of words with inflectional morphemes suggests that pupils are most exposed to common words which may be fed by the teacher's linguistic input and in turn used by pupils in their narratives. This may also manifest that the kind of words pupils can easily process or handle are familiar words, which further suggests that reading materials should have a close fit to readers' linguistic ability to ensure comprehensibility. Thus, familiar words should be used as the kind of lexical input appropriate for grade school pupils to facilitate comprehension. However, pupils should also be exposed to words that challenge their linguistic ability in order for them to progress as they mature linguistically.

Moreover, derivational morphemes, which are also used to denote change of word taxonomy, show pupils' ability to manipulate diversity of words. Following are the derived words used by pupils per grade level:

Table 2  
*List of Words and Their Derivational Morphemes in Pupils' Narratives*

Derivational Morpheme	Grade 2	Grade 4	Grade 6
<i>-ion</i> (noun)			negotiation, direction
<i>-ation</i>			determination
<i>-ness</i>		sadness, happiness	prettiness
<i>-ance</i>			remembrance
<i>-ment</i>			amazement
<i>-y</i> (adjective)	piggy		starry
<i>-ly</i>		lonely, lovely	tiredly
<i>-ful</i>	beautiful, careful	beautiful, wonderful	beautiful, peaceful, successful
<i>-al</i>		original, magical	normal
<i>-ic</i>			enthusiastic, ecstatic,
<i>-ive</i>			attractive
<i>-ish</i>			childish
<i>-ly</i> (adverb)	quickly, really, perfectly, happily, slowly	accidentally, really, happily, mysteriously, sadly, quickly, brightly, immediately, lovely, lonely	brightly, extremely, heavenly, immediately, really, slowly, quickly, luckily, surely, sadly, happily, safely, wildly, exactly

It is worth emphasizing that “derivational morphemes generally change the grammatical category of words while inflectional morphemes do not” (Yule, 1997, p. 63). Narratives that are dense with derivational morphemes are difficult to read because they require higher semantic cognition of word category; thus, they complicate lexical inputs. Given these, Table 3 reveals that the derivational morphemes used by Grade 2 pupils are limited to *-y* and *-ful* for adjectives and *-ly* for adverbs. These grammatical categories function as modifiers which mean that adjectival morphemes develop earlier than other lexical-forming morphemes. These are denser in Grade 4 except the *-y* morpheme but with *-al* as the adjectival morpheme and *-ness* for nominal morpheme. Derivational morphemes highly increase in Grade 6 with additional morphemes such as *-ion*, *-ation*, *-ance*, and *-ment* for nominal morphemes and *-ic*, *-ive*, *-ish* for adjectival morphemes. This also means that derivational morphemes increase in pupils' narrative repertoire as they gain more linguistic ability. There seems to be a smooth transition of

morphemes from one grade level to another. As mentioned earlier, Grade 2 pupils can only create varying word categories in a limited fashion, Grade 4 pupils slightly improve in building new word categories, and Grade 6 pupils significantly develop their handling of derivational morphemes. Hence, lexical inputs should be fairly observed with limited derivational morphemes in the first two elementary levels, moderately improved in the middle levels, and highly explored in the last two levels. There should be a gradual incorporation of derivational morphemes so as not to make materials difficult to read.

Furthermore, a number of words used by the subjects are single morpheme. Variation appears with some words having two morphemes as well as a few words with three-morphemes and a very least occurrence of words with four morphemes. All of them used one to two morphemes and in a very rare instance, three to four morphemes especially for Grades 2 and 4. Grade 6 pupils, however, demonstrate a little increase of words with three morphemes and a few use words with four morphemes. Although there is an increase of morphemes in the narratives of pupils, complex morphemes do not show sufficient density in all grade levels. One to two morphemes seem to be the number of morphemes the pupils can handle. This further shows that the structure of words in their narratives reflects the length of words available to them, which also shows the length of words that they can easily process for comprehension. However, the pupils' use of a few three to four morphemes in words implies that pupils, especially in the last grade level, should also be given inputs that contain this length of words for them to be exposed gradually to words with complex structure. But this should be observed with caution so as not to frustrate the readers.

Likewise, many of the words used in the lexical production of the pupils were single words (i.e. not hyphenated or compounded). A few compound words, specifically two-words, were used by Grades 2 and 4, and an increase in Grade 6 with a single use of three words. This result shows that there is an increasing use of two words in the narratives of pupils by grade level. The gathered data strongly suggest that Grade 2 pupils tend to use the least number of two words while Grade 4 with a minimal increase of use and Grade 6 with a modest increase of two words in their narratives. This further



reveals that the use of two to three words increases as the pupils grow chronologically with language maturity. Grade 2 pupils should not be provided with words that are complex since they can only handle simple words. On the other hand, few advanced words can be introduced to Grade 4 pupils for them to be familiar with other lexical structures appropriate to their level. Grade 6 pupils, however, should be exposed to a controllable number of compound words so as not to impede their comprehension. Lexical structures should be tailored appropriately according to a particular instructional level.

Given these descriptions, the lexical features of the pupils increase steadily as the grade level increases. Filipino pupils, as second language learners of English, can only handle common or familiar words with one to two morphemes and a few compounds. Results also imply that reading materials to be used for grade school pupils should show increasing complexity in lexical features and not change in structure to a certain level. This finding debunks Anderson and Davison's (1986) claim that difficult words (longer or less frequent words) do not affect complexity of texts. Derivatives and compounds, in spite of being longer than primitive words, are normally easier to interpret. However, Filipino pupils need scaffolding of lexical features because they may find a word difficult in terms of its structure. The longer or less frequent the words are, the more difficult the text becomes. Lexical complexity is dictated by its structure. Therefore, scaffolding should be observed with the help of the teacher. Inflections, derivations, and number of words or compounds should be used with caution considering the language ability of the pupils per grade level.

### **Syntactic Features of Pupils' Narratives**

The syntactic features, in this study, refer to the syntactic elements that pupils written production contain. The total number of T-units (LENGTH) constitutes the units of analysis as they can be recognized without difficulty and provide a more accurate means of gauging the complexity of sentences in written texts (Sotillo, 2000). Wolfe-Quintero et al. (1998) also assert that the number of dependent clauses per total clauses, the clauses per T-unit, or the number of dependent clauses per T-unit are the best measures of syntactic

complexity. The Minimal Terminable Unit (T-unit) is the shortest unit of a particular passage that contains one independent clause with its dependent clause/s and can be segmented without “leaving any sentence fragments as residue” (Hunt, 1970, p.189). T-units with errors in typography but do not damage the clarity and meaning were considered for analysis. Other than the LENGTH, the mean length of T-units in words (MLT-W), the mean length of T-units in morphemes (MLT-M), the total number of complex T-units (COMPLEX), the total number of coordinating conjunctions (COORD), the total number of subordinating conjunctions (SUBORD), and the proportion of complex T-units (PROPCOMPLEX) are considered syntactic variables.

Table 3

*Means of Syntactic Features in Pupils' Narratives*

Grade Level	LENGTH	MLT-W	MLT-M	COMPLEX	COORD	SUBORD	PROPCOMPLEX
Grade 2	22.35	3.76	4.33	3.65	6.65	3.90	.16
Grade 4	25.35	4.01	4.84	4.55	7.85	5.05	.20
Grade 6	32.60	4.34	5.53	7.05	5.95	7.80	.21

Table 3 reveals that the LENGTH of pupils' narratives steadily increases as pupils grow chronologically by grade level. This is also true to MLT-W and MLT-M since the lexical features in terms of TNW and TNM improve as pupils mature linguistically. Generally, there is a linear increase of all syntactic measures as pupils progress to a higher level except for COORD which is densest in Grade 4 then followed by Grade 2 and subsequently by Grade 6. The use of coordinating conjunctions by Grade 4 pupils shows that they seem to concentrate on COORD which reduces their use of SUBORD and thus affects a little organization of COMPLEX and PROPCOMPLEX. They tend to join T-units together into sentences of coordinating conjunctions; hence, their fewer use of SUBORD as compounds manifest that their outputs are less complex as compared to the outputs of Grade 6. Likewise, Grade 2 pupils use more coordinating conjunctions with low means in SUBORD and COMPLEX which succeedingly affect PROPCOMPLEX. This further implies that Grades 2 and 4 pupils show connected T-units in a sentence using more coordinating conjunctions than subordinating ones which make their syntactic organization less complex. On the other hand, the

lowest mean attributed to the Grade 6 pupils' use of COORD signifies their skill in varying the use of conjunctions. Given this finding, it is apt to say that there is a spread of conjunction use from SUBORD to COORD which advances the highest mean in COMPLEX and PROPCOMPLEX, as opposed to the means calculated for Grades 4 and 2. Therefore, Grade 6 pupils display their ability of weaving narratives using varied types of conjunctions which indicates that the use of conjunctions by Grade 6 pupils decreases on COORD but fulfills the use of other conjunctions and further demonstrates availability of other conjunctions that may be used in expressing meanings of connected clauses.

In terms of coordinating conjunctions used, there is a repetitive instance of usage by pupils in the three grade levels. Coordinating conjunctions such as *but*, *so*, and *and* are repeatedly used in their organization which make the T-units complex in a single construction. Construction is used here as a composition of T-units within a terminal punctuation that is used to signify a single sentence. Likewise, the conjunctive adverb *then* which is used to conjoin two independent clauses that coordinating conjunctions realize is included as part of COORD, as specified in the methods of tabulation and calculation of words. The repetitive use of the four connectors in pupils' narratives reveals that from the coordinating conjunctions and conjunctive adverbs, only the four connectors are activated to structure multi-clauses sentences. Conjunctive adverbs that were used in the narratives but were not used to conjoin independent clauses served as transitions but never calculated as a measure of COORD. Consider the following language samples in the narratives parsed into T-units:

Grade 2:     *One night a girl was sleeping/  
(Pupil 6)     and she woke up/  
                  and she went outside and said/  
                  *"Papa can you get the moon for me" "Ok"/*  
                  then his dad carry her/  
                  and she can't still get it./ (6 T-units)*

Grade 4:     *Then the girl played with/  
(Pupil 9)     then accidentally she threw it so high/  
                  then it disappeared suddenly/*

*then the girl started to frown/  
then she went back to her bedroom and went back to  
sleep./ (5 T-units)*

Grade 6: *The father grabbed the nearby star/  
(Pupil 4) and the ladder learned on the star/  
and the ladder stopped moving./ (3 T-units)*

The COORD show a repetitive use in the constructions which implies pupils' inability to determine meanings of connectors appropriate in conjoining connected clauses. This further means that most of these coordinating conjunctions and conjunctive adverbs are not yet available to pupils even in the last grade. Considerably, Grades 2 and 4 pupils demonstrate run-on sentences with recurring use of conjunctions. However, the last grade shows that the LENGTH of the construction is reduced but still with repeated COORD. This implies that Grade 6 pupils seem to monitor LENGTH which may be attributed to their ability to simplify constructions but complicate such using other cohesive devices like SUBORD. However, the given samples reveal that although Grades 2 and 4 pupils tend to use more T-units in a single construction, these do not guarantee developing complexity of their narratives. It is on the spread of syntactic complexity measures: COORD and SUBORD that denote increase of COMPLEX and PROPCOMPLEX which lead to syntactic complexity. Following are the subordinating conjunctions used by the pupils by grade level:

Table 4  
*Subordinating Conjunctions Used in Pupils' Narratives*

Grade 2	Grade 4	Grade 6
where, when, as, until, so, that, while, if, because, after	as, when, that, while, because, so that, so, until, till, if, after, no matter, instead of	when, where, as, until, if, that, because, while, since, after, so, in order, so that, as soon as

Evident in Table 4, all subordinating conjunctions are single words in Grade 2, mostly one word in Grades 4 and 6 with only two

two-word subordinators in both grades, and one three-word subordinators in Grade 6. This reveals the grammatical length of subordinators used by the pupils as they step to higher grade levels – that there is a slight use of two- or three-word subordinators. The finding challenges the claim of Wolfe-Quintero et al. (1998) that a nonlinear relationship exists between subordination and development. This implies care in using simple subordinators in all levels, especially in Grade 2 and a scaffolding of structurally complex subordinators in Grades 4 and 6. Likewise, the data also prove that there is an increasing use of subordinators in the narratives of the pupils. It should, therefore, be observed that what is available and decodable for Grade 2 pupils are one-word subordinators while Grade 4 is from one- to two-word subordinators, and Grade 6 from one- to three-word subordinators.

Subordinating conjunctions are “typically said to be types of cohesive devices, lexical expressions that may add little or no propositional content by themselves but that serve to specify the relationships among sentences in oral written discourse, thereby leading the reader/listener to the feeling that the sentences ‘hang together’ or make sense” (Celce-Murcia & Larsen-Freeman, 1999, p. 519). Interestingly, Grade 2 pupils demonstrate their ability to embed and subordinate clauses in their constructions. Though capable of using such subordinators, the measures of syntactic complexity do not yield a high degree of usage.

Hence, the connectors and subordinators both statistically and subjectively aforementioned are the cohesive devices available to pupils by grade level, suggests that teachers and coursebook writers should observe caution in introducing conjunctions of other kinds. Pupils should only be presented with conjunctions that are within their ability; however, as the grade level steps up, pupils should also be exposed to other subordinators although meanings should be expressed explicitly with the teacher’s help. Since the given conjunctions signal what is decodable by pupils, reading texts that are used to foster interest and comprehension should contain only cohesive devices that are within pupils’ ability.

Likewise, pupils’ syntactic constructions yielded phrases and clauses. The number and type of clauses used by pupils denote syntactic complexity and reveal that such type of clauses are

determined by the kind of conjunctions used in the constructions. Grade 2 pupils are already capable of producing clauses, be it dependent or independent. This ability improves as they go to higher instructional levels.

### **Conclusion**

From the findings obtained from this study, it can be concluded that the narratives steadily increase as pupils grow chronologically by grade level. Both lexical and syntactic features of the narratives increase in complexity, although findings suggest that there should be scaffolding of features as pupils progress linguistically. This steady increase manifests that pupils' linguistic ability improves as they mature linguistically.

Lexical features affect complexity of texts for grade school pupils. Such features increase steadily as pupils improve with language ability and chronological even grade level. Lexical complexity is influenced by variables such as types of words, length of words, number of morphemes, and inflectional and derivational morphemes. On the other hand, it is on the spread of complexity measures which lead to syntactic complexity. The presence of complex syntactic features in a text in some way may not directly cause difficulty, but may ease comprehensibility. Therefore, the lexical features should be assessed before providing reading texts to grade school pupils. Assessment of this kind may be generated using commercial language analysis software or may be subjectively appraised by experts who have gained sufficient experience in and exposure to text analysis. Significantly, the inflectional and derivational morphemes that pupils can handle should be included as bases of text analysis. Teachers and coursebook writers should be guided by the fact that knowledge of derivational morphemes develops later than knowledge of inflectional morphemes (Anderson & Davison, 1986). Inflectional morphemes in pupils' narratives are denser than derivational morphemes. Compounds should also be taken into account since they also increase in use as pupils progress linguistically.

Syntactic features are defocused in text comprehensibility. Certainly, it is worthy to qualify that what is comprehensible syntax

is simple—with minimal use of connectors. Readability formula is limited to lexical features and thus cannot measure syntactic complexity. There may be other factors about readers and texts which cannot be described in terms of the readability formula such as pupils' interest or motivation, schema, type of reading materials, and an approach that can capture reading performance for older pupils. Syntactic features of reading texts may also be appraised like the lexical features to determine appropriateness of syntactic constructions for pupils. As found, it is on the spread of syntactic complexity measures: COORD and SUBORD that denote increase of COMPLEX and PROPCOMPLEX which lead to syntactic complexity.

Even though the present study was conducted in the Philippines, it offers valuable insights for publishers, material developers, and classroom teachers worldwide. They can use the findings in selecting the reading texts to be incorporated in the coursebooks and used in the language classrooms.

### References

- Agnihotri, R., & Khanna, A. (1991). Evaluating the readability of school textbooks: An Indian study. *Journal of Reading*, 35(4), 282-288.
- Al-Issa, A. (2006). Schema theory and L2 reading comprehension: Implications for teaching. *Journal of College Teaching & Learning*, 3(7), 41-48.
- Anderson, R., & Davison, A. (1986). *Conceptual and empirical bases of readability formulas*. USA: Bolt, Beranek and Newman.
- Arya, D., Hiebert, E., & Pearson, P. (2011). The effects of syntactic and lexical complexity on the comprehension of elementary science texts. *International Electronic Journal of Elementary Education*, 4(1), 107-125.
- Barry, S., & Lazarte, A. (1998). Evidence for mental models: How do prior knowledge, syntactic complexity, and reading topic affect inference generation in a recall task for nonnative readers of Spanish? *Modern Language Journal*, 82, 176-193.
- Bernhardt, E., & Kamil, M. (1995). Interpreting relationships between L1 and L2 reading: Consolidating the linguistic interdependent hypothesis. *Applied Linguistics*, 16, 15-34.

- Carrell, P. (1991). Second language reading: Reading ability or language proficiency? *Applied Linguistics*, 12, 223-242.
- Celce-Murcia, M., & Larsen-Freeman, D. (1999). *The grammar book: An ESL/EFL teacher's course*. (2nd ed.). USA: Heinle & Heinle.
- Chen, Q., & Donin, J. (1997). Discourse processing of first and second language biology texts: Effects of language proficiency and domainspecific knowledge. *Modern Language Journal*, 81, 209-227.
- Crossley, S., Greenfield, J., & McNamara, D. (2008). Assessing text readability using cognitive based indices. *TESOL Quarterly*, 42(3), 475-493.
- Davison, A., & Green, G. (1988). Introduction: In A. Davison & G. Green (Eds.), *Linguistic complexity and text comprehension: Readability issue reconsidered*, (pp. 1-4). Hillsdale, NJ: Erlbaum.
- Davison, A., Wilson, P., & Herman, G. (1986). *Effects of syntactic connectives and organizing cues on text comprehension*. Champaign, IL: Center for the Study of Reading.
- Distefano, P., & Valencia, S. (1980). The effects of syntactic maturity on comprehension of graded reading passages. *Journal of Educational Research*, 73(5), 247.
- Droop, M., & Verhoeven, L. (1998). Background knowledge, linguistic complexity, and second language reading comprehension. *Journal of Literacy Research*, 30(2), 253-271.
- Ghosn, I. (2002). Four good reasons to use literature in primary school ELT. *ELT Journal*, 56(2), 172-179.
- Gunning, T. (2003). *Creating literacy instruction for all children*. USA: Pearson Education.
- Housen, A., & Kuiken, F. (2009). Complexity, accuracy, and fluency in second language acquisition. *Applied Linguistics*, 30(4), 461-473.
- Hudson, T. (2007). *Teaching second language reading*. New York: Oxford University Press.
- Hunt, K. (1970). Syntactic maturity in schoolchildren and adults. *Monographs of the Society for Research in Child Development*, 35(1). Chicago: University of Chicago Press.
- Justice, L. et al. (2006). The index of narrative microstructure: A clinical tool for analyzing school-age children's narrative performances. *American Journal of Speech-Language Pathology*, 15, 177-191.



- Klare, G. (1963). *The measurement of readability*. Iowa: Iowa State University Press.
- Larsen-Freeman, D. (2009). Adjusting expectations: The study of complexity, accuracy, and fluency in second language acquisition. *Applied Linguistics*, 30(4), 579-589.
- Laufer, B., & Nation, P. (1999). A vocabulary-size test of controlled productive ability. *Language Testing*, 16, 33-51.
- Long, P., Johns, C., & Morris, P. (2006). Comprehension ability in mature readers. In M. Traxler & M. Gernbacher (Eds.), *Handbook of Psycholinguistics* (2<sup>nd</sup> ed., pp. 801-833). Burlington, MA: Academic Press.
- Malik, A. (1995). A psycholinguistic analysis of the reading behavior of EFL-proficient readers using culturally familiar and culturally nonfamiliar expository texts. *American Educational Research Journal*, 27, 205-223.
- Mendiola, C. (1978). *An analysis of the grammatical structures in the written language (English) of children in grades four, five, and six*. Unpublished thesis, Philippine Normal University, Manila, Philippines.
- National Institute of Child Health and Human Development (NICHD) (2000). Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.
- Preece, A. (1987). The range of narrative forms conversationally produced by young children. *Journal of Child Language*, 14, 273-295.
- Pritchard, R. H. (1990). The effects of cultural schemata on reading processing strategies. *Reading Research Quarterly*, 25, 273-295.
- Qian, D. (2002). Investigating the relationship between vocabulary knowledge and academic reading performance: An assessment perspective. *Language Learning*, 52, 513-536.
- Schmitt, N., Jiang, X., & Grabe, W. (2011). The percentage of words known in a text and reading comprehension. *The Modern Language Journal*, 95(1), 26-43.

- Sotillo, S. (2000). Discourse functions and syntactic complexity in synchronous and asynchronous communication. *Language Learning and Technology*, 4(1), 82-119.
- Talja, S. (1999). Analyzing qualitative interview data: The discourse analytic method. *Library and Information Science Research*, 21(4), 459-477.
- Vandergrift, L. (2006). Second language listening: Listening ability or language proficiency. *Modern Language Journal*, 90(1), 6-18.
- Vellutino, F. (2003). Individual differences as sources of variability in reading comprehension in elementary school children. In A. P. Sweet & C. E. Snow (Eds.), *Rethinking reading comprehension*, (pp. 51-81). New York: Guilford Press.
- Wolfe-Quintero K., Inagaki, S., & Kim, H. (1998). *Second language development in writing: Measures of fluency, accuracy, and complexity*. Hawaii: University of Hawaii Press.
- Young, M. (1993). Instructional design for situated learning. *Educational Technology Research and Development*, 41(1), 43-58.
- Yule, G. (1997). *The study of language*. (2nd ed.). New York, USA. Cambridge University Press.

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