# Modifying Words in Vocabulary Banks: An Active Learning Strategy to Increase the Students' Verbal Intelligence

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**Abstrak**

*This research aimed to determine the improvement in students' verbal intelligence resulting from improved the quantity and quality of vocabulary. The study undertook correlation analysis to identify the relationships between research variables, i.e., vocabulary bank and quantity of vocabulary items; the quantity of vocabulary items and quality of vocabulary understanding; quality of vocabulary understanding, and verbal intelligence. The research was undertaken in Madrasah Ibtidaiyah (MI) Al-Islam Balesari, located in Balesari Village, Windusari District, Magelang Regency, Central Java Province, Indonesia. The research sample comprised 50% of all students in the fourth grade and included 9 out of 37 students. The data collection technique in this study was the observation of the correlation between teachers and fourth-grade students at MI Al-Islam Balesari. The data analysis technique used was the Pearson correlation test. The results showed that the vocabulary bank strategy improved students' verbal intelligence. This impacts increased interest and motivation among the students concerning, students' speed in understanding the matters learned, the quality of the reconstruction of aspects studied to be reiterated both written and oral, and improved quantity and quality of students' vocabulary comprehension. Students find it easy to understand the lesson because the information conveyed uses language media that they can understand.*

*Keyword: active learning, speaking assessment, verbal intelligence, vocabulary bank*

## INTRODUCTION

Verbal intelligence (speaking) concerns the understanding of words and how language works, or the ability to use language clearly (Geers & Sedey, 2011). Verbal intelligence can help students connect existing knowledge and understanding with new information. Thus, verbal intelligence is required of all students.

Greater verbal intelligence allows students to understand new information quickly, i.e., the subject matter required for their courses. Students can learn the material through reading and listen. However, they are predominantly required to access material first through listening. Moreover, verbal intelligence enables students to understand materials more rapidly, in particular as the content of the subject matter is designed using language media. Another positive impact of verbal intelligence is that students can reconstruct what they have learned in communicating with others, both orally and in writing. Verbal intelligence is thus beneficial for students in designing material that will be delivered using language media.

Verbal intelligence aids students in generating and filtering the use of language in various formats. These formats include the ability to recognize words, form words based on patterns, understand the meaning of words, and ultimately choose the right words when conveying information to interlocutors. When students have verbal intelligence, they may exhibit abilities such as understanding and use metaphors, hyperbole, and language symbols in communication. Another positive impact of verbal intelligence is that students will have a sense of the word and sensitivity to language structure.

Not standing its importance, teachers experience problems in improving students' verbal intelligence. Based on preliminary classroom observation, this is because of a lack of vocabulary, which plays an important role in the acquisition of verbal intelligence. Thus, teachers need to consider the use of various teaching strategies to develop students' vocabulary and

verbal intelligence. Given this, it is important to conduct research focused on students' vocabulary banks. By modifying the words in students' vocabulary banks, it is hoped that they will have a greater ability to write and speak.

This research draws on two previous studies to compare teaching strategies. The first is Hunt and Feng's (2016) paper "Improving vocabulary of English language through direct vocabulary instruction". In their study eight-second grade students were given a pretest on their vocabulary knowledge and the read-aloud vocabulary strategy was then employed together with direct vocabulary instruction. Whereas their study focused on the use of direct instruction to improve vocabulary, this study uses a modification of vocabulary banks.

The second prior study is that of Singh, Singh, and Eng entitled "Effectiveness of oral proficiency in English for secondary schools (OPS-English) program in improving English language vocabulary among secondary school students." They undertook an experimental study to determine the effectiveness of using the OPS English strategy for improving English vocabulary. In contrast, this study applies vocabulary banks in active learning to increase the verbal intelligence of students (Singh, Singh, & Eng, 2015).

Regarding these previous studies, it is necessary to conduct this study as they only focused on increasing vocabulary in English, while this study focuses on increasing vocabulary in Indonesian. Another difference lies in the learning strategy used: the previous studies used direct vocabulary instruction and the OPS English strategy, while this study uses vocabulary banks. The students' needs addressed in the studies, the contexts, and the research designs also differ. Overall, the purpose of this study is to identify the improvement in students' verbal intelligence resulting from enhancing the quantity and quality of understanding of vocabulary.

Among the characteristics of students who possess verbal intelligence are richness and accuracy in vocabulary use. Therefore, it is necessary to increase the quantity of vocabulary among students. The development of information technology has eased efforts to increase students' vocabulary. Students can use mobile devices to search for the meaning of new or unexpected vocabulary to understand the material being studied. However, not every student has a mobile device, and not all schools allow students to take such devices into the classroom. Alternatively, teachers can use a vocabulary bank strategy. This strategy is easy to implement and is low cost because each student has a notebook in which to record new vocabulary and modify their word banks. This is a very efficient and effective method. Above all, it should be noted that students' verbal intelligence needs to be improved early on.

In the field of education, learning is the primary objective. Learning has been defined in various ways by educational experts. Learning strategies are the various operations that learners use to make sense of their learning (Kuo Lee, 2010). In essence, teaching is not just about delivering the subject matter, but also includes the process of regulating the environment so that students (English & Kitsantas, 2013). Thus, teaching is a form of learning. In learning, students should be at the center of the activity. Student activity in learning takes precedence over teacher activity. Learning is student-centered, and learning seeks to shape students' personalities and enable them to cope in their future lives by adjusting to various situations and conditions.

Learning is not an automatic consequence of pouring information into the minds of students. Learning requires mental engagement and work on the part of students. Explanation and demonstration alone do not result in sustainable learning outcomes because only active learning activities result in lasting learning. Learning experiences can be implemented in various ways, and entail students listening, seeing, and doing. Each approach will lead to different levels of understanding and learning outcomes. As the Chinese philosopher, Confucius said: I hear, and I forget, I see, and I remember, I do, and I understand (Riding & Rayner, 2013).

Moreover, students' understanding of what is heard is influenced by the ability and appeal of teachers/lecturers in delivering the material. If the teacher can convey the concepts clearly and in a way that engages students in listening, there is the possibility of better understanding. Conversely, lack of such ability on the part of teachers will result in a lack of understanding among students. Learning that

involves only the auditory sense thus has many disadvantages. The second means of learning and acquisition is seeing. When students' learning is supported visually, what is being learned is more concrete. Thus, students can make connections from concrete examples to abstract concepts. This results in more enhanced understanding than only listening.

To obtain a high level of understanding, student activity is required, i.e., not only listening and seeing but doing. This includes engaging students in the activities of searching, discovering, formulating, reconstructing experience, and thence creating or producing. The involvement of students in the learning process can improve their understanding and leave a longer-lasting, even permanent, impression. Direct experiences entail active learning (Roehl, Linga, Gayla, & Shannon, 2013).At active learning, students are involved for a more significant proportion of class time, engaging in learning activities for approximately 75% of the duration of the lesson.

Active learning can facilitate the activation of three domains: cognitive, affective, and psychomotor. Activities provide opportunities for students to activate their brains in searching for various types of information and from various sources, which are then formulated to achieve learning outcomes. Student activity does not stop at formulation but continues to production or creation. The ability of students at the level of creating indicates that they have achieved the highest learning competency. This competency will only be achieved if students want to learn. Moreover, learning by doing must be implemented not only once or twice, but repeatedly.

Therefore, active learning is necessary to maximize students' achievement. The learning outcomes can then be utilized by students in real life. Thus, students will be able to address various situations and conditions in their lives, confronting and overcoming problems and obstacles. Problems can be resolved properly without giving rise to new issues. Active learning can enhance students' maturity in thinking and can also cater to individual students' different learning styles.

Learning is the channel by which learning outcomes are achieved. It is essential to ensure that each student attains the highest-quality learning outcomes possible, such that students have a sense of satisfaction. As noted by Rasyid and Mansyur (2008), the quality of learning outcomes is influenced by the quality of learning. Moreover, the quality learning outcomes in one stage will influence input for the next learning process. Progression to the next stage and be executed when most students have achieved the maximal learning outcomes. If there are still many who have not succeeded, enrichment is needed before moving on.

Learning outcomes should be relevant to the goals to be achieved: Without clear goals, the attainment of learning outcomes cannot be said to be qualified or maximal. Clark (2011) notes that learning outcomes in the form of ability, skills, attitudes, and specific behaviors are essentially a realization or a manifestation of the achievement of goals. Learning outcomes are often used as a measure to determine the extent to which a person has mastered the material already taught. To operationalize learning outcomes, sound measures based on valid and reliable evaluation tools are needed (Sullivan, 2011), and the assessment instruments, in this case of speaking, must be objective and fair.

This research develops a model of ability to speak in college. The assessment of students' speaking ability concerns various aspects, including linguistic mastery and mastery of ideas. These will be weighted differently at different levels of education (Figure 1 and 2).
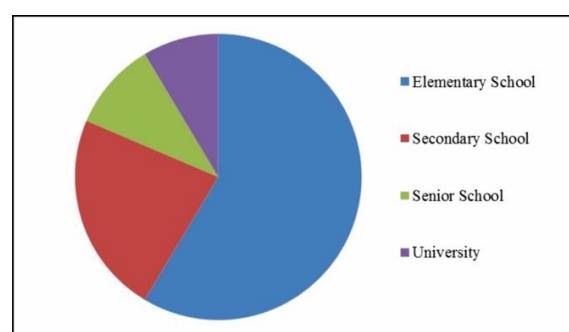


**Figure 1.**
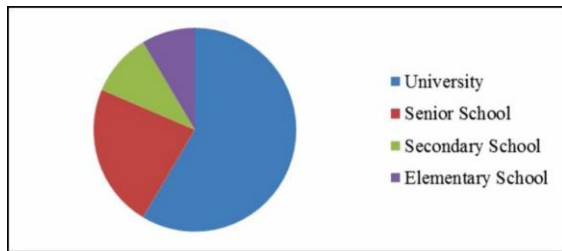The Weighting of Language Aspects

**Figure 2.**
Assessment Weight Idea Aspect

As already noted, learning is not an automatic consequence of pouring information into the minds of students. Learning requires mental engagement and work on the part of students. Explanation and demonstration alone do not result in sustainable learning outcomes; lasting learning can only be achieved through active learning activities (Silberman, 2007). To learn to be active, students must do many tasks, activating their brains to review ideas, solve problems, and apply aspects learned.

Students' level of vocabulary knowledge influences their ability to understand materials, and to reconstruct what they have learned/comprehended, and thus the quality of learning outcomes. Therefore, the level of students' vocabulary needs to be improved. One way of increasing the quantity and quality of vocabulary is by using the vocabulary bank strategy. The relationship between these three aspects is shown in Figure 3.
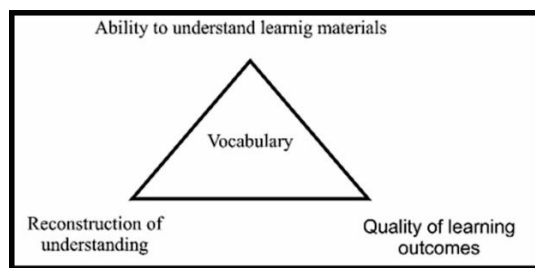


**Figure 3.**
Role of Vocabulary

## METHODS

### Research Method

This study was used a Correlational research study quantitative approach. A correlational study is a type of research design where a researcher seeks to understand what kind of relationships naturally occurring variables have with one another. This study comprised correlational research aimed at identifying the relations between variables as follows: the vocabulary bank (X1) with vocabulary quantity (X2); vocabulary quantity (X2) with the quality of vocabulary understanding (X3); quality of vocabulary understanding (X3) with verbal intelligence (Y). For the data analysis, the value of Y (verbal intelligence) was predicted by X3 (quality of understanding the vocabulary definition), based on the equation $Y=a+bX3$ (Sugiono, 2009).

### Participants

The research was undertaken in Madrasah Ibtidaiyah (MI) Al-Islam Balesari, located in Balesari Village, Windusari District, Magelang Regency, Central Java Province, Indonesia. The sources of research data were teachers and fourth-graders at MI Al-Islam Balesari. The research sample comprised 50% of all students in the fourth grade and included 9 out of 37 students. Fourth-grade students were chosen as they are making the transition from low to high grade in elementary school. At this stage, the students have already started to be independent and creative in the learning process. At the same time, they have not yet been significantly exposed to the use of technological devices. Mobile devices were still too expensive for MI Al-Iman students due to the economic conditions of their families. Thus, the students had not had the opportunity to develop their vocabulary using such devices. An alternative means of increasing the vocabulary quantity of students is to utilize the vocabulary bank strategy.

### Data Analysis

The data analysis technique used was the Pearson correlation test. The results were analyzed using IBM SPSS version 21. Prior to the Pearson trial, the data were tested for normality by using the data normality test then using calculations using SPSS version 21. The criteria for the Pearson test are the conditions for r count> r table then, these variables have each other and without The time limit is said to be significant, the R-value on the coefficient of termination> 0.75.

## RESULTS & DISCUSSION

### Vocabulary Bank Strategy

Strategy of Vocabulary Bank is implemented as follows: 1) Activity target: Elementary School, Secondary School, Senior School; 2) Objectives: (a) To build a vocabulary bank or vocabulary that will be used in each lesson, task, or topic. (b) To connect new concepts with fields of science that have been previously developed using vocabulary banks; 3) Usage: (a) Each lesson section or lesson unit is based on mastery of the students' vocabulary for application in the next lesson. (b) The vocabulary bank is used while working on a task or developing a topic in greater depth. What is needed. Notebook; 4) Activity: (a) The teacher selects four to seven vocabulary items that students have learned in the previous lesson or unit. (b) The teacher reviews the definitions of the words recorded and discussed in the course of the next lesson or unit. (c) The teacher invites the students to use the words that have been recorded in the notebooks and that have previously been mastered. (d) After reviewing the words previously noted, the teacher invites the students to identify four to seven new keywords and definitions to be learned in the next lesson or unit. (e) The teacher asks the students to display the words in the form of images. (f) The teacher invites the students to use their own words to give meaning to the words in their notebooks; 5) Activity variations: (a) Use three to five words per week. (b) Put the words that students use each week or the entire vocabulary bank on a bulletin board. (c) Pair students to share word definitions, compose sentences, and practice pronunciation. (d) Hold a competition for students to pair the definitions with the right words (Bellanca, 2011).

### Correlation Analysis

The results of the vocabulary bank strategy and students' verbal intelligence calculated the correlation between the different predictor variables and the dependent variable using the Pearson correlation test. Based on observation and data analysis, the vocabulary bank strategy (X1) is found to improve students' verbal intelligence (Y). Students with a large vocabulary (X2) and a sound understanding of the definitions (X2) found it easier to understand the various materials being studied. Moreover, the ability to understand the materials easily is one of the indicators of verbal intelligence. The positive effects of using the vocabulary bank strategy also include: (1) improvement in students' interest and motivation, (2) enhanced speed of understanding, (3) improved quality of reconstruction results, and (4) providing help for students not allowed to bring devices into the classroom and for those without such devices.

### Discussion

Recording various vocabulary items and modifying these in notebooks as a vocabulary bank led to motivation on the part of the students, and high interest in following up in lessons that applied the vocabulary bank strategy. This was because the students found it easy to understand the lesson as the information was conveyed using language media that they could comprehend. The students had no trouble understanding the new vocabulary.

The second positive effect of applying the vocabulary bank strategy was the speed of understanding the various aspects being studied. The students considered they were helped to increase both the quantity and quality of their vocabulary. In this regard, the vocabulary bank strategy encouraged the students to be active by applying the principle of learning by doing, thus facilitating the speed and quality of understanding. This is in line with Roehl et al. (2013), who contend that learning by doing invites students to learn actively.

The third positive effect was the quality of the reconstruction of the learning materials. When the students are asked to re-arrange the materials that had been studied, they were able to do so correctly. However, based on the students' reconstructions, it was found that in some cases there was a lack of materials or inappropriate materials were used. Nonetheless, the reconstruction in spoken or written form of the material that had already been studied showed high-quality results.

The fourth positive effect of the application of the vocabulary bank strategy was that it provided support for students from remote areas without access to technological devices, i.e., the Internet, due to family economic factors. The vocabulary bank strategy was aptly applied in schools with various weaknesses that could be an

obstacle to improving students' competence, included the location in remote areas, unstable or less than optimal Internet coverage, or no Internet network at all.

## CONCLUSION

The results showed that the vocabulary bank strategy improved students' verbal intelligence. This has impacts on increased interest and motivation among the students concerning, students' speed in understanding the matters learned, the quality of the reconstruction of aspects studied to be reiterated both written and oral, and improved quantity and quality of students' vocabulary comprehension. The strategy was highly effective in helping students who did not have internet access, either because they were in remote areas or because of family economic factors. In the future, researchers hope to improve the quality of research by using variables related to students 'verbal intelligence, so that many students can cultivate students' verbal intelligence.

## CONFLICT OF INTEREST

Author declared that this study does not have any conflict of interest

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