

# The Effectiveness of Multimedia for Teaching and Learning Indonesian Affixes

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## Abstract

This study examines the effectiveness of incorporating multimedia materials in vocabulary-building exercises during a course taught to 56 students at a university in central Taiwan during the Fall 2019 term. Exercises focused on derived verbs, including the active prefix *meN-*, the passive prefix *di-*, the involuntary passive prefix *ter-*, and transitive suffix *-kan*. This study was conducted through action research, using a vocabulary learning section naturally embedded in the course, and sought to answer the following three questions: (1) what are the effects of using pictures and videos to teach Indonesian affixation? (2) how should knowledge of Indonesian affixation be assessed? and (3) should Indonesian examples of affixation be introduced with or without Chinese translations?

The instruments included four PowerPoint presentations with pictures and videos embedded as illustrations for example sentences, four sets of ten multiple-choice questions for online assessment, and weekly questionnaires with open-ended questions designed to elicit students' immediate feedback on what they had learned and their suggestions on improving teaching activities. This research provided useful insight into how multimedia materials can be used and integrated into teaching activities, with valid assessment, to increase L2 Indonesian vocabulary learning.

**Keywords:** Indonesian vocabulary, Indonesian teaching and learning, affixation, assessment, pictures, videos



# 1 Introduction

Multimedia materials have proven effective for teaching vocabulary (Abraham, 2007; Bakhsh, 2016; Cetinkaya & Sutcu, 2019; Frey & Birnbaum, 2002; Johansson, 2006; Mayer, 2014; Plass et al., 2003; Xin & Rieth, 2001), including in Indonesian-language education (Fikri et al., 2019; Praheto et al., 2020; Susiati et al., 2019). However, no studies have investigated how such materials can be used to teach affixation within a college classroom to Indonesian as a second language (L2) students.<sup>1</sup> While teaching L2 Indonesian in Taiwan, the authors have found that Indonesian affixes pose a great challenge to beginning students; we thus decided to explore how multimedia materials can be incorporated to facilitate students' acquisition of Indonesian affixation.

One important element of learning Indonesian vocabulary is knowing which affixes can be combined with which roots to form words, which is a first step towards understanding the meanings of derived words—an important part of vocabulary acquisition (Nation, 2001, p. 8). Anindita (2017), studying a child's acquisition of Indonesian-language affixes, found that the L1 learner wrongly said *berkerja* and *metidurkan*, which indicates a common overgeneralization and a lack of complete mastery of the *meN-* morphophonemic rules. The suffix *-kan*, with which L2 Indonesian learners struggle, is also acquired late in L1 acquisition. As knowledge of affixes is a cornerstone of morphology, morphological analysis is an essential vocabulary acquisition strategy. This is supported by Bellomo (2009), who examined the effect of morphological analysis as a vocabulary strategy in English, with pretest and posttest to determine student scores for each group at each level of achievement in a college reading preparatory course.

Vocabulary assessment can also be used to measure L2 vocabulary development and inform vocabulary instruction. Multiple-choice questions are the most commonly used technique for vocabulary assessment in formal academic settings (e.g., Jia et al., 2012). Even though translations into language learners' first language may serve as necessary scaffolding for vocabulary assessment, when tests are translated from one language to another (such as from Spanish to English), they do not retain their psychometric properties (Kester & Peña, 2002). It is therefore necessary to understand how to design valid and reliable vocabulary tests for assessing the effectiveness of vocabulary instruction.

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<sup>1</sup> Indonesian as a second language (ISL) has been taught in Indonesia (Suparsa et al., 2017) as well as internationally (Hardini et al., 2019) for decades. There are also well-established ISL teaching programs in Indonesia (e.g., Consortium for the Teaching of Indonesian) and in the United States (e.g., the University of Wisconsin-Madison's Southeast Asian Studies Summer Institute). Online resources have also been made available by Northern Illinois University's Center for Southeast Asian Studies, among others (Rau et al., 2019).

In this research, we attempt to use an innovative teaching method—applied directly to a real classroom—to show how pictures and videos can be used to display authentic communication when teaching Indonesian affixes, as well as how vocabulary acquisition can be assessed through immediate assessments. This study was conducted using action research, during which a vocabulary learning section was naturally embedded in the course, to answer the following questions: (1) what are the effects of using pictures and videos to teach Indonesian affixation? (2) how should knowledge of Indonesian affixation be assessed? and (3) should Indonesian examples of affixation be introduced with or without Chinese translations to facilitate Chinese L1 speakers' acquisition of L2 Indonesian morphology?

## **2 Methods and Participants**

This study was conducted in a beginning Indonesian class offered at a university in central Taiwan from September 17, 2019 to December 31, 2019. Participants consisted of 56 students. In response to the Taiwanese government's New Southbound Policy, Taiwanese students have shown increased interest in learning the Indonesian language and culture, seeing it as a means of facilitating communication with Indonesian new immigrants, migrant workers, and international students. Table 1 presents data on the gender, year of study, and nationality of the student participants. All were undergraduate students from the university's seven colleges. Participants had a wide range of Indonesian proficiency levels, from true beginners to native speakers of Indonesian. Aside from the large group of L2 beginners, there were also Indonesian- and Malaysian-speaking students who took this course either for easy credits or to learn how to teach Indonesian as a second language.

**Table 1.** Demographic information of student participants

Status	Classification	Number
<b>Gender</b>	Male	21
	Female	35
<b>Year of study</b>	First Year	10
	Second Year	33
	Third Year	10
	Fourth Year	3
<b>Nationality</b>	Taiwan	33
	Indonesia	14
	Malaysia	6
	Russia	1
	Singapore	1
	Korea	1

*Note.* Compiled by the authors.

The instructor for the beginning Indonesian class was a professor (the second author) with expertise in Austronesian linguistics. In this course, the professor was responsible for curriculum design and teaching the basic grammar based on the textbook *Indonesian Travel Frog CALLED*<sup>2</sup> (see CCU MOOCs, [n.d.](#); Rau et al., [n.d.](#)). Eight native speakers of Indonesian were recruited as teaching assistants (TAs); each was assigned to a group of students. Two TAs were doctoral students, while the other six were students studying for their master's degrees. The first author was one of the TAs and was responsible for creating the vocabulary teaching activities for this study. The first author designed tasks for students to learn affixes with pictures and videos and administered assessment quizzes using E-course, the university's online learning management system, which provided the data for this study.

<sup>2</sup> In Chinese, 《印尼旅蛙來電了》; In Indonesian, “*Petualangan katak di Indonesia*”.

### 3 Action Research Design

The weekly schedule of affixation-focused classes is presented in Table 2.

**Table 2.** Schedule of affixation-focused classes in the vocabulary learning unit

Week	Date	Roots	Prefixes	Suffixes
1	Nov. 5, 2019	<i>besar</i> [big], <i>hilang</i> [lost], <i>rusak</i> [broken], <i>tabrak</i> [hit]	<i>meN-</i>	<i>-kan</i>
2	Nov. 12, 2019	<i>tidur</i> [sleep], <i>bangun</i> [wake up]	<i>ter-, di-</i>	<i>-kan</i>
3	Nov. 19, 2019	<i>tunduk</i> [bow], <i>injak</i> [step on]	<i>meN-, di-, ter-</i>	<i>-kan</i>
4	Dec. 10, 2019	<i>cari</i> [look for], <i>oles</i> [rub], <i>kirim</i> [send], <i>antar</i> [deliver], <i>garuk</i> [scratch]	<i>meN-</i>	<i>-kan</i> vs. none

*Note.* Compiled by the authors.

Each vocabulary instruction session lasted for 10–15 minutes and was followed by a 5-minute online assessment. The pictures and videos were recorded by the first author to illustrate how to use active and passive affixes. The pictures and videos used natural action to help the students better understand the meaning. Following instruction, students completed ten multiple-choice questions on E-course every week. Students paid attention to the pictures and videos while the professor explained the sentence examples in class. Because many of these words were new to the students, Chinese translations were usually added to facilitate their understanding. In response to students' feedback that they relied too much on the Chinese translations to guess the correct answers, for the last week of the vocabulary learning activity pictures and videos were included in the PowerPoint and the multiple-choice assessment instrument without any Chinese translations. As it was a challenge for the students to use their own strategies to understand the meanings directly, without the guidance of Chinese translations, the sentence examples also tended to be less complicated.

This design allowed for pictures and videos to be incorporated into PowerPoint slides to illustrate the sentence examples used in the classroom. Roots were selected based on the words introduced in the textbook. The affixes taught included the active prefix *meN-*, the passive prefix *di-*, the involuntary passive and stative prefix *ter-*, and the transitive suffix *-kan*. After the professor explained the grammar, using the pictures and videos as illustrations, students demonstrated their understanding by choosing the answer with the correct affix in multiple-choice questions on the E-course platform.



The instruments used for data collection included (1) four PowerPoint presentations with pictures and videos embedded as illustrations for example sentences, (2) four online quizzes consisting of ten multiple-choice questions, and (3) weekly questionnaires with open-ended questions designed to elicit students' immediate feedback on what they had learned and their suggestions on improving teaching activities.

## 4 Data Analysis

The results of online quizzes were collected from E-course to allow item analysis of the four assessments using the distribution of the scores for each assessment. A basic item analysis was conducted in SPSS to calculate the facility value (or difficulty level) and the discrimination index (Alderson et al., 1995). The facility value measures the difficulty of an item, while the discrimination index measures the extent to which the results of an individual item correlate with results from the whole test. Test scores were assessed following Kehoe (1994) to determine good and bad items. Test items were listed according to difficulty levels (easy, medium, and hard) and discrimination index (good, fair, and poor), and the quality of individual questions was assessed by comparing student's responses to each question to their total test scores.

Content analysis was conducted to generalize the themes of the students' feedback, that is, their responses to the open-ended questions at the end of the class. Through this, we sought to determine students' reactions to the teaching strategy of using pictures and videos and to the assessment method.

## 5 Findings and Discussion

### Effects of multimedia in the teaching and learning of Indonesian affixes

As expected, students expressed a preference for PowerPoint presentations that contained exciting pictures and videos to directly convey how the meaning changes in each sentence. Students were first shown the pictures, then the videos. Combined, these two methods provided an effective strategy for students to understand the vocabulary concepts. When the picture was not a clear enough illustration, the video supplemented the instruction. For example, the media presentations for the prefix *ter-* asked students to differentiate *tidur* [go to sleep] and *ter-tidur* [fall asleep], and to distinguish between *bangun* [wake up] and *ter-bangun* [wake up suddenly or involuntarily]. In the end, we found that some words could be illustrated clearly using only pictures, whereas others might

require additional videos. As found by Mizumoto and Takeuchi ([2009](#)), when a combination of pictures and videos are used, students' memories were generally strengthened, and they reported a positive attitude regarding vocabulary learning in a classroom setting.

Students' responses at the end of the lesson indicated which input (picture vs. video) and which presentation (which week) they found most effective. Based on students' responses, as collected through online feedback, it is safe to conclude that students were generally very enthusiastic and enjoyed the use of pictures and videos. Some thought it was easy to understand, as the actors allowed them to imagine the vocabulary usage. Some mentioned they liked the multimedia presentation and found it effective. Overall, they indicated that they preferred using pictures and wanted to use them again in the future. This does not mean that videos were ineffective in vocabulary instruction; it merely indicates that pictures required less time to show (Van Laarhoven et al., [2010](#))—this would also be less work for the TA. As content was different each week, new materials had to be created every week. Likewise, as individuals have different preferences for the types of teaching materials used, it would be helpful to evaluate each student's reaction to how teaching materials were presented. However, due to the time constraints of this study, a weekly evaluation of pictures and videos was not conducted; further investigation is required.

In summary, students expressed high levels of motivation and positive attitudes towards the multimedia-assisted vocabulary teaching technique. They felt that it was an effective way to learn a second language, because they felt comfortable and relaxed. It was also helpful to add Chinese translations next to the sentence examples, pictures, and videos provided in the classroom to facilitate comprehension. Although the students enjoyed the PowerPoint presentations and gave mostly positive feedback to this teaching strategy, their responses to the four weeks of material design and assessment results were different. For example, students had trouble understanding when to use the suffix *-kan* to express benefactive meaning (Chung, [1976](#)). Although most verbs with the *-kan* suffix are transitive (Sneddon et al., [2010](#), p. 73), it takes extra effort to distinguish the causative, instrumental, and benefactive meanings of this suffix. In addition to the challenges of the nuanced meaning of *-kan*, the students also struggled to figure out the meaning of the Indonesian sentences without Chinese translations.



## Assessment of students' knowledge of Indonesian affixation

One of the challenges in effectively teaching vocabulary is designing a vocabulary assessment instrument that can be used to measure students' vocabulary knowledge and inform instruction. Our assessment method was to provide ten multiple-choice quiz questions on the E-course platform, to be completed immediately after the PowerPoint presentation component of the vocabulary lesson. Students' vocabulary scores were calculated and compared to judge the difficulty level and the discriminatory index of each test item. At the same time, the effectiveness of visual media in language learning can be seen.

Cronbach's (1943) dimension of "[the] ability to use the word productively," as discussed in Dougherty Stahl and Bravo (2010), leads us to distinguish between the receptive and productive aspects of word knowledge. Receptive vocabulary refers to words that students understand when they see or hear language learning content, while productive vocabulary refers to words that students can use correctly to answer a question when writing or speaking. Our vocabulary assessment only measured receptive knowledge.

Each week, students answered ten questions after vocabulary materials were presented via pictures and videos. These ten questions, each of which had four options available, measured students' ability to recognize differences in the affixation discussed in the material that week. For the first three weeks, the ten questions contained Chinese translations, allowing students to answer based on their ability to choose the answer that matched the Chinese translations. In the last week, ten questions were prepared with only two answer options and without Chinese translations. The scores of the four weekly quizzes that match our four-week teaching schedule (as shown in Table 2) are shown in Table 3.

**Table 3.** Results of the four online weekly quizzes

Week	Mean	SD	N
1	76	20	52
2	85	17	55
3	70	23	51
4	71	20	56

*Note.* SD = standard deviation; N = no. of participants. Compiled by the authors.



As the contents of the weekly quizzes were not comparable, no statistical analysis was conducted to compare the means. The results only indicated that the quizzes of the first two weeks appeared easier than those of the last two weeks. As students' feedback from the first three weeks indicated that the Chinese translations might have given away the correct answers, in the last week the students were not provided Chinese translations to fall back on and had to choose the correct words based on their understanding of the Indonesian sentences.

As shown in Table 3, the assessment scores were different each week. This could be due to the same factors identified by Butler and Lee (2010), including (1) the skills to be assessed, (2) the characteristics of each student, and (3) the questions they received. Table 3 shows that the assessment mean for the first week was 76, which is considered 'fair'. Students scored higher on the second assessment, with a mean score of 85, which is considered 'excellent'. Students, thus, had become familiar with both the affixation rules and the assessment formats after two weeks of vocabulary teaching with pictures and videos. However, even with Chinese translations, the content of the third week was a bit too difficult. As a result, the mean score of the third vocabulary assessment, 70, was the lowest of the four weeks. This indicates the students could not accurately grasp the concepts of the materials provided, and the test results were judged to be 'poor'. To judge the sufficiency of the assessment, the following criteria were set: (a) the assessment had to be embedded in the context of class, (b) students should understand the teaching materials clearly, and (c) the assessment needed to be useful for future learning. Although the design of the first two assessments probably met the first and third criteria, the contents of the third assessment (*ter-*, *meN-*, *di-*, and *-kan*) were probably beyond the students' level of understanding—even with Chinese translations. Some students commented that they guessed answers randomly, while others said that they had simply used the Chinese translations to find clues regarding the correct answers, without reading the Indonesian questions. The results of the third week inspired us to reduce the difficulty level of the last assessment by simplifying the Indonesian sentences, deleting the Chinese translations, and reducing the answer choices from four to two. Although this task was more challenging without the translation, the mean score of the last week, 71, was essentially the same as the third week, with a slight decrease in standard deviation.



In the fourth week, the discussion focused on the differences between *meN-* with and without the suffix *-kan*. Given this more focused task, students could remember the concepts more effectively by applying memory process strategies (Tseng et al., 2006) after pictures and videos were used to reinforce their memories. As the mean scores varied between 70 and 85 out of 100, to improve the quality of the tests in the future it was necessary to examine the difficulty level and discrimination index of the test items to ascertain what was wrong with the assessment questions each week.

The difficulty level of each question affected students' ability to answer it. Table 4 presents the most challenging question item from each week, for which difficulty levels ranged from 41% to 72%.

**Table 4.** Questions of highest difficulty in each online weekly quiz

Week	Multiple-Choice Question		Correct (%)
	Prompt	Choices	
1	Q3. Adiknya sudah _____ tiga hari yang lalu dari rumah neneknya. 他弟弟三天前從祖母家走失了。	(a) kehilangan <b>(b) menghilang*</b> (c) hilang (d) menghilangkan	56
2	Q10. Aku selalu _____ saat mengerjakan PR Bahasa Mandarin. 我做中文作業時，總是會睡著。	(a) tidur (b) menidurkan <b>(c) tertidur*</b> (d) ditidurkan	72
3	Q10. Mereka suka _____ rumput kering di halaman belakang sekolah. 他們喜歡踩學校後院的乾草。	(a) menginjakkan <b>(b) injak*</b> (c) terinjakkan (d) terinjak	41
4	Q5. Dia _____ adiknya ke sekolah.	(a) mengantarkan <b>(b) mengantar*</b>	51

Note. \* = correct answer. Compiled by the authors.

Based on the assessment scores, the fourth week was better than the third week as the task was much easier with only two options to choose from. However, without Chinese translations as scaffolding, the students required the ability to decipher the Indonesian sentences and make reflective, critical responses. The challenge in instructional design reminds us of the study by Watson and Pecchioni (2011), who found that creating an effective assignment requires bringing to bear the progress of technical skills along with course material and providing direction and feedback throughout a semester-long project.

Only 56% of the students correctly answered the third question of the first online weekly quiz. Although the correct answer was *menghilang* [disappear], some students thought that the answer was *hilang* [lost]. In this, they failed to use the *meN-* prefix to turn the stative verb into a dynamic verb. Likewise, the question asks for the whereabouts of the *adik* [younger sibling]; as this sibling is the main actor doing the action or movement, an active verb (with the prefix *meN-*) should be used. The word *hilang*, meanwhile, can only be used to refer to the state of the younger sibling. If we examine the PowerPoint instruction in Figure 1, we can see that the choice of the examples might have confused the students because the actor in the *menghilang* example (top) was not a human being, but rather an inanimate object, *kacamata Prili* [Prili's glasses]. In contrast, the subject of the *hilang* example (bottom) is not an inanimate object, but rather a human being named Rini.

**Figure 1.** PowerPoint materials for Week 1 (*meN-* + *hilang*)

	<p>Kacamata Prili _____ saat berbicara dengan temannya.</p> <p>(a) menghilangkan (b) <b>menghilang*</b></p> <p>Prili正在跟朋友說著話，眼鏡不見了(disappear)。</p>
	<p>Prili dan Rini sedang bermain, tiba-tiba Rini _____ begitu saja.</p> <p>(a) kehilangan (b) <b>hilang*</b></p> <p>兩姊妹正在玩耍，突然Rini就這樣消失不加了(gone)。</p>

Note. \* = correct answer. Compiled by the Author.

The most challenging question in Week 2's online assessment was Question 10, which 72% of students answered correctly (see previous Table 4). In this question, the students had to figure out the distinction between *tidur* [go to sleep] and *tertidur* [fall asleep]. The correct answer was *tertidur*, which emphasizes the involuntary action of the main actor. As shown in Figure 2, although both the picture and video illustrated someone falling asleep while reading or studying, the choice of illustration might have confused the students. We intended to show that, while studying, one may become fatigued and fall asleep without planning to, in a less comfortable position. The picture, however, might have given a misleading signal, as the person is shown sleeping on the bed. The video of a person with her eyes closed in the library, meanwhile, could have been perceived as taking a nap in the library—a common thing to do—rather than falling asleep unintentionally. Therefore, the students chose *tidur* rather than *tertidur*, as they understood it as going to bed after working on a problematic assignment.

**Figure 2.** PowerPoint materials for Week 2 (*ter-* + *tidur*)

	<p>Dia _____ karena kelelahan belajar.</p> <p>(a) <b>tertidur*</b></p> <p>(b) tidur</p> <p>她唸書累到<b>睡著</b>了。</p>
	<p>Prili selalu _____ saat mengerjakan PR Bahasa Mandarin.</p> <p>(a) tidur</p> <p>(b) <b>tertidur*</b></p> <p>Prili寫中文作業的時候，總是會<b>睡著</b>。</p>


*Note.* \* = correct answer. Compiled by the Author.

The most challenging question in Week 3's online assessment was Question 10, which only 41% of the students answered correctly (see previous Table 4). Students were confused about what to choose, as the four options were very similar to one another: (a) *menginjakkan* [set foot on something], (b) *injak* [step on], (c) *terinjakkan* [get trampled on], and (d) *terinjak* [get stepped on]

accidentally]. The meaning of the original word changes when affix elements such as *ter-* and *di-* are added to form passive verbs. The prefix *ter-* indicates an action that has been completed accidentally or suddenly, while the suffix *-kan* indicates an action that has already been done with high agentivity and resulted in a complete change. The prefix *meN-* encodes an active verb, which can also be an activity that occurs frequently. Confusingly, there could be several logical answers to that question: “*mereka suka \_\_\_\_ rumput kering di halaman belakang sekolah*” [they like to \_\_\_\_ on dry grass in the back of the schoolyard]. Although the correct answer was (b) *injak*, the answer could also be (a) *menginjakkan*, as the affix *meN-* is often used for something that happens frequently and the word *suka* indicates repeated occurrence.

It turns out that the examples in the PowerPoint presentation might have also caused confusion. As shown in Figure 3 and 4, we only discussed the differences between *menginjak* and *menginjakkan*, but never *injak* and *injakkan*.

**Figure 3.** PowerPoint materials for Week 3 (*meN-* + *injak*)




Dia \_\_\_\_ kursi itu.

(a) menginjakkan,  
**(b) menginjak\***

她踩到座椅上。  
那個座椅被她踩上去。

*Note.* \* = correct answer. Compiled by the Author.

**Figure 4.** PowerPoint materials for Week 3 (*di-* + *injak* + *-kan*)



Kakak sedang tidur, dan badannya sengaja \_\_\_\_ adiknya.

(a) menginjak,  
**(b) diinjakkan\***

姊姊正在睡覺，身體被她妹妹故意踐踏。

*Note.* \* = correct answer. Compiled by the Author.



The most difficult quiz question in the final week of assessment was answered correctly by 51% of students (see previous Table 4), which indicates that Indonesian-language transitive verbs cannot be mastered within a semester. This question sought to test the differences between the prefix *meN-* with and without the suffix *-kan*. It was quite confusing for the students, as both answers could be correct, and they were not familiar with the different meanings. *Mengantarkan* means “to deliver something for somebody, with the focus on the specific object delivered”.<sup>3</sup> In the prompt sentence, “*Dia mengantar adiknya ke sekolah*” [he drove or brought his sister to school], meanwhile, the word *mengantar* focuses on the agent, who is doing the work himself.

Discussion of the factors that influenced the fluctuation of the scores during the assessment indicates that in-depth analysis of the teaching materials and the presentation of the contents can account for why certain tasks were easier or more difficult and show how pitfalls can be avoided in the future design of material presentation and testing in vocabulary teaching.


### Effects of Chinese translations as scaffolding

In the first three weeks, the vocabulary materials had Chinese translations included with all assessment questions to facilitate students’ understanding of the sentences in the pictures and video material. As students were at the beginning level, we sometimes had to use many unfamiliar words in the example sentences; as such, Chinese translations were necessary as scaffolding. However, as stated before, students confessed that they depended solely on the Chinese translations as clues for guessing the correct answers for the third assessment since the task difficulty level was too high. Therefore, we decided to simplify the task and delete the Chinese translations for the fourth week.

We can see the difference if we compare the contents of the PowerPoint presentations for the third and fourth weeks. In the third week, Chinese translations were given, but difficulty emerged from discrepancies between the PowerPoint examples and the assessment questions. In the third week of this study, meanwhile, the goal was to understand how the affixes *meN-*, *di-*, *ter-*, *-kan* could be added in various combinations to the root word. Apparently, this design had some problems; as illustrated in the following PowerPoint slides, the examples presented with Chinese translations were *tunduk* [bow] and *menundukkan* [subdue].

3 E.g., *Kakak sudah mengantarkan paket itu ke rumah abang Ganda* [Elder sister already delivered that package to Brother Ganda’s house]

**Figure 5.** PowerPoint materials for Week 3 (*tunduk*)




Dia \_\_\_\_\_ dan berpikir apakah dia besok harus pulang ke rumah neneknya.

(a) menundukkan  
(b) **tunduk\***

她低著頭考慮明天是否要回阿嬤家。

*Note.* \* = correct answer. Compiled by the Author.

**Figure 6.** PowerPoint materials for Week 3 (*meN-* + *tunduk* + *-kan*)



Jessica \_\_\_\_\_ kepalanya kepada gurunya yang lewat di dekatnya.

(a) tunduk  
(b) **menundukkan\***

潔西卡面對迎面而來的老師，她把頭低下去。

*Note.* \* = correct answer. Compiled by the Author.

As shown in Example 5, *tunduk* means “to contemplate something with one’s head lowered”, while the transitive verb *menundukkan* takes the direct object *kepalanya* [her head] to indicate “to bow one’s head”. With the help of these pictures and videos, accompanied by Chinese translations in the PowerPoint presentation, students slowly understood the vocabulary differences with different derivative affixes. However, the question in the assessment, as shown in Table 5, tested a metaphorical use of *tunduk* [comply with something], which was not explicitly addressed in class. Although the Chinese translations served as scaffolding, the questions in the assessment did not match the PowerPoint presentation.

**Table 5.** *Tunduk* in Week 3’s assessment

Prompt	Choices
Mereka _____ pada peraturan di negara mereka tinggal, untuk tidak membuang sampah sembarangan. 他們服從國家法律，不亂丟垃圾。	(a) <b>tunduk*</b> (b) tertunduk (c) menunduk (d) menundukkan


*Note.* \* = correct answer. Compiled by the Author.



In the fourth week, no Chinese translations were provided with the example sentences. Although the students scored a little higher than in the third week, many factors could account for their better performance. First, the Indonesian sentence examples were simplified, and the students probably paid more attention to the signals conveyed by the pictures and videos. As a result, students' vocabulary learning seemed to have improved.

As illustrated in the following examples, the students focused on the differences between '*meN-* + ... + *-kan*' and '*meN-* without *-kan*'. However, understanding the differences between *mengantarkan* and *mengantar* required a further understanding of the difference between bringing something specifically for someone and bringing someone home. This nuance went beyond the students' understanding of the general principle conveyed by the transitive *-kan*.

**Figure 7.** PowerPoint materials for Week 4 (*meN-* + *antar* + *-kan*)




Ibu Pos \_\_\_\_\_ paket ke pada Jessica.

(a) **mengantarkan\***  
(b) *mengantar*

Note. \* = correct answer. Compiled by the Author.

**Figure 8.** PowerPoint materials for Week 4 (*meN-* + *antar*)



Rini \_\_\_\_\_ Jessica pulang kerumah.

(a) **mengantar\***  
(b) *mengantarkan*

Note. \* = correct answer. Compiled by the Author.

Videos provided students with an excellent way to understand the simplified task of determining whether *-kan* is necessary. However, students also had to use more vocabulary learning strategies to learn without relying on Chinese translations. Perhaps Chinese translations could have been added to the PowerPoint presentations to reinforce some of the more marked differences.



In summary, translation plays an active role in helping students understand new lessons. However, concepts and materials are essential for students' knowledge; even with perfect translation, if the content is dense and confusing, it also confuses learners. Therefore, vocabulary task design interacts closely with pictures and videos to decide whether, when, and how Chinese translations should be added to the PowerPoint and the assessment instrument.

## **6 Conclusion**

This study demonstrates how pictures and videos can be used to introduce Indonesian vocabulary with different affixes at the beginning level. The findings also show results from students' weekly performance. In general, students gave positive responses to this teaching method. Pictures and videos, when used appropriately in combination with the questions in the tasks and in the assessment, can improve students' learning outcomes. Challenges were posed by the mismatch of explanations and test questions, and the presence or absence of Chinese translations. Therefore, all these different factors must be taken into consideration when interpreting the results.

### **Pedagogical implications**

As the use of pictures and videos has been proven to be helpful for students' general understanding of the contexts of affixation, one can consider adopting this teaching strategy to raise students' motivation for learning a second language. As the difficulty levels of affixation will influence students' understanding and performance, the decision of pairs of words to be contrasted in PowerPoint presentations must be carefully considered. An online follow-up assessment on E-course provided a quick way to determine students' understanding of the vocabulary, but the design of the quiz should match students' level of understanding and be without Chinese translations.



## Limitations

This study has several limitations. First, the time allowed for teaching complicated affixation was very limited because the students were still beginners. Likewise, the sentence examples illustrated by the pictures and videos in the brief presentation of materials were also limited. When the sentences were beyond students' comprehension, Chinese translations had to be provided; thus, it became difficult to determine to what extent students understood the functions of the targeted affixes and to what extent they guessed the answers based on the Chinese translations. Second, as vocabulary teaching material differed every week, some students may have fallen behind, without a systematic follow-up to reinforce earlier lessons. For example, while some students were still struggling with the active prefix *meN-*, the material for the following week already included the involuntary passive prefix *ter-*. Third, passive affixation was a difficult obstacle for students, one that could not be explored in depth in a beginning course. It was also a challenge to design pictures or videos to illustrate some Indonesian vocabulary when the words compared were very similar and had only nuanced differences. As this was the authors' first attempt to explain affixation using pictures and videos, the lack of clear distinction in the pictures might have prevented the students from fully understanding the meaning of the affixes in each example sentence. Overall, the four vocabulary presentations might have been too challenging for students with low Indonesian proficiency; thus, the quiz questions were also too challenging for them.

Despite the limitations of this study, its way of teaching Indonesian affixation in vocabulary acquisition holds promise. Instructors in future classes should create innovative pictures and videos for vocabulary teaching and further test the design. When implementing this teaching technique, an Intermediate Indonesian class might be a more suitable level than the beginning Indonesian class used by the researchers.

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