

Motivation and Learning Effects in University English Education

大学英語教育におけるモチベーションと学習効果

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Abstract

This preliminary research explores the connection between student motivation and learning reflected in standardized test scores for the purpose of developing new teaching techniques. The researchers conducted a survey of first-year university students in which they answered questions indicating their degree of motivation towards English language learning. Survey results were cross referenced with two sets of participants' standardized test scores: one taken before the start of the semester, and one from the end of the first semester. While the researchers expected to find a positive correlation between motivation and improvement, the data collected did not reveal a positive relationship. However, analysis of the data did yield some useful insights, and implications for future study are discussed in the paper's conclusion.

Keywords: motivation and learning, instrumental motivation, internal motivation

The purpose of this preliminary study is to explore the relationship between student motivation and practical learning gains in order to improve teaching techniques in the classroom. For the purposes of analyzing our findings, we define learning as a change or growth in skills over time (Ainley, 2019, p.666). Specifically, our goal was to ascertain the presence (or absence) of a relationship between motivation and learning (improvement in English language skills) in university students and to evaluate the respective merits of internal and instrumental motivations. An analysis of our survey results initially suggests little, if any, correlation between learning and motivation, but did provide insights into potential future improvements to study methodology and classroom practice.¹

Background

Research has shown that motivation accounts for individual differences in learning across a variety of contexts (Gardener, 2007, p.15). Motivation has long been viewed in terms of an intrinsic vs. extrinsic framework. According to this framework, intrinsic motivation is motivation generated within the learner herself—colloquially understood as learning for the love of learning. Conversely, extrinsic motivation is learning driven by positive and negative outside stimuli—motivation by carrot and stick. Both of these forms of motivation may be conceived of

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¹ We asked Second ACT, a professional data analyzing company, to analyze the data we collected from 135 students who filled in the questionnaire (see Appendix) via Moodle. We were not able to include their visuals due to space limitations, but the company permits us to show the results to interested readers. If you want to see them, please contact any of the authors via e-mail.

as pleasure-dependent: intrinsic motivation produces pleasure through the act of learning, and extrinsic motivation either produces pleasure through learning gains (e.g. earning a high test score) or avoids a painful outcome (e.g. receiving a failing grade).

One typical motivation study took two small groups of students (the three highest and three lowest achieving in the class) and sought to measure their motivation in relation to their achievement midway through a language course. Contrary to the researcher's expectations, all the students showed roughly the same degree of intrinsic motivation, whereas the higher-achieving students exhibited a higher degree of external motivation (Park, 2004, p. 309). The researcher concludes, however, that higher motivation is related to higher personal goals and self-expectations. This complicates any simple view of intrinsic versus extrinsic motivation.

Accordingly, researchers have recently suggested that while the intrinsic vs. extrinsic distinction has historically been useful, it should be refined to more accurately distinguish "between activities that are pursued for consequences that bear an intimate relation to the activities themselves, and those that are purely instrumental" (Schwartz, 2019, p. 373). Instead of relying on the internal-external dichotomy, Schwartz and Wrzesniewski proffer the terms "internal" and "instrumental" motivations. This shifts the focus from pleasure to "a distinction between behavior whose motivating consequences are intimately related to the acts and behavior whose motivating consequences are arbitrarily related to the acts" (p. 381). The latter behavior is termed "instrumental." For example, a learner may pursue language study because he finds it pleasurable but may become demotivated when he finds it too difficult, because the real object of pursuit was pleasure. As the motivation here is only arbitrarily linked to language study, when "the going gets tough," the learner redirects his pursuit of pleasure toward a less stressful medium—another subject, hobby, etc. According to the conventional terminology, learning for the pleasure of the activity would be considered "intrinsic motivation," but with the new terminology, in cases such as the above, the definition would shift to "instrumental," since the pleasure being sought is not "intimately related" to the activity. Instrumentally motivated activities would also, of course, include learning for the sake of some desirable consequence/reward; i.e. extrinsic motivation.

In contrast, internally motivated activities, "while ... not necessarily pleasurable ... yield lasting effects on well-being that instrumental consequences typically do not" (p. 373). Let's say that another learner also finds language learning enjoyable, but has additionally determined that pursuing language study will be good for her life in general: it will give her valuable communication skills, build character as she progresses through difficulty, and open up new worlds of knowledge and information. When the going gets tough and the immediate sense of pleasure decreases, she perseveres. Pleasure may often exist as a peripheral consequence, but it is not the central focus. Instead, internal motivation involves the Aristotelian "pursuit of excellence," which is characterized in activity as a "practice" (pp. 378, 381).

Thus, it seems that the centrality of pleasure to our understanding of motivation is something of a red herring. Pleasure often accompanies internally motivated activities, but it is a byproduct, rather than an end in and of itself. Indeed, Duckworth's well-known work on "grit" highlights the skill of maintaining a high level of effort toward pursuing tasks which may not be consistently pleasurable (p. 381). If the focus of the above-described study's questions and analysis had been internal/instrumental rather than intrinsic/extrinsic, the higher-achieving students likely would have shown higher levels of internal motivation than the lower-achieving ones. In the present study, the authors endeavor to employ the internal/instrumental distinction.

There is a further complicating factor in the study of motivation: fluctuations in motivation levels over the course of completing a task, necessitating the cultivation of learner grit. One study identifies "motivationally or emotionally meaningful episodes" wherein learners' motivation undergoes a change during a particular learning activity (Ainley & Ainley, 2019, p. 677). The interaction between learners, between learners and teachers, as well

as between learners and their environment introduce many variables influencing the learners' motivation—both from moment to moment and over prolonged learning stages. There may also be personal circumstances outside the learning environment which affect motivation. Researchers must remain cognizant of these factors when analyzing data on motivation.

Method

This study relies on data from an online self-reported questionnaire and testing data from a mandatory standardized test administered to all incoming freshmen before the start of classes and again during the thirteenth week of the semester. Self-reporting questionnaires remain a well-established method, one of the oldest in the field (Ainley & Ainley, 2019, p. 670). This method does raise some issues of validity, as participants' understanding does not always coincide with the researcher's intended meaning (p. 672). During the course of the study, the authors became aware of the need to hone their questions further. Additionally, due to a misstep in process of creating the submission form, some respondents were able to leave items blank, resulting in a small number of lacunae in the data.

The survey was widely distributed during the first two weeks of the spring semester of 2019, and yielded responses from 135 students from eight different classes (listening and reading). 18.5% of respondents were from elementary, 68.9% from intermediate, and 12.6% from advanced classes. The survey consisted of five rating-scale questions and five short-answer questions in the students' native language (Japanese) designed to elicit responses concerning student motivation levels and types motivations, including their attitudes toward the English language and English learning experiences. Results were then analyzed with respect to two standardized test scores for each student. The standardized test employed is divided into reading and listening sections. As such, for classes focusing on reading, the test scores from the reading section were analyzed, and likewise for classes whose focus is on listening skills.

Analysis

Our survey included a number of open response questions, the results of which were analyzed by level (elementary/intermediate/advanced) via text mining (Second Act, 2019). For one question, students were asked to describe a concrete experience that provided opportunity for a change in their thinking toward English language learning, as well as what they had felt from said experience. Representative answers from the elementary level revealed experiences wherein students encountered their lack of ability to successfully complete a task: for example, the difficulty of memorizing vocabulary words, or not being able to understand someone talking to them. As the latter case illustrates, the focus is on the passive aspect (listening). By contrast, the intermediate students' answers tended toward the difficulty of the active aspect (speaking), citing concerns that they couldn't speak, or that if they were to travel overseas, their speech would not be understood by others. Advanced students' answers were more focused on necessity: the need to be able to read English, or the importance of being able to think proactively.

The survey also asked students to describe someone who can speak English. Elementary students described such a person with superlatives that apparently put them at a distance from the student: a genius, a wise/smart person. Intermediate students used many English terms in their responses (the bulk of the other levels were in Japanese, their native language), showing a certain level of identification with the object of the question. Responses included English words such as "cool" and "smart." Advanced students' responses were mostly in Japanese, expressing sentiments that such a person is "great" or "a good communicator." The fact that answers at this level tend to be in Japanese may indicate a level of assimilation wherein students basically identify with the answers they are giving, whereas elementary students do not identify with them, and intermediate students are in a phase

of transition. As for the reasons given for their responses, responses representative of elementary students included “because [people who can speak English] are smart” and “because English is difficult.” Intermediate and advanced responses both focused on reasons related to the ability to speak with people from different countries. Again, elementary level students cited such a person’s diligence in studying and high levels of confidence as reasons for their English abilities. Intermediate students cited proactivity in speaking and action, and advanced students cited their communication skills and ability to live and interact while in a foreign country—all responses indicative of the students’ concurrent levels.

Finally, students were asked to imagine how they see themselves using English in the future. Elementary students’ answers indicated goals that were more vague or passive, including “talking to foreigners who visit Japan” or “when sightseeing.” Intermediate students’ responses revealed more concrete and active goals, including those applicable to the present and short-term future such as “reading academic papers” and “working together with [English speakers].” Advanced students likewise showed concrete vocational goals, mirroring “reading academic papers,” as well as very concrete applications in the short-term future such as “in the medical profession” (by a student studying to be a doctor).

With respect to instrumental motivation, the free-answer portion of our survey reveals that elementary students see English speakers at a distance, with English proficiency as a goal that is desirable but not easily attainable. Their goals are also vaguer; the reason presents a chicken-and-egg problem in that it is unclear whether their lack of concrete goals is the reason for or the result of their lower English level. Intermediate and advanced students show increasing levels of attainability, specificity and realism in their goals, as well as of identification with the imagined English speaker targeted by the survey. In subsequent research, we will modify this section to target internal and instrumental motivations.

Results and Discussion

The researchers’ expectation was to find a positive correlation between motivation and learning (specifically, self-reported intrinsic/extrinsic motivation); i.e. that motivated students would show a greater degree of improvement than would less motivated or unmotivated students. The research results surprisingly did not suggest any definitive correlation between motivation and learning. The results are best indicated by the first two ratings-scale questions on our survey, in which students were asked to express their degree of agreement with the statements Q1 “I enjoy English” and Q2 “I tend to proactively engage in any situation [I encounter].” The former question was intended to address learners’ intrinsic motivation; however, when viewed instead in light of the internal/instrumental terminology, the question is ambiguous: it could apply to either since it implies a sense of pleasure from learning but fails to distinguish whether said pleasure is the goal or simply a byproduct. The latter question was also intended to address intrinsic motivation, and likewise targets internal motivation in that it reveals a posture toward life suggestive of the “pursuit of excellence.” In neither case, however, did the self-reported motivation correlate with our analysis of test scores. For example, high motivation reports (answers of “4” indicating the highest level of motivation) for each intermediate class did not reliably predict positive changes in test scores; in some cases (e.g., the data from the advanced students), it even appears to do the reverse.

When the data is analyzed in smaller samples, the results provide some interesting points for observation. One intermediate class showed a preponderance of 1s and 4s for Q1 on the negative and low side of the improvement scale. This may indicate that both those who very much enjoy the subject, along with those who don’t, may simply lack the “grit” to persevere through the more difficult times. On the other hand, those who only “somewhat” enjoy (answering with a 3 on the survey) the subject are more prepared for periods of study that will not necessarily be enjoyable, having a more sober view of a subject that they still approach positively (rather than expecting everything

to be enjoyable and being easily discouraged/demotivated when it's not). Indeed, there was a preponderance of "3" answers for both Q1 and Q2 along the higher half of the improvement scale, possibly suggesting that students who improve have a more sober view of the subject matter as well as of their own approach to life. Again, the fact that many "4" answers were clustered in the negative side of the improvement scale may indicate that students who answer as such have unrealistic expectations of the subject matter as well as of themselves, and are easily demotivated. For the other two intermediate classes, the majority of "3" answers for Q1 and Q2 were likewise on the positive improvement side of the scale. The fourth class shows the opposite, the digression that is discussed below. The advanced students showed no particular correlation either way.

Survey data is currently based on a single motivation survey at the beginning of the semester, and therefore the following results should be considered preliminary. Still, they provide a broad, albeit shallow, snapshot of student motivation for the sake of comparison with test scores. In subsequent iterations of this study, the researchers will work to refine the questions to target more specific aspects of the issue, including changes in motivation over time and the internal/instrumental split, according to the authors' specific areas of interest.

The data also provided some additional insights beyond our intended goals. The class with the highest rate of improved test scores (17 out of 21 students) is unique in that it was conducted in more of a CLIL (Content and language integrated learning) style than the other classes, with most students actively engaged in the content; those who did not show improvement were largely students who demonstrated the lowest level of engagement with said activities. The class with the lowest rate of improvement (11 out of 23 students) additionally had to cope with a disruptive behavioral issue that had to be addressed several times during the semester, at times negatively affecting the class atmosphere during activities.

Reflection: Researcher 1 (elementary English)

Recently, universities have accepted a wide variety of students with divergent academic backgrounds (graduates from occupational high schools or those who have worked for private organizations), who sometimes lack the fundamental knowledge necessary for university-level language education. For instance, typical elementary-level students answering Q2 (how much do you like English) in our questionnaire, responded that they did not like English much. I (as well as other teachers who are in charge of elementary classes) assumed that their internal motivation toward English was very weak at this stage; however, they said that English is worth studying in response to Q4. Many of them have talked with foreigners and want to know about foreign countries in the future. In other words, even if they have little or no interest in English itself, they have instrumental motivation (they need to learn it for practical reasons). They also generally imagine themselves using English in some capacity sometime in the future.

The literature often suggests that internal motivation regarding English learning comes, for example, from a sense of achievement or curiosity about different cultures, and that I should therefore use those topics to inspire them in English classes. Following the importance of internal motivation (for instance, Deci and Flaste, 1995, and Kage, 2013), I encouraged my elementary class students to develop an interest in English itself, or in communication via English. Based on the results of the questionnaire, however, I am not taking an approach in the classrooms to develop their internal/individual engagement in learning English, saying that English is fun itself or using a textbook on English literature. Elementary-level students seem sensitive only to external/instrumental motivation (studying only for credits/points, or for getting a better job). I have to find something to motivate them outside the individual realm. However, once matriculating students have lost the most powerful external motivation of the entrance exam, teachers must struggle with how to motivate students who are not interested in English. What are effective external motivations for the purpose of learning foreign languages for university students? The

environmental factors to stimulate students are said to be related with credits/grades, or the prospects of better jobs or financial success in their future, in addition to praise from teachers in classes. In fact, such motivations as environmental factors are common and effective regardless of student level. It is well-known that there is a positive relationship between English proficiency and annual income. Students understand the necessity of entering their best TOEIC scores on job entry sheets. Besides, we know that there are behavioral, humanistic, and cognitive social approaches that teachers should make use of to motivate learners, and that we should try all of these approaches when encountering students who are not initially interested in English. I basically do not like the behavioral approach that utilizes “reward and punishment.” I do not hesitate to praise students when they do a good job, but I know well from my experience that behavioral motivations are short-lived and cannot stimulate students on a long-term basis. This author likes the motivation of using the approaches known as humanistic theory, and makes frequent use of group work (known as the socio-cultural approach).

To take a humanistic approach to language education, teachers must believe that students have an inherent desire to broaden their knowledge and that they can always be motivated if they are given an appropriate foundation for learning (i.e. they will develop internal motivation if they are given a proper education). This is fundamentally different from an approach that takes advantage of external/instrumental motivations (for instance, talking too often about grades and/or points they get from each assignment/participation in an activity). In order to listen to each student's individual questions while believing that the student has a desire to know, the author always requires students to write a reflection note, or exit ticket, after each class. At the beginning of a class, I distribute an attendance/reflection sheet to each person upon which they will state their attendance, participation, and ask a question each time. Once a student submits his/her attendance/reflection sheet, he/she may leave the classroom. After each class, I write a comment or answer their question; I return it to the student when the next class starts. This is a method that I learned from a native speaker colleague to promote student engagement (the teacher has a strong interest in individual students, trusting and teaching them as individuals). Because I believe that students all contain the capacity for internal motivation, they can recognize when their teacher trusts them to have their own desire to learn and to take agency of their learning process. Another method I am exploring is a social cognitive method in which group activities and discussions are frequently encouraged. Even in beginners' classes, I notice a lot of discussion among students even if they don't have a personal interest in English. Also, what is important to motivate elementary (as well as mid- or advanced level) students is the content of teaching materials, which can be thought of as socio-cultural motivation. Even if elementary students have difficulty in finding the learning goal purely in the English language itself, they have a strong desire to gain knowledge about wider society and world problems. For use in my first term reading courses, I thoroughly examined the contents of many textbooks that we are allowed to use. I chose a textbook that focuses on current situations in the world, including population issues, social networks, robots and discrimination, as teaching material for English classes. Content-oriented education, called CLIL (see below for more details), has more meaning not only for the intermediate and advanced students described below, but also for beginners. Instead of exploiting external motivation that emphasizes control, such as grades or points, I intended to develop internal motivations among elementary students, giving them widely different perspectives about the world, thereby guiding them toward the ultimate goal of self-actualization. We do not want to explain motivation based on simple and static taxonomy like the internal-external dichotomy, in this preliminary study, but explore ways to improve teaching practice from a dynamic view of helping our students internalize learning motivation.

There is some data quantifying the results of these exercises on student motivation. From the external exam called the VELC test, which our students took twice, before the spring term and in the thirteenth class. Student scores improved on average in the reading part by +25.2, +31.5 and +61.6 points in my three reading classes.

Converting these scores into TOEIC points, the improvements would be +14.6, +20.9 and +46.8. In addition, even in the reading classes, I emphasized the importance of listening to audio recordings and watching video materials to improve their speed-reading, including skimming and scanning skills. The total increase combined with the effects of their listening courses showed +23.7, +32.7, +47.1 in the VELC scores, and +29, +38.8, and +46.8 in converted TOEIC scores. On the other hand, the standard deviation in April was 20.8, 21.6 and 29.2 for my classes, but in July, it became 29.2, 57.2, and 49.4. This may be because too much emphasis was placed on intrinsic motivation and student autonomy was overestimated, so the educational effects were not sufficient for those requiring external motivation, such as required assignments, to improve their English proficiency (though I did impose assignments on students in almost every class). This time, insufficient data has led to no specific conclusions on the relationship between the quality of the individual student's motivation and VELC score improvement; however, such text-based student surveys have been effective for my method to develop internal, not external/instrumental, motivation in my classes, as the improvement of the VELC scores show. I can safely say that I have improved my teaching skills with the aim of getting elementary-level students to internalize dynamic learning motives.

Reflection: Researcher 2 (intermediate English)

One of the biggest hurdles I have seen in my students is the difficulty of overcoming the anxiety that often accompanies the feeling of “I didn’t understand!” I have been working to develop grit in students by encouraging them to engage with CLIL content that may be felt to be a bit difficult, but presents them (often in the form of collaborative group work) with an attainable goal, an opportunity to show their own skills and creativity. Thus they can, hopefully, come to see the feeling of “I don’t understand!” not as an indicator of their incompetence, but as a real opportunity for growth.

For example, in listening classes, I have been using TED Ed videos (a collection of short videos on a range of academic subjects) to encourage students to engage with a variety of content in English. After modeling several lessons, students proceed to work in groups, selecting videos that they enjoy and then presenting the class with a brief lesson based on the video they selected.

In a recent reading class, I asked students over the course of the semester to gradually read through a simplified English translation of a relatively long passage of classical literature. Students then demonstrated their reading comprehension by creating a kamishibai (a type of storytelling accompanied by still images) of what they read. Students reported that they experienced the text as ranging from “manageable” to “a bit difficult,” but were able to work through it and produce excellent visuals displaying their understanding, a payoff for their perseverance.

I have also been exploring the relationship between teacher-student connection and learner motivation. When one teacher has over 100 students, forging personal connections with all of them is difficult, but not impossible. I use Moodle (an online learning management system, LMS) to provide individualized feedback for homework assignments, commenting specifically on the content of their submissions (rather than simply correcting technical errors). This encourages students to see their classwork as relational (i.e., part of their communication with the instructor) rather than merely transactional (i.e., a submission that elicits a grade), theoretically providing opportunity for the development of internal motivation.

While reflecting on this study along with my own experience, I have also come to see more clearly the utility of the ostensibly “lower” form of instrumental motivation. In human development, the general trend is from external to internal. For example, a child’s sense of danger may begin with an adult saying “No!” as she reaches for an electrical socket out of curiosity. Over time, the “no” becomes internalized as she develops the ability to recognize the danger on her own. Likewise, students are still developing as humans; instrumental motivation can be seen as a stepping-stone on the path to internal motivation. Instrumental motivators such as grades and feedback

can be employed to encourage learners along that path. I suspect that the skillful application of such instrumental motivations in an English class would exist with an aim toward drawing out a realistically achievable degree of excellence: a lower grade, then, does not take on the meaning, “you’re bad” or “you’re not good enough.” It means, “You are capable of something better than this.” This is an important difference; the former implies that there is a belief in the learner that he is incapable of excellence; the latter implies a confidence that he is capable of excellence. If learners believe that they are capable of excellence and then are put in a situation where they must display it concretely, they are well on the path to internalizing its pursuit.

Reflection: Researcher 3 (advanced English)

Over the past several years, I have attempted to incorporate the concept of learner motivation into my courses at a meta-level—in other words, through teaching students about learning—in several ways. The following description of in-class activities is a practical report on techniques and activities currently in development for a program of action research.

In a recent reading class, I incorporated a CLIL exercise in which students researched topics in language pedagogy and attempted to teach them to their classmates over a period of four weeks. While the connection to learner motivation may not be immediately apparent, one of the rationales behind this exercise was to reveal some of my teaching philosophy and foster understanding and investment in the learning process. The intended result was for students continuing their college education to be able to recognize these pedagogical principles (e.g. metacognitive learning, blended learning, CLIL, etc.), ideally lessening frustration (negative motivation) in the learning process when encountering a different teaching style.

A second avenue through which I have attempted to increase student motivation is through a deliberate discussion of learning goals. I do not specifically force students to prepare “can-do statements”; instead, I propose they write learning goals. Originally this activity was a twenty-minute exercise conducted during the last class of the semester; however, recently I have reconfigured it into an exit-ticket activity. At the end of the first class, students write two language-learning goals without any further instruction. I provide feedback on the ticket itself, and lecture to the entire class the following week about effective types of goals (concrete, specific) and methods (realistic, effective), and collect a revised round of tickets. Halfway through the semester students return to their learning goals to reassess the goals and self-evaluate their progress toward them, and they self-assess their progress once again at the end of the semester. By extending the goal exit-ticket activity into a process, I hope to increase the amount of time learners spend contemplating the learning process itself. When lecturing about goal setting, however, I emphasize the importance of skill improvement over goal attainment (e.g. “passing the class” is a less mature perspective than “gaining the knowledge and skills necessary to pass the class”). In light of the current study, this approach might be said to attempt to find nuance in instrumental motivation, hopefully opening a path toward internal motivation.

In a word, these activities engage the students with elementary levels of learning advising with the goal of broadening their perspective on the process and philosophies of higher-education and, in so doing, offer a chance for them to realize their potential instrumental motivation. Furthermore, by pushing learners to envision internalized goals and engage in learning advising, I seek to open avenues for that instrumental motivation to be internalized. Effective learning advising helps learners to take control and responsibility for their learning process and can be directly linked to the theory of internal motivation introduced above. As there are limited opportunities at this university for students to take credited language courses after their first year, I envision a learning-advising success to transition toward active participation in the university’s Self Access Learning Center (SALC). As the SALC does not generally provide extrinsic motivators, it may be useful in the future to combine a study of rate of

student access with other data on motivation.

Conclusions

Our research unexpectedly showed little to no correlation between motivation and learning. However, analysis in hindsight suggests that there may have been methodological issues which detracted from the quality of the data and analysis. First, the survey should have been repeated at the end of the semester. Conducting a survey at the beginning of the semester revealed students' motivation coming into the class but did not reflect any changes that occur during the class. It is possible that many students' perspectives on learning English changed as they proceeded through the course, not to mention as they got used to university life, as the majority of respondents were first-year students. Second, our questions need to be honed to better reflect both internal and instrumental motivation. The questions used, in hindsight, can all apply to internal motivation, but none specifically focus on instrumental motivation. It may be that when it comes to university courses, instrumental motivation is more of a determining factor of improvement than is internal motivation. For example, an internally motivated student may be engaged and motivated in language learning but may be more complacent when it comes to test scores, determining that her time is best spent in other activities so long as she has a passing grade. Again, for the same reason, an instrumentally motivated learner may be more powerfully driven by test grades, studying towards the test specifically, rather than getting distracted by study methods or other activities that may be interesting and engaging but do not necessarily directly lead to better grades. We plan to continue developing this project in the future, incorporating other teachers and improving our scientific method, and creating activities to promote internal motivation across all levels of learners.

References

- Ainley, M. and Ainley, J. (2019). Motivation and Learning: Measures and Methods. In Renninger K. A. and Hidi S. E. (Eds.), *The Cambridge Handbook of Motivation and Learning* (pp. 665–688). New York, NY: Cambridge University.
- Deci, E. L., and Flaster (1995) *Why We do what we do: The Dynamics of Personal Autonomy*. New York: G. P. Putnam's Sons. (エドワード・L・デシ, リチャード・フラスト 桜井茂男 (監訳)「人を伸ばす力—内発と自律のすすめ—」東京：新曜社.
- Gardner, R.C. (2007). Motivation and Second Language Acquisition. *Porta Linguarum*, 8, 9–20.
- 鹿毛雅治. (2013). 「学習意欲の理論—動機づけの教育心理学」. 東京：金子書房.
- Park, B. (2004). Relationship between Motivation and Language Learning. *The Korean Language in America*, 9, 308–313. Retrieved from <http://www.jstor.org/stable/42922875>
- Schwartz, B. and Wrzesniewski, A. (2019). Reconceptualizing Intrinsic Motivation: Excellence as a Goal. In Renninger K. A. and Hidi S. E. (Eds.), *The Cambridge Handbook of Motivation and Learning* (pp. 373–393). New York, NY: Cambridge University.
- Second Act, Inc. (2019, July 16). *Eigo Gakushu Anketo no Tekisuto Bunseki* [Text Analysis of an English Learning Survey]. Tokyo: Second Act.

Appendix
Motivation survey (preliminary questions omitted)

1. 次の文にたいして、次の文にたいして、1～4の選択肢からひとつを選んで回答してください。「私は英語が好きだ。」
2. 次の文にたいして、1～4の選択肢からひとつを選んで回答してください。「私はどんなことに対しても積極的に取り組むほうだと思う。」
3. これまでの英語授業についてどう感じていますか。1～4の選択肢からひとつを選んで回答してください。
4. 英語の勉強は価値があると思いますか？ 1～4の選択肢からひとつを選んで回答してください。
5. これまでで英語学習についての考え方をえるきっかけとなった具体的な経験とそれについてどう感じたか、なるべくくわしく書いてください。
6. ふだん授業以外で一週間にどれくらい英語を勉強しますか（平均で一週間に3時間半くらい勉強するなら、3.5のように答えてください。）
7. 次の文の（ ）の中に、あなたが好きな形容詞を入れて、文を完成させてください：「英語がよくできる人は（ ）だと思う。」
8. 英語ができる人について、あなたが(7)のように感じた理由を書いてください。
9. あなたは将来英語をどのように使っている、と思いますか？またそう思っている理由をなるべくくわしく書いてください。あなたが英語を使っている様子を二つ以上、想像した人はすべて描いてください。
10. (9)(8)で述べたあなたの将来の英語の使い方について、どれくらい実現すると思っていますか。1～4の選択肢からひとつを選んで回答してください。