Effects of Rubric-Referenced Self-Assessment Training on Korean High School Students' English Writing*

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The present study attempts to provide empirical and qualitative evidence to support the feasibility of rubric-referenced self-assessment to promote learning in a Korean high school EFL context. Over four rubric-referenced self-assessment lessons, with the help of a teacher's instructions, students wrote a first draft and assessed it using a scoring rubric. Drawing on this self-assessment, they wrote a second draft, also followed by a self-assessment as well as a self-assessment diary. As quantitative data, the scores of the first draft of the first class were compared with those of the second draft of the fourth class. Survey questionnaires, interviews, self-assessment diaries, and essay self-assessments served as qualitative data. The findings are, first, rubric-referenced self-assessment showed positive effects on students' writing quality. Second, students came to perceive the effectiveness of rubric-referenced self-assessment. Lastly, rubric-referenced self-assessment positively influenced students' learning strategies and attitudes. These results imply that rubric-referenced self-assessment promotes learning in a Korean high school EFL context, leading students to become self-regulated learners that take responsibility for their own learning.

Key words: rubric-referenced self-assessment, alternative assessment, formative assessment, promoting learning, self-regulated learning, autonomy

1. INTRODUCTION

In the past, teachers and textbooks drove learning. Now educators emphasize helping learner autonomy (Boud, 2000; Carless, 2002). In other words, the importance of creating self-directed learners is widely accepted in the education field (Bolhuis, 2003; Brookfield,

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2009). This trend aligns with calls for a shift from traditional to alternative assessment (Boud & Falchikov, 2006; Gipps & Stobart, 2003; Sadler, 1989). Traditional assessment focuses on measuring outcomes with respect to learning objectives and not on improving students' performance per se, while alternative assessment seeks to improve learning itself; assessment is the means of learning not the sum or product of learners' performance (Lee, 2007; McNamara, 2001). In this regard, alternative assessment fits well with current language-learning practices (Black & Wiliam, 2005; Dann, 2012; Knight, 2012).

There have been ongoing attempts to introduce alternative assessment in Korea. For instance, the national curriculum has emphasized nationwide implementation of various types of alternative assessment in middle and high school English classrooms. Yet, English grades have a significant influence on Korean students' success in university entrance examinations. Thus examination-oriented and teacher-centered learning has impeded the incorporation of alternative assessment in the classroom. Meanwhile, few studies examine the educational values and benefits of alternative assessment in Korea. Although some investigate the effects of peer- and portfolio assessments as forms of alternative assessment in colleges and universities (Kang, 2004; Kim, 2016), studies regarding alternative assessments in a Korean secondary EFL context are very rare. In particular, *self-assessment*, which refers to the involvement of learners in making judgments about their learning and achievement as one type of alternative assessment, has been denied a fair opportunity to show its effectiveness in Korean secondary schools. Studies show that self-assessment is a decision-making process leading learners to tap into higher-level thinking and providing information about learners' strengths and weakness, ultimately contributing to improvement in learning and self-regulation (Butler & Lee, 2010; Nicol & Macfarlane-Dick, 2006). Also, some studies demonstrate that secondary school students in EFL contexts such as in Iran and Sweden can successfully implement self-assessment and that self-assessment positively affects their learning. (Javaherbakhsh, 2010; A.D. Oscarson, 2009). The question of how self-assessment might fare in a Korean context, where traditional assessment is rooted, is worth investigating.

Therefore, in order to confirm the effectiveness and desirability of alternative assessment, especially self-assessment, in a Korean secondary school context, further investigation providing qualitative as well as quantitative evidence is required. Such an undertaking may help teachers and instructors gain insight into the use of self-assessment in promoting learning.

The present study attempts to identify the effectiveness of self-assessment training with the use of a rubric in improving Korean high school students' English writing. Nineteen high school students were surveyed and interviewed following a series of rubric-referenced self-assessment lessons. In this manner, the effectiveness of rubric-referenced self-assessment on English writing, students' perceptions toward this process, and changes in

their learning strategies and attitudes toward English writing were examined. Accordingly, the following three research questions are addressed.

1. How does rubric-referenced self-assessment training affect EFL students' writing quality?
2. How do students perceive the effectiveness of rubric-referenced self-assessment training in writing classes?
3. How does rubric-referenced self-assessment training influence students' learning strategies and attitudes toward their writing?

2. REVIEW OF LITERATURE

2.1. Self-Assessment as a Means of Improving Language Learning and Rubrics as Self-Assessment Tools

Assessment can be implemented for either summative or formative purposes. For summative purposes, assessments are used to assign grades indicating mastery of knowledge or skills. For formative purposes, assessments provide feedback to students to empower them and improve their learning (Lee, 2007; Stobart, 2006). Self-assessment can serve a summative purpose by helping students to determine whether they have learned or contributing to their grades (Boud & Falchikov, 1989). However, with the increasing interest in learning autonomy, formative use of self-assessment is gaining in popularity. Emphasizing the formative characteristics of self-assessment, Andrade, Du, and Mycek (2010) define self-assessment as "a process of formative assessment during which students reflect on the quality of their work, judge the degree to which it reflects explicitly stated goals or criteria, and revise accordingly" (p. 199). In other words, self-assessment with a formative purpose involves students making judgments about their learning, allowing them to recognize areas that require improvement. With regard to the processes of self-assessment as a means of enhancing learning, Ross (2006) suggests the following steps: self-observation where students focus on particular aspects of their performance, self-judgments by which they verify progress in relation to desired results, and self-reaction by which they express a certain level of satisfaction with the results of their actions with respect to their goals. These processes subsequently lead to students' enhanced *self-efficacy beliefs*, which means improvement of their perceptions of their own ability to succeed at a similar or related task considering their own previous experiences (Paris & Paris, 2001; Schunk, 2003). Figure 1 below shows the processes of self-assessment as a means of improving learning.

FIGURE 1

How Self-Assessment Contributes to Learning (Ross, 2006, p. 6)
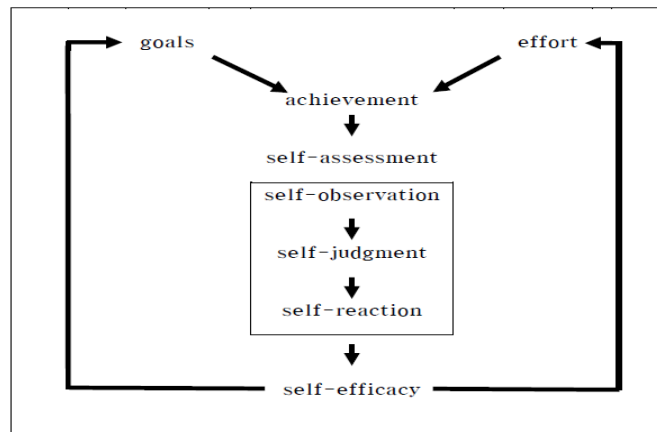
Many studies that examine how to advance the learning aspect of self-assessment find training students to self-assess very effective (Ross, Rolheiser, & Hogaboam-Gray, 1999; Sadler & Good, 2006). These studies especially mention two strategies. One is to instruct students how to apply the criteria (Andrade, 2006) and the other is to provide feedback while they implement self-assessment (Patri, 2002). With regard to the former, the use of analytic scoring rubrics is suggested to provide criteria or standards in self-assessment (Hafner & Hafner, 2003; Perlman, 2002). The benefits of using analytic rubrics in self-assessment include improvement of inter- and intra-rater reliability. Also, regarding formative approaches to self-assessment, analytic rubrics inform both teachers and students of what is looked for in terms of assessment (Arter & McTighe, 2002; Busching, 1998; Perlman, 2002). Furthermore, analytic scoring helps students to identify strengths and weakness and learning needs (Johnson, Penny, & Gordon, 2000). Due to these characteristics, some studies claim that the analytic rubric itself, like self-assessment, possesses the potential to boost self-efficacy (Arter & McTighe, 2002; Quinlan, 2006).

2.2. Self-Assessment and Self-Regulated Learning

Many studies find that self-assessment contributes to promoting self-regulated learning (Kostons, Van Gog, & Paas; 2012; Nicol & Macfarlane-Dick, 2006). *Self-regulation* refers to "self-generated thoughts, feelings, and actions that are planed and cyclically adapted to the attainment of personal goals" (Zimmerman, 2000, p. 14). This implies a cyclic process where students monitor the effectiveness of their learning and respond to feedback. These responses manifest as covert changes including improvements in self-esteem and self-efficacy as well as overt changes including self-instruction and self-

reinforcement, which, in turn, influence subsequent self-regulation (Carver & Scheier, 1981). Through this cycle, students' learning and motivation become interdependent. Accordingly, self-regulated students consistently self-monitor, self-evaluate, plan, organize, change conditions for better outcomes, and attain desired results, and perceiving self-efficacy, set higher learning goals. Furthermore, they seek out cognitive strategies and social support such as teacher and peer advice, information, and skills by which they can further their learning (Paris & Paris, 2001).

A growing body of empirical evidence supports the stipulation that self-regulated students are more effective learners: they are more persistent, resourceful, self-assured and achieve better results (Pintrich, 1995; Zimmerman, 2000; Zimmerman & Schunk, 2001). Moreover, they have academic autonomy, possessing a sense of control over their learning, whereby they are less dependent on external aid (Zimmerman & Schunk, 2004). Furthermore, considering the fact that self-regulation is a self-directive process by which students transform their mental abilities into academic expertise, it is undeniable that self-regulation is essential to the development of lifelong learning skills (Boud, 1995).

3. METHODOLOGY

3.1. Participants

The participants of the study were 16 female and three male 11th grade students from a co-ed high school in Ansan, Gyeonggi Province. These students were volunteers from among the 148 students in the four English-language classes for which the researcher was responsible. They each desired to improve their English writing. None had lived in an English-speaking country before or received private English writing lessons outside the classroom. Furthermore, none of them had implemented English writing self-assessment prior to the study. English competence among the students varied a great deal. Table 1 shows the scores of a reading and grammar test conducted by the school prior to the study. This test was based on the English textbooks used in the English classes and consisted of 18 reading and five grammar questions.

TABLE 1

Participants' Scores on a Preliminary Test

	Reading and Grammar Test (out of 100)				
	Number of Students	Minimum	Maximum	Mean	Standard deviation
Total	19	47.10	94.90	76.01	12.78

3.2. Instruments

Instruments utilized for the present study were the rubric for self-assessment, four essays on different topics, self-assessment diaries, survey questionnaires, and interviews. A brief description of each instrument is provided below.

3.2.1. Rubric for self-assessment

The rubric for self-assessment was adapted from Andrade et al. (2010) and the analytic rubric provided by the Korean Institute for Curriculum and Evaluation (KICE) (Shin, Min, & Joo, 2012). Andrade et al.'s (2010) rubric included criteria common for assessing writing in research and used language appropriate for EFL high school students. Also, since the KICE analytic rubric was developed for Korean English teachers to assess Korean high school students' writing performances, it was assumed that the rubric criteria would be appropriate for the students' self-assessment. Considering all these factors, the rubric for self-assessment consisted of four criteria, each with a maximum score of five: task completion, content, organization, and language use. Task completion required satisfaction of five conditions, including number of words, clear introduction, taking a position (agreement or disagreement), adding a third argument to two provided beforehand, and conclusion. For content, students were asked to clearly present a main idea, relevant and detailed examples and appropriate supporting details. For organization, students were asked to write a clear topic sentence, supporting details, and a concise concluding sentence, displaying logical progression with appropriate cohesive devices. Finally, for language use, students were asked to use correct grammar and spelling and appropriate and varied vocabulary and expressions (see Appendix A).[1]

3.2.2. Essays

In each writing class, students were provided a different persuasive essay topic.[2] The present study adopted only the persuasive essay writing style for the writing task. Since the experiment was conducted over just four classes, it was thought that students might be overwhelmed if assigned different writing styles each class, hindering accurate assessment.

For each essay, students had to agree or disagree with a given statement and include an

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[1] Drawing on Andrade (2000), who argues that when rubrics are written in a language that students can easily understand this supports learning, Korean language was used in the rubric.

[2] Just as with the rubric, instructions for the essay tasks were provided in Korean, based on the rationale that this would better enable students to understand the tasks and accurately self-assess their performances (M. Oscarson, 1989).

introduction, body, and conclusion. In the main body, students had to present their own idea supporting why they agreed or disagreed with the statement (two others were provided beforehand). Essay length was set at approximately 80-120 words. The topical statements were as follow: "Students should be allowed to take on a part-time job"; "Co-education is desirable for students"; "Students should go to university"; and "Engaging in fan-club activities is harmful to students."

3.2.3. Self-assessment diary

The self-assessment diary included various criteria to evaluate students' progress and their perceptions of that progress. Students were asked about their feelings regarding how they did in class, what difficulties they experienced, in what ways they improved, and what they intended to do next class. They also recorded a self-assessment score for each criterion in the rubric. Finally, the teacher added feedback in students' mother tongue, as a formative mechanism.

3.2.4. Survey questionnaires and interviews

To understand students' perceptions regarding the impact of rubric-referenced self-assessment, a survey and individual interviews were conducted. The survey and interview questions were both devised by the researcher, with reference to Andrade and Du (2005) and Butler and Lee (2010).

The survey was distributed in the penultimate class. It was composed of 12 questions: seven statements relying on the five-point Likert-type scale, in which five signified *strongly agree* and one *strongly disagree*, and one ordering question, one multiple-choice, and three open-ended.

The interviews were conducted in the final class. Students participated in individual interviews for approximately thirty minutes each, answering questions regarding changes in their learning strategies, attitudes toward their writing, and perceptions of the self-assessment process (see Aappendix B).

3.3. Data Collection Procedure

3.3.1. Rubric-referenced self-assessment training lessons

Previous studies address the importance of training students to conduct self-assessment through instruction and feedback (Nicol & Macfarlane-Dick, 2006; Orsmond, Merry, & Reiling, 2000). Building on these findings, the present study carried out rubric-referenced

self-assessment lessons involving instruction and feedback to promote students' acquisition of self-assessment skills.

Table 2 below briefly outlines the self-assessment lesson schedule. Students participated in a total of four rubric-referenced self-assessment lessons over two weeks, with two lessons per week. Each lesson was composed of two sessions, with each session lasting sixty minutes. There was a ten-minute break between the two sessions. Through the first to fourth classes students were provided with a different essay topic for their essay writing and self-assessments. A survey was also carried out in the fifth class and individual interviews were conducted in the sixth class.

TABLE 2
Schedule Outline

Total Study Period	Three weeks
Class Days	Every Tuesday & Thursday (six classes in total)
Duration of Each Class	130 minutes (First Session: 60 min. / Break time: 10 min. / Second Session: 60 min.)
Class	Activity
First	Essay Writing 1 ("Students should be allowed to take on a part-time job")
Second	Essay Writing 2 ("Co-education is desirable for students")
Third	Essay Writing 3 ("Students should go to university")
Fourth	Essay Writing 4 ("Engaging in fan-club activities is harmful to students")
Fifth	Survey Questionnaires
Sixth	Individual Interview

(1) Writing of first draft

The first session of each lesson began with the writing of a first draft on a given topic over 30 minutes. Students were allowed to use an electronic dictionary. The lesson then progressed with the teacher directing and students engaging in self-assessment. Table 3 describes the sequence of events in each class.

TABLE 3
Sequence of Events in Each Class

Session	Allotted Time	Events
First Session	30 min.	Writing of First Draft
	30 min.	Teacher's Instruction & Self-Assessment for First Draft
Break Time	10 min.	
Second Session	30 min.	Writing of Second Draft
	30 min.	Self-Assessment for Second Draft & Writing in a Self-Assessment Diary

(2) Instruction and self-assessment for first draft

Thirty minutes were allotted for teacher's instructions and students' self-assessments in the latter part of the first session of each class. Students were given a scoring rubric for self-assessment and the researcher gave students a lesson about how to self-assess using the rubric. The researcher explained what each criterion meant, the significance of the scale relative to each criterion, and how students could evaluate their first draft using the rubric. When students set to work, they were asked to underline or color code evidence in their writing indicating satisfaction of the requirements of each criterion. If they could not find any such evidence in their essay, they would write a reminder to make improvements in the second draft. They were also asked to write a score regarding each criterion and comment on why they chose each score. The instructions were repeated each class to ensure that students were aware of how to properly self-assess their work.

(3) Writing of second draft

In the first session, students wrote their first draft, followed by the teacher's instruction in self-assessment, which the student then carried out. After a ten-minute break, in the second session, students began work on second drafts. They were given thirty minutes to revise their first draft based on the results of their assessments. They could refer to a dictionary as well as their first drafts for assistance.

(4) Writing in a self-assessment diary

According to Dickinson and Carver (1980) and M. Oscarson (1989), self-assessment diaries help to systemize self-assessment procedures, allowing students to set clear objectives for their next writing task. Students were given thirty minutes to write in their self-assessment diaries. Before beginning, they were asked to self-assess their second draft using the rubric and record their self-assessment scores for both the first and second drafts in the self-assessment diary. The researcher then guided and trained students to write effectively in their own self-assessment diaries, encouraging them to reflect on their work to develop self-assessment skills. In accordance with the self-assessment diary format, students were asked to write freely regarding the following categories: "how I did in this class," "what difficulties I had," "in what respect I improved," and "what I intend to do in the next class." The researcher returned the diaries with feedback in the next class.

3.3.2. Survey and interview

In the fifth class, a survey on perceptions with regard to the impact of rubric-referenced self-assessment was administered in the classroom. For in-depth qualitative data, individual interviews were also conducted in the sixth class. The students were encouraged to express in detail what they felt or thought regarding the impact of rubric-referenced self-assessment on their writing. The interviews were recorded and transcribed for data analysis.

3.3.3. Rating

For the sake of rater reliability, an English teacher as well as the researcher graded the essays, using the same scoring rubric the students used in self-assessment. In order to ensure reliable scoring, the teacher trained by rating twenty persuasive essays in conjunction with the researcher. After the training period, the two scorers rated a total of 152 essays (eight essays per 19 students) independently. With respect to inter-rater reliability, the inter-rater agreement measured by Cohen's Kappa coefficient for total essay scores ranged from .14 to .57 (M=.37) and the Spearman correlation coefficient for the four criteria ranged from .67 to .82 (task completion r=.82, content r=.77, organization r=.67, and language use r=.76).[3]

3.4. Data Analysis

To examine the impact of rubric-referenced self-assessment on writing quality (research question 1) total essay scores, scores for each criterion, and total number of words were analyzed using a sample t-test when the data followed a normal distribution, and when it did not, a non-parametric Wilcoxon matched-pairs singed-rank test. To inspect students' perceptions pertaining to the impact of rubric-referenced self-assessment (research question 2) on learning strategies and attitudes toward writing (research question 3), the data from the survey questionnaire, interviews, self-assessment diaries and essay self-assessments were qualitatively analyzed.

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[3] A Cohen's Kappa coefficient was used when the data were normally distributed. Otherwise, a Spearman correlation coefficient was used.

4. RESULTS

4.1. Effects of Rubric-Referenced Self-Assessment on Students' Writing Quality

With regard to the first research question, quantitative changes in students' writing following rubric-referenced self-assessments were analyzed in terms of three aspects: total essay scores, scores for each criterion, and total number of words. Overall, the results suggest that self-assessment positively affected the students' writing, but it should be noted that the study did not include a control group to more rigorously assess this relationship. Table 4 describes the terms used to indicate each draft appearing in this study.

TABLE 4

Terms for "Drafts" in the Present Study

Class	Terms for Drafts	Class	Terms for Drafts
First class	First draft $\Rightarrow$ 1F[4] Second draft $\Rightarrow$ 1S[5]	Third class	First draft $\Rightarrow$ 3F Second draft $\Rightarrow$ 3S
Second class	First draft $\Rightarrow$ 2F Second draft $\Rightarrow$ 2S	Fourth class	First draft $\Rightarrow$ 4F Second draft $\Rightarrow$ 4S

4.1.1. Increase in total essay scores

To examine the effect of accumulated training over four rubric-referenced self-assessments, the total essay scores of 1F and 4S were compared. Total essay scores reflected a combination of scores with respect to the four criteria of the scoring rubric: task completion, content, organization, and language use. They were also averaged based on the scores provided by the two teachers, with the maximum possible score being 20 (maximum score for each criterion was five). The descriptive statistics are summarized in Table 5.

TABLE 5

Teacher-rated Total Essay Scores on 1F and 4S ($N = 19$)

Draft	Minimum	Maximum	Mean	Standard deviation
1F	6.50	17.50	12.13	3.52
4S	12.00	19.50	16.68	2.00

As shown in Table 5, the mean 1F score of 12.13 increased to the mean 4S score of

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[4] "F" stands for "first."
[5] "S" stands for "second."

16.68. Since the data followed a normal distribution, a sample paired *t*-test was conducted. As Table 6 indicates, the result of the *t*-test showed statistical significance ($p < .001$), indicating that the rubric-referenced self-assessments positively impacted total essay scores.

TABLE 6
Paired *t*-Test of Teacher-rated Total Essay Scores on 1F and 4S ($N = 19$)

Draft	Mean	Standard deviation	*df*	*t*	Sig. (two-tailed)
4S – 1F	4.55	2.42	18	8.20	.000***

*** $p \leq .001$

The total essay scores of the first and second drafts were also analyzed to investigate individual score changes before and after self-assessment in each class. The data displayed in Table 7 show that total essay scores improved, suggesting that rubric-referenced self-assessment had a positive effect. In addition, the means of the total essay scores steadily increased with each successive class. Furthermore, the standard deviation of the scores continually decreased, indicating that students who received lower total essay scores in the first class steadily improved. Finally, it is notable that the minimum total essay scores continually increased. As shown in Table 7, meaningful improvement was apparent in each class between first and second drafts in minimum total essay scores.

TABLE 7
Teacher-rated Total Essay Scores on Eight Drafts ($N = 19$)

Class	Draft	Minimum	Maximum	Mean	Standard deviation
First	1F	6.50	17.50	12.13	3.52
	1S	8.50	18.50	14.65	3.03
Second	2F	7.50	17.75	13.39	3.17
	2S	11.00	18.00	15.24	1.99
Third	3F	10.00	17.50	14.15	2.54
	3S	10.50	19.00	16.00	2.30
Fourth	4F	9.00	18.50	15.08	2.52
	4S	12.00	19.50	16.68	2.00

As displayed in Table 8, the result of the *t*-test pertaining to total essay scores in each class maintained statistical significance ($p < .001$) through all four classes. This suggests that in each class, the self-assessment conducted following the first draft could have positively influenced the second draft. Additionally, one may note that the absolute value of the means of the paired *t*-test in the first class was 2.52, the largest among the four classes. This suggests that self-assessment most significantly affected the second draft in the first class. Finally, in considering the mean differences, standard deviations, and minimums of total essay scores across four classes, it appears that rubric-referenced self-assessments most greatly affected weaker writers.

TABLE 8
Paired *t*-Test of Teacher-rated Total Essay Scores on Eight Drafts (*N* = 19)

Class	Draft	Mean	Standard deviation	df	t	Sig. (two-tailed)
First	1S – 1F	2.52	1.68	18	6.56	.000***
Second	2S – 2F	1.84	1.86	18	4.32	.000***
Third	3S – 3F	1.84	1.47	18	5.45	.000***
Fourth	4S – 4F	1.66	1.20	18	5.78	.000***

*** $p \leq .001$

4.1.2. Improvement in scores for individual criteria

The present study also examined the relationship between self-assessment and each criterion in the scoring rubric. Table 9 lists the scores given by the two raters for each criterion on 1F and 4S. It shows that all the scores for each criterion increased after four rubric-referenced self-assessments. The mean score for content improved the most (by 1.37), while language use improved the least (by 0.73). The increases in mean scores for task completion and organization were almost identical (by 1.23 and 1.21 respectively). In addition, minimum scores improved for all four sections, with the largest increase for task completion (by 2.50).

TABLE 9
Teacher-rated Scores for Individual Criteria (*N* = 19)

Criterion	Draft	Minimum	Maximum	Mean	Standard deviation
Task Completion	1F	1.50	5.00	3.58	1.02
	4S	4.00	5.00	4.81	.38
Content	1F	1.50	4.50	2.89	.89
	4S	3.00	5.00	4.26	.69
Organization	1F	1.00	4.00	2.71	.96
	4S	2.50	5.00	3.92	.63
Language Use	1F	2.00	4.50	2.95	.83
	4S	2.50	4.50	3.68	.61

Table 10 shows that self-assessment was significantly related to individual criteria scores. According to the results of the Wilcoxon matched pairs test, the *p*-value for all four criteria was statistically significant ($p \leq .001$).

TABLE 10
Wilcoxon Matched Pairs Test of Teacher-rated Scores for Individual Criteria (*N* = 19)

Class	Draft	Z	Sig. (two-tailed)
Task completion	4S – 1F	3.437	.001***
Content	4S – 1F	3.716	.000***
Organization	4S – 1F	3.590	.000***
Language use	4S – 1F	3.580	.000***

*** $p \leq .001$

4.1.3. Rise in total number of words

Previous studies stipulate an association between language fluency and the word total of a written work (Housen & Kuiken, 2009; Wolfe-Quintero, Inagaki, & Kim, 1998). In other words, a rise in word total indicates writing development. Based on this rationale, the total number of words of 1F was compared to that of 4S to inspect writing development following rubric-referenced self-assessment.

Tables 11 and 12 show that students' essays became dramatically longer following rubric-referenced self-assessment lessons. In fact, the mean score of 4S was almost twice that of 1F, which was statistically significant ($p < .001$). Meanwhile, the minimum score of 4S increased threefold over that of 1F, while the maximum score almost doubled. Therefore, it is quite likely that self-assessment positively affected fluency, one of the most crucial elements in students' writing.

TABLE 11

Total Number of Words ($N = 19$)

Draft	Minimum	Maximum	Mean	Standard deviation
1F	20	127	69.89	30.97
4S	68	232	129.00	42.82

TABLE 12

Paired *t*-Test of Total Number of Words ($N = 19$)

Draft	Mean	Standard deviation	*df*	*t*	Sig. (two-tailed)
4S – 1F	59.11	37.70	18	6.83	.000***

*** $p \leq .001$

4.2. Students' Perceptions about the Effectiveness of Rubric-Referenced Self-Assessment Training

To describe how students perceived the effectiveness of rubric-referenced self-assessment training (research question 2), this section provides qualitative data in the form of questionnaires, interviews, and self-assessment diaries. Responses were categorized into three groups according to the following questions: "In what respects did you perceive the rubric-referenced self-assessment as effective?"; In what respects did your writing improve (4.2.1)? What were the benefits of the teacher's instruction and feedback and the self-assessment diaries (4.2.2)? What aspects of your learning were most affected (4.2.3)?

4.2.1. Improvement of writing

Table 13 shows how the students perceived rubric-referenced self-assessment in terms of improvement of writing. In Tables 13, 14, and 15, RSA refers to rubric-referenced self-assessment and WSD to writing in a self-assessment diary.

TABLE 13
Students' Perceptions Toward Rubric-Referenced Self-assessment
(Improvement of Writing) (*N* = 19)

Questions	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Q1. I think the RSA had a positive effect on my essay writing.	0 (0%)	0 (0%)	2 (10.5%)	8 (42.1%)	9 (47.4%)
Q2. I think my 2nd draft improved after the RSA on the 1st draft in each class.	0 (0%)	0 (0%)	0 (0%)	11 (57.9%)	8 (42.1%)
Q3. I think my 4S (the 2nd draft of the 4th class) improved compared with my 1F (the 1st draft of the 1st class)	0 (0%)	0 (0%)	4 (21.1%)	10 (52.6%)	5 (26.3%)

Q4. Following four RSA lessons, in which section do you think your writing improved the most, and which the least? Please, write '1' in the bracket of the most improved section and '4' in the bracket of the least improved.		Task Completion	Content	Organization	Language use
	The Most	11 (57.9%)	4 (21.1%)	2 (10.5%)	2 (10.5%)
	The Least	4 (21.1%)	0 (0%)	3 (15.8%)	12 (63.1%)

Q5. If you think RSA had a positive effect on your essay writing, why or in what aspect?	***Reasons***[6] (1) RSA made me realize my writing weaknesses. (*8 students*) (2) RSA gave me the opportunity to reflect on or judge my writing from an objective perspective. (*6 students*) (3) The rubric provided the chance for me to self-assess my writing objectively. (*6 students*) (4) RSA helped me to think about how to improve my writing. (*2 students*) (5) RSA helped me to realize the strengths and weakness of my writing. (*1 student*)

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[6] In open-ended questions (Q5, Q7, and Q9), students were allowed to write more than two opinions if they want.

Q11. I think I would have received higher scores on my last writing performance test if I had participated in rubric-referenced self-assessment lessons beforehand.	0 (0%)	1 (5.3%)	1 (5.3%)	10 (52.6%)	7 (36.8%)
Q12. If given the chance, I believe I would participate in rubric-referenced self-assessment classes in the future.	0 (0%)	0 (0%)	1 (5.3%)	10 (52.6%)	8 (42.1%)

According to the responses to Q1, Q2, Q3, Q4, Q5, Q11, and Q12 in the questionnaire, overall, the students affirmed the positive effects of rubric-referenced self-assessment on their essay writing. When asked about whether rubric-referenced self-assessment was effective for their essay writing (Q1), eight out of 19 (42.1%) chose "agree" and nine (47.4%) "strongly agree." Drawing on the answers given to the open-ended Q5, "If you think rubric-referenced assessment had a positive effect on your essay writing, why and in what aspect?" the effects of rubric-referenced self-assessment could be summarized as follows: "Rubric-referenced self-assessment was helpful because it allowed students to objectively reflect on and improve their writing by identifying their strengths and weakness." Six students also stated, "the rubric provided a chance to self-assess my writing objectively." These findings suggest that students were generally aware of the effects of rubric use in self-assessment.

In addition to the survey responses, interview and diary excerpts provide more concrete evidence of the fact that students truly believed the quality of their work improved.[7]

(D-1)[8] I'm happy I'm using the dictionary less than before. I feel more comfortable doing my work. My writing has become longer, and I find myself trying to use various constructions in comparing sentences.

(Student J, Fourth Class)

(D-2) I was surprised to find that my supporting ideas became more specific.

(Student G, Fourth Class)

(I-1)[9] The organization of my writing became much better. The writing unfolded

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[7] Opinions in the self-assessment diaries and interviews, which were written or spoken in Korean, were translated into English by the researcher.
[8] "D" stands for "self-assessment diary."
[9] "I" stands for "Interview."

systematically, arranged with an introduction, body, and conclusion. I was able to use supporting ideas more abundantly.

(Student E, Sixth Class)

(I-2) I think my writing has gotten much better. I have come to use more various and higher-level words in my writing. In addition, it is much longer and richer in content.

(Student Q, Sixth Class)

4.2.2. Benefits of teacher's instruction and feedback and self-assessment diaries

As shown in Table 14, the students' responses in the questionnaires revealed that they perceived the teacher's instruction and feedback as beneficial and the self-assessment diaries as effective for rubric-referenced self-assessment.

TABLE 14
Students' Perceptions Toward Rubric-Referenced Self-Assessment
(Benefits of Teachers' Instruction and Feedback and Self-assessment Diaries) ($N = 19$)

Questions	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Q6. I think the teacher's instructions on how to self-assess and feedback regarding my self-assessment diary were helpful.	0 (0%)	0 (0%)	0 (0%)	13 (68.4%)	6 (31.6%)
Q7. If you think the teacher's instructions on how to self-assess and feedback regarding your self-assessment diary were helpful to you, why do you think this was so?	*Reasons* (1) The teacher's instruction helped me to self-assess my writings in a more detailed manner. (*9 students*) (2) The teacher's instruction helped me to self-assess my writings more objectively. (*2 students*) (3) The teacher's concrete examples helped me to understand the rubric better. (*2 students*) (4) The teacher explained how to self-assess. (*2 students*) (5) The teacher's feedback in the self-assessment diary helped me to realize the weakness of my writing. (*2 students*) (6) The teacher's instruction helped me to self-assess my writings more accurately. (*1 student*) (7) When I asked, the teacher explained how to self-assess in detail. (*1 student*) (8) The teacher's instruction made me reflect on how I self-assessed. (*1 student*) (9) The teacher's feedback in the self-assessment diary helped me to improve my writing for the next time. (*1 student*)				
Q8. I think that writing in a self-assessment diary was helpful to my writing and further self-assessment	0 (0%)	1 (5.2%)	4 (21.1%)	10 (52.6%)	4 (21.1%)

| Q9. If you think in a self-assessment diary was helpful to your writing and further self-assessment, why do you think so? | ***Reasons***
(1) WSD allowed me to reflect on the weakness in my writing and improve them in the following classes. (*9 students*)
(2) WSD allowed me to reflect on how I self-assessed my writings. (*6 students*)
(3) WSD allowed me to better remember which sections (aspects) I should improve next. (*2 students*)
(4) WSD helped me to realize the weakness and strengths in my writing and gain self-confidence over time. (*1 student*)
(5) WSD helped me to notice how my writing changed and what I should do in further classes to improve. (*1 student*)
(6) WSD helped me to compare my writing over different classes and examine what aspects of my writing had improved. (*1student*)
(7) WSD helped me to improve my writing for the next time. (*1student*)
(8) WSD helped me to try harder next time. (*1student*) |

To Q6, "I think the teacher's instruction on how to self-assess and feedback regarding my self-assessment diary were helpful," 13 out of 19 (68.4%) chose "agree" and the remaining six (31.6%) "strongly agree." Regarding the open-ended Q7, which asked why the teacher's instructions and feedback regarding the self-assessment diary were helpful, the most frequent response was, "The teacher's instruction helped me to self-assess my writing in a more detailed, objective, and accurate manner" (12 out of 21 responses). Although students differed in the use of the terms "detail," "objective," or "accurate," it seems reasonable to conclude that the teacher's instruction was an essential component in students' self-assessment of their writing and that, overall, the rubric alone was insufficient for self-assessment, although they certainly recognized its effectiveness. The students were also positive about the effectiveness of feedback regarding the self-assessment diary (e.g., "The teacher's feedback in the self-assessment diary helped me to realize the weakness of my writing" in responses to Q6).

In Q8, which asks whether students thought that writing in a self-assessment diary was helpful to their writing and self-assessment, 10 out of 19 (52.6%) responded "agree" and four out of 19 (21.1%) "strongly agree." To the open-ended Q9, which asks why the self-assessment diary was helpful, the students responded that writing in a self-assessment diary enabled them to look back on what they did and make a plan for improvement.

4.2.3. Most affected aspect of writing

As shown in Table 15, to investigate whether students thought they improved most with respect to writing ability or affective domains, Q10 asked, "Following four rubric-referenced self-assessment lessons, in which aspect did rubric-referenced self-assessment

affect you the most?"

TABLE 15

Students' Perceptions toward Rubric-Referenced Self-Assessment
(Most Affected Aspect of Writing) (*N* = 19)

Questions	Options			
Q10. Following four rubric-referenced self-assessment lessons, in which aspect did the rubric-referenced self-assessment affect you the most?	Writing ability	Self-confidence	Motivation	Others
	8 (42.1 %)	9 (47.4%)	2 (10.5%)	0 (0%)

The students reported that "self-confidence" was the most affected (47%), followed by "writing ability" (42%) and "motivation" (10%). Even though affective domains were most significantly affected by rubric-referenced self-assessments, accounting for 58% of the responses ("self-confidence" plus "motivation"), "writing ability" was also powerfully affected (42%). Also, it is noteworthy that eight of 10 students who averaged between 15.75 to 18.13 on total essay scores (perfect score 20) throughout the four classes selected "writing ability" as the most influenced aspect. In other words, the students who chose "writing ability" as most affected by rubric-referenced self-assessment had higher writing scores, while those selecting "self-confidence" or "motivation" had lower scores.

4.3. Development of Effective Learning Strategies and Positive Attitudes Toward Writing

Existing research demonstrates that self-assessment promotes self-regulated learning. In addition, some studies stipulate that self-assessment covers all three domains of self-regulated learning, namely, metacognitive domain, cognitive domain, and affective domain (Butler & Lee, 2010; Dann, 2012, Paris & Paris, 2001). Drawing on these findings, this section examines changes in the students' learning strategies and attitudes toward writing as evidence of self-regulated learning across the three domains, using the interviews, self-assessment diaries, and self-assessment comments on the essay papers. Detailed explanations for each domain are presented in each corresponding section, and each of these is categorized into subsections based on the data, referring to the subclassifications of each domain found in the work of Butler and Lee (2010).

4.3.1. Metacognitive domain

In terms of the metacognitive domain, self-regulated learners plan, set goals, organize,

self-monitor, and self-evaluate while processing their writing. The metacognitive domain was identifiable in the present study in terms of three categories: (1) evaluating personal state by reflecting on writing; (2) monitoring writing process and progress; and (3) awareness of goals and expectations.

(1) Evaluating personal state by reflecting on writing

Sixteen of the students reported discovering their strengths and weakness by reflecting on their writing after the rubric-referenced self-assessments, as shown in the interview excerpts (I-3) and (I-4).

(I-3) I think it was effective. I could **identify the weakness** in my writing through rubric-referenced self-assessments. This **gave me an opportunity to reflect on my work** and make an effort to improve my writing over the following classes.

(Student K, Sixth Class)

(I-4) I like the self-assessment. By self-assessing with the rubric, I came to **know in what areas I had weaknesses and strengths**. While revising my work in the following classes, I found that my writing became much better. I thought that this was really amazing.

(Student I, Sixth Class)

(2) Monitoring writing process and progress

In the interviews, nine students commented on how they could now monitor their progress much more effectively. They recognized that this was because the rubric gave them an objective way to look at their work.

(I-5) **With the help of the rubric**, I was able to **check my writing objectively, as if it was someone else's. This helped me further monitor my writing progress** and give myself feedback on it.

(Student N, Sixth Class)

Comparing comments given by student A about her essays in the first and fourth classes provides more evidence that students were monitoring their writing progress. As shown in Figures 2 and 3, her self-feedback regarding her essays[10] became more concrete and

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[10] Self-assessment comments and self-feedback on the essays, which were written in Korean, were translated into English by the researcher.

detailed as the rubric-referenced self-assessment lessons progressed.

FIGURE 2

Sample Essay Self-Assessment (Student A, First Class)

• *Task completion*: four points, could not meet the third condition • *Content*: five points, gave three supporting ideas and examples • *Organization*: five points, used connective words appropriately • *Language use*: four points, used participle construction appropriately, though not variety of expressions.

FIGURE 3

Sample Essay Self-Assessment (Student A, Fourth Class)

• *Task completion*: five points, met all five conditions
• *Content*: three points
  · supporting idea one: natural phenomenon → teenagers' hearts fluttered
  · supporting idea two: made friends with same interest → became excited because I met friends at concert with same interest
  · supporting idea three: broke the ice and became friendly, talking about entertainment
    → at first awkward, though later became familiar
    ⇒ supporting idea three was not suitable because too similar to supporting idea two and content wasn't specific.
• *Organization*: five points
  Writing organized with three supporting ideas as shown in ①, ⑦, and ⑫. Appropriate connective words used like ③ and ⑬ (for showing time), ① and ⑥ (for commenting on reasons), and ⑧ (for expressing examples).
• *Language use*: three points
  Parallel structure and subject-verb-object-object complement structure used properly. However, sentence length generally short and vocabulary level low.

Meanwhile, student P's consistent monitoring of her writing progress in terms of vocabulary and grammar is intelligible in her self-assessment diary (Figure 4), and in her interview, she stated, "I realized that vocabulary and grammar are essential for good writing, thus setting a goal to improve these and devising an appropriate study plan."

FIGURE 4

Sample Self-Assessment Diary (Student P, Second Class)

Self-Assessment Diary			
Lesson No.	Second		
Date	May 31st		
	Criterion	Score	
		First draft	Second draft
Test Result by Self-assessment	Task completion	3	3
	Content	4	4
	Organization	5	5
	Language use	3	2
	Total score	15	14
How I did in this class	*I had to look up many vocabulary words and felt deficient in many areas, such as arranging the words.*		

What difficulties I had	Even though I felt I was poor at English grammar and needed to study it, I did not. *Through this class, I realized once again that I have to make an effort to memorize words and grammar.*
In what respect I improved	*After assessing the first draft using the rubric, I became aware of what words I should use and how I should use these words in certain contexts.*
What I intend to do in the next class	*I'll apply myself to studying grammar and vocabulary so that in the next class I won't have difficulty writing.*
Feedback	You seem to realize that you need to put more effort into grammar and vocabulary. I think that looking closely at the "language use" section in your rubric will help you understand how you should study grammar and vocabulary for high-quality work. I believe your effort will be rewarded.

(I-6) No matter what grades I got for other criteria, I could not get a high total score on the essay due to a low score for "language use." **Surely, without knowledge of grammar and vocabulary, I cannot produce high-quality work. I decided to study grammar and vocabulary and started to study them for two hours per day with workbooks**. I would love it if, after a year of doing self-assessment, I could get much better grades.

(Student P, Sixth Class)

(3) Awareness of goals and expectations

As examined in the survey responses, students were aware of the critical role of the "rubric" in self-assessment. It was evident that, as shown in excerpts (I-7) and (I-8), students came to understand the value of writing goals, setting directions, and understanding teachers' expectations with the rubric.

(I-7) **Thanks to the rubric, I could understand what the teachers wanted in the work.** The rubric helped me identify strengths and weaknesses in my writing.

(Student O, Sixth Class)

(I-8) It seems the rubric was very helpful for self-assessment. With the help of the rubric's guidelines, I could analyze my work objectively. I think **the rubric played a significant role in providing "direction" in my essay writing.**

(Student M, Sixth Class)

4.3.2. Cognitive domain

With regard to cognitive domain, Zimmerman (1986) mentions that self-regulated learners who perform rubric-referenced self-assessment initiate learning themselves and develop strategies or specific methods to achieve their goals. According to the students' responses, cognitive domain was divided into two categories in the present study: (1)

developing effective task strategies; and (2) employing specific methods.

(1) Developing effective task strategies

Excerpts (D-3), (D-4), and (D-5) below show how students developed certain task strategies to improve their writing. These include asking the teacher questions and looking up words and grammatical expressions on the internet.

(D-3) I **will ask the teacher if what I wrote is grammatically correct or not.** After this class, I will ask about a lot of things that confused me while completing my work!
(Student I, Fourth Class)

(D-4) I wanted to use words appropriate for the context of the class. When I went home, **I searched for vocabulary words, expressions, and sentence structures on the Internet**. I came across new words unexpectedly.
(Student L, Second Class)

(D-5) When I self-assessed my work with the rubric, I realized I should pay attention to subject-verb agreement. I missed that part while writing my work in today's class, but I expect to meet this condition in the next class. **I'll also look up the use of prepositions such as "to," "of'' and "at" after class**.
(Student N, Second Class)

(2) Employing specific methods

It is also noteworthy that in (D-6) student Q presented a specific method of "writing down my ideas as soon as they occur." She was aware that she "needs to think about supporting ideas more deeply."

(D-6) I **realized I need to think about supporting ideas more deeply** and that **it's useful to write down my ideas as soon as they occur to me**. **I'll look up more connective words** after this class so as not to be given such low marks in the area of "organization."
(Student Q, Second Class)

4.3.3. Affective domain

As examined in section 4.2.3, when asked what the four rubric-referenced self-assessment lessons most greatly affected (Q10), more than half the students chose affective domains, including self-confidence and motivation. When asked the same question in the interview, they reported a wider variety of affective factors: confidence, motivation, anxiety, and interest in English essay writing. The interview excerpts below describe these responses more precisely.

(I-9) Before the rubric-referenced self-assessment, I didn't have any self-confidence about essay writing. Through the self-assessment, I realized the strengths and weaknesses of my writing, and improved my writing by practicing repeatedly. Now, I **have self-confidence** in my writing!

(Student B, Sixth Class)

(I-10) At first, I thought to myself, "How can I write an English essay? I can't!" But after doing the rubric-referenced self-assessments, I **gained self-confidence** and felt a desire to get good grades on my writing.

(Student S, Sixth Class)

(I-11) With the use of the rubric, I could figure out on what criterion I was insufficient. This **motivated me to put in more effort to get a better grade** on that criterion.

(Student F, Sixth Class)

(I-12) Before participating in the self-assessment classes, I thought that self-assessing my writing was too difficult. However, the rubric-referenced self-assessments made me realize my writing could surely improve. I'm **motivated to enhance my ability to write high-quality essays** by spending more time on rubric-referenced self-assessment.

(Student A, Sixth Class)

(I-13) Self-assessment with the rubric **eased my mind**. I've been able to think of a wide range of writing themes and get a feel of how I can write essays logically. I believe that rubric-referenced self-assessment could be very helpful if continued over a prolonged period of time.

(Student L, Sixth Class)

(I-14) I'm **no longer afraid of writing essays**. Before participating in the self-

assessment, I was so worried about the vocabulary, grammar, and organization of my writing that I couldn't set to work. However, through these practices, I'm more confident and **no longer nervous about my writing**.

(Student E, Sixth Class)

(I-15) I **became more interested in English itself**. To me, English was a very difficult and boring subject before taking part in these classes. Through these lessons, I realized that English is a pretty interesting subject. I believe I'll study English harder in the future.

(Student M, Sixth Class)

5. DISCUSSION

With respect to the first research question, "How does rubric-referenced self-assessment training affect EFL students' writing quality?" changes in students' writing were found in three respects. First, comparing the total essay scores of 1F to 4S rated by teachers showed a meaningful improvement in students' writing. This suggests the positive effect of rubric-referenced self-assessment, a result that accords with studies such as Ross et al. (1999) and Andrade, Du, and Wang (2008). Regarding the effects of self-assessment in each class, teachers' ratings showed that the largest impact of self-assessment occurred in the first class. In addition, it was found that rubric-referenced self-assessment training appeared most effective with respect to weaker writers. Second, in terms of mean scores for each criterion, teachers' ratings suggested that rubric-referenced self-assessment impacted content the most and language use the least. Third, the remarkable increase in total essay scores implies writing development following rubric-referenced self-assessment training. Thus, while the absence of a control group is a caveat, increases in total essay scores, scores for individual criteria, and total number of words reveal that rubric-referenced self-assessment appeared to positively impact the students' writing.

Regarding the second research question, "How do students perceive the effectiveness of rubric-referenced self-assessment training in writing classes?" responses to the survey and interviews and students' self-assessment diaries showed that students believed that rubric-referenced self-assessment positively affected their writing quality. Students expressed that the use of the rubric was effective for allowing them to self-assess their writing objectively. This result is consistent with those of studies on the positive effects of rubrics for improving assessment (Hafner & Hafner, 2003; Perlman, 2002). Students considered the teachers' instruction essential because it helped them to self-assess their writing in a more detailed, objective, and accurate manner. This result accords with those of previous

literature on the impacts of instruction or training on self-assessment (McDonald & Boud, 2003; Orsmond et al., 2000). Moreover, students recognized the positive effect of feedback with respect to the self-assessment diaries, which also concurs with previous studies arguing that feedback gives students a clear understanding of standards and helps them to develop assessment skills (Nicol & Macfarlane-Dick, 2006; Taras, 2010). Students additionally expressed that the self-assessment diaries were helpful for looking back on their writing and making a plan for development. These responses support M. Oscarsons' (1989) view that writing in a self-assessment diary is an effective component in students' self-assessment that serves as a part of formative feedback. Finally, the survey responses revealed that students thought that rubric-referenced self-assessment most positively affected affective domains (self-confidence plus motivation), followed by writing ability. Notably, the students with higher writing scores chose writing ability, whereas those with lower scores affective domains. Altogether, these findings reveal that students perceived the effectiveness of rubric-referenced self-assessment training with the help of teacher's instruction and feedback and self-assessment diaries and believed their writing quality improved and that they were most affected relative to writing or affective domains.

Lastly, with regard to the third research question, "How does rubric-referenced self-assessment training influence students' learning strategies and attitudes toward their writing?" the data from students' interviews, self-assessment diaries, and self-assessment comments on the essay papers supports the argument that rubric-referenced self-assessment training made it possible for students to internalize standards of quality writing, learn to reflect on their work, evaluate their efforts, and develop task strategies. This seemed to lead to enhanced self-confidence, motivation, and interest. As per the cyclic relationship of the metacognitive, cognitive, and affective domains, students satisfied with their accomplishments set additional goals in their writing and continually strived to achieve them. Building on the findings of previous studies (Schunk, 1996; Zimmerman, 1986, 2000), the developments observed in the students' learning strategies and attitudes suggest that rubric-referenced self-assessment allowed students to regulate their learning more effectively and take initiative toward accomplishing further learning goals. Therefore, rubric-referenced self-assessment appeared to positively affect Korean students' learning strategies and attitudes toward promoting self-regulated learning, in accordance with the results of previous studies demonstrating how rubric-referenced self-assessment promotes self-regulated learning (Butler & Lee, 2010; Harris, 1997; Paris & Paris, 2001).

6. CONCLUSION

The purpose of the present study was to examine how rubric-referenced self-assessment

affected Korean students' writing quality (research question 1), how the students perceived the impact of rubric-referenced self-assessment on their writing (research question 2), and how rubric-referenced self-assessment influenced students' learning strategies and attitudes toward their writing (research question 3). In order to investigate these three questions, 19 high school students participated in four rubric-referenced self-assessment lessons over two weeks. The study found that rubric-referenced self-assessment can be implemented as a useful tool to enhance students' learning in a Korean EFL high school class: rubric-referenced self-assessment positively impacted student's writing, their perceptions on the use of self-assessment in writing classes, and their learning strategies and attitudes toward English writing.

The study also suggests pedagogical implications for rubric-referenced self-assessment training in a Korean EFL context. First, rubric-referenced self-assessment can promote students' learning. Indeed, the present study demonstrated that as a formative tool, rubric-referenced self-assessment enhances students' learning by helping them to develop effective learning skills and affecting their emotional states, such as with regard to self-confidence and motivation.

Second, although many Korean secondary school students are primarily concerned with getting good marks, rubric-referenced self-assessment can effectively help them to become self-regulated learners. Along with promoting students' learning, this benefit supports the educational goal of autonomy in learning. Since rubric-referenced self-assessment involves both reflecting on and evaluating one's work, it helps students to accurately locate their own strengths and weaknesses and think clearly about how to accomplish their goals, enhancing their motivation and self-efficacy to improve learning overall. Students can thus develop a sense of autonomy and responsibility in their learning.

Third, qualitative data reveals that self-assessment training tools such as teacher instruction and feedback and self-assessment diaries were essential factors in developing students' self-assessment skills. This means that self-assessment training can be successful when equipped with appropriate and effective elements.

Therefore, the present study suggests the clear feasibility of implementing self-assessment in Korean high school English classrooms: with proper preparation, implementing rubric-references self-assessment can be a good alternative to traditional assessments, fostering self-regulated learning and a student-centered learning context and enhancing students' overall English learning.

REFERENCES

Andrade, H. (2000). Using rubrics to promote thinking and learning. *Educational Leadership*, *57*(5), 13-19.

Andrade, H. (2006). The trouble with a narrow view of rubrics. *The English Journal*, *95*(6), 9-9.

Andrade, H., & Du, Y. (2005). Student perspectives on rubric-referenced assessment. *Practical Assessment, Research & Evaluation*, *10*(3), 1-11.

Andrade, H., Du, Y., & Mycek, K. (2010). Rubric-referenced self-assessment and middle school students' writing. *Assessment in Education: Principles, Policy & Practice, 17*(2), 199-214.

Andrade, H., Du, Y., & Wang, X. (2008). Putting rubrics to the test: The effect of a model, criteria generation, and rubric-referenced self-assessment on elementary school students' writing. *Educational Measurement: Issues and Practice*, *27*(2), 3-13.

Arter, J., & McTighe, J. (2002). *Scoring rubrics in the classroom: Using performance criteria for assessing and improving student performance*. California: Corwin Press.

Black, P., & Wiliam, D. (2005). *Inside the black box: Raising standards through classroom assessment*. London: Granada Learning.

Bolhuis, S. (2003). Towards process-oriented teaching for self-directed lifelong learning: A multidimensional perspective. *Learning and Instruction*, *13*(3), 327-347.

Boud, D. (1995). *Enhancing learning through self-assessment*. London: Kogan Page.

Boud, D. (2000). Sustainable assessment: Rethinking assessment for the learning society. *Studies in Continuing Education*, *22*(2), 151-167.

Boud, D., & Falchikov, N. (1989). Quantitative studies of student self-assessment in higher education: A critical analysis of findings. *Higher Education*, *18*(5), 529-549.

Boud, D., & Falchikov, N. (2006). Aligning assessment with long-term learning. *Assessment & Evaluation in Higher Education*, *31*(4), 399-413.

Brookfield, S. D. (2009). Self-directed learning. In R. Maclean & D. Wilson (Eds.), *International handbook of education for the changing world of work: Bridging academic and vocational learning* (Vol. 1) (pp. 2615-2627). New York: Springer Science & Business Media.

Busching, B. (1998). Grading inquiry projects. *New Directions for Teaching and Learning*, *74*(2), 89-96.

Butler, Y. G., & Lee, J. (2010). The effects of self-assessment among young learners of English. *Language Testing*, *27*(1), 5-31.

Carless, D. R. (2002). The 'mini-viva' as a tool to enhance assessment for learning. *Assessment & Evaluation in Higher Education*, *27*(4), 353-363.

Carver, C. S., & Scheier, M. F. (1981). *Attention and self-regulation: A control-theory approach to human behavior*. New York: Springer Science & Business Media.

Dann, R. (2012). *Promoting assessment as learning: Improving the learning process*. New York: Routledge.

Dickinson, L., & Carver, D. (1980). Learning how to learn: Steps towards self-direction in foreign language learning in schools. *English Language Teaching Journal*, *35*(1), 1-7.

Gipps, C., & Stobart, G. (2003). Alternative assessment. In T. Kellaghan & D. L. Stufflebeam (Eds.), *International handbook of educational evaluation* (pp. 549-575). New York: Springer Science & Business Media.

Hafner, J., & Hafner, P. (2003). Quantitative analysis of the rubric as an assessment tool: An empirical study of student peer-group rating. *International Journal of Science Education*, *25*(12), 1509-1528.

Harris, M. (1997). Self-assessment of language learning in formal settings. *ELT Journal*, *51*(1), 12-20.

Housen, A., & Kuiken, F. (2009). Complexity, accuracy, and fluency in second language acquisition. *Applied Linguistics*, *30*(4), 461-473.

Javaherbakhsh, M. R. (2010). The impact of self-assessment on Iranian EFL learners' writing skill. *English Language Teaching*, *3*(2), 213-218.

Johnson, R. L., Penny, J., & Gordon, B. (2000). The relation between score resolution methods and interrater reliability: An empirical study of an analytic scoring rubric. *Applied Measurement in Education*, *13*(2), 121-138.

Kang, H. D. (2004). Online support for oral presentation skills in a framework of portfolio assessment. *English Language Teaching*, *16*(2), 29-47.

Kim, H. J. (2016). Peer assessment in a university writing class. *Foreign Languages Education*, *23*(1), 47-65.

Kim, J. S. (2014). *Effects of rubric-referenced self-assessment on Korean high school students' English writing*. Unpublished master's thesis. Seoul National University, Seoul.

Knight, P. (2012). *Assessment for learning in higher education*. New York: Routledge.

Kostons, D., Van Gog, T., & Paas, F. (2012). Training self-assessment and task-selection skills: A cognitive approach to improving self-regulated learning. *Learning and Instruction*, *22*(2), 121-132.

Lee, I. (2007). Assessment for learning: Integrating assessment, teaching, and learning in the ESL/EFL writing classroom. *Canadian Modern Language Review, 64*(1), 199-213.

McDonald, B., & Boud, D. (2003). The impact of self-assessment on achievement: The effects of self-assessment training on performance in external examinations. *Assessment in Education: Principles, Policy & Practice*, *10*(2), 209-220.

McNamara, T. (2001). Editorial: Rethinking alternative assessment. *Language Testing, 18* (4), 329–332.

Nicol, D., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education, 31*(2), 199-218.

Orsmond, P., Merry, S., & Reiling, K. (2000). The use of student derived marking criteria in peer and self-assessment. *Assessment & Evaluation in Higher Education*, *25*(1), 23-38.

Oscarson, A. D. (2009). *Self-assessment of writing in learning English as a foreign language: A study at the upper secondary school level.* Göteborg, Sweden: University of Göteborgs Press.

Oscarson, M. (1989). Self-assessment of language proficiency: Rationale and applications. *Language Testing, 6*(1), 1-13.

Paris, S. G., & Paris, A. H. (2001). Classroom applications of research on self-regulated learning. *Educational Psychology*, *36*(2), 89-101.

Patri, M. (2002). The influence of peer feedback on self-and peer-assessment of oral skills. *Language Testing*, *19*(2), 109-131.

Perlman, C. C. (2002). An introduction to performance assessment scoring rubrics. In C. Boston (Ed.), *Understanding scoring rubrics: A guide for teachers* (pp. 5-13). College Park, MD: University of Maryland Press.

Pintrich, P. R. (1995). *Understanding self-regulated learning*. San Francisco: Jossey-Bass.

Quinlan, A. (2006). *Assessment made easy: Scoring rubrics for teachers from K-college*. Lanham, MD: Rowman & Littlefield Education.

Ross, J. A. (2006). The reliability, validity, and utility of self-assessment. *Practical Assessment, Research & Evaluation, 11*(10), 1-13.

Ross, J. A., Rolheiser, C., & Hogaboam-Gray, A. (1999). Effects of self-evaluation training on narrative writing. *Assessing Writing, 6*(1), 107-32.

Sadler, D. R. (1989). Formative assessment and the design of instructional systems. *Instructional Science*, *18*(2), 119-144.

Sadler, P. M., & Good, E. (2006). The impact of self-and peer-grading on student learning. *Educational Assessment*, *11*(1), 1-31.

Schunk, D. H. (1996). Goal and self-evaluative influences during children's cognitive skill learning. *American Educational Research Journal*, *33*(2), 359-382.

Schunk, D. H. (2003). Self-efficacy for reading and writing: Influence of modeling, goal setting, and self-evaluation. *Reading &Writing Quarterly*, *19*(2), 159-172.

Shin. D. K., Min, H. K., & Joo, H. W. (2012) *English writing assessment manual for National English Ability Test (NEAT) preparation: For high school.* (Report No. ORM 2012-6703). Seoul: Korean Institute for Curriculum and Evaluation.

Stobart, G. (2006). The validity of formative assessment. In J. Gardner. (Ed). *Assessment and learning* (pp. 133-146). London: SAGE.

Taras, M. (2010). Student self-assessment: Processes and consequences. *Teaching in Higher Education*, *15*(2), 199-209.

Wolfe-Quintero, K., Inagaki, S., & Kim, H. Y. (1998). *Second language development in writing: Measures of fluency, accuracy, & complexity.* Honolulu, HI: University of Hawaii Press.

Zimmerman, B. J. (1986). Development of self-regulated learning: Which are the key subprocesses? *Contemporary Educational Psychology*, *16*(3), 307-313.

Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, & P. R. Pintrich & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13-39). Orlando, FL: Academic.

Zimmerman, B. J., & Schunk, D. H. (2001). Reflections on theories of self-regulated learning and academic achievement. In B. J. Zimmerman & D. H, Schunk (Eds.), *Self-regulated learning and academic achievement: Theoretical perspectives* (pp. 289-307). New York: Routledge.

Zimmerman, B. J., & Schunk, D. H. (2004). Self-regulating intellectual processes and outcomes: A social cognitive perspective. In D. Y. Dai & R. J. Sternberg (Eds.), *Motivation, emotion, and cognition: Integrative perspectives on intellectual functioning and development* (p. 323-349). New York: Routledge.

APPENDIX A

Rubric for Self-Assessment

Score	Task Completion	Content	Organization	Language Use
	* Meeting the 5 requirements (1) Persuasive writing with 80-120 words (2) Clear introduction (3) Took a position on the issue ('agreement' or 'disagreement') (4) Added one reason to support the main idea in addition to the two already given (5) Clear conclusion	* Clear main idea * Relevant and detailed content or examples of the main idea * Provided adequate supporting details in a coherent and developed manner	* Clear topic sentence, supporting details and concluding sentence * Logical progression of main idea * appropriate cohesive devices	* Few errors in grammar and spelling * Appropriate and various use of vocabulary and expressions
5	Completely addressed the task (met the 5 requirements)	Provided relevant and detailed content in a coherent and Thoroughly developed manner	Developed an Introduction, body, and conclusion completely. Sequenced main idea logically using appropriate cohesive devices.	Few grammar or spelling errors. Correct and appropriate use of various vocabulary and expressions
4	Made a reasonable attempt and addressed the work almost completely (met 4 out of 5 requirements)	Provided relevant content in a mostly coherent and developed manner	Developed introduction, body, and conclusion almost completely. Sequenced main idea mostly logically using fairly appropriate cohesive devices.	Some grammar or spelling errors, but they do not disrupt communication of main idea. Almost all correct and appropriate use of vocabulary and expressions
3	Made a reasonable attempt but addressed the work incompletely (met 3 out of 5 requirements)	Provided some relevant content, but in a somewhat incoherent or undeveloped manner	Developed introduction, body, and conclusion incompletely. Sequenced main idea illogically using somewhat inappropriate cohesive devices.	Some grammar or spelling errors, which can disrupt communication of main idea. Some control of vocabulary and expressions, although errors affect communication of main idea

| 2 | Made a poor attempt and addressed the work incompletely (met 2 out of 5 requirements) | Provided irrelevant content in an incoherent and undeveloped manner | Developed incomplete organizational structure. Illogical progression of main idea | Many errors in grammar, spelling, and the use of vocabulary and expressions, which can negatively affect communication of main idea |
| 1 | Failed to address the work (met 1 or 0 out of 5 requirements) | Failed to provide relevant content | Failed to develop an organizational structure. (and/or) Main idea not evident | Persuasive errors in grammar, spelling, and the use of vocabulary and expressions, which can significantly disrupt communication of main idea |

APPENDIX B

Interview Questions

1. Do you think rubric-referenced Self-assessment had a positive effect on your essay writing?
   1-1. Why do you think it had a positive effect on your essay writing?
   1-2. Why do you think it did not have a positive effect on your essay writing?
2. After taking part in the rubric-referenced self-assessment, what is the biggest change you have experienced?
   2-1. Is there any change in your learning strategies toward writing?
   2-2. Is there any change in your attitudes toward writing?

Applicable levels: Secondary

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