English Teaching, Vol. 72, No. 3, Autumn 2017
DOI: 10.15858/engtea.72.3.201709.165

Selecting the Best Indicators of Grammatical Knowledge and Ability: Preliminary Results*

Sungsoo Kim**
(Chilseong High School)
Jungok Bae
(Kyungpook National University)

Kim, Sungsoo, & Bae, Jungok. (2017). Selecting the best indicators of grammatical knowledge and ability: Preliminary results. *English Teaching, 72*(3), 165-180.

Because English grammar consists of a long list of features, it is impractical to include all of them in a single grammar test. It would be useful to identify among all those features the best indicators of students′ grammatical knowledge and ability so that we could focus on what were the most representative knowledge and skills and simplify grammar assessment. This study is a preliminary, small-scale attempt to do just that. It surveyed 72 high school teachers and 129 Grade 12 students on their opinions of which features of grammar best represented grammatical knowledge and ability. They were asked to choose five indicators, including the best one, and provide reasons for thinking so. The relative pronoun was selected most frequently as the best indicator of grammatical knowledge and ability, followed by subject-verb agreement, the subjunctive, to-infinitives, and participles. This paper does not claim these five features to definitively represent the best indicators; further research should be conducted.

Key words: grammar, assessment, indicators of grammatical knowledge and ability

1. MOTIVATION AND PURPOSE OF THE STUDY

Grammar consists of a huge list of items ranging from the very simple to the

* This paper is a revision of the First author's Master's thesis.
** Sungsoo Kim: First author; Jungok Bae: Corresponding author

highly complex. Any grammar book contains many different morphological and syntactic structures. Numerous attempts have been made to compose a list of basic grammatical structures for language teaching and learning (Richards, 2012). However, when it comes to testing grammatical knowledge and ability, it is impossible to incorporate all grammatical features into a single test: it would be both impractical and not advisable to cover all features in a single test. L2 teachers and testers must therefore decide which grammatical features to regard as being representative of grammar ability, especially when the candidates' grammatical ability is assessed using a single, one-time test. Language researchers and evaluators often face circumstances in which language samples need to be evaluated with respect to language users' grammatical ability in context with limited time and resources.

Furthermore, in this era of computers and corpus analysis, teachers and testers have easy access to computer programs that can yield a huge list of linguistics features with one click. While they can therefore choose from a great variety of grammatical features, many of those features are only tenuously correlated with general language skills. Therefore, the results of tests and analyses that focus on such features are of dubious relevance to test-takers' actual grammatical knowledge and ability.

In this situation, if the best indicators of grammatical knowledge and ability among the multitude of features could be identified, tests and studies of grammatical knowledge and ability could focus only on that limited set of highly relevant features, simplifying both assessment and analysis. This would result in a more practical assessment process while preserving the content validity of the measurement and analysis, particularly when it comes to sample representativeness and content relevance.

This study is motivated by the considerations described above, and the following question in particular: Which of the many available grammatical features best represent students' grammatical knowledge and ability?

The purpose of the present study is to explore this subject. To answer the question posed above, a small-scale survey of teachers and students was conducted. This study also aims to investigate the participants' reasons for choosing the grammar indicators they did. The specific research questions are as follows:

1) What are the *top five* indicators of grammar that teachers and students perceive as being the most representative of students' grammatical knowledge and ability?

2) What is *the best* indicator of grammatical knowledge and ability according to teachers' and students' perceptions?
3) What similarities or differences are there between teachers' and students' perceptions of the best indicators?

2. PREVIOUS RESEARCH

2.1. Conventional Approaches to Grammar Assessment

In the traditional approach to grammar assessment, grammatical knowledge is described in terms of accurate production and comprehension (Larsen-Freeman, 2009, p. 533). Testing consists of decontextualized, discrete-point items such as fill-in-the-blanks, error-correction, sentence completion, sentence combining, elicited imitation, judging grammatical correctness, and modified cloze passages (Larsen-Freeman, 2009). The underlying assumption of the discrete-point approach is that the different components of language can be isolated and properly assessed in that decontextualized state (Brown, 2000).

The most common such method of assessing grammar is to use selected response (SR) tasks to separate and assess "discrete units of grammatical knowledge" (Purpura, 2014, p. 114). The problem with discrete-point items and SR tasks in particular, as Purpura (2014) observes, is that "knowledge of forms in isolation may not actually translate into the ability to use these forms meaningfully in communication" (p. 115). However, several studies have investigated the validity of discrete-point and SR items, and the research results indicate that they are indeed highly reliable and valid indicators of grammatical knowledge (Purpura, 2014, p. 115).

The integrative approach to grammar assessment stands in contrast to discrete-point grammar assessment. In this approach, grammatical performance is evaluated by raters who use rubrics that measure "grammatical accuracy, complexity, and the range of grammatical structures used" (Larsen-Freeman, 2009, p. 533).

Based on the idea that grammar assessment is best undertaken through performance tasks, performance data can be scored on holistic scales (Purpura, 2014). For example, a holistic rubric for a complaint task might include "scaled descriptors characterizing the response's use of grammatical forms (the form dimension) to make a meaningful complaint (the meaning dimension)," which would be expressed as one overall score ranging from one to five (Purpura, 2014, p. 117).

Another example of this holistic approach to assessing grammar is found in Bee and Bachman (2010) where specific criteria were used to rate the grammar in students' writing. Critical and minor grammatical errors were classified based on the degree to which they hindered raters' reading comprehension. The scale comprised five points ranging from zero to four, with half-point between the major scale points. In this case, the number of complex sentences, constructed either with a coordinating conjunction or a subordinating conjunction, was used as an important indicator of the highest level of grammatical ability.

2.2. Automated Programs Yielding Syntactic Indicators

Advancements have been made in studies of L2 syntactic complexity using machines. Popular automated computational systems now make it possible to analyze the syntactic features of written discourse. As a result, several studies using such systems have confirmed that syntactic complexity is one of the main components of discourse quality (Crossley, Weston, Sullivan, & McNamara, 2011; Kim, 2014; McNamara, Crossley, & McCarthy, 2010). Syntactic complexity has been taken to be indicated by such features as "embedded phrases, dense syntactic structure, and load on working memory" (Graesser & McNamara, 2011, p. 17).

Lu (2010) described one such computerized syntactic complexity measurement system. The system uses fourteen different measures suggested by previous studies, including length of production unit, sentence complexity, and coordination, all of which were further subdivided.

Another such computational tool, Coh-Metrix, covers a range of linguistic features at various levels of language, discourse, and conceptual analysis (Crossley & McNamara, 2012, p. 115). According to Crossley and McNamara (2012), Coh-Metrix can be used to analyze "600 indices of linguistic features of a text" (p. 120). Coh-Metrix also has several syntactic complexity indices (Graesser & McNamara, 2011) including the mean number of words before the main verb, the mean number of modifiers per noun-phrase, minimum edit distance scores, and the proportion of intersecting tree nodes.

Although automated analysis is systematic and specific, many of these indices of syntactic complexity are technical, extensive, and difficult to apply to the analysis of L2 written text for grammar assessment. Unless L2 teachers and researchers are well aware of automated computational systems and have the required syntactic knowledge, they may have difficulty interpreting and

applying the outputs of such syntactic complexity measures. More importantly, L2 teachers and researchers should be able to decide which variables to choose to evaluate student writing, and they should be concerned about whether the selected variables well represent the learners' grammar ability.

3. METHOD

3.1. Data Collection

The participants of this study consisted of two groups: teachers and students. The teacher group comprised 72 secondary school teachers of English, and the student group 129 high school seniors from six classes in Daegu, Korea. High school seniors were selected because they are in the highest grade of secondary school and thus have the highest level of English knowledge available to give informed answers to the grammar related questions in the survey.

3.2. Instrument

A questionnaire was administered to the teacher and student groups. The selection of target grammatical features investigated in the questionnaire was based on a review of several references such as English grammar books and high school English textbooks (Ahn, 2007; Lee, 2012; Song, 2007), as well as the authors' understanding of grammatical categories. As this study aimed to identify specific indicators of grammatical knowledge and ability, larger grammatical categories such as verb phrases and tenses were subdivided into smaller grammatical features. A total of 25 features were selected for the questionnaire, which the teachers and students then completed. The questionnaire format and the 25 selected grammatical features are presented in Figure 1.

The questionnaire required the respondents to choose the top five best grammar indicators and to identify the best one among them. In addition, the participants were asked to give reasons for their choices next to each selected feature. In the case of the best indicator, they were required to explain their reasoning for why that particular feature is the best indicator of grammatical knowledge and ability.

FIGURE 1

Grammatical Features Presented in the Questionnaire

Gerund	Number 1 (Best Indicator)	Reason
Participle		
Relative pronoun		
Relative adverb		
To-infinitive		
Subject-verb agreement	Number 2	Reason
Verb with S+V structure		
Verb with S+V+C structure		
Verb with S+V+O structure		
Verb with S+V+O+O structure		
Verb with S+V+O+C structure	Number 3	Reason
Auxiliary verb		
Noun clause		
Adverb clause		
Tense agreement		
Past tense	Number 4	Reason
Future tense		
Progressive tense		
Present perfect		
Past perfect		
Pronouns	Number 5	Reason
Comparative		
Superlative		
Passive voice		
Subjunctive		

The questionnaire had two versions: one for the teachers and one for the students. The questionnaires were administered in 2015. The questionnaire given to the teachers was the same as that shown in Figure 1; the questionnaire for the students additionally provided example sentences containing the target grammatical features in parentheses. The students were instructed to take as much time as they needed with the survey. They were also shown a brief Power Point presentation intended to raise their awareness of the relevant grammatical points. In this paper, the questionnaire is presented in English, but a Korean version was used in the actual implementation of the questionnaire.

4. RESULTS

4.1. Perceptions of the Top Five Grammar Indicators

TABLE 1

Overall Analysis: Top Five Grammar Indicators

Grammar Index	Number of teachers and students combined	Percentage
Relative pronoun	123	12.7
Subjunctive	95	9.8
To-infinitive	87	9.0
Participle	78	8.1
Subject-verb agreement	78	8.1
Passive voice	72	7.4
Tense agreement	60	6.2
Relative adverb	55	5.7
Noun clause	35	3.6
Verb with S+V+O+C structure	34	3.5
Gerund	33	3.4
Auxiliary verb	33	3.4
Present perfect	33	3.4
Past perfect	27	2.8
Pronouns	27	2.8
Adverb clause	22	2.3
Verb with S+V+C structure	14	1.4
Verb with S+V+O+O structure	13	1.3
Verb with S+V+O structure	12	1.2
Past tense	10	1.0
Comparative	10	1.0
Verb with S+V structure	8	0.8
Superlative	5	0.5
Future tense	3	0.3
Progressive tense	1	0.1
Total Sum of Responses	968	100

This section presents the results of investigating the first research question regarding teachers' and students' perceptions of the top five indicators, as well as the best indicator, of grammatical knowledge. Further, it compares the results of the two groups, the teachers and the students, in order to answer the third research question, regarding the similarities and differences in their choices.

In the analysis, inappropriate responses that failed to meet questionnaire requirements were excluded, except if participants merely listed fewer than five indicators, in which case their chosen grammatical features were included.

Table 1 shows the combined number of choices for the top five indicators of grammatical knowledge and ability. As shown there, when the two groups' choices were combined, the most frequently selected indicator of grammatical knowledge and ability was the relative pronoun. This was followed in frequency by the subjunctive, to-infinitive, participle, and subject-verb agreement.

Next, the teachers' and students' responses were analyzed separately. As shown in Table 2, the two groups' responses show a difference in their order of frequencies as well as some substantial differences in the top five most commonly selected features.

Specifically, the relative pronoun ranked the first and the second in the teacher and student groups respectively. Subject-verb agreement ranked the third and the fifth, and subjunctive the fifth and the first in the respective group. Participles and passive voice ranked the second and the fourth respectively in the teacher group, but they were not among the chosen elements by the student group, who included to-infinitives and tense agreement among the five instead.

TABLE 2

Top Five Grammar Indicators: Teachers and Students

Order of Frequency	Teachers	Students
1st	Relative pronoun (59)	Subjunctive (65)
2nd	Participle (36)	Relative pronoun (64)
3rd	Subject-verb agreement (34)	To-infinitive (60)
4th	Passive voice (32)	Tense agreement (48)
5th	Subjunctive (30)	Subject-verb agreement (44)

Note. The numbers in parentheses are the number of people who selected that feature.

4.2. Perceptions of the Best Grammar Indicators

This section addresses the results of investigating the second research question,

regarding teachers' and students' perceptions of the best grammar indicator, i.e., the indicators placed at the number 1 spot in the questionnaire. Cross-tabulation was used to investigate the question. The third research question, regarding the similarities or differences in choices by the two groups, is also addressed (Table 3).

TABLE 3

The Best Grammar Indicator as Chosen by Teachers and Students*

Grammatical features	Teachers	Students	Total
Relative pronoun	23(32.4%)**	24(19.0%)	47(23.9%)
Subject-verb agreement	18(25.4%)	17(13.5%)	35(17.8%)
Subjunctive	6(8.5%)	13(10.3%)	19(9.6%)
To-infinitive	4(5.6%)	13(10.3%)	17(8.6%)
Participle	5(7.0%)	10(7.9%)	15(7.6%)
Total response for 25 features	71(100%)	126(100%)	197(100%)

Note. * Only the top five out of a total of 25 features are presented.

**Number of selection (% of all responses in the same group)

The relative pronoun was selected as the best grammar indicator in both groups with 23 teachers and 24 students selecting it. Subject-verb agreement was the second most commonly selected best indicator with 18 teachers and 17 students choosing it, followed by the subjunctive chosen by 6 teachers and 13 students. To-infinitives and participles round off this list of the top five features selected as the best indicators of grammatical knowledge and ability.

4.3. Reasons for Selecting the Best Indicator

This section addresses the reasons why the participants selected a particular feature as the best indicator of grammatical knowledge and ability. For this purpose, this study focused on the three most commonly selected best indicators of grammar: the relative pronoun, subject-verb agreement, and the subjunctive.

The participants' reasons were diverse, but they were coded into several broader categories. Table 4 shows the given reasons by group. As shown there, the teachers chose the relative pronoun because it indicates sentence structure awareness and involves L1-L2 differences; on the other hand, the students chose it because it is difficult to understand and use, and because relative pronouns often appear on tests.

TABLE 4
Reasons for Selecting the Best Indicator

Features	Teachers	Students
Relative pronoun (T**=23, S=24)	Awareness of structure (10*)	Rule difficulty (8)
	L1-L2 difference (5)	Frequently used in tests (7)
	Language awareness (2) Difficult for students (2) Shows grammar ability (2)	Used frequently (4)
	Miscellaneous (2)	Miscellaneous (5)
Subject-verb agreement (T=18, S=17)	Fundamental principle (9)	Frequently used in tests (5)
	Importance of finding subject and predicate (5)	Fundamental principle (3)
	General understanding of sentence structure (3)	Importance of finding subject and predicate (2) Rule difficulty (2)
	Miscellaneous*** (1)	Miscellaneous (5)
Subjunctive (T=6, S=13)	Rule difficulty (3)	Rule difficulty (12)
	Showing awareness of other grammatical features (3)	Miscellaneous (1)

Note. *The numbers in parentheses indicate the number of people who gave that reason.

**T stands for teachers, and S stands for students.

*** Miscellaneous includes situations where no reason was given.

The teachers selected subject-verb agreement because it is an important principle of grammar; the students selected it because it often appears on exams. The main reason for choosing the subjunctive was the same in both groups: the difficulty of the rules.

Overall, there was a distinct difference between the two groups with regard to their reasons for selecting a grammar feature as the best indicator of grammatical knowledge and ability. The teachers focused on their general language understanding; they considered awareness raising and importance of associated rules to learn. On the other hand, the students seemed to choose on the basis of rule difficulty and occurrence in tests.

5. DISSCUSSION AND CONCLUSION

On the basis of the results, the five best grammar indicators commonly agreed on

by both groups, the teachers and the students, are the relative pronoun, subject-verb agreement, the subjunctive, to-infinitives, and participles. These five were not only among the top five indicators most commonly selected by both the teachers and the students combined (Table 1), but they were also among the best indicators most commonly chosen by each group separately (Table 3).

Out of the five, the best indicator of grammatical knowledge and ability as perceived by the respondents is the relative pronoun, which was the most commonly selected feature in terms of the total number of choices made in both groups combined. The two best indicators of grammatical knowledge and ability could be said to be the relative pronouns and subject-verb agreement, the number one and two most commonly selected features in each group. The subjunctive is also notable in that it was the third-most commonly selected best indicator, and it was chosen by many students as one of their top five indicators.

As such, the following discussion focuses on these three features of grammar (the the relative pronoun, subject-verb agreement, and the subjunctive) as ostensibly the best indicators of grammatical knowledge and ability.

First, students generally have difficulty understanding and using relative pronouns. This difficulty can be explained using processability theory (Pienemann, 1999). According to Ellis (2006), "processability is to be understood in relation to Pienemann' s account of the processing procedures that underlie the acquisition sequences of a range of grammatical structures in different languages" (p. 436). Pienemann (1999) offers a hierarchy of processing procedures: "English relative clauses following a subject noun phrase would constitute an example of the most difficult structure" (Ellis, 2006, p. 436). As Pienemann (1999) observes, "processing procedures developed at one stage are a necessary prerequisite for the following stage" (p. 87). Therefore, structures with relative pronouns would be difficult for L2 learners because they are part of the ultimate stage of hierarchical processing, which has many prerequisite procedures.

Errors in subject-verb agreement are commonly made by L2 learners. For example, Sun (2014) examined the free writing of Chinese EFL learners and reported several ungrammatical patterns, including lack of subject-verb agreement. Using five experiments, Nicol, Forster, and Veres (1997) found that subject-verb agreement processing often involved syntactic aspects. They commented that "interference may arise whenever a structure containing a singular head and intervening plural is computed" (p. 569). It can be assumed that this interference of syntactic processing often causes difficulties in L2 learners' production of subject-verb agreement.

Studies have also shown that errors involving subject-verb agreement can be

due to L1-L2 differences (Jiang, Novokshanova, Masuda, & Wang, 2011; Kang, 2016; Shin & Milroy, 1999). These studies have indicated that, if a student's first language does not feature subject-verb agreement, they have difficulty using it in a target language that does feature it.

It is also important to consider the occurrence frequency of grammatical features, particularly when designing grammar syllabi (Richards, 2012, p. 11). Biber and Reppen (2002) emphasized the role of frequency in designing learning materials and in teachers' choices in their classroom instruction. Moreover, the students in this study said they chose the relative pronoun as the best indicator of grammatical ability because of how frequently it appeared in exams. Subject-verb agreement also occurs in almost all sentences, as well as commonly on tests.

Finally, with respect to the subjunctive, many students find it difficult to understand its rules. Although relatively few teachers chose the subjunctive as the best indicator, those that did list it mentioned the difficulty of the rules as the reason for their choice. Dulay and Burt (1973, 1974, quoted in Richards, 2012) proposed the order in which grammatical features are mastered. According to this order, the last grammatical feature to be successfully acquired is the first conditional, in which the present simple tense is used in the if-clause and the future simple tense in the main clause (e.g., *If I have free time, I will go to California*). This supports the difficult nature of the subjunctive.

These findings lead us to consider whether these best indicators could be used in grammar assessment, particularly in contexts with practical constraints such as time and resources. We are also led to the question of why syntactic measures in automatic scoring systems of language samples do not focus on the indicators identified in the present study. Such computer programs list many grammatical features as possible indicators of linguistic ability, many of which do not actually have any significant correlations with the quality of written texts used as input data. Some of the linguistic elements examined by those programs do share syntactic attributes with relative pronouns, such as T-units. The number of to-infinitives is also a common indicator in those systems. Largely, however, the wide variety of elements considered in those automated systems does not always include the top three or even the top five best indicators identified in this study. This low correspondence between the indicators of grammatical ability found in this study and those available to automated computer programs may lead us to caution against blindly accepting automated syntax analysis as a valid method for gauging L2 grammatical knowledge and ability.

This study had some limitations. Firstly, the study was based on a small-scale survey of high school students and high school English teachers. Definitively

determining the best indicators of grammatical ability requires further studies, including more rigorous empirical and theoretical investigations to cross-validate, modify, or extend the current results.

The present study surveyed English teachers as stand-ins for language experts and Grade 12 students as stand-ins for mature, experienced learners, as these two are the most important groups interacting in L2 learning, and their opinions may well provide a complementary source of information on what grammar features are most representative of students' grammatical knowledge and ability. Despite this, the opinions of these groups have rarely, if ever, been investigated in previous research.

We should, of course, be aware of the limitations of teachers' and students' perspectives on the matter. For instance, the decision on what to include in grammar assessment does not depend on what teachers and students think, but mostly on theoretical frameworks of grammar assessment. Moreover, it is not certain that the perceived difficulty or significance of the grammar features identified by the teachers and students corresponds to their actual difficulty or significance. Furthermore, this study surveyed a far greater number of students than teachers, so the findings may be said to reflect the students' views more than the teachers'. Future studies may want to survey other types of participants, such as university professors as an expert group, to expand on our findings of the best indicators of grammatical knowledge and ability.

This study selected and used 25 grammatical features in the questionnaire. As such, it is possible that the questionnaire responses were in part affected by the pre-selection and categorization of the 25 features. Future studies may therefore want to select and subdivide grammatical categories from a different perspective.

Until more rigorous theoretical and empirical studies are conducted on this subject, we should delay our decision to incorporate the indicators identified in this study into grammar assessment. If future empirical studies produce the same or similar results, these indicators or ones adjusted according to the new findings may be effectively used in grammar assessment, and such selection would be particularly useful in contexts with practical constraints such as time and resources. Those indicators could be part of specific criteria for grammar scoring, and the scale descriptors of the scoring criteria could contain guidelines that refer to those indicators. The best indicators may also be used as grammar indices in automated language analysis tools for research with linguistic indicators.

In conclusion, notwithstanding the stated limitations, the current study can be seen as an initial attempt to raise the subject of best indicators of grammatical knowledge and ability. It makes a unique contribution to grammar assessment by

cautioning against accepting and using a wide variety of linguistic features for grammar assessment under the potentially wrong impression that they are all equally important and indicative of grammatical ability. This study might also stimulate critical investigations into further rationales and methods for determining the best indicators of grammatical ability.

The present study suggests these indicators of grammatical knowledge and ability as the best according to teachers' and students' perceptions: the relative pronoun, subject-verb agreement, the subjunctive, to-infinitives, and participles. This study does not claim these five elements to definitively represent the best indicators of grammatical knowledge and ability, but the study does suggest that evaluators, teachers, and program developers should pay special attention to these five indicators, and invites future studies to cross-validate and modify these findings. With possibly adjusted research outcomes, we may be able to incorporate the best indictors of grammatical ability into test design and computer program implementation, simplifying grammar assessment focusing on only those features that are most representative of and relevant to general grammatical knowledge and ability.

REFERENCES

Ahn, M.-H., Choi, N.-J., Jang, I.-S., & Im, S.-C. (2007). *HB Grammar*. Seoul: Chonjae Education.

Bee, J., & Bachman, L. F. (2010). An investigation of four writing traits and two tasks across two languages. *Language Testing, 27*(2), 213–234.

Biber, D., & Reppen, R. (2002). What does frequency have to do with grammar teaching? *Studies in Second Language Acquisition, 24*(2), 199-208.

Brown, H. D. (2000). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). Pearson: New York.

Crossley, S. A., & McNamara, D. S. (2012). Predicting second language writing proficiency: the roles of cohesion and linguistic sophistication. *Journal of Research in Reading, 35*(2), 115-135.

Crossley, S. A., Weston, J. L., Sullivan, S. T., & McNamara, D. S. (2011). The development of writing proficiency as a function of grade level: A linguistic analysis. *Written Communication, 28*(3), 282–311.

Dulay, H. C., & Burt, M. K. (1973). Should we teach children syntax? *Language Learning, 23*(2), 245-258.

Dulay, H. C., & Burt, M. K. (1974). Natural sequences in child second language

acquisition. *Language Learning, 24,* 37-53.

Ellis, R. (2006). Modeling learning difficulty and second language proficiency: The differential contributions of implicit and explicit knowledge. *Applied Linguistics, 27*(3), 431–463.

Graesser, A. C., & McNamara, D. S. (2011). Computational analyses of multilevel discourse comprehension. *Topics in Cognitive Science, 3*, 371– 398.

Jiang, N., Novokshanova, E., Masuda, K., & Wang, X. (2011). Morphological congruency and the acquisition of L2 morphemes. *Language Learning, 61*(3), 940-967.

Kang, M.-J. (2016). *Errors in subject-verb agreement for third person singular verbs*. Master's thesis. Kyungpook National University, Daegu, Korea.

Kim, J. (2014). Predicting L2 writing proficiency using linguistic complexity measures: A corpus-based study. *English Teaching, 69*(4), 27-51.

Larsen-Freeman, D. (2009). Teaching and testing grammar. In M. Long & C. Doughty (Eds.), *The handbook of language teaching* (pp. 518-543). Malden, MA: Blackwell Publishers.

Lee, C.-S., Whang, W.-Y., Ahn, S.-J., Koo, E.-Y., Kim, J.-H., & Lee, J.-E. (2012). *High School English*. Seoul: Neung-Nyul Education.

Lu, X. (2010). Automatic analysis of syntactic complexity in second language writing. *International Journal of Corpus Linguistics, 15*(4), 474 – 496.

McNamara, D. S., Crossley, S. A., & McCarthy, P. M. (2010). Linguistic features of writing quality. *Written Communication, 27*(1), 57–86.

Nicol, J. L., Forster, K. I., & Veres, C. (1997). Subject–verb agreement in comprehension. *Journal of Memory and Language, 36*, 569–587.

Pienemann, M. (1999). *Language processing and second language development: processability theory*. Amsterdam: John Benjamins.

Purpura, J. E. (2014). Assessing grammar. In A. J. Kunnan (Eds.), *The Companion to language assessment* (pp. 100-124). Oxford, UK: John Wiley & Sons.

Richards, J. (2012). *Curriculum development in language teaching* (12th ed.). Cambridge: Cambridge University Press.

Shin, S. J., & Milroy, L. (1999). Bilingual language acquisition by Korean School children in New York City. *Bilingualism: Language and Cognition*, *2*(2), 147-167.

Song, S-M. (2007). *Sungmoon Jong-hap English*. Seoul: Sungmoon Publisher.

Sun, X. (2014). Ungrammatical patterns in Chinese EFL learners' free writing. *English Language Teaching, 7*(3), 176-183.

Applicable levels: Secondary

Sungsoo Kim
Chilseong High School
13, Chilseong-ro, Buk-gu, Daegu 41586
Phone: 053- 231-6956
Email: rapiel1024@naver.com

Jungok Bae
Department of English Education
Kyungpook National University
80 Daehak-ro, Daegu 702-701
Phone: 053- 950-5833
Email: jungokbae@knu.ac.kr

Received on June 1, 2017
Reviewed on July 15, 2017
Revised version received on August 15, 2017