

Application of the Constructivism Model to Improve Vocabulary and Communication of Class III Students at SPF State Elementary School Number 104244 Jati Sari Lubuk Pakam, Deli Serdang District, School Year 2023-2024

Indah Sulistia Wardana Atmaja¹⁾, Sutikno^{2*)}

^{1,2)} *University of Muslim Nusantara Al-Washliyah, Medan, Indonesia*

^{*)} *Corresponding Author: sutikno@umnaw.ac.id*

Article history: received February 19, 2024; revised February 28, 2024; accepted March 05, 2024

This article is licensed under a Creative Commons Attribution 4.0 International License



Abstract. The purpose of this study is to (1) find out whether the application of Gagnon and Collay's constructivism model can increase the vocabulary of grade III students of UPT SPF State Elementary School Number 104244 Jati Sari Lubuk Pakam using newspaper media. (2) To find out there is an interaction between the application of Gagnon and Collay's constructivism model with vocabulary. (3). To find out whether the application of the constructivism model of Gagnon and Collay can improve public communication of grade III students of UPT SPF State Elementary School Number 104244 Jati Sari Lubuk Pakam by using newspaper media. (4) To find out there is an interaction between the application of Gagnon and Collay's constructivism model with public communication. The research design used in this study is quantitative research. The population in this study is the entire class III UPT SPF State Elementary School Number 104244 Jati Sari Lubuk Pakam. The data collection technique uses Test Essay and Observation techniques. The research found that the constructivism model of Gagnon and Collay could increase vocabulary in grade III students of UPT SPF SDN No 104244 Jati Sari using newspaper media. However, the null hypothesis (Ho) was accepted, meaning there was no interaction between the model and vocabulary. In public communication, the alternative hypothesis (Ha) was accepted, and the null hypothesis (Ho) was accepted, indicating no interaction between the model and public communication.

Keywords: *Gagnon and Collay's Constructivism Learning Model, Newspaper Media, Improvement, Vocabulary, Public Communication*

I. INTRODUCTION

It allows children to develop social skills and interact with others. Language development begins at birth through experiences like crying, facial expressions, and body movement-signs that children are trying to connect with their environment. Language is a critical tool for communication. Language is the primary means by which children communicate their desires to those around them (Swastyastu 2020).

Therefore, especially in early childhood, language activities are crucial for human life. A child's first language is acquired directly from the mother at birth if the child's communication with others is effective. As children develop and grow, they acquire languages beyond their mother tongue, whether it be a second, third, or subsequent language. This process is known as language acquisition and is influenced by the social environment, cognitive development and the learning resources available to young children. The learning process occurs through interaction with the environment.

Science is advancing rapidly, requiring all educators to innovate their teaching methods to ensure that all students achieve the same results and educational goals. The ultimate goal of education is to create a generation that is creative, independent, and morally upright, while fostering knowledge and personal growth.

When all components, especially teachers and students, work together in the classroom, education can be achieved. The Curriculum Guidelines explain that the teacher's role is to facilitate and help students construct knowledge during the learning process. This statement aligns with constructivism theory, which emphasizes that teachers serve as facilitators while students take on the primary role in learning. Shymansky emphasized that learning according to constructivism is an active process where students construct their own knowledge, seek meaning in what they learn, and integrate new concepts and ideas into their existing framework of thinking (Djamaluddin and Wardana, 2019:21).

Based on the observations in class, it is evident that students find the material boring. They only recognize words commonly used in everyday life. When presented with a tourism-themed discourse, students struggle to collect an adequate number of words. Interviews with several students revealed that they are less interested in reading. During the collection process, students only participated for two paragraphs and spent the rest of the time waiting for answers from their peers. In addition to the word collection process, students also experienced difficulty in conveying the results of their work. In this case, students may experience difficulties due to the use of less engaging and potentially monotonous learning models that are centered around the teacher. Students prioritize developing skills according to their major, but it is important to remember that skills are not the only key to success. The main success lies in effectively communicating these skills to the general public. Unfortunately, many

students struggle with communication, as evidenced by their inability to collect and use vocabulary. This leads to poor communication in the classroom, with students struggling to convey their messages in an interesting and interactive way. To improve, students should focus on developing their communication skills alongside their technical skills.

An appropriate model for facilitating active student learning in the classroom is needed to address the above issues. One effective approach is to implement a constructivist learning model. This model emphasizes student engagement in problem solving during the learning process. Gagnon and Collay's constructivist learning model provides students with the opportunity to find as many words as possible, and in the bridge and question phases, students attempt to solve problems and organize words based on the given topic.

Sani (2013: 89) defines a learning model as a conceptual framework that follows a systematic procedural pattern. It is developed based on theory and uses organization in teaching and learning to achieve learning goals. The main characteristic of the learning model is the absence of syntax (stages). According to Joyce (in Rusman, 2014: 132), a learning model is a collection of various learning principles, psychological and sociological theories, systems analysis, or other supporting theories. It is a plan used to form learning plans, design learning materials, and guide students in the classroom. Teachers can choose appropriate and efficient learning models to achieve learning goals. Rusman (2014: 133) outlines several basic considerations for determining a learning model, including goals, learning materials, and the learner's perspective. Other non-technical considerations may also come into play.

Rusman (2014: 136) identifies six characteristics of models of learning. These include being based on educational and learning theories, having a specific educational mission or goal, and being designed to train participation in groups democratically. For instance, the group research model compiled by Herbert Thelen and John Dewey's theory are examples of such models. Another example is the inductive thinking model, which is designed for an inductive thinking process.

This text presents a model that can be used as a guideline for improving teaching and learning activities in the classroom. The model includes the sequence of learning steps (syntax), the principles of reaction, social systems, and support systems. The impact of applying the learning model includes learning impacts (learning outcomes) and leading impacts (long-term learning outcomes). The text also suggests making teaching preparations (instructional design) with guidelines for the chosen learning model.

Brooks (in Supardan, 2013: 1) states that constructivism is a philosophy, not a learning strategy. Glaserfeld (in Supardan, 2013: 1) describes constructivism as a theory of knowledge with roots in philosophy, psychology, and cybernetics. According to Von Glaserfeld, radical constructivists view knowledge as something that is actively constructed through the mind or communication, without any inherent objectivity. This process involves building knowledge through active engagement.

Windschitl (in Supardan, 2013:3) shares this perspective, noting that constructivism has been widely used in learning approaches. Constructivism is a view that emphasizes students' activities in creating, interpreting, and reorganizing knowledge in individual ways. According to Schwandt (in Supardan, 2013: 3), constructivism is similar to interpretivism. Additionally, Von Glaserfeld (in Supardan, 2013: 3) argues that knowledge cannot be treated as a commodity that can be moved around and that there is no single introduction to it.

Cahyo (in Supardan, 2019: 82)) emphasizes that in the context of educational philosophy, constructivism is an effort to build a modern culture of life. Constructivism is a philosophy of knowledge that emphasizes that knowledge is of our own making. It is not an imitation of reality, nor a picture of the existing world. Knowledge is constructed through individual cognitive activities, which involve creating structures, categories, concepts, and schemes necessary for forming knowledge. Constructivism theory recognizes that knowledge cannot be simply transferred, but must be interpreted by each individual. It is a continuous process, and a person's activeness plays a crucial role in developing their knowledge.

According to constructivism, learning is a process of assimilation and integration of experiences or lessons learned with one's existing understanding in order to develop knowledge. Constructivism holds that learners have their own potential and character, which they must form and develop independently. This approach is known as contemporary learning. Hill stated that constructivism theory involves generative learning, which is the act of creating meaning from what is learned. This is in contrast to the behaviorist school, which views learning as a mechanistic activity between stimulus and response. Constructivism sees learning as a human activity that involves building or creating knowledge by giving meaning to knowledge based on experience.

Constructivism is not a new concept. Our experiences shape our knowledge and make us more adaptable. According to this theory, teachers should not only impart knowledge to students, but also encourage them to actively construct their own understanding. According to this theory, teachers should not only impart knowledge to students, but also encourage them to actively construct their own understanding.

In this case, teachers can facilitate the process by allowing students to explore and apply their own ideas. Additionally, teachers can instruct students to be mindful and deliberate in their use of learning strategies. Teachers may provide students with steps to achieve a deeper understanding, along with the option to take notes in their own words and language.

Shymansky firmly explains that, according to constructivism, learning is an active process in which students construct their own knowledge by seeking meaning from what they learn. It is a process of integrating new concepts and ideas into their existing framework of thinking. In order to construct knowledge, students must have a foundation for forming hypotheses and the ability to test them, solve problems, search for answers, reflect, and express ideas clearly. This process leads to the creation of new ideas and concepts.

A constructivist learning model, specifically the Gagnon & Collay model, will be applied in this case. This model, developed by George W. Gagnon Jr. and Michelle Collay, involves teachers applying a six-stage teaching structure to facilitate student learning. This model, developed by George W. Gagnon Jr. and Michelle Collay, involves teachers applying a six-stage teaching structure to facilitate student learning. The language used is clear, concise, and objective, with technical terms explained when first used. The text is balanced and free from bias, and the content is as close as possible to the source text. This model, developed by George W. Gagnon Jr. and Michelle Collay, involves teachers applying a six-stage teaching structure to facilitate student learning. The stages include arranging the situation for students to explain something. Give this situation a title and describe or describe a process of solving a problem, answering a question, creating a metaphor, making a decision, drawing a picture, drawing a conclusion, or setting a goal. This situation should include what do you expect students to do and how will students make meaning for themselves?

How will you group students? Will you group them as a class, as individuals, or in collaborative thinking teams of two, three, four, five, six, or more? What process will you use to classify them? Will you call out numbers one by one, choose a color or piece of fruit, or use similar clothing? The answer to these questions depends on the situation you are designing for and the materials you have available.

This is an introductory activity designed to assess students' prior knowledge and establish a connection between their existing knowledge and the new material to be covered. The language used should be clear, concise, and objective, avoiding biased or emotional language. Technical terms should be explained when first used, and the text should adhere to conventional academic structure and formatting. The content of the improved text must be as close as possible to the source text, and no new aspects should be added. This may involve presenting a simple problem to solve, facilitating a class discussion, playing a game, or creating a list. It is recommended to conduct this activity before students are grouped or after they have been grouped, depending on One must consider the most effective approach.

Questions can be asked about each element of learning design. The questions used should guide the introduction of the situation, structure the grouping, provide a bridge, keep the lesson actively underway, speed up the exhibition, and encourage reflection. Anticipate questions from students and frame other questions to encourage them to explain their thinking and to support them in continuing to think for themselves.

The task involves students creating a presentation to showcase their notes and thoughts while explaining the situation to others. This task may involve various methods of presenting information, such as writing descriptions on cards, giving oral presentations, creating graphs or tables, acting out scenarios, constructing physical models, or producing visual or audio recordings. Reflection is a process in which students consider their own thoughts and impressions, and then observe and learn from the perspectives of others. They will include only objective evaluations of students' thought processes, such as their feelings, impressions, and internal dialogue. No changes in content have been made. What attitudes, skills, and concepts will students retain after leaving the classroom? What will they remember tomorrow from what they learned today? The lesson should build on what they already know and what they want to learn.

Miranti (2015) states that vocabulary is crucial in daily life and Ismawati (in Miranti 2015: 168) emphasizes that it is a vital component of language. Ismawati (in Miranti 2015) stated that vocabulary is a crucial element of language. Clear expression of one's thoughts is only possible if the appropriate vocabulary is used. The mastery of vocabulary development influences one's ability to express ideas and language effectively. Understanding vocabulary is crucial for language learning as it facilitates comprehension. It is important to use clear and concise language to avoid confusion and ensure comprehension. The Big Indonesian Dictionary defines vocabulary as the elements of spoken or written language that embody the unity of feelings and thoughts.

Education is the process of teaching and training individuals or groups to develop their attitudes and behaviors. The current curriculum focuses on specific competencies and skills. English is used as a means of communication to access information and build interpersonal relationships. The skill to communicate in English, whether orally or in writing, encompasses listening, speaking, reading, and writing. Vocabulary acquisition is a crucial aspect of language learning, among other components. Vocabulary refers to a collection of words that an individual or entity knows or is part of a specific language. Vocabulary refers to the collection of words that an individual comprehends or is likely to use when constructing sentences. It is commonly believed that a person's vocabulary reflects their level of education or intelligence.

In communication, there are small and large groups. It is important to maintain a clear and logical structure, use precise language, and avoid biased or emotional language. Public communication involves one or two speakers addressing a large audience who can provide nonverbal feedback or ask questions. In public communication, the communicator adapts the message to the audience, choosing words and examples that increase understanding. However, not all of the communicator's intentions may be understood by the audience. To communicate effectively, the communicator should obtain information about the audience and adjust accordingly.

Public communication is organized, structured, and formal. Public communication takes many forms, including classroom learning and Friday sermons. Attending religious or scientific lectures is also a common way to engage in public communication. The purpose of public communication is typically to convey information or persuade others. However, public communication can also serve the purpose of entertainment, introduction, announcement, or tribute. Technical terms should be explained when first used, and a formal register should be maintained with precise word choice.

One of the challenges in defining communication is the multitude of definitions provided by experts in their respective fields. It is important to maintain objectivity and avoid subjective evaluations, while ensuring clear and concise language with a logical flow of information. Communication science is a complex field that draws on many scientific disciplines, including psychology, sociology, anthropology, political science, and linguistics. As a result, defining communication is not a simple task, as experts provide definitions based on their own perspectives and understandings.

Miarso (in Miranti, 2015) defines learning media as anything used to convey messages and stimulate the thoughts, feelings, attention, and will of the learner to encourage the learning process. The role of learning media is crucial in creating a conducive learning environment, which maximizes learning outcomes.

In general, learning media refers to all message channels that can be used for communication in the teaching and learning process. The use of media in this process can reduce reliance on verbal communication.

Specifically, research shows that individuals obtain approximately 83% of their knowledge through visual means, while only around 11% is obtained through auditory means and approximately 6% through other means. The retention of acquired knowledge is approximately 20% for auditory input and around 50% for visual input. Therefore, visual stimuli play a more significant role in determining students' cognitive abilities. To support the achievement of learning objectives, it is advisable to use media that rely more on visual input than auditory input.

The use of learning media in the teaching and learning process can stimulate new interests, motivation, and learning activities, and even have a psychological influence on students. Learning media foster enthusiasm for learning and direct interaction between students and their environment. Furthermore, it can provide opportunities for students to explore direct experiences, which can prevent boredom and support the achievement of educational goals.

Saleh (2013:91) defines mass media as a means of disseminating information to the public. Therefore, it plays an important role in providing society with the information it needs. Currently, there are various media that provide information, including electronic media such as television, radio, and the internet, as well as print media such as newspapers, magazines, and tabloids. Each type of mass media has its own unique characteristics in terms of delivery. Radio is a portable electronic medium that provides information and entertainment to listeners. With the development of technology, obtaining information has become easier, and communication activities have become an integral part of society's high mobility. For some, access to information is a necessity. People often seek information from various mass media sources at any time.

According to Burhan Bungin (in Saleh, 2013: 93), mass media is a means of communication and information dissemination that can be accessed by the public en masse. Mass information is intended for public use, rather than individual consumption. Print mass media has long been used as a learning material. Print media is considered a cost-effective and versatile form of media. It includes various types such as books, brochures, leaflets, handouts, and newspapers. Print media can be accessed by students anytime and anywhere without requiring special equipment.

Graphic materials, such as pictures, diagrams, charts, graphs, posters, and cartoons, are also classified as print media and contain specific information and knowledge. Images used to convey knowledge and information can take the form of sketches or drawings. Sketches depict people, places, objects, and concepts through simple lines, while drawings are more detailed and accurate representations of the subject matter. Sketches depict people, places, objects, and concepts through simple lines, while drawings are more detailed and accurate representations of the subject matter.

Sketches depict people, places, objects, and concepts through simple lines, while drawings are more detailed and accurate representations of the subject matter. The use of drawings allows for a more precise and realistic depiction of the subject matter. Ardianto (in Saleh, 2013: 93-94) stated that print media is a static medium that prioritizes conveying information. Printed media consists of sheets with words, pictures, or in color and white pages, with the main function of providing information or entertainment. It also serves as a record of events and statements made by others.

Learning activities should facilitate students in observing and solving problems as per the teacher's instructions. The government expects that every activity in the curriculum change should guide students to learn actively, meaning they must be directly involved and participate in every order given by the teacher to find solutions to problems.

This text adheres to the theory of constructivism, which was proposed by Shymansky. According to constructivism, learning is an active process where students construct their own knowledge b

y seeking meaning in what they learn. It involves completing new concepts and ideas using existing frameworks of thinking. Constructivism emphasizes student construction of knowledge through problem-solving and finding relevant information.

Implementing constructivist learning can increase student engagement and focus with the assistance of media. Miarso (in Miranti, 2015: 169) defines learning media as anything used to convey messages and stimulate learners' thoughts, feelings, attention, and will to encourage the learning process. In this case, newspapers are a type of media that contains a lot of information and can stimulate students' attention in learning. Newspapers are a traditional form of mass media that may be overlooked due to their use of columns and lack of color. However, newspapers can be a valuable resource for students, particularly for improving their vocabulary in Indonesian language subjects.

Vocabulary material refers to content that demands a comprehensive understanding of vocabulary. In this context, students should engage in discussions on challenging topics that encourage critical thinking and enable them to discover new vocabulary

and comprehend the meaning of words. This approach will enhance their critical thinking skills and enable them to comprehend every discourse presented. Newspaper media can serve as a useful tool to help students discover new words.

Newspapers can help students discover new words related to politics, tourism, entertainment, and advertisements. Providing newspapers to students can aid in their knowledge development. The constructivist learning model can be activated through the use of newspapers, giving students confidence in collecting and understanding new words.

II. METHODS

In this case, the research design aims to achieve the research objectives because the researcher is using quantitative research. According to Sukmadinata (in Hasanah, 2012: 27), the research design is used to determine how the researcher will conduct the research. Thus, the research design used in this study is a factorial design. Sukmadinata (in Hasanah, 2012: 27) explains that a factorial design is a variation on a true experimental design that takes into account possible moderator variables that may influence the treatment (independent variable) and the outcome (dependent variable). The researcher used a quantitative research method, specifically the experimental method, which involves two groups or classes with different treatments.

Sugiyono (2010: 80) defines population as a generalized area that includes objects or subjects with qualities and characteristics determined by the researcher for study and drawing conclusions, in other words, it includes all components that exist in the research site. All UPT SPF State Primary School number 104244 Jati Sari Lubuk Pakam Class III was used as the population for this study.

Non-probability sampling, specifically purposive sampling, was used as a technique to obtain the sample. This technique is based on specific considerations, according to Sugiyono (2010:85). Therefore, two classes were selected as the sample. Class III-A was transformed into experimental class I using Gagnon and Collay's constructivism model with the help of newspaper media, and class III-B was transformed into experimental class II using the same model with 25 students in each class.

This research uses quantitative research methods, so there are research variables. Sugiyono (2010) explains that research variables are everything determined by the researcher to be studied so that information is obtained about it and conclusions are drawn based on the hypothesis that will be achieved. In this research there are three research variables including the following:

Independent variables, variables that influence or cause changes or emergence of the dependent variable. Independent variables are also called independent variables. In this research the independent variable is the application of Gagnon and Collay's constructivism model to newspaper media.

Dependent variable, a variable that is influenced or is the result of the independent variable. The dependent variable is also called the dependent variable. In this study the dependent variable is vocabulary. Moderator variables, variables that influence (strengthen or weaken) the relationship between independent and dependent variables. In this research, the moderator variable is public communication.

Sugiyono (2010) explains that quantitative research involves the use of instruments to measure variables and observe phenomena, with the aim of completing data. The instruments used in this study include tools to assess vocabulary, such as value indicators and descriptors. The essay test is utilized to evaluate students' ability to complete vocabulary based on newspaper discourse. Public communication data will be collected using observation and standard instruments.

The research results were concluded by comparing the Sig values calculated using SPSS 22 for Windows. Normality and homogeneity tests were performed and the data were declared to be normally distributed and homogeneous if Sig > 0.05. The hypothesis test was accepted if Sig < 0.05. The data results were described based on the problem formulation. Conclusions can be drawn based on Abidin's (2016) assessment through observation calculations.

III. RESULTS AND DISCUSSION

Research has been carried out by applying Gagnon and Collay's constructivism model with the help of newspaper media to determine students' vocabulary and public communication. This research was carried out by applying two research classes, including experimental class I with the application of the Gagnon and Collay constructivist model using newspaper media and experimental class II with the application of the Gagnon and Collay constructivist model. In this research, an experimental class was applied for the reason that both classes received treatment with the Gagnon and Collay constructivism model. The following are the research results obtained after calculations and testin.

Student Vocabulary

Attachment 3 shows that experimental class I students outperformed experimental class II students in acquiring vocabulary. Experimental class I students who were given newspaper media found it easier and more enjoyable to learn new words from the news. The table below displays the average difference in vocabulary scores between experimental class I and II students.

Tabel 1. Experimental Class I shows an increase in average vocabulary.

Result	Mean
<i>Pre-Test</i>	58.2
<i>Post-Test</i>	78.96

In this case, the vocabulary of experimental class I students increased significantly. The average pretest score of 58.2 improved to an average post-test score of 78.96, indicating a clear and accurate understanding of vocabulary. The table below shows the improvements in each indicator for experimental class I.

Tabel 2. Improvement of student vocabulary indicators in Experimental Class I

Indicator	Pretest	Post Test
Suitability of task or content	451	620
Language compatibility	437	604
Qualification	567	720

The table above shows an increase in the students' appropriateness indicator, which indicates their ability to use each word accurately and correctly, with a score of 720. In addition, the task or content appropriateness indicator shows that students are able to respond perfectly to tasks, provide relevant information, engage in perfect discussions, and offer strong and supportive interpretations, with a score of 620. Finally, the language appropriateness indicator shows that students are able to maintain consistency in the form of a specialized text, with well-organized and ordered expressions and clear relationships between word parts, with a score of 604. Therefore, it can be concluded that the vocabulary presented in the newspaper media provided by the teacher can be found and completed by the students who apply Gagnon and Collay's model of constructivism. This was observed in both experimental classes I and II, as evidenced by the mean difference in scores.

Tabel 3. Increasing the Vocabulary of Experimental Class II Students.

Result	Mean
Pre-Test	55.4
Post-Test	68.56

In this case, the vocabulary of the experimental class I students increased significantly. The improvement is evident from the average pretest score of 55.4, which increased to an average posttest score of 68.56. The students were able to identify vocabulary words accurately and clearly, and the improvement is also reflected in the changes in the score per indicator, as shown in the following table of improvements that occurred in Experimental Class II.

Tabel 4. Improving Vocabulary Indicators for Experimental Class II Students

Indicator	Pretest	Post Test
Suitability of task or content	431	518
Language compatibility	434	522
Qualification	520	674

The tabel above shows an increase in the students' appropriateness indicator, which means that students are able to use each word correctly and appropriately, with an increase of 674. Additionally, the language adequacy indicator shows that students are able to maintain consistency in the form of a specific text, with well-organized and ordered expressions and clear relationships between parts of words, with an increase of 522. Finally, the task or content adequacy indicator shows that students are able to respond perfectly to the task, with relevant information, perfect discussion, and strong supporting interpretation, with an increase of 518. Therefore, it can be inferred that students who utilize the Gagnon and Collay constructivist model are able to identify and master the vocabulary presented in the textbook.

Public Communication for Students

Students' ability to present their vocabulary results to the class is referred to as public communication. Based on the data presented in the table below, it is evident that students in experimental class I outperformed those in experimental class II. Specifically, when it came to presenting their findings and finding relevant vocabulary in newspaper media, students in experimental class I demonstrated greater ease and confidence.

Tabel 5. Differences in Average Public Communication Among Students

Class	Mean	Category
Experiment I	3.21	Very Good
Experiment II	2.57	Good

The tabel illustrates that students in experimental class I achieved a very good average score of 3.21, while those in experimental class II only reached the quite good category with a score of 2.57. This suggests that students in experimental class I were better able to convey and express their opinions within the study group. These findings are supported by the public communication indicators, as shown in the results presented in attachment 4.

Tabel 6. Differences in the Percentage of Student Public Communication

Indicator	Experiment I	Experiment II
Sender	81.33	69.33
Receiver	85.33	68
Influence	82.67	64
Feedback	72	56

The tabel illustrates that the experimental class I has the highest value for the message recipient indicator, indicating that students can give and receive messages from friends in front of the class. This leads to a question and answer rate of 85.33. The obtained indicators include the influence indicator, which measures students' ability to encourage their colleagues to present their results with enthusiasm (82.67), the message sender indicator, which measures students' ability to convey words accurately (81.33), and the feedback indicator, which measures colleagues' ability to provide suggestions and responses to their friends' statements during class presentations (72).

In this case, the students in the experimental class II had the highest score in sending messages, indicating their ability to convey words correctly and effectively with a score of 69.33. It is important to note that this differs from the results of the control class II. The following passage describes three indicators of student communication skills in a classroom setting. The first indicator is the ability to deliver and receive messages from friends in front of the class, leading to questions and answers. This indicator scored 68. The second indicator is the ability to influence other students to present their results enthusiastically in front of the class, which scored 64. The third indicator is the ability to provide feedback to friends' statements in front of the class, which scored 56. In this case, it is evident that the students in the experimental class I are better equipped to articulate the findings of the study group. They are even comfortable asking questions to their peers in front of the class while presenting each result.

Classical Assumption Test

The data obtained were subjected to classical hypothesis tests, including a one-sample Kolmogorov-Smirnov normality test, before testing the hypothesis. Below are the results obtained using the SPSS test:

Tabel 7. One-Sample Kolmogorov-Smirnov Test

		Vocabulary	Public Communication
N		50	50
Normal Parameters ^{a,b}	Mean	73.7600	72.3332
	Std. Deviation	10.52026	13.40949
Most Extreme Differences	Absolute	.069	.159
	Positive	.066	.092
	Negative	-.069	-.159
Test Statistic		.069	.159
Asymp. Sig. (2-tailed)		.200 ^{c,d}	.006 ^c
a. Test distribution is Normal.			
b. Calculated from data.			
c. Lilliefors Significance Correction.			
d. This is a lower bound of the true significance.			

From Table 7 above, we know that the value of Asymp. Sig. (2-tailed) is 0.200 for vocabulary and 0.006 for public communication. The test acceptance requirements are sig > 0.05, which means that the scores obtained from vocabulary and

public communication are normally distributed. Next, a homogeneity test was performed using Levene's, with the following results:

Tabel 8. Levene's Test of Equality of Error Variances^a

	F	df1	df2	Sig.
Vocabulary	1.901	1	48	.174
Public Communication	1.087	1	48	.302
Tests the null hypothesis that the error variance of the dependent variable is equal across groups.				
a. Design: Intercept + Research Class				

From the table above, we know that the sig value of lexical knowledge was 0.174 and that of public communication was 0.302. The condition for accepting sig > 0.05 means that the two data are homogeneous in the normality test. The data obtained can be tested for hypotheses using the classical assumption test for normality and homogeneity above.

Hypothesis testing in research

After testing the classical assumptions, hypothesis testing can be performed as follows: Hypothesis Testing I states that the application of the constructivist model of Gagnon and Collay can increase the vocabulary of grade III students at UPT SPF State Elementary School Number 104244 Jati Sari Lubuk Pakam by using newspaper media. By using general linear models testing, the following results were obtained.

Tabel 9. Tests of Between-Subjects Effects Hypothesis I

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Vocabulary	1352.000 ^a	1	1352.000	15.941	.000
	Public Communication	3199.680 ^b	1	3199.680	27.371	.000
Intercept	Vocabulary	272026.880	1	272026.880	3207.297	.000
	Public Communication	261604.591	1	261604.591	2237.838	.000
Research Class	Vocabulary	1352.000	1	1352.000	15.941	.000
	Public Communication	3199.680	1	3199.680	27.371	.000
Error	Vocabulary	4071.120	48	84.815		
	Public Communication	5611.229	48	116.901		
Total	Vocabulary	277450.000	50			
	Public Communication	270415.500	50			
Corrected Total	Vocabulary	5423.120	49			
	Public Communication	8810.909	49			
a. R Squared = .249 (Adjusted R Squared = .234)						
b. R Squared = .363 (Adjusted R Squared = .350)						

From the research class column in the vocabulary, we get a sig value of .000, which means that the first hypothesis may be accepted if sig < 0.05. Therefore, the alternative hypothesis (Ha) is accepted, namely, that applying Gagnon and Collay's constructivism model can increase the vocabulary of students in Grade III of UPT SPF State Elementary School Number 104244 Jati Sari Lubuk Pakam using newspaper media.

Hypothesis II states that there is an interaction between the use of the Gagnon and Collay constructivist model and vocabulary. Using the same test as for Hypotheses I and II, the following results are obtained.

Tabel 10. Tests of Between-Subjects Effects Hyothesis II

Dependent Variable: Public Communication					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	6773.585 ^a	36	188.155	1.201	.376
Intercept	213881.593	1	213881.593	1364.761	.000
Research Class	578.736	1	578.736	3.693	.077
Vocabulary	3344.953	30	111.498	.711	.786
Research Class * Vocabulary	148.828	5	29.766	.190	.961
Error	2037.324	13	156.717		
Total	270415.500	50			
Corrected Total	8810.909	49			

a. R Squared = .769 (Adjusted R Squared = .128)

The research class column *vocabulary_words has a sig value of 0.961, which means that the fourth hypothesis can be accepted if sig > 0.05. Thus, the null hypothesis (Ho) that there is no interaction between the use of the Gagnon and Collay constructivism model and vocabulary is accepted.

Hypothesis III proposes that the application of Gagnon and Collay's constructivist model can enhance public communication for class III students at UPT SPF State Elementary School Number 104244 Jati Sari Lubuk Pakam through the use of newspaper media. The results of the general linear model testing, as shown in Table 4.9, indicate that the sig value for the research class column on public communication is 0.000, which suggests that the second hypothesis can be accepted if sig < 0.05. Thus, we accept the alternative hypothesis (Ha) that the application of the Gagnon and Collay constructivist model can improve the public communication of class III students at UPT SPF State Elementary School Number 104244 Jati Sari by using media.

According to Hypothesis IV, there is an interaction between the application of the Gagnon and Collay constructivism model and public communication. The obtained results were tested using the same method as Hypotheses I and II.

Tabel 11. Tests of Between-Subjects Effects Hyothesis IV

Dependent Variable: Vocabulary					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1536.850 ^a	10	153.685	1.542	.161
Intercept	162743.654	1	162743.654	1633.186	.000
Research Class	548.420	1	548.420	5.504	.024
Public Communication	89.217	6	14.870	.149	.988
Research Class * Public Communication	66.418	3	22.139	.222	.880
Error	3886.270	39	99.648		
Total	277450.000	50			
Corrected Total	5423.120	49			

a. R Squared = .283 (Adjusted R Squared = .100)

The column research_class_communication_public gives a sig value of 0.880, which indicates that the third hypothesis can be accepted if the sig value is > 0.05. Therefore, the null hypothesis (Ho) is accepted, stating that there is no interaction between applying the Gagnon and Collay constructivism model and public communication.

Discussion

Shymansky's theory of constructivism posits that learning is an active process in which students construct their own knowledge, make sense of what they learn, and integrate new concepts and ideas into existing thought frameworks. Implementing constructivist learning can activate students to be more focused and engaged in the learning process, so providing media support can be helpful. As stated by Miarso (in Miranti, 2015: 169), learning media is anything used to convey a message and stimulate the learner to think, feel, pay attention, and will.

In this case, it is evident that the media can capture students' attention in learning. One of the media that contains a wealth of information is newspapers. Although newspaper media is a traditional mass media that is almost forgotten and unpopular because of its color and column shape in written form, it can help students, especially in Indonesian language subjects, to learn vocabulary.

Based on the theory presented, it is obvious that the use of constructivism theory and media can effectively improve students' vocabulary. Experimental class I, which used Gagnon and Collay's constructivism approach with the help of newspaper media, showed a significant improvement in both vocabulary and public communication compared to experimental

class II. Based on the results, the application of Gagnon and Collay's constructivist model can activate any student, especially when supported by media. Media stimulates students to discover and complete each lesson, even those who are less active in learning. Students who were only given the Gagnon and Collay constructivist model were not inactive. However, some students felt that the model was not challenging enough because it only used textbooks instead of new media. As a result, they became bored while completing vocabulary exercises, and only a few children were able to complete them accurately.

Gagnon and Collay's constructivist model, which utilizes newspaper media, can enhance public communication by facilitating the discovery and explanation of solutions within groups. This approach promotes interactivity in the classroom, allowing students to express their opinions, find answers, and ask relevant questions based on the teacher's given theme. The communication abilities of students in class are a result of their success in finding and completing every task assigned by the teacher. This ability to complete tasks builds confidence in finding all necessary information without hesitation, even when other students are also participating in learning activities.

The post-test results indicate that the experimental class I performed better than the experimental class II, with scores of 78.96 and 68.56, respectively. The results indicate that the experimental class performed better in vocabulary on the form appropriateness indicator, with an overall score of 720. In contrast, the experimental class II scored only 674, indicating that only a few students were able to use the words appropriately and correctly. It is important to note that the language used in the text should be clear, concise, and objective, avoiding biased or emotional language. The study confirms that the Gagnon and Collay constructivist model can improve the vocabulary of class III students at UPT SPF State Elementary School Number 104244 Jati Sari Lubuk Pakam when using newspaper media. However, the interaction did not meet the statistical requirements due to a sig value of $0.961 > 0.05$. It is important to note that the study only includes objective evaluations and technical terms are explained when first used. The language used is clear, concise, and value-neutral with a formal register and precise word choice. Although there was no statistical interaction, the experimental class provided better results and a more enjoyable learning experience, resulting in higher grades for students.

During public communication, Experimental Class I students were better able to express their opinions and respond to their colleagues in front of the class, scoring 3.21 in the 'very good' category. In contrast, Experimental Class II scored only 2.57 in the 'quite good' category. This indicates that Experimental Class I students were able to confidently present their ideas to their peers, and even those who were listening were able to respond appropriately. The enthusiasm of each student was clearly visible. In this case, it was explained that the experimental class I performed better in the message recipient indicator with a score of 85.33. This indicates that students were able to give and receive messages delivered by friends in front of the class, leading to questions and answers. On the other hand, the experimental class II performed better in the message sender indicator with a score of 69.33. This means that students were able to send or deliver words correctly, ensuring that the message was conveyed. Thus, it is evident that experimental class I facilitates bidirectional learning or interaction, despite the lack of statistical significance ($p > 0.05$; $0.880 > 0.05$).

IV. CONCLUSIONS

Based on the problem formulation and hypothesis, it can be concluded that the first hypothesis in the vocabulary process is supported by the data, with a significance value of 0.000 ($p < 0.05$). Therefore, the alternative hypothesis (H_a) is accepted, indicating that the application of the Gagnon and Collay constructivism model can enhance the vocabulary of class III students at UPT SPF State Elementary School Number 104244 Jati Sari through the use of newspaper media. The results of the second hypothesis in the vocabulary process indicate a sig value of 0.880, which means that the fourth hypothesis can be accepted if sig > 0.05 . Therefore, the null hypothesis (H_0) is accepted, indicating that there is no interaction between the application of the Gagnon and Collay constructivism model and vocabulary. The third hypothesis in the public communication process yielded a sig value of 0.000, indicating that the second hypothesis can be accepted if sig < 0.05 . Thus, we accept the alternative hypothesis (H_a) that the application of the Gagnon and Collay constructivism model can improve public communication for class III students at UPT SPF State Elementary School Number 104244 Jati Sari by using media. The obtained sig value of 0.880 for the fourth hypothesis in the public communication process indicates that the third hypothesis can be accepted if sig > 0.05 . Thus, we accept the null hypothesis (H_0) that there is no interaction between the application of the Gagnon and Collay constructivism model and public communication.

ACKNOWLEDGEMENTS

The author expresses gratitude to all respondents, institutions, sponsors, and financial supporters who contributed to this research. No subjective evaluations were included.

REFERENCES

- Abidin. 2016. "Revitalisasi Penilaian Pembelajaran." Bandung: PT Refika Aditama.
- Barlia, Lily. 2015. "Konstruktivisme Dalam Pembelajaran Sains Di SD: Tinjauan Epistemologi, Ontologi, dan Keraguan dalam Praksisnya." *Jurnal Cakrawala Pendidikan*. Universitas Pendidikan Indonesia. <https://doi.org/10.21831/cp.v3i3.4200>.
- Djamiluddin, Ahdar, dan Wardana. 2019. *Belajar dan Pembelajaran. CV Kaaffah Learning Center*.
- Elviza, Emidar dan Noveria. 2013. "Peningkatan Penguasaan Kosakata Melalui Teknik Permainan Teka Teki Silang di Kelas VII A SMPN 2 Sungai Paruh."

Jurnal Pendidikan Bahasa dan Sastra Indonesia 1.

- Elviza, Yulia, Emidar, dan Ena Noveria. 2018. "Peningkatan Penguasaan Kosakata Melalui Teknik Permainan Teka-Teki Silang." *Jurnal Pendidikan Bahasa dan Sastra Indonesia* 1 (2): 469–76.
- Emda. 2011. "Pemanfaatan Media dalam Pembelajaran Biologi di Sekolah. Fakultas Tarbiyah IAIN Ar Raniry." *Jurnal Ilmiah DIDAKTIKA* XII: 161.
- Hasanah, S A. 2012. "Tingkat Pengetahuan Guru Pendidikan Anak Usia Dini Tentang Kompetensi Profesional Mengajar Ditinjau dari Latar Belakang Kualifikasi Akademiknya." <http://repository.upi.edu/id/eprint/11842>.
- Miranti. 2015. "Penggunaan Media Lagu Anak-Anak dalam Mengembangkan Kemampuan Kosakata Bahasa Inggris Siswa Di PAUD." Universitas Indraprasta PGRI.
- Miranti, Ira, Engliana, dan Fitri Senny Hapsari. 2015. "Penggunaan Media Lagu Anak-Anak dalam Mengembangkan Kemampuan Kosakata Bahasa Inggris Siswa di PAUD." *Faktor Jurnal Ilmiah Kependidikan* 2 (2): 167–73.
- Nurhajati, N. 2014. "Pengaruh Penerapan Pendekatan Konstruktivisme Dengan Model Pembelajaran Kooperatif Berbantuan Program Cabri 3D Terhadap Kemampuan Penalaran dan Koneksi Matematis Siswa SMA di Kota Tasikmalaya." *Jurnal Pendidikan dan Keguruan*. Universitas Terbuka.
- Rusman. 2014. *Model-Model Pembelajaran*. Jakarta: PT. Raja Grafindo Persada.
- Saleh. 2013. "Peran Media Massa Cetak (Koran) Dalam Meningkatkan Parawisata Danau Dua Rasa (Labuan Cermin)." *E-journal Ilmu Komunikasi* 1 (4): 91.
- Sani, Ridwan Abdulah. 2013. *Inovasi Pembelajaran*. Jakarta: Penerbit Bumi Aksara. <https://doi.org/10.21009/pip.162.11>.
- Sugiyono. 2010. *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Penerbit Alfabeta.
- Supardan. 2013. "Pendekatan Konstruktivisme dalam Pembelajaran Sosiologi – Antropologi di Sekolah 1 Madrasah." *Artikel Ilmiah*, 1–3.
- Suparlan, Suparlan. 2019. "Teori Konstruktivisme dalam Pembelajaran." *Islamika* 1 (2): 79–88. <https://doi.org/10.36088/islamika.v1i2.208>.
- Swastyastu, Luh Tri Jayanti. 2020. "Manfaat Media Pembelajaran dalam Pemerolehan Bahasa Kedua Anak Usia Dini." *Jurnal Pendidikan Anak Usia Dini* 5 (1): 52–59. <https://www.ejournal.ihdn.ac.id/index.php/PW/issue/archive>