

The Effects of Three Cooking Projects on Human Nutrition Majors' Confidence in English

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One challenge facing teachers of English when trying to improve students' English language knowledge and skills is that the students themselves often have a deep-rooted lack of confidence in their English receptive and/or productive abilities. This study examines whether a 15-week English II course comprised of three five-lesson Project Based Language Learning cooking projects in English resulted in improved confidence in English among the participants, and the reasons why or why not. A seven-item questionnaire was administered to freshmen Human Nutrition majors (N=41) at a private Japanese university. Results show that 20 students reported perceived improved confidence in English resulting from participation in the three cooking projects. Reasons included the learning of new vocabulary (n=8), learning English for Culinary Purposes (n=6), improved capacity to communicate in "short, simple English" (n=3) and improved language skills and knowledge (n=9). Conversely, 21 students reported no change in their perceived confidence to use English, citing a continued belief that they cannot use English or are not good at it (n=5), that they cannot speak in English (n=4), or generally lack confidence for an unspecified reason(s) (n=4). Given the presumed very low levels of confidence with which most of the students started the course, these results are seen as encouraging, though suggestions are made to support those who still lack confidence.

Keywords: English for Specific Purposes, Project Based Language Learning, Vocabulary learning, Project work, English for Culinary Purposes

Introduction

Depending on one's first language and the target language (TL) one wants to learn, foreign language learning is, to a greater or lesser extent, a combination of hard work and the right mindset. The former comes in the shape of learning the grammatical patterns and vocabulary, and practicing the language skills one needs to express

oneself in a target domain. The latter might be more technically referred to as 'affect', which comprises numerous facets including motivation, engagement, participation, enjoyment, creativity, sense of self, self-esteem, self-efficacy, attitude towards learning and using the TL, satisfaction of achievement, learner autonomy, independence, self-initiation, and a willingness to take responsibility for one's own learning. Another is confidence in using the target language, and it is this affective aspect that this paper concerns itself with.

Specifically, the purpose of this study was to examine whether, in what ways and for what reasons, participating Japanese undergraduate students

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perceived that three Project Based Language Learning (PBL) cooking projects had improved their confidence in English in a compulsory freshman English II course, as part of their curriculum within the Department of Human Nutrition at a private university in Japan. It was important to answer these questions because one of the course's core, albeit informal objectives was to reverse the commonly held negative perceptions of English as a subject of study and as a living language among Japanese students. Unless such perceptions were confronted and resolved by the teachers, it was felt by them that little English language learning would be achieved in the English II course.

Before detailing the research method, presenting, and discussing the results and drawing conclusions, I will first outline the underlying rationale for the English II course which served as the setting for this study, in order to assist the reader in understanding the challenges which the two teachers faced in designing and executing the course and how they arrived at their solutions to those challenges.

Underlying rationale for the English II syllabus

The teachers' aim for the English II course was to make it accessible, enjoyable, interesting, relevant, and useful to the freshman students' current studies in human nutrition and their likely future work as dietitians, while accepting and working within various assumed constraints.

The first of these, perhaps with a very few exceptions, was that the students' proficiency and interest in English, and their future need for it in the workplace would, realistically, likely be extremely low, and they would intuitively understand this, which could adversely affect their active engagement with the course.

Next, many Japanese students actively and strongly dislike English as a foreign language because they perceive it as extremely difficult to acquire at any useful, meaningful level of functionality. This is entirely understandable given that the linguistic distance between Japanese and English has been shown to be wider than for any other language pairing (Chiswick & Miller, 2005).

Furthermore, many Japanese students intensely dislike English as a subject of study because they

associate it strongly negatively with what Kamiya (2009) describes as the "exam hell" that they had to undergo in preparation for both senior high school and university entrance examinations. Most Japanese students probably hope that they have seen the last of their English studies once they enter university.

Finally, the textbook used for their mandatory freshman English I course, taught by another teacher, though directly related to human nutrition, was set so far above their English proficiency level as to be not only unattainably difficult but also affectively counterproductive. The two teachers for the English II course (Teachers 1 and 2) were *deeply* concerned that the textbook had only served to further reinforce the students' pre-existing negative perceptions of, and affect towards English as a living language and subject of study.

With these issues in mind, the two English II teachers considered it essential to work to reverse these negative perceptions and affect, to encourage students to engage with the course and with English not just as a subject of study, but as a living language that could be used to get things done.

It was therefore decided to use project work as a form of active learning, and cooking projects specifically for their direct relevance to the students' major field of study. These projects would keep the demands of the linguistic content low by foregrounding relevant lexical items useful for understanding and cooking recipes, while downplaying the traditional centrality of grammatical content, which students often find problematic and demotivating. At the same time, the relevance and interest value of the carrier content would be high by selecting three novel project themes: Finger Food, Soups and Salads, and International Food. Similar projects had previously achieved high levels of engagement and interest among students from this and one other department.

It was decided that three five-lesson projects would allow the teachers and students to set a manageable pace for a 15-lesson course. The first lesson in each project would introduce the theme and related vocabulary. In the second and third lessons, students would decide their recipe and

prepare a recipe card in English which included a space for the ingredients, cooking instructions, cooking time, utensils needed, etc. Each student would then cook their individual recipe at home in lieu of the fourth lesson and submit their recipe cards and cooking videos by the fifth lesson, during which their videos would be shown and a short project-specific English test would be administered for assessment purposes.

With over 40 freshmen enrolled, the Department of Human Nutrition decided to divide them into two groups (Group 1: n=22, Group 2: n=19, N=41), both taught at the same time by the two teachers, who agreed to use the same syllabus, materials and assessment for the two groups to maintain parity.

Literature Review

When tasked with designing and implementing a course of study, teachers are faced with a wide range of decisions to make and problems to solve. For each decision, there are often various options and for each problem, there are usually several potential solutions. The challenge is in selecting those that maximise the chance of the students attaining the course goals.

While other approaches to teaching English as a foreign language might serve well in the current research setting, PBLL was selected because it offers numerous benefits as reported in the literature over several decades. These benefits can be categorized into language knowledge learning, language skills development, content knowledge learning, content skills development, cognitive skills development, social skills development, and positive affective change. (See Stoller, 2006, p. 25 for a more in-depth index of these benefits and supporting literature.) Among the affective benefits resulting from the use of PBLL project work is increased confidence in the TL (Legutke, 1985; Carter & Thomas, 1986; Coleman, 1992; Padgett, 1994; Gardner, 1995; Lee, 2002; Levine, 2004; Moritoshi, 2017).

Since the projects used in the English II course:

- a. are intended to meet the specified language learning needs of the students,
- b. relate directly to the students' major field

- of Human Nutrition, connected occupation (dietician) and activities,
- c. focus on language that meets the needs of that field, occupation, and those activities,
- d. and can be contrasted with General English,

they meet Strevens' (1988) definition of English for Specific Purposes (ESP): In this case, English for Culinary Purposes (ECP). This is noteworthy because, just as increased motivation has been a reported benefit of PBLL (Gu, 2004; Levine, 2004), it is also a stated potential outcome with respect to ESP (Dudley-Evans & St John, 1998, p. 10). This is because ESP approaches are learner needs-orientated, time-efficient, relevant to students, confer learning and are "more cost-effective than 'General English'" approaches (Dudley-Evans & St John, 1998, p. 10).

Exhibiting qualities of both PBLL and ESP, the three cooking projects should therefore confer several learning and affective benefits upon the students participating in this study.

Method

This study was set within the Department of Human Nutrition, Faculty of Contemporary Life Sciences, Chugokugakuen University in the 2021-2022 fall semester.

The English II course outline: Three projects: Finger food, Soups and Salads, International food. All three projects had a common format. In the first lesson of each five-lesson project, the teacher would introduce the theme and related vocabulary and concepts. Students would then be given a blank recipe card and time to decide what recipe to detail on the card. They would then prepare the recipe card in weeks two and three, video record themselves making the recipe at home in week four, then submit the video and recipe card for grading in week five. While some students declined to have their videos shown in the final lesson for each project, those that were shown seemed to be well-received by their classmates.

Participants

The participants were all undergraduates in the above department (N=41). Of these, 38 were

freshman aged 18 and three were transferees to the university, having studied at the Department of Human Life Sciences for two years at the affiliated Chugoku Junior College. All were enrolled in the compulsory English II course which served as the research setting. This course met once a week for a 90-minute lesson. No data were available on their English proficiency at commencement of the English II course.

Materials

This study utilized a bespoke, seven-item Japanese language questionnaire designed by the researcher (Appendix). The form's purpose was to elicit the participants' opinions on whether, and in what ways, the three cooking projects conducted during the course had changed their perceptions of the English language in general terms and, more specifically, their willingness to learn and use English as a living language. It also asked what they had liked and disliked about the cooking projects, whether they had enjoyed them and whether they had served to improve their confidence in using English. It is this final item with which this paper is concerned.

Procedure

To reduce class sizes, the 41 students were divided into two groups 1 (n=22) and 2 (n=19). These two groups were taught by different teachers (Teacher 1 and Teacher 2), who committed to using the same syllabus, course goals, linguistic content, project work and sequencing. In the final lesson of the course, the teachers reviewed the contents of the

course with their respective students, highlighting how the projects had attempted to bring about the course goals.

It was then explained that the teachers would like to research the students' experiences with the projects they had completed and that to do this, the students were asked to complete the questionnaire. Participation was voluntary and anonymous, but all students completed the form to some extent. To maintain anonymity, students placed their form into an A4 envelope at the front of the room. These were then collected and analysed by tallying the number of participants who had answered Yes or No to item 7. The participants' qualitative data were translated into English then coded by theme.

Results

As to whether participating in the three cooking projects had improved each participant's confidence in English (item 7 on the form), the results of the tally of "Yes" and "No" responses are shown in table 1 below.

Table 1: Quantitative results for item 7

	Yes	No	Total
Group 1	10	12	22
Group 2	10	9	19
Total	20	21	41

From the thematic coding process, various themes emerged to explain why the participants' confidence in English had or had not improved as a result of participation in the three cooking projects (Tables 2 and 3 respectively below).

Table 2: Ranked reasons given for improved confidence in using English

Theme	Participant #	Total
Learning of new vocabulary	4, 9, 22, 28, 29, 31, 32, 35	8
Learning English for cooking	8, 9, 20, 21, 23, 32	6
Can now use "short, simple English"	3, 7, 22	3
Improved skills (speaking)	7, 8, 25	3
Improved skills (writing)	20, 21,	2
Improved skills (in general)	3, 23	2
Improved English knowledge	10, 19	2
Giving peer instruction	6	1
Learning of new grammar	4	1
It was fun	41	1

Table 3: Ranked reasons given for no improvement in confidence in using English

Theme	Participant #	Total
Can't use English / Not good at English	16, 17, 18, 26, 36	5
No improvement in speaking skill	2, 13, 15, 38	4
Not confident (reason unspecified)	9, 27, 30, 39	4
Lack of English comprehension	11, 12	2
English is difficult	33	1
Cannot recall grammar or vocabulary when needed	5	1
The linguistic content was not diverse or challenging enough.	1	1

These quantitative and qualitative results will be discussed with reference to the projects and the literature.

Discussion

Roughly half of the participants in each group perceived an improvement in their confidence in English as a direct result of the three cooking projects and associated activities conducted during the English II course. It is interesting that this applies to both groups despite having different teachers, suggesting that the effect is derived more from the materials, activities and approaches used than from the teacher who implemented them. While only a 50% success rate might seem low, given the very low bar that is assumed to have existed at the start of the course, perhaps such a result is understandable, even noteworthy, though the lack of a pre-course measure of confidence in English makes it impossible to make further claims.

Closer examination of the reasons given by students as to why their confidence in English did or did not improve can also yield some useful insights. Table 2 shows that by far the most common explanation for the former was that they had learned new vocabulary:

"I can know words about cooking."
 "Because I knew a lot of words."

This, it has been explained, was an intentional learning focus intended to make the course more accessible to these low-level students, and this seems to have paid an affective dividend as well as a positive language learning outcome.

The next most common reason for increased

confidence in English was that they had learned English for cooking:

"I can speak a little English that can be used in cooking."
 "Because I can write recipes in English."

This speaks to the effectiveness of the choice to target ECP rather than general English.

Finally, the course emphasized repeatedly that one can express a vast array of information with even just basic grammars and the right vocabulary, and this seems to have resonated with some of the students:

"Because I can use short, simple sentences."
 "I learned that it can be communicated in simple English."

Finally, there were a total of nine statements relating to improved speaking or writing skills, general language skills or English language knowledge:

"I thought I could speak in simple sentences."
 "I learned how to write a recipe through the recipes cards."
 "Because I can teach the (Japanese) food to foreigners."
 "To feel that I have acquired knowledge of English about cooking."

These show that, to some extent, the formal course goals of improving the students' English knowledge and language skills were met.

Conversely, some students' confidence in English did not improve because they have a

deep-rooted belief that they cannot use English or are not good at English:

“I can’t use English freely.”

“I can’t speak very well.”

“I’m not confident because I haven’t mastered it.”

or because they lack confidence for an unspecified reason:

“I didn’t feel confident.”

“I’m not confident originally.”

Perhaps with more contact time and/or one-to-one instruction these students might become more confident in their English, at least at their own level.

As with most studies, there were some limitations in the method. Firstly, no pre-course measures were taken against which to compare the post-course data and results, so it is not possible to show change over time. This will be resolved in a subsequent study for which this one has become a pilot study. Also, the questionnaire was administered on paper rather than online. Using the latter would have made it quicker and easier to translate and analyse the qualitative data.

Conclusion

In conclusion, the three ECP PBLL cooking projects implemented in the English II course went some way to improving the confidence in English of 20 of the 41 participants, which given the low point from which most of these students presumably started is arguably a positive result. However, the other half of the participants cannot be overlooked. Even with a combined ECP and PBLL approach, which conventional wisdom would suggest *should* have had positive impact on confidence to use the TL, this informal objective was not achieved. Perhaps with more time and personalised tuition this might be overcome, but it must also be conceded that for many of these students, their lack of confidence or proficiency in English will not necessarily be a barrier in their future studies or careers.

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Appendix

森年教授とチンデミ教授は、栄養学の学生の英語に対する認識と英語の学習と使用に対する料理プロジェクトの影響を研究しています。この調査は任意ですが、以下の質問に正直に答えていただければ助かります。このアンケートは匿名です。名前や学生番号を書かないでください。提供されたスペースに追加情報を入力してください。これは、私たちがあなたの答えをより深く理解するのに役立ちます。日本語または英語で自由に書いてください。質問がわからない場合は、先生に聞いてください。

この英語 II コースでは、3つの料理プロジェクトで英語を学び、実践し、使用しました。

1. フィンガーフード
2. スープとサラダ
3. インターナショナルフード

レシピを選び、プロジェクトごとにレシピカードを用意しました。次に、レシピを説明する料理動画を作成しました。

1. 料理プロジェクトは言語としてあなたの英語の認識を変えましたか？（答えを丸で囲んでください。）

A. はい B. いいえ

その理由を説明してください。

2. 料理プロジェクトは英語学習の認識を変えましたか？（答えを丸で囲んでください。）

A. はい B. いいえ

その理由を説明してください。

3. 料理プロジェクトは英語を使うという認識を変えましたか？（答えを丸で囲んでください。）

A. はい B. いいえ

その理由を説明してください。

4. 全体として、プロジェクトは楽しかったですか？（答えを丸で囲んでください。）

A. はい B. いいえ

その理由を説明してください。

5. プロジェクトのどこが気に入りましたか？
-

6. プロジェクトの何が気に入らなかったのですか？
-

7. 英語に対する自信は向上しましたか？

A. はい B. いいえ

その理由を説明してください。

お時間をいただきありがとうございます。
森年ポールとチンデミ・グレゴリー