# Internet-Based Flipped Classroom: Japanese Causative Verbs at Selected International Universities in Bangkok

สุพิน แสนเรือง

Suphin Sanruang


มหาวิทยาลัยอัสสัมชัญ

Assumption University of Thailand


**Corresponding Author:**

Suphin Sanruang

Assumption University of Thailand

592/3 Ramkhamhaeng Rd., Hua Mak, Bang Kapi, Bangkok 10240, Thailand

E-mail: suphins@gmail.com

# Abstract

This study aimed to explore the efficiency and effectiveness of "Internet-based flipped classroom: Japanese causative verbs at selected international university in Bangkok". The population was 26 students from Japanese III course in the first semester of the year 2021 at selected international university in Bangkok. There are two groups of sampling units. Group one is three experts who were invited to improve the internet-based flipped classroom on Japanese causative verbs. The second group consists of 26 students who try out internet-based flipped classroom on Japanese causative verbs. The qualitative data was gathered from the suggestions and comments made by the three experts using in-depth interviews whereas the quantitative data was obtained from student assessment tools with a paired samples T-test. The efficiency was proven by the $E_1/E_2$ formula. The finding showed the efficiency through $E_1/E_2$ score equaled 80.03/80.26 that meets the criteria 80/80. The effectiveness was proven through a statistically significant difference between pre-test and post-test, as seen from the $p < 0.05$ level which corresponds to the hypothesis set. A five point Likert scale was used to measure satisfaction in the course content "causative verbs". The satisfaction level of the course content in "causative verbs" was confirmed by the three experts with an average value of 4.5 and 4.32 from students, and both average scores mean "very satisfied".

**Keywords:** efficiency, effectiveness, flipped classroom, Japanese causative verbs

## 1. Introduction

To apply a suitable particle in Japanese language is difficult for the students especially the particles in lesson 48, みんなの日本語 II that concern causative verbs. Some students are still confused about the group of verbs such as 浴びます, so they often make mistake when conjugating the verb to causative form. In addition, they cannot classify transitive or intransitive verbs because the particles used with causative verbs are different. Ever since the impacts of Coronavirus 2019 (COVID-19) pandemic strengthen, the traditional mode of learning in a classroom could not be resumed, thus online mode was introduced to carry out studying and to support both teachers and students.  According to the NXPO President, Dr. Kitipong Promwong (*Major changes in Thai education anticipated after the COVID-19 pandemic,* 2020) it is expected that the competition among universities will get more intense. Education will be a blend of in-person lessons and distance learning. Moreover, it will focus more on equipping students with professional skills and lifelong learning, as well as facilitating students with anytime and anywhere education. This point has let the researcher to think about how students should be able to access teaching material on a course content or any practices by themselves, especially on grammar – causative verbs - which they still find it difficult to work on.

### 1.1 Statement of research problems:

The characteristic of Japanese language is not only about the tense but also the particle. When verb or particle changes its form, the meaning changes as well unlike Thai, Chinese, and some other languages that they have no tense nor particle in their structure. Thus, it is hard for language learners to study Japanese language. Nowadays, teaching method is shifting from traditional to online mode, thus the problem occurred is that teachers still carry out the same way of teaching to students because they lack knowledge of new technology. When teachers ask students to answer the question, there is no answer. Consequently, there is no interaction between lecture and students. The lecturer then only talks to the screen and does not know whether students are studying or not. It can be said that students would not practice nor concentrate on studying. Finally, students could not follow the lesson and that makes them bored with the class. In short, more practices are needed for a lifelong learning and facilitating

students with anytime and anywhere education. Hence, the teaching method should be developed.

**1.2 Research Objective:**

**The objectives of this research are as follows:**

To develop the course content "causative verbs" for students at selected international university in Bangkok based on 80/80 efficiency criteria. 2) To examine the effectiveness of the course content "causative verbs" from the average score of the pre-test and post-test taken by students who studied the course content "causative verbs". And 3) To observe satisfaction of the course content on "causative verbs".

**1.3 Research Questions:**

In what ways can feedback and suggestions from the three experts be used in developing and improving the content and exercises in the course content "causative verbs" for students of Japanese III at selected international university in Bangkok based on 80/80 efficiency criteria? 2) What is the significant level of pre-test and post-test score? And 3) What is the satisfaction level of courseware in "causative verbs"?

**1.4 Research Hypotheses:**

The hypotheses of this research on the efficiency of the course content "causative verbs" are:

$H0_1$= The efficiency of the developed course content "causative verbs" for graduates

meets the 80/80 criteria.

$H0_2$= The developed course content "causative verbs" for graduates is effective

for Japanese III students at selected international university in Bangkok.

Hypothesis for effectiveness from a paired samples T-test are:

$H0_1$= The average scores before and after taking the lesson are the same.

$H0_2$= The average score after taking the lesson is higher than before taking the lesson.

**2. Literature Review**

The meaning of causative verb can be interpreted either with "make somebody do" or "let somebody do" which depends on general knowledge and the context of the sentence

that solves that issue (Banno et al., (2003), *みんなの日本語 II*, (1998)). The problem is that the particle used with causative verbs is complicated for the students. According to Iroi, et al. (2000, p. 300), the particles used with transitive and intransitive verbs are different and users should be aware of the topic of a sentence because senior could either let or make the action taker do the action as sentences below:

① 先生は子供たち（ x を/ 0 に）作文を書かせた。

Tanaka (1990, p. 237) stated that intransitive verbs, the particle "に" is used when the action takers intend to take action and is interpreted as "let". If the action takers do not intend to take action, the particle "を" is used and it means "make" as sentences below:

② 先生は子供たち（を/に）泳がせた。
③ 子供（に）お願いして行かせる。

If action takers are inanimate, it should be with the particle "を" as sentences below:

④ 倒れていた看板<sub>かんばん</sub>（ 0 を/ x に）立たせた。
⑤ 神戸<sub>こうべ</sub>まで車（ 0 を/ x に）走らせた。

There are verbs that contain emotional meaning such as 心配する, がっかりする using the particle "を" with action taker as a sentence below:

⑥ 成績が良くなかったので、(私は)母（ 0 を/ x に）がっかりさせました。

If some verbs are not transitive verbs but they interpret the meaning of "pass through" such as 「道を歩く」, 「空を飛ぶ」, the particle "に" is used as a sentence below:

⑦ 田中さんは林さん（ x を/ 0 に）危険な道を通らせる。

In case of causative verbs ～ていただけませんか, the topic is always omitted.

⑧ （社長は）私（ x は/ 0 に）（それを）説明させていただけませんか。

That explains why students always make mistake when it comes to particles. In addition, students are still confused with the meaning of causative verb ～ていただけませんか which means to ask permission as "please let me do" and causative verb ～てもらう/くれる which means you feel grateful when you get a permission to do something (日本語文型辞典, 1998). In order to help students understand the meaning and to able to apply appropriate particles used with causative verbs, researcher recognized that teaching materials, which are to help students learn anytime or anywhere, should be made. Moreover, teaching method is also important. Nowadays, teaching method is shifting from traditional to online mode which should also encourage autonomous learning among students. Online education is a variously termed as hybrid, flipped classroom and etc.

Carrasco and Johnson (2015, as cited in Snart, 2010) stated that the history of hybrid teaching has its roots in distance education established in higher education as far back as the mid nineteenth century. Also, Liming and Jianli (2013, as cited in Graham 2006, p. 3) stated that nowadays the information technology has facilitated a convergence between traditional face-to-face and technology-mediated learning environment, which is so-called hybrid or blended learning. Graham (2006, p. 3) points out that the essence of blended learning is the combination of face-to-face instruction and computer-mediated instruction. Caulfield (2011, pp. 3-4) defined it as the course reduces "face time" and is replaced by time spent outside the traditional classroom. Bamrungsetthapong et al. (2020, p. 220) stated that the effectiveness of hybrid teaching and learning comprises of three items as the followings: 1) Input: an analysis of the problem, students' characteristic, objectives, and content of the study. 2) Process: a design and development of teaching and learning such as selection of teaching methods and appropriate content design. And 3) Output: a teaching evaluation, which consists of an evaluation during the teaching preparation process, an evaluation after teaching and a follow up after teaching. Likewise, Brahmawong (2013) stated that multi-media instructional packages are produced to impart knowledge and experiences of the teachers to class-based and home-based students who need to test their efficiency and the evaluation stage of instructional package production - this is called Developmental Testing (DT). Thus, there is a concept of the formula $E_1/E_2$ that uses three aspects as criteria to develop and determine the quality. The draft of an instructional package is completed and presented as follows: 1) Students' progress on their learning achievement as an evidence from the significant difference of their post-tests and pre-tests; the significant difference on students learning progress is usually set at 0.05. 2) The efficiency of students' learning at both process and product is designated by $E_1/E_2$. $E_1$ is the percentage of an average or mean score students earn from their activities or assignments, such as drills, exercises, project works, etc. $E_2$ is the percentage of an average or mean score students earn from their post-test, final examinations, and other summative evaluations (Thieanthong, 2005, p.309). 3) In terms of satisfaction level among the instructors and students, the questionnaire is normally used to ask for their satisfaction on teaching and learning via instructional package. Therefore, to improve the quality of the instructional package production, it can be check from students' learning progress, efficiency of students' learning, and satisfaction level of instructors and students.

In addition, the essential elements for being successful in online classes comprise a clear guideline, interesting teaching design, using the right teaching tools, encouraging students to collaborate online, taking advantage of both group work and individual work, using available resources, closing teaching with a conclusion, and giving feedback (Khruunan, 2020).

Another method that supports autonomous learning among students is flipped classroom. Kiray and Yildirim (2016, as cited in Johnson et al., 2014) stated that flipped classroom provides an environment where students learn from videos, listen to podcasts, read eBooks and meet with peers online instead of obtaining information from lecturers through presentations in their class time. Learners can reach these broad sources any time they need. Teachers then serve as a coach or mentor in flipped classroom where students have direct access to different sources of knowledge. There are many definitions related to flipped classroom model. Brown (2016, p.4) stated that flipped classroom is a model of delivering instruction that shifts lectures from a class-time activity to an at-home activity, and shifts "homework" from an at-home activity to an in-class, critical thinking set of activities. Also, Ayçiçek and Yanpar Yelken (2018, as cited in Bishop & Verleger, 2013) mentioned that flipped classroom is a student-centered learning method. There are two parts: one is interactive learning activities during lesson, and another is individual teaching based on computer out of lesson. Ayçiçek and Yanpar Yelken (2018, p. 387) argued that in order to pursue this method, students are to use technological equipment, develop their abilities, create interactive discussion conditions, and discover different learning methods with different learning activities. Bergmann and Sams (2012, p. 13) explained traditional flipped classroom model as "*what is done at school done at home, homework done at home completed in class*". A teacher shares resources and materials before class and a teacher is also a guide when working on activities during class time such as problem solving, discussion, and brainstorming. In order to enhance effective teaching and learning, a lecturer should provide flexible environments to support teaching and learning.

A research study by Karnawati and Istianingrum (2021) entitled "The Effectiveness of Blended Learning Using the Flipped Classroom and Hybrid Learning Models in the Chuukuuu Bunpou" worked with two classes on the experiment. One is 4A class using hybrid learning, and another is 4B class using flipped classroom. They found that before exhibiting hybrid learning and flipped classroom in the blended learning, the pre-test average scores for 4A class

and 4B class were below 70. However, after exhibiting hybrid learning and flipped classroom, both 4A and 4B class showed an increase in learning outcomes. This means that the use of hybrid learning and flipped classroom is equally effective in improving learning outcomes. So, it can be concluded that blended learning or hybrid learning, and flipped classrooms have the same level of effectiveness although hybrid learning is more effective due to the higher percentage of effectiveness on improving learning outcomes compared to flipped classrooms. Another research by Wang et al. (2022) entitled "The Flipped Classroom Model of Japanese Teaching Based on Intelligent Decision-Making System" found that the flipped classroom learning mode can improve teaching Japanese language. A teacher-centric learning mode from the beginning is transformed into a student-centered learning mode that captures students' attention and interest in learning, maximizes their enthusiasm for learning, improves Japanese application skills, and enhances learning efficiency. Therefore, the result of teaching and learning on both hybrid and flipped classroom are effective; students' progress their learning much better.

## 3. Methodology

**3.1 Method:** The ADDIE model (Gagne et al., 2005) was adopted, and divided into analysis, design, development, implementation, and evaluation. An **analysis** comprised review of literature on hybrid learning, flipped classroom, and analytical tools. **Design** covered the course content, assessments (graded exercises, pre-test and post-test), and a satisfaction form.

1) The course content "causative verbs" was based on lesson 48 in みんなの日本語Ⅱ. It consisted of objectives aiming to find out how to apply suitable particle, conjugate causative verb, and determine the meaning.



**Figure 1** Intransitive Verb

**Source:** Source: (Hotel Sendai, 2012)



**Figure 2** Emotional Verb

**Source:** (illustAC, n.d.)

2) Assessment tools refer to pre-test and post-test, and graded exercise.

*Pre-test and Post-test*: The objectives of the tests are to evaluate if the students are able to: (1) know how to conjugate the causative verbs, (2) know how to apply a suitable particle to transitive, intransitive, and emotional verbs with meaning, and (3) use the causative verbs to ask for permission. Furthermore, several tests were designed. The tests were set to be taken within a specific time.

*Graded exercise*: The objectives of graded exercises are to check if students meet the followings: (1) understand how to conjugate the causative form and meaning, (2) understand the suitable particle that is used with transitive, intransitive and emotional verbs in causative form, and (3) understand the situation of when to use causative verbs 〜ていただけませんか to ask for permission.

3) The satisfaction form on the course content "causative verbs" was made in two sets. One was for students who studied the course content "causative verbs" while another was for the three experts. Both forms were an open-ended type of questionnaire aiming to investigate opinions, suggestions, and satisfaction. A five point Likert scale was used to measure the outcome. The following criteria were utilized to interpret the meaning of the scores for each topic.

| | |
|---|---|
| 4.51-5.0 | Most satisfied |
| 3.51-4.5 | Very satisfied |
| 2.51-3.5 | Satisfied |
| 1.51-2.5 | Dissatisfied |
| 1.00-1.5 | Very dissatisfied |

The **development** started from the first draft of the course content "causative verbs", assessment tools (pre-test and post-test, graded exercise), and the satisfaction form on the course content "causative verbs" that was made and proofed by the three experts. The qualitative aspect involves an in-depth interview with the three experts. Thus, the content revision was made and developed based on experts' comments and suggestions. The content validity of the course content, assessment tools and graded exercises were done by three experts through IOC (Index of Item Objective Congruence). The second aspect was a pilot test administered to thirty eight students who completed Japanese III in the second semester of

the year 2020 at selected international university in Bangkok to determine the difficulty (p), discrimination (r) based on technic by Chung-Teh Fan 27% and reliability based on KR-20 (Kuder Richardson).

During the **implementation** phrase, classes were shifted to online mode due to COVID-19. The experiment was done on 26 students who studied Japanese III (JA2702) in the first semester of the year 2021 at selected international university in Bangkok. There are 15 weeks of teaching. Each period is 1.5 hours long and students have to take two periods per week. The experiment was conducted from week 10-12 which makes it a total of 5 periods or 7.5 hours of teaching. Teaching method was on both asynchronous and synchronous. The first experiment was conducted in online class on the first period of week 10. It started off with a pre-test with 26 students, followed by a guideline reading. Before students started each part, they must read the objectives first. Next, students studied the course content "causative verbs". After that, the teacher let students work on the graded exercise in part one which was about how to conjugate causative verbs with meaning. In the second period, which was also in week 10, before studying part two, the teacher pointed out mistakes from the graded exercises and explained them to students, as well as making a conclusion on part one and allowing students to ask questions if they had any. The method of teaching in part two and part three was the same as part one on week 11 and 12. Finally, to explore their opinions and satisfaction, students were asked to complete the satisfaction form in the course content "causative verbs". On period five of week 12, students were asked to complete a post-test.

**Table 1** Steps to do the Experiment and Equipment

| The experiment | Periods (7.5 hours) Each period = 1.5 hour | Steps to do the experiment | Equipment |
|---|---|---|---|
| Week 10 | Period 1: Part 1: How to conjugate causative verbs | 1. Pre-test<br>2. The students read the guideline and objectives in part 1.<br>3. Studied via PowerPoint<br>4. Did Graded Exercises | LMS.<br>LMS.<br>LMS.<br>LMS. |
| | Period 2: Part 2: Transitive and Intransitive verbs | 1. Showed the result of graded exercises part 1<br>2. Teachers pointed out mistakes from part 1 and explained them again. Question and answer.<br>3. The students read the guideline and objectives in part 2.<br>4. Studied via PowerPoint<br>5. Did graded Exercises | Microsoft teams<br>Microsoft teams<br><br>LMS.<br>LMS.<br>LMS. |
| Week 11 | Period 3: Part 3: Emotion verbs<br>Part 4 ～て Causative verbs | 1. Showed the result of graded exercises part 2<br>2. Teachers pointed out mistakes from part 2 and explained them again. Question and answer.<br>3. The students read the guideline and objectives in part 3 and 4.<br>4. Studied via PowerPoint<br>5. Did graded Exercises | Microsoft teams<br>Microsoft teams<br><br>LMS.<br>LMS.<br>LMS. |
| | Period 4: | 1. Showed the result of graded exercises part3-4<br>2. Teachers pointed out mistakes from part 3 and 4. Question and answer.<br>3. Conclusion on all parts.<br>4. Complete the satisfaction survey in the course content "Causative verb" | Microsoft teams<br>Microsoft teams<br><br>Microsoft teams<br>Google Form |
| Week 12 | Period 5: | 1. Post-test | LMS. |

The **Evaluation** phase was then conducted to find the efficiency of the course content "causative verbs" and the effectiveness of learning using T-test by comparing the pre-test and post-test scores. The efficiency of students learning was checked using $E_1/E_2$ formula.

### 3.2 Sampling and Data Collection

The sample group was twenty-six students of Japanese III (JA2702) in the first semester of the year 2021 at the selected international university in Bangkok and a group of three experts who are teachers and have been teaching Japanese language Minna no Nihongo (みんなの日本語ⅠⅡ) for more than 10 years.

The **qualitative** data was gathered from the suggestions and comments from the three experts using in-depth interviews whereas the **quantitative** data was obtained from student assessment tools such as the achievement tests (pre-test and post-test, graded exercise) to prove the effectiveness of the course content "causative verbs" with a paired samples T-test. The statistical measurements, including means and the percentile, were determined using SPSS (Standard Statistical Packages for Social Science). Moreover, the quality of the assessment was measured according to the difficulty (p), discrimination (r) based on Chung-Teh Fan 27%, and the reliability of the test based on    KR-20, Kuder Richardson's criteria.

## 4. Results

The results of the pilot test, pre-test and post-test, and the course content evaluation form will be presented hereafter.

### 4.1 Pilot –Test (IOC, Reliability, Discrimination and Difficulty)

To check the quality of the course content on "causative verbs", pre-test and post-test, and graded exercises, the three experts gave some suggestions to help develop the courseware. Then IOC was applied; the results from all questions of pre-test and post-test and graded exercises were equal to 1 which is over the criteria 0.5. In addition, the value of reliability, discrimination, and difficulty shown in the table below suggested that the quality of pre-test and post-test are in criteria.

**Table 2** The Value of Difficulty (p), Discrimination(r) and Reliability from Pilot Test

| Topic | Result of Pilot Test | | |
|---|---|---|---|
| | Criteria | The value | Result |
| Reliability | <1.00 | 0.87 | Reliability is 0.87 |
| Difficulty (p) | 0.20-0.80 | 0.38 | easy |
| Discrimination (r) | 0.20-1.00 | 0.38 | can be classified |

(Sujindawong, 2004)

### 4.2 Results from the experiment

To determine the students' progress or efficiency of students' learning and satisfaction, there are three results from the experiment shown as the followings:

4.2.1 The formula $E_1/E_2$: The efficiency of students' learning

$E_1$ = the marks from the test while studying        $E_2$ = the marks of the post-test

**Table 3** $E_1/E_2$: The Efficiency of Students' Learning

| Number of Students | Graded Exercises' Marks | | | Post-test's Marks | | |
|---|---|---|---|---|---|---|
| | Full mark | $\Sigma X$ | $E_1$ | Full mark | $\Sigma Y$ | $E_2$ |
| 26 | 68 | 1415 | 80.03 | 45 | 939 | 80.26 |

$$E_1 = \frac{\frac{\Sigma X}{N}}{A} \times 100 = \frac{\frac{1,415}{26}}{68} \times 100 = 80.03$$

$$E_2 = \frac{\frac{\Sigma Y}{N}}{B} \times 100 = \frac{\frac{939}{26}}{45} \times 100 = 80.26$$

The efficiency of students' learning was checked via the $E_1/E_2$ formula and was equal to 80.03/80.26. Hence, the efficiency of students' learning passed the objective of this research, which is 80/80.

4.2.2 T-Test: Students' progress

To determine students' progress, it can be examined from the significant difference of their pre-test and post-test. As shown in table 4, the mean of the post-test equaled 36.12 which is higher than the marks before taking the lesson which equaled 20.27.

The value of S.D equaled 3.788. Moreover, when comparing the statistic to a paired samples T-test with hypothesis $H0_2$, which is set as an average score, the result after taking the lesson was higher than before taking the lesson. The test results showed that there was a statistically significant difference between pre-test and post-test as seen from the $p<0.05$ level which corresponded to the hypothesis set.

**Table 4** A Paired Samples T-Test

|  | N | Mean | S.D | t | Sig. (2-tailed) |
|---|---|---|---|---|---|
| Pre-test | 26 | 20.27 | 8.947 | -8.743 | 0.000* |
| Post-test | 26 | 36.12 | 3.788 |  |  |

*p<0.05

4.2.3 The satisfaction in the course content "causative verbs" form

There are two sets of the satisfaction form and the sense of checking satisfaction between experts and students are different with the course content "causative verbs". Set one is the result from three experts that checked the technic, content validity and so on. Another set is the result from 26 students who learned from the course content "causative verbs", and the details of questionnaire is different from the set for experts.

**Table 5** Three Experts' Satisfaction

| The evaluation items | Five-rating scale is indicated opinion | | | | |
|---|---|---|---|---|---|
|  | Expert 1 | Expert 2 | Expert 3 | Average | Result |
| 1. Technic |  |  |  |  |  |
| - The proper style of the text | 4 | 4 | 5 | 4.3 | Very satisfied |
| - The proper size of the text | 5 | 5 | 5 | 5.0 | Most satisfied |
| - The proper color and courseware Background | 4 | 4 | 5 | 4.3 | Very satisfied |
| - The clearness of the text | 5 | 4 | 5 | 4.7 | Most satisfied |
| - Courseware usability | 4 | 5 | 5 | 4.7 | Most satisfied |
| 2. Content |  |  |  |  |  |
| - Content validity | 5 | 5 | 4 | 4.7 | Most satisfied |
| - The way to present the content is suitable | 4 | 5 | 4 | 4.7 | Most satisfied |
| 3. Pictures and texts |  |  |  |  |  |
| - Appropriateness of pictures that used to explain grammars | 5 | 5 | 3 | 4.3 | Very satisfied |
| - Texts that used are easy to understand | 5 | 4 | 3 | 4.0 | Very satisfied |
| The Total average | 4.6 | 4.6 | 4.4 | 4.5 | Very satisfied |

**Table 6** Students' Satisfaction

| No. | Evaluation items | Average | Result |
|---|---|---|---|
| 1. | The way to present the content is easy to understand | 4.27 | very satisfied |
| 2. | The order in which the texts are presented is appropriate. | 4.42 | very satisfied |
| 3. | The texts and pictures made me understand the content and the grammar clearly. | 4.31 | very satisfied |
| 4. | The courseware enhance my memorization of the content. | 4.27 | very satisfied |
| 5 | I am satisfied with the use of courseware as the teaching material. | 4.31 | very satisfied |
|  | The Total average | 4.32 | very satisfied |

The satisfaction result from the three experts was in a "very satisfied" level with the average score of 4.5 in the sense of creating the course content "causative verbs". The satisfaction result from the students was in a "very satisfied" level with the average score of 4.32 in the sense

of learning from the course content "causative verbs". Thus, both the three experts and students are satisfied with the course content "causative verbs". There was one comment suggesting "need a teacher to teach in class" which implied that some students were not implementing autonomous learning.

## 5. Discussion

### 5.1 Pre-Test and Post-Test

There are three parts in pre-test and post-test via LMS platform.

Part 1: Concerns conjugating the verbs to causative form. For item 8, students could do it despite an error in the setting; there were two correct answers. So, teachers have to be more precise on setting the test or exercises on LMS.

Part 2: Checking the particles that are used with transitive, intransitive and emotional verbs in the causative form. The questions from items 1-4 concern transitive verbs. When checking the questions that concern the particles, the average score in a post-test is higher than a pre-test. In item 1 question number ③, the post-test result revealed the average score of 0.35. Fifteen students did not conjugate verb to past tense. Moreover, eleven students made mistake when conjugating verb to causative form. Items 5-8 concern the particles that are used with intransitive verbs in the causative form. Item 7 question number ㉑ is the same problem as question number ③. Students did not conjugate the verb to past tense. For item 6 question number ⑰ "帰っています", there are two verbs but students could not understand which verb should be conjugated to causative form. Thus, only 3 students could do this question. Also, 23 students made mistake. Due to this fact, teacher should emphasize the words that should be conjugated to causative form, in case the two verbs connect such as 帰っています, and conjugate the tense as appropriate for adverb of time. Items 9-11 looked at the particles used with emotion verbs in causative form. The average scores of post-test are higher than pre-test, except item 9 question ㉕ in which 15 students did not conjugate the tense to past tense. Some students conjugated がっかりします as the verb of group one. Items 12-14 were to check if students understand the meaning of causative form and the result from the post-test showed that students can understand the meaning.

Part 3: The questions from items 15-17 revealed a result of average scores of post-test higher than pre-test, which means students can understand the situation of when to use causative verbs〜ていただけませんか.

To conclude, the experiment revealed that the issue with an application of appropriate particles with causative verbs got better compared to pre-test. Yet, some students forgot to conjugate the tense and this may be the result of an absence of tense in their mother-tongue language, so they were not aware of the tense conjugation. As for the teachers, they should be more precise on setting the questions and answers on LMS platform. Teachers should revise and preview before using it in class. Furthermore, teachers should emphasize the words that should be conjugated to causative form, in case the two verbs connect such as 帰ってい ます. Also, students should be advised to be aware of adverbs of time to conjugate the tense as appropriate. There are many reasons why average scores of post-test are higher than pre-test. **One** is that teaching material must have quality such as content validity. Moreover, the objective in each part is important – which is to show the guideline for teaching and learning. This is the instructional alignment that refers to the match between objectives and learning activities (Eggen & Kauchak, 1996 as cited in Cohen, 1987). **Another** is the teaching process. Students were advised to read the objectives for that specific lesson to obtain some understanding about what they will learn from the lesson. Next, let the students learn from the course content "causative verbs", and complete the graded exercises. The teacher checked the questions that most students made mistakes. The questions were used as a tool to help them understand their mistakes, so-called "learning from mistake". Students can improve their study as they completed all activities in the course and they get to know the result immediately. The feedback is used to improve students' performance in the future and the importance of improving their learning is clear (Eggen & Kauchak, 1996, p. 37). Following up with feedback from graded exercises allows students to ask questions they want to know and learning from mistakes could encourage them to further their studies. Finally, in the last part, the teacher made a conclusion and pointed out the main concept of the lesson. This step is to review lesson and give a closure. A review emphasizes important points or summarizes previous work and forms a link between what has been learned and what is coming (Eggen & Kauchak, 1996, p. 39). Therefore, the teaching process corresponds to

the elements of online teaching and learning that are instructor, students, instructional media, learning process, communication system, network system and evaluation (Wayo et al., 2020)

In conclusion, in order to encourage autonomous learning among students, as well as facilitating students with anytime and anywhere education, not only the teaching material is important, but also the process of teaching. The objectives show an outline of the study, feedback functions as a treatment to encourage students to further their study, and a conclusion of each lesson shows a summary of what students have learned.

### 5.2 The problems that occurred during the research

From the experiment, there are many problems occurred. **1) Technology:** Based on Online Lesson Practice Guide (2021) suggested 10 tips for assessing learning online such as devise exam questions, limit answer time and diversify the question pattern. Therefore, it is not only the knowledge of the subject the teachers must have, but also technological skills. **2) Students:** All students nicely participated in class and worked on the provided activities, but they did not want to turn on their cameras. Therefore, when in a part of explaining mistakes or question and answer, it is hard to know whether all students can understand or not. Moreover, it is hard to catch up with students who cannot follow the class. **3) Preparation Time:** In each step, it is time consuming to prepare the content, graded exercises, and examination, as well as putting everything in LMS through various types of test format such as multiple choice questions, true or false, matching, embedded answer (Cloze), and so on. However, when looking at the test, the researcher has to design a new set for every semester to prevent students from copying one another's work. This point, to make the test, is hard for the teacher because sometimes the lecturer has limited patterns of questions or forms on the same content.

### 6. Conclusion

According to the previous study, Brahmawong (2013) stated that the three criteria that help develop and determine the quality of the course content "causative verbs" for "Internet-based flipped classroom: Japanese causative verbs at selected international university in Bangkok" concern the followings: The first one is students' progress proofed by a statistically significant difference between pre-test and post-test as seen from the $p < 0.05$ level which corresponded

to the hypothesis set. The second one is the efficiency of students' learning proofed by the $E_1/E_2$ result which equaled to 80.03/80.26 suggesting a pass (score 80/80) on the objective of this research. The last one is satisfaction. In a sense of creating a course content, the average score from the three experts' satisfaction is 4.5 which means "very satisfied", and in a sense of learning from a course content "causative verbs", students' satisfaction is 4.32 which means "very satisfied". According to the results of this research, the answers for the research questions are 1) The ways feedback and suggestions from the experts can be applied to develop and improve the course content "causative verbs" are from the qualitative data gathered from the in-depth interview. 2) The significant level of pre-test and post-test scores equaled 0.000. The result showed that the pre-test and post-test were statistically and significantly different. 3) The satisfaction level of the course content "causative verbs" confirmed by the three experts got an average value of 4.5 and 4.32 from students, and both scores were in a "very satisfied" level. The future work should concentrate on drills and practices because they can help familiarize students to the use of Japanese language in real life situation. Also, there is a need to design the program to fit with a life style of university students and e-Learning should be implemented as a practical studying tool for students in this generation.

## References

Ayçiçek, B., & Yelken, T. Y. (2018). The effect of flipped classroom model on students' classroom engagement in teaching English. *International Journal of Instruction, 11*(2), 385-398. https://doi.org/10.12973/iji.2018.11226a

Bamrungsetthapong, S., Tharnpanya, P., & Satjaharuthai, K. (2020). Hybrid learning and the quality improvement of Thailand's education in the 21st Century. *Narkbhutparitat Journal Nakhon Si Thammarat Rajabhat University. 12*(3), 214-224. https://so04.tci-thaijo.org/index.php/nakboot/article/view/245900/168814

Banno, E., Ohno, Y., Sakane, Y., Shinagawa, C., & Tokashiki, K. (2003). *An integrated course in elementary Japanese Genki*. The Japan Times.

Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. International Society for Technology in Education.

Bishop, J. L., & Verleger, M. A. (2013, June 23-26). *The flipped classroom: A survey of the research*. ASEE National Conference, Atlanta, GA.

Brahmawong, C. (2013). Developmental testing of media and instructional package. *Silpakorn Educational Research Journal, 5*(1), 7-20. http://www4.educ.su.ac.th/2013/images/stories/081957-02.pdf

Brown, B. A. (2016). *Understanding the flipped classroom: Types, uses and reactions to a modern and evolving pedagogy*. https://repository.stcloudstate.edu/ed_etds/12/

Carrasco, B., & Johnson, S. M. (2015). *Hybrid language teaching in practice*. Springer Briefs in Education.

Caulfield, J. (2011). *How to design and teach a hybrid course*. Stylus.

Cohen, S. (1987). Instructional alignment: Searching for a magic bullet. *Educational Researcher, 16*(8), 16-20. https://www.jstor.org/stable/1175370

Eggen, P. D., & Kauchak, D. P. (1996). *Strategies for teachers: Teaching content and thinking skills* (3rd.). Allyn & Bacon.

Gagne, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2005). *Principal of instructional design*. Thomson Learning Academic Resource Center.

Graham, C. R. (2006). *Blended learning systems*: *Definition, current trends, and future directions*. Pfeiffer Publishing.

Iroi, I., Takanashi, S., Nakanishi, K., & Yamada, T. (2000). *初級を教える人のための日本語文法ハンドブック*. 3A Corporation.

Johnson, L., Becker, S., Estrada, V., & Freeman, A. (2014). *NMC horizon report: 2014 higher education edition*. The New Media Consortium.
https://www.learntechlib.org/p/130341/

Karnawati, R. A., & Istianingrum, A. (2021). The effectiveness of blended learning using the flipped classroom and hybrid learning models in the Chuukuuu Bunpou. *Advances in Social Science, Education and Humanities Research*, *518*, 370-375.
https://doi.org/10.2991/assehr.k.210120.147

Khruunan. (2020, May 16). *8 effective online teaching methods*. Rakkhruu.
https://rukkroo.com/24199/

Kiray, S.A., & Yildirim, F.S. (2016). Flipped classroom model in education. In W. Wu, S. Alan, & M. T. Hebebci (Eds.), *Research highlights in education and science, 2016,* (pp. 2-8). ISRES Publishing.
https://www.researchgate.net/publication/335756684_FLIPPED_CLASSROOM_MODEL_IN_EDUCATION

Liming, Z., & Jianli, J. (2013). A study on effective hybrid math teaching strategies. *International Journal of Innovation and Learning*, *13*(4), 451 – 466.
DOI:10.1504/IJIL.2013.054239

*Major changes in Thai education anticipated after the COVID-19 pandemic*. (2020, June 16). Office of National Higher Education Science Research and Innovation Policy Council.
https://www.nxpo.or.th/th/en/4841/

*Online Lesson Practice Guide: 10 tips for assessing learning online.* (2021). Department of Teaching & Learning Support, Center for Education in Liberal Arts and Sciences, Osaka University.
https://www.dropbox.com/s/dtdh2ag1zqyowbd/10%20Tips%20for%20Assessing%20Learning%20Online.pdf?dl=0

Sujindawong, S. (2004). Item analysis method. *Sripatum Journal*, *4*(1), 21-33.
http://dspace.spu.ac.th/bitstream/123456789/1986/2/02.pdf

Snart, J. A. (2010). *Hybrid learning: The perils and promise of blending online and face-to-face instruction in higher education*. Praeger.

Tanaka, T. (1990). *Guidance on Japanese grammar*. Kindaibungeisha.

Thienthong, M. (2005). *Design and computer courseware development*. http://home.dsd.go.th/kamphaengphet/km/information/WBI/index.htm

Wang, X., Li, Z., Dong, L., & Li, W. (2022). The flipped classroom model of Japanese teaching based on intelligent decision-making system. *Scientific Programming*. *2022*, 12 pages. https://doi.org/10.1155/2022/2792428.

Wayo, W., Charoennukul, A., Kankaynat, C., & Konyai, J. (2020). Online learning under the COVID-19 epidemic: Concepts and applications of teaching and learning management. *Regional Health Promotion Center 9 Journal*, *14*(34), 285-298.

illustAC. (n.d.). 子供の発熱を心配するお母さん. https://www.ac-illust.com/main/search_result.php?word=%E7%9C%8B%E7%97%85%E7%96%B2%E3%82%8C

Hotel Sendai. (2012). 日本語教育のためのイラスト教材. http://skrykk.blog.fc2.com/blog-entry-62.html

日本語文型辞典. (1998). Kurosio Publishers. https://www.9640.jp/nihongo/ja/search/?search=7&key=%3C%E6%97%A5%E6%9C%AC%E8%AA%9E%E6%96%87%E5%9E%8B%E8%BE%9E%E5%85%B8%3E

みんなの日本語Ⅱ. (1998). 3A Cooperation.