言語学習における学生の興味と自己効力感を向上させる：
音声メッセージによる介入の枠組み

Enhancing Student Interest and Self-efficacy in Language Learning:
A Framework for Audio Message Interventions

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概要：

本稿では、言語学習における学生の興味と自己効力感を高めるための新しいアプローチを紹介する。英語の授業中に流れる BGM に、音声コマーシャルを挟むというものである。アニメーションのビデオコマーシャルを利用した先行研究を基に、この研究はメッセージの頻度を増やし、メッセージ伝達の摩擦を減らすことを目的としている。 著者らは、10 本のアニメーションビデオ CM を音声フォーマットに再利用した。 そして、授業中に人気のある英語の歌の合間に、ラジオのようなコマーシャルとして流した。それぞれ 8 つのコマーシャルと 7 つの歌を含む 10 のプレイリストが作成され、10 週間の介入期間にわたって再生された。

　この研究では、介入前と介入後にアンケートを実施し、学生の英語学習に対する関心と自己効力感の変化を測定した。結果は統計的分析待ちであるが、この革新的なアプローチは、費用対効果が高く、ローテクで、学生へのメッセージの伝達が最小限に抑えられる方法として可能性を秘めている。語学学習コースにとどまらず、この手法は BGM が適しているさまざまな教育的文脈で広く応用できる。メッセージの内容は、動機付け、安全、情報など多岐にわたる。

Abstract :

This paper presents a novel approach to enhancing student interest and self-efficacy beliefs in language learning. It utilizes audio commercials interspersed with background music played during English classes. Building upon previous studies that utilized animated video commercials, the present research aims to increase message frequency and reduce friction in message delivery. The authors repurposed ten animated video commercials into an audio format and played them as radio-like commercials in between popular English songs during classroom activities. Ten playlists, each featuring eight commercials and seven songs, were created and played over a ten-week intervention period.

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The study administered pre- and post-intervention surveys to measure changes in student interest and self-efficacy in learning English. While the results await statistical analysis, this innovative approach holds potential as a cost-effective, low-tech, and minimally intrusive method for delivering messages to students. Beyond language learning courses, this technique has broader applicability in various educational contexts where background music is suitable. The messages can contain motivational content, safety information, course information, and so on.

キーワード：音声メッセージ、関心を高める、語学学習

Keywords：audio messages, interest, language learning

1 Introduction

In a previous study, the authors created and utilized brief animated video commercials as a means of enhancing university student self-reported interest and self-efficacy in learning English as a foreign language. In a subsequent study (Matthews et al., 2023), animated commercials were once again created in order to persuade students in *Reading & Writing* courses to regularly and frequently spend time using the online extensive reading platform *Xreading* (n.d.). These interventions were intended to be inexpensive to produce and easy to deploy in the classroom, while also being eye-catching and attention grabbing.

However, in both studies the interventions produced only minor degrees of success. Upon reflection, the authors believed that this could be attributed in part to the limited number of times students were exposed to the commercials and the messages they contained. It was hypothesized that if students could be exposed to the messages in these commercials more frequently, the messages could take hold more deeply and produce a greater effect. The following report describes the methodology in which the authors created a new study with this hypothesis in mind.

2 Background

The authors originally created ten animated video commercials (mean length 56 seconds) for the aforementioned study aimed at bolstering university student interest in learning English, as well as their sense of self-efficacy in learning English. The commercials were created with the online animated video production software suite *Vyond* (n.d.). *Vyond* is a platform which allows users to create animated videos quickly and efficiently. It provides numerous tools and assets for creating customizable backgrounds, objects, characters, and character animations. Recorded dialogue can be assigned to characters, and *Vyond* will automatically generate and animate lip syncing, regardless of the language used.

Notably, *Vyond* does not require users to possess highly developed technical skills in animation or video production.

The commercials featured voice acting in Japanese, performed by actors sourced from the freelance marketplace website *Fiverr* (n.d.). Japanese was chosen over English in order to ensure that the messages, narration, and dialogue in the videos were easy for students to understand. It was also thought that this would minimize the cognitive load placed on students as they viewed the commercials. The purpose of these commercials was not to teach English, but rather to enhance student interest and self-efficacy beliefs. Screenshots from two of the commercials utilized in the study can be seen in Figure 1. Once video production was complete, the commercials were uploaded to YouTube. Two of these commercials may be viewed in full by scanning the QR codes in Figure 2.

Figure 1

Screenshots from Two Commercials Used in the Initial Study

Figure 2

QR Codes Linking to Two Commercials Used in the Initial Study

Students in the control group were shown videos (mean length 59.6 seconds) sourced from a third-party content creator on YouTube called レイニー先生の必ず役立つ英会話 (n.d.).　The control group videos each featured a simple, quick lesson on a set of common and useful English conversational phrases. These videos were not overtly aimed at enhancing interest or self-efficacy in language learning. A screenshot from one of the control group's videos can be seen in Figure 3.

Figure 3

A Screenshot from a Control Group Video used in the Initial Study

All of the videos were embedded in the Moodle online learning management system (LMS) utilized by the university's Language Education and Research Center.　Prior to accessing their weekly e-learning homework for Listening & Speaking courses on Moodle, students had to play one video on their own smartphone, tablet, or computer. The videos were placed on a schedule which dictated the pace at which they could be viewed. Two videos were to be viewed each week over the course of 10 weeks, for a total of 20 viewings. This was done in order to prevent students from watching all of the videos in one session at the end of the semester. Moreover, in an attempt to ensure that students actually watched the commercials and paid attention to them, students had to complete a simple multiple choice viewing comprehension question at the end of each video.　If students answered this question incorrectly, they had to watch the video again. In this

manner, students either viewed each video appropriately to obtain the correct answer to the comprehension question, or they simply played each video multiple times without paying attention to the content until the answer they chose was the correct one.

This process proved to be an unpleasant one for some students, as they were forced to complete an extra task in order to access their homework. The pressure of approaching homework deadlines further exacerbated the situation at times. The authors were made aware of student displeasure with the video viewing system when a small number of students actively complained. For these students, watching the videos and answering the comprehension questions had become a considerable nuisance and disruption. The authors took note, and upon the completion of the study this approach was abandoned. A message aimed at improving interest in language learning is likely to see its effectiveness greatly diminished when the very act of receiving that message is fraught with frustration and resentment. The authors felt strongly that the delivery system of the message should not detract from the message itself.

The subsequent study aimed to use five newly created animated commercials (mean length 59.6 seconds) in order to persuade a new group of students in *Reading & Writing* classes that utilizing *Xreading* regularly would be an effective and convenient method of learning English. *Xreading* is an online extensive reading platform that offers a wide range of digital reading materials in English. It is designed to promote language learning and reading comprehension by providing access to a library of graded texts, and it has been implemented in Kyushu Sangyo University curricula since the start of the 2019 - 2020 academic year.

Students in *Reading & Writing* classes would often leave the bulk of a major 60,000-word Xreading extensive reading semester assignment until the end of the semester to complete, rather than completing a reading target of 6,000 words each week. This common practice severely diminishes the numerous and profound benefits of extensive reading in language learning. The intervention aimed at addressing this problem head on by encouraging students to engage in extensive reading for just 10 minutes each day, while also teaching students about the merits of doing so.

These extensive reading videos were once again created with the *Vyond* animated video production software, and they featured voice acting in Japanese. Teachers participating in the study played two videos for their students: one at the beginning and end of each class. The videos were played on YouTube and projected onto a large screen at the front of the classroom. This was done twice per week for 10 consecutive weeks, resulting in a total of 40 videos screened over the course of the study. The control group again watched the one-point English lesson videos from レイニー先生の必ず役立つ英会話 on YouTube. These videos did not

contain any content related to extensive reading.

The authors believed that this viewing process would be far less frustrating for students, compared to embedding videos into the Moodle online LMS and forcing students to watch videos prior to allowing access to e-learning homework. However, the authors did find that some students quickly grew bored of the commercials upon repeated viewings. In addition, some students did not always appear to give the commercials their full attention.

3 Methodology

In the current study, the authors set out to improve the intervention in two distinct ways. Firstly, they wanted to remove as much frustration and boredom as possible from the student experience of consuming the commercials. Second, they sought to increase the number of times students were exposed to the commercials' messages. In an effort to achieve both of these aims, the new intervention would be conducted in an entirely different fashion. The ten commercials from the first study were repurposed and played in an audio format in between songs that were played as background music during class time. In this sense, the videos would now become very much like inobtrusive radio commercials. Students would passively listen to the commercials during class, rather than being forced to watch them.

The commercials were to be played in between background music tracks. In order to increase students' attention and enjoyment, the authors sought to play English music in class that students actually wanted to listen to. At the beginning of the first semester of the 2023 - 2024 academic year, a Google Forms survey was conducted among all students in the control and intervention groups, soliciting English song requests. Upon compiling the results of this survey, commonly requested songs were identified and placed into YouTube playlists.

Each playlist consisted of eight commercials and seven English songs. An example of one of these playlists can be seen in Figure 4. The first track was always a commercial, followed by a song, and then another commercial. This alternating pattern continued until the final track, which was always a commercial. A video consisting of hours of silence was placed at the very end of each playlist to prevent YouTube from automatically playing more music once the playlist had ended.

Intervention Group Playlist 3

Track	Content	Duration
1	Commercial 1	1:01
2	Song 1	3:24
3	Commercial 2	1:02
4	Song 2	3:49
5	Commercial 3	1:16
6	Song 3	3:33
7	Commercial 4	1:09
8	Song 4	2:15
9	Commercial 5	1:14
10	Song 5	3:18
11	Commercial 6	0:52
12	Song 6	3:36
13	Commercial 7	0:33
14	Song 7	3:18
15	Commercial 8	0:59
16	Silence Track	- -

Total Duration (excluding Silence Track): 31:19

Figure 4

A Playlist Used with the Intervention Group

Ten playlists were created, with a mean length of 32 minutes and 58 seconds. One new playlist was played in class each week, over the course of the ten-week intervention. Therefore, students were exposed to 80 commercials in total. The playlists were played as background music during *Listening & Speaking* classes, often during pair work and group work activities. Teachers paused and resumed the playlists whenever they saw fit to do so. The playlists utilized in the control group always featured identical lists of songs, but all of the commercials were removed. This meant that control group playlist lengths were shorter than intervention group playlists (mean length 23 minutes and 51 seconds).

4 Limitations

One significant limitation may have hindered this study. For reasons possibly related to video export options in the *Vyond* software or YouTube's automated volume adjustments to uploaded videos, the volume levels of the commercials were almost always lower than those of the music tracks when played on YouTube. This left teachers with two options for audio playback. They could leave the volume at one constant level with the commercials potentially being too quiet or the music too loud; or they could actively monitor playback and increase the volume when commercials played, then turn down the volume when music played.

The songs were meant to be played as quiet background music. Therefore, if the volume was set to a background level and not adjusted, the quiet commercials featuring low-pitched male voice acting or narration could become nearly inaudible at times. Ideally, the music would have been played at a quiet background level, and the commercials would have been slightly louder to draw attention and ensure comprehension. In practice, however, the authors found that the commercials were often played back too quietly unless they intervened.

5 Conclusion

Pre- and post-intervention surveys were administered in Japanese through Google Forms in order to measure changes in interest and self-efficacy in learning English. The results of these surveys will be subjected to statistical analysis. While the results have yet to be analyzed, the authors hypothesize that audio messages played frequently as commercials between background music tracks could prove to be a low-cost, low-tech, and low effort means of message delivery to students. The recent proliferation of free, high-quality AI text-to-speech software also means that any audio message can be quickly generated without the cost of hiring voice actors.

Beyond language learning classes, this technique has the potential to be utilized in any class where playing music in the background is appropriate. Message content could be motivational in nature, safety-related, informational, and so on. It is hoped that educators in other fields will explore, develop, and refine this technique through future research.

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