

# Support Needed by False-beginners in English Learning to Reach Their Goals: Considering the Dunning-Kruger effect

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## 英語学習における疑似初級者が目標を達成するためには どのようなサポートが必要か？

—— ダニング・クルーガー効果を考慮して ——

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### 概 要

現代コミュニケーション学科で英語を専攻している学生のほとんどは、英語を仕事で使いたい、英語の試験でいい点を取りたい、という目標を持っている。にもかかわらず、指導者のアドバイスに従って、教室外で自律的に学習するのはごく少数の上級レベルの学生だけである。しかし、言うまでもなく初級レベルの学生こそ自律的な学習に向かう必要がある。そこで我々は、初級レベルの学生は自分のスキルを過大評価しているのではないか、つまりダニング・クルーガー効果により、ゴールまでの距離を把握できず、適切な行動がとれないのではないか、という仮説を立てた。本研究では、英語学習に対する学生の意識にダニング・クルーガー効果が存在するかどうかを、上級レベルと初級レベルの2人の被験者から質的・量的データを収集して検討した。量的データの統計分析では、仮説通り両被験者にダニング＝クルーガー効果が存在することがわかった。また、質的データとして収集したアンケート回答から、上級者は自分のスキルを過小評価しているが、自分の学習に対する調整能力が高いこと、初級者は自分の英語スキルを過大評価しており、自分の学習に対する調整能力が低いことが示唆された。

キーワード：ダニング・クルーガー効果，メタ認知，英語，言語学習，疑似初級者

Key words: Dunning-Kruger effect, metacognition, English, language learning, false-beginners

### Introduction

For Japanese learners, the amount of time it takes to acquire English, a foreign language and the opposite of Japanese in nature, is far greater than the number of classes they take in school. According to Matsumura (2009), even if students take four hours of classes a week for 35 weeks a year from the first

year of junior high school to the second year of university, they still lack 3,000 hours of time needed to acquire an intermediate level of English. Therefore, autonomous learning outside of the classroom is essential for English acquisition. Based on Matsumura's (2009) report, Yasuda (2016) argues that it is the "metacognitive skills" that lead to autonomous learning as follows:

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“The need for metacognitive skills is high for Japanese learners of English. One of the main reasons for this is to ensure learning outside the classroom...In an EFL (English as a Foreign Language) environment such as Japan’s, it is difficult for learners to carry out their own learning outside the classroom without a great deal of conscious effort, so metacognitive skills are essential.” (p.58)

The Department of Communication has an issue regarding the learning attitudes of students majoring in English that needs to be resolved. All students, without exception, said that they wanted to become fluent in English, work in English, and get a good score on English tests. However, no matter how much advice teachers give on completing assignments and the need for autonomous learning outside of class (e.g., Students should read aloud and use shadowing technique instead of working silently on workbooks, repeatedly solve problems and memorize the patterns and sentence examples, set a time limit for test preparation just as they would for a real test, memorize vocabulary along with its context, etc.), only a very small number of “advanced students” follow this advice and behave autonomously. “False beginner students” do not seem to care about autonomous learning outside the classroom, and some of them only do the assignments given in class with minimum effort, or even neglect them. There are some students who take English courses from another university, but as in the case of students in the Department of Communication, the “advanced students” are more anxious and take their prior and post-assignments more seriously, while the “false-beginner students” do not seem to be anxious or feel bad about their lack of enthusiasm.

What is the reason for this phenomenon?

In this study, we hypothesized that unskilled students overestimate their own skills; that is, they may

not be able to grasp the distance from their goals and take appropriate actions (i.e., focus on the given task to the maximum extent possible and also strive for autonomous learning outside the classroom) due to the Dunning-Kruger effect.

The Dunning-Kruger effect is a hypothesis about the cognitive bias that people with low skills overestimate their skills (Kruger & Dunning, 1999). According to the hypothesis, this bias is the result of unskilled people’s illusion of themselves (overestimating themselves) and skilled people’s illusion of others (overestimating others). Thus, when confidence is on the vertical axis and skill level is on the horizontal axis, there is no upward trend, with those with low skills lacking confidence and those with high skills being full of confidence. This phenomenon can be seen in a variety of skills, such as a person’s ability to solve mathematical problems or detect errors in grammar (Dunning, 2011).

This study aims to investigate whether the Dunning-Kruger effect exists in the self-assessment of the English skills of students taking English courses in the Department of Communication. If the Dunning-Kruger effect does exist, it is necessary to consider and immediately implement how to guide “unskilled students” to improve their metacognitive skills and obtain correct self-awareness. Although the Dunning-Kruger effect has been actively discussed in many different fields, in the field of second language acquisition, Saito et al. (2020) investigated how second language (L2) speakers evaluate the comprehensibility of their L2 utterances and reported that the Dunning-Kruger effect exists. However, the number of related studies remains relatively small. Therefore, this study was significant.

This study is the first part of an action research project that aims to answer the following questions:

Why do “unskilled students” not make efforts despite having a clear goal, and how to encourage “unskilled students” to study autonomously outside the classroom?

## Methodology

Data were collected in October 2021 within the English course “Integrated English Skills” in the Department of Communication.

In the class, students engaged in activities using all four skills (listening, dictation, dictogloss, reading, reading aloud, conversational skit practice, retelling, English composition, presentation, etc.). Of these, retelling was chosen as the activity to be assessed because while the content is fixed to some extent, it allows us to measure the impromptu and diverse English skills of individuals. In addition, it was judged that it would be easy to show the level of skills, making it easier to evaluate later.

It was the first class of the course, which consisted of 15 sessions. The students came to the class without any preparation because it was an orientation session. Therefore, they were not prepared to retell.

Retelling was conducted using the audio CD and script of the dialogue in the textbook. After confirming the students’ understanding of the words and phrases used, they were asked to listen to the dialogue, which consisted of about 200 words in English, twice at 80% speed, and then to retell the summary as if they were explaining the meaning of the dialogue to someone who had never heard it before. They were also asked to perform in their own words as much as possible within one minute. In the beginning, if they were to use indirect speech, it would be relatively easy to make the recollections by the characters in the dialogue into past or present

perfect tense if they started the tense of the underlying situation with the present tense. The students were asked to record their retelling performance using the functions of their smartphones and to submit audio data after class. They were also instructed to submit their self-assessment on a 5-point scale from 0 to 4 for the following eight items: fluency, grammar, context, vocabulary, intonation, rhythm, accent, and pronunciation of each word.

One student with a test of English for international communication (TOEIC) score of less than 300 (participant 1) and one student with a TOEIC score of more than 700 (participant 2) were chosen as participants to study their English skills. Neither participant 1 nor participant 2 had any experience of retelling before taking this class.

On the other hand, one native English-speaking college teacher and two Japanese college teachers (both with MA in TESOL and experience living in the US) conducted the assessment.

Teachers’ assessments are based on the same rubric (modified from Hirai (2021)), and each item was rated on a 5-point scale.

To collect qualitative data in addition to quantitative data, questionnaires were given to participants 1 and 2, respectively, asking them to describe “their impressions of their own retelling performance, which was the subject of the assessment” and “how they are doing in their self-regulated learning at home for the improvements.”

## Results

For participants 1 and 2, the agreement between the students’ self-assessment and the teachers’ assessment was tested at a significance level of 5%. For the teachers’ assessments, the mean value of

the three teachers was used.

Null hypothesis: The participants' self-assessments and teachers' assessments are consistent.

Conflict hypothesis: The participants' self-assessment and teachers' assessments were not consistent.

**Table 1 Results of participant 1**

	self-assessment	Teachers' assessment (average)	coincidence
Fluency	2	1.00	+
Grammar	2	1.00	+
Context	2	1.33	+
Vocabulary	2	1.00	+
Intonation	1	0.67	+
Rhythm	2	0.67	+
Accent	2	1.00	+
Pronunciation	2	1.00	+

**Table 2 Results of participant 2**

	self-assessment	Teachers' assessment (average)	coincidence
Fluency	2	2.67	—
Grammar	2	2.67	—
Context	3	3.33	—
Vocabulary	2	3.67	—
Intonation	3	3.00	0
Rhythm	3	3.00	0
Accent	3	3.00	0
Pronunciation	2	3.00	—

From Table 1, the test statistic for participant 1 is  $S=8$ , and the sample size is  $N=8$ ; therefore, the significance probability is

$$p = 1.000$$

in the following table. Similarly, because the test statistic for participant 2 is  $S=0$ , and the sample size is  $N=5$ , the significance probability is:

$$p = {}_5C_0 \left(\frac{1}{2}\right)^5 \left(\frac{1}{2}\right)^0 = 0.031$$

As both are below the 5% significance level, the null hypothesis is rejected in both cases. Therefore, it cannot be said that self-assessment by the participants themselves and the teachers' assessments are consistent for both participants 1 and 2. Therefore, it is clear that the participants' and teachers' assessments were not consistent.

The results of the descriptive questionnaire were as follows: There were many grammatical errors and misspellings in the actual descriptions, and adjustments were made by the authors without changing their meaning.

• PARTICIPANT 1

[Thoughts on your own retelling performance that was assessed]

I think I need to improve my listening skills. To do this, I will listen to more English. I will also try my best to remember words.

[How are you doing your home studies for improvement?]

When I had time, I used to complete the TOEIC workbook. I also used a vocabulary book to memorize words. Now, I am busy, so I do not do anything.

• PARTICIPANT 2

[Thoughts on your own retelling performance that was assessed]

I could not perform very well, and it was frustrating retelling performance to listen. I wanted to make my explanation concise, but I could not do so well. Indirect speech is difficult, but I would like to try it next time. I will practice retelling repeatedly so that I can imagine myself retelling not being embarrassed in front of others. I know what I have to do for this class, so all I have to do is just working hard.

[How are you doing your home studies for improvement?]

In preparation for the Eiken test and TOEIC, I not

only solve the questions repeatedly, but also try to learn new words whenever I encounter them. I focus on how they are used in a sentence and try to remember them. If I am unsure about spelling, I write it down and remember it. I am busy every day, but I promise to learn little by little. For example, when I watch American movies or dramas in my spare time, I try to shadow the lines of the characters as I watch. I think I have a good understanding of grammar but I am not confident when it comes to speaking. This is my weak point. To overcome this, I am going to listen to my own voice recorded in class and review the parts in which I made mistakes. In speaking, it is important to have the courage not to be afraid of making mistakes, but if I only focus on that, my grammar will fall apart. I am not very good at this part, and I feel frustrated because I cannot fix it easily.

## **Discussion**

As mentioned above, based on the analysis of the quantitative data, it can be said that the cognitive bias that “unskilled people overestimate their own skills and skilled people underestimate their own skills” applies to both participants, and this can be considered a manifestation of the Dunning-Kruger effect.

Next, qualitative data will be discussed.

Participant 2, who had obtained a TOEIC score of 700 or higher, followed the teachers’ advice and was diligent in her self-regulated learning at home. Although she underestimated the level of her performance, it was not a condescension, but rather the ability to humbly look down, select, and implement appropriate actions toward a desirable goal, such as “What is lacking?” “What is to be done to make up for it and improve further?” There is also the possi-

bility that she had a high sense of shame. She may be proud that she can do better than others; therefore, she may want to avoid experiences that hurt her pride in front of others. As for participant 2, there was a tendency to underestimate, but this was not a problem because it led to a more favorable learning behavior.

On the contrary, participant 1 consistently took the TOEIC test for two years, but her score was stagnant at 200 with no sign of improvement. As for her home study, she answered “I did the TOEIC workbook” and “I memorized the words.” As she said, she may have only solved the questions randomly (without following the teachers’ advice), and she may have only memorized the spelling of each word corresponding to the meaning in Japanese without any context. Unlike the situation of the other “unskilled students”, Participant 1 does not neglect her home study at all. However, the fact that she did not follow the teachers’ advice and continued to study on her own for two years with no results, and the fact that she did not show any sense of crisis in her answers to the questionnaire raises the possibility that she lacks the ability to see things from a bird’s eye view; that is, she overestimates her own skills. This also implies that her skills in making adjustments to her learning are weak.

## **Conclusion**

To acquire English as a foreign language in Japan, autonomous learning outside of class is essential. Despite this, beginner-level students in the Department of Communication do not engage in self-directed learning despite having a clear goal. In this study, it is hypothesized that this is because they overestimate their skills; that is, the Dunning-Kruger effect exists. Qualitative and quantitative data

for two participants were collected and investigated. The participants included an advanced-level student and a beginner-level student. In the statistical analysis of the quantitative data, the Dunning-Kruger effect was found to exist in both participants, as hypothesized. In addition, the Dunning-Kruger effect was observed, and the questionnaire responses showed that although the advanced-level student tended to underestimate her own skills, she was able to link this to effective autonomous learning because she was humble and had a high degree of self-regulation. Whereas, the student at the beginner level was unable to learn English effectively because of her weak ability to overlook and her low skills to adjust her English learning.

Without a discrepancy between self- and other-assessments (i.e., correct self-perception through adequate metacognitive skills), people are unable to objectively assess their own eligibility. It prevents them from making appropriate skill-based decisions, such as whether to pursue a particular career (e.g., Dunning, Heath, & Suls, 2004 ).

Students with low English proficiency only fantasize about “getting a job using English” and do not perform appropriate learning actions. In many cases, they waste time and fail to achieve ideal results in job hunting. Participant 1 also aimed to become an English teacher when she first entered school, but she decided to pursue a field completely unrelated to English.

Conversely, there was another case in which another student, who appeared to be doing well in her teaching courses to obtain a junior high school English teacher’s license, unfortunately, discontinued the courses after the teachers’ consolation because she believed her skills were too low. This was definitely against the fact that she was not as proficient in English as Participant 2, but had suffi-

cient background to become an English teacher.

The risk of false self-assessment does not only lie with false beginners.

Ross (2006), reviewing the results of research on self-assessment, found that self-assessment contributes to the improvement of learners’ achievement and behavior, the strengths of self-assessment can be enhanced by training learners on how to assess their own work, and teacher interventions can reduce the weaknesses of self-assessment (i.e., the risk of overestimation).

Therefore, in subsequent articles, we will attempt to provide students with educational interventions to “enable them to assess themselves correctly” and report on the results.

Finally, this study has some limitations. Since the data size was very small with only two participants, it is difficult to generalize the results unless the number of participants was increased, and a follow-up survey was conducted. In addition, different results may be obtained when investigating different activities. It is also necessary to examine whether there is a difference between impromptu and non-impromptu activities.

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## Appendix

Retelling Scoring Sheet for student's name

point of view	4	3	2	1	0
1 Fluency	English is fluent and natural, with little or no pauses.	There are a few pauses and/or fillers, but they are not bothersome.	The pauses and/or fillers are bothersome.	There are many pauses and/or fillers and can cause misunderstandings.	English is not fluent at all.
2 Grammar	There are very few mistakes.	There are a few mistakes, but they are not bothersome.	The mistakes are bothersome.	There are many mistakes and can cause misunderstandings.	It doesn't make sense.
3 Context	It covers almost everything. The content is accurate and coherent.	It covers about 80% of the content. It is somewhat lacking in coherence.	It covers about half the content. It lacks of accuracy in content.	It covers about 30% of the content. It lacks of accuracy in content.	The content has not been conveyed.
4 Vocabulary	She has a good command of expressions not in the textbook, and can speak almost entirely in "her own words."	Although there is some manipulation of expressions not in the textbook, there is more borrowing from the textbook.	There are a few expressions not in the textbook, but they are generally borrowed from the textbook.	Expressions other than the ones found in the textbook are not used.	Even the expressions in the textbook are hardly used.
5 Intonation	It is like that of a native.	There are a few mistakes, but they are not bothersome.	The mistakes are bothersome.	There are many mistakes and can cause misunderstandings.	It doesn't work at all.
6 Rhythm	It is like that of a native.	There are a few mistakes, but they are not bothersome.	The mistakes are bothersome.	There are many mistakes and can cause misunderstandings.	It doesn't work at all.
7 Accent	It is like that of a native.	There are a few mistakes, but they are not bothersome.	The mistakes are bothersome.	There are many mistakes and can cause misunderstandings.	It doesn't work at all.
8 Pronunciation	It is like that of a native.	There are a few mistakes, but they are not bothersome	The mistakes are bothersome.	There are many mistakes and can cause misunderstandings.	The pronunciation is wrong.

Note. Revised the Presentation Slides of Online Lecture 3, by Hirai (2021), The 52nd Annual Meeting of the Japanese Association for Language Testing.