

The Implementation of 3-N (*Niteni, Nirokke, Nambahi*) Teaching Strategies Concept to Improve Students' Speaking Skill

Asnawi Muslem*, Nur Mulia Nanda & Nira Erdiana

Departement of English Education, Universitas Syiah Kuala, Indonesia

*Corresponding email: drasnawi@usk.ac.id

Received: 25 April 2024

Accepted: 29 May 2024

Published: 18 July 2024

Abstract: The Implementation of 3-N (*Niteni, Nirokke, Nambahi*) Teaching Strategies Concept to Improve Students' Speaking Skill. Objectives: This study is intended to determine if using the 3-N teaching strategies significantly improves students' speaking skills. **Methods:** A pre-experimental design is used to collect data from the same group of participants before and after the implementation of an intervention. This design is often used to evaluate the effectiveness of an intervention over a limited time. A pre-experimental design makes it necessary to collect data from participants before administering the intervention, administer the intervention, and collect data after the intervention to observe changes and effects. The researcher conducted treatment for students, the treatment was performed five times, including the pre-test and post-test. **Findings:** The treatment succeeded in improving students', both with low and high initial understanding. The use of the 3-N teaching concept is effective in improving students' speaking skills, especially in the vocabulary aspect. **Conclusion:** The use of 3-N provides benefits to students, they can get the opportunity to listen and imitate before they create their work. It can also add to the student's creativity because they can also modify and add to what they have learned.

Keywords: niteni, nirokke, nambahi, vocabulary, speaking skill.

To cite this article:

Muslem, A., Nanda, N. M., & Erdiana, N. (2024). The Implementation of 3-N (*Niteni, Nirokke, Nambahi*) Teaching Strategies Concept to Improve Students' Speaking Skill. *Jurnal Pendidikan Progresif*, 14(1), 742-750. doi: 10.23960/jpp.v14.i2.202454.

■ INTRODUCTION

Various methods have been used to master English among learners. However, the student's ability to speak English is still insufficient (Safitri, 2015; Songbatumis, 2017; Muslem, Zulfikar, Ibrahim, Syamaun, Saiful, & Usman, 2019; Rahmah & Sodik, 2021). As a global language, English has an essential function and role (McKay, 2004; Guilherme, 2007; Xiaohong, & Zeegers, 2010). By speaking English, we can easily access and get information because most of the information is written in English (Hincks, 2010). English functions as the language of

science, technology, and trade (Coxhead, Parkinson, Mackay, & McLaughlin, 2019). The widespread use of English in science, technology and business is due to its role as a common unifying language that facilitates communication, cooperation and the dissemination of information across cultures and countries. It helps promote global innovation, economic growth and scientific development. Crystal (2003) said that English is the language to be spoken worldwide as a first, second, or foreign language. Caine (2008) said that a language can become an international language for geographical, historical, social, and

cultural reasons. The ability to speak English becomes a determining factor, not only when applying for a job but also for education; good English skills are a determinant of whether someone will pass or not in the selection to enter college (Dincer, & Yesilyurt, 2017). For job seekers, English proficiency enhances employability and career growth, while for students, it is often a prerequisite for college admission and academic achievement. Consequently, investing in English language skills can significantly impact one's professional and educational prospects. Primarily, EFL students only use English in their teaching and learning activities; moreover, in the English 2 classes in junior high school, students do not necessarily fully use English as a medium of interaction in the classroom (Putri, Artini, & Nitiasih, 2017). This makes it difficult for students to speak English because there is no English interaction outside or in the classroom. The teachers should introduce some group and pair activities in their regular English classrooms so that the ELLs can develop their speaking skills enormously (Rao, 2019). Everyone is aware of the importance of being able to speak English. Having the ability to speak English will make it easier for someone to communicate, and can also help someone in carrying out education and getting a job. However, being able to use English well is not easy.

According to the results of a survey conducted by PISA (Programme for International Students Assessment) in 2018, only 10% of Indonesian students can speak English well, while the remaining 90% still have difficulties, especially in terms of minimal vocabulary. For this reason, the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) issued a new policy on English language learning in 2023, namely by increasing these lessons from 4 hours to 6 hours per week. The policy is expected to be the first step to improving students' speaking

skills. However, it is still the case that this has not been achieved as expected, and there are still many students who have not been able to master English well, especially in speaking skills. Based on the facts mentioned previously, the authors are interested in providing one of the appropriate strategies to learn English through old Javanese strategies called Niteni, Nirokke, and Nambahi. This teaching strategy offered by Tamansiswa, which was initiated by Ki Hadjar Dewantara, is the 3-N teaching concept (Niteni, Nirokke, Nambahi). According to Wijayanto (2019), Niteni comes from the root word "titen" which means the ability to observe, recognize and capture the meaning of an object. Niteni means the process of searching and finding the meaning (nature, characteristics, procedures, truth) of an object observed through the sensory organs. Nirokke can be understood as imitating and following. Nambahi means adding meaning to develop (innovate/add value). The concept of 3-N is still relevant in the 21st century. Most activities have three stages: observation, imitation, and modification. This is supported by research conducted by Widyawati, Setyawan, & Kuncoro, (2019) which states that the relevance of the 3-N concept can be elaborated into the concept of Niteni. Niteni means carrying out activities based on previous research results. Nirokke involves comparing current activities or research to previous ones. Nambahi involves discovering novelty in the research conducted. By using these concepts, students can be brought into the 21st century.

The Niteni, Nirokke, and Nambahi learning approaches are learning methods based on traditional Javanese concepts that include observation, imitation, and further development (Damayanti, & Rochmiyati, 2019). Concept: Niteni is the first step in which students observe or pay attention to a process or phenomenon carefully. Social Learning Theory, Albert Bandura: (Rumjaun, & Narod, 2020) emphasizes the

importance of learning through observation. Bandura stated that individuals can learn by observing the behavior of others, especially models or figures they imitate. Constructivist Theory, Jean Piaget: (Waite-Stupiansky, 2022) emphasizes that learning is an active process in which individuals build knowledge based on interactions with the environment and observation. Concept: Nirokke is the second step where students try to imitate or imitate what they have observed. This process helps students understand and internalize the skills or knowledge observed. Supporting Theories: Social Learning Theory (Albert Bandura): Apart from observation, Bandura also emphasized the imitation process as an important step in learning. Through imitation, individuals can practice and reinforce what they have learned from observation. Behaviorism Theory, B.F. Skinner: emphasizes that behavior can be learned through repetition and reinforcement. In the context of imitation, students repeat actions they observe and receive feedback that reinforces the behavior (Vargas, 2017; Ermawati, & Rochmiyati, 2020). Concept: Nambahi is the third step where students develop or add to what they have observed and imitated with innovation or modification. It involves critical thinking and creativity. Supporting Theories: Constructivist Theory (Lev Vygotsky): Vygotsky emphasized the importance of social interaction and support (scaffolding) in learning (Vygotsky, & Cole, 2018; Devi, 2019). The process of adding includes further development of what is learned through collaboration and assistance from teachers or peers (Nguyen, & Ng, 2020). Experiential Learning Theory (David Kolb): emphasizes that learning is a cyclical process involving concrete experience, reflection, conceptualization, and active experimentation. Nambahi reflects the active experimentation stage in which students apply and modify the knowledge gained (Baker, Robinson, & Kolb, 2012; Kolb,

2013; Kolb, Boyatzis, & Mainemelis, 2014; Oya, & Haryanto, 2022).

The results showed that in these genres the process of *niteni*, *nirokke*, and *nambahi* always appeared (Rochmiyati, & Putro, 2020). The *niteni*, *nirokke*, *nambahi* approach effectively bridges observation, imitation, and innovation, making it applicable across diverse genres and fields. This structured yet flexible method promotes a deep understanding of the subject matter while encouraging creativity and critical thinking. By integrating these steps, learners and professionals can achieve a comprehensive and dynamic learning experience, ultimately leading to mastery and innovation in their respective domains. Further research was conducted by Budiati et al. (2018) who implemented 3-N (*Niteni-Nirokke-Nambahi*) to increase students' motivation in Math. The result of this research says that learning models are very important in influencing student motivation. Especially math lessons which are considered difficult by most students. 5 With the 3-N teaching concept students may observe the object of the lesson, imitate what they have understood, and perfect it with their creativity. As has been mentioned, this study is trying to investigate whether the application of the 3-N teaching concept (*Niteni*, *Nirokke*, *Nambahi*) is effective in improving the students speaking skills of SMP students 17 Banda Aceh.

■ METHOD

Participants

The population of the study was all first-grade students of Junior High School 17 Banda Aceh. There are nine classes in first grade with a total of 276 students. From these classes, the sample of the study was students in class VII. The sample was taken using a purposive sampling technique due to the authors wanted to give treatment only in that class. This class of students

was less competent compared to other classes. The sample of this study consisted of 28 students.

Research Design and Procedures

This study used a quantitative approach in nature. A pre-experimental design was used in this study. This research design offers some insights into the relationship between variables, but they lack the rigour and control of true experimental designs. This study investigated the effectiveness of using 3-N in improving students' speaking skills. A group of students that consisted of 28 was engaged in the study. One-group pretest-posttest design was used. Before giving treatment, a pretest was given. In the pretest, students were asked to introduce themselves one by one. After giving a pretest, the treatment was started. The treatment was given three times using 3-N; *Niteni, Nirokke, and Nambahi*. For clarity, the following presented procedures; The authors presented a video on self-introduction. The students were asked to watch and observe the video three times repeatedly until they understood. This was a *niteni* process. Then, students were asked to do as they had seen the model of self-introduction from the video. This was a step of *Nirokke*. In this case, students imitated what they had seen previously and started introducing themselves one by one until all students completed it. They conducted this activity in the class with their classmates and teachers observed the process. The last step was *Nambahi*. In this case, students were asked again to watch another model of self-introduction from the video. After that, they started introducing themselves to their peers and hobbies. In this phase, students undertake something different from the first self-introduction. They added another point related to self-introducing. These activities were done for the next meetings until the treatment was accomplished.

After completing the treatment, a post-test was given to see if the students improved.

Students were asked to speak in English to introduce themselves. They were recorded to ease authors gave marks. The recording was played and started giving marks objectively based on the students' performances. Lastly, the authors compared the pretest and post-test scores to assess any improvement in speaking. Of course, this pre-experiment had limitations. It was a lack of control group. It is difficult to rule out alternative explanations for observed changes. It was also vulnerable to threats to internal validity. Findings from pre-experimental designs may have limited generalizability due to the non-random selection of participants. However, the pre-experimental design was useful for initial explorations and pilot studies but should be followed by more rigorous experimental designs for conclusive evidence.

Research Instruments

A speaking test on introducing oneself was used in this study. This test was based on common points and consisted of self-introduction; name, age, hobbies, goals, and other relevant things in self-introduction. The assessment was focused on the vocabulary in students' speaking skills.

Data Analysis

The data collected were analysed statistically using SPSS. Using SPSS to analyze the data pre-test and post-test scores with a T-test is a solid approach to determine if there was a statistically significant difference in the scores before and after intervention. Using SPSS for this analysis provided a robust method for understanding the impact of the intervention and helped to ensure the reliability and validity of the results.

■ RESULT AND DISCUSSION

Based on the data analyses, it reported that the following results of the study as shown in the following figure and followed by the discussion.

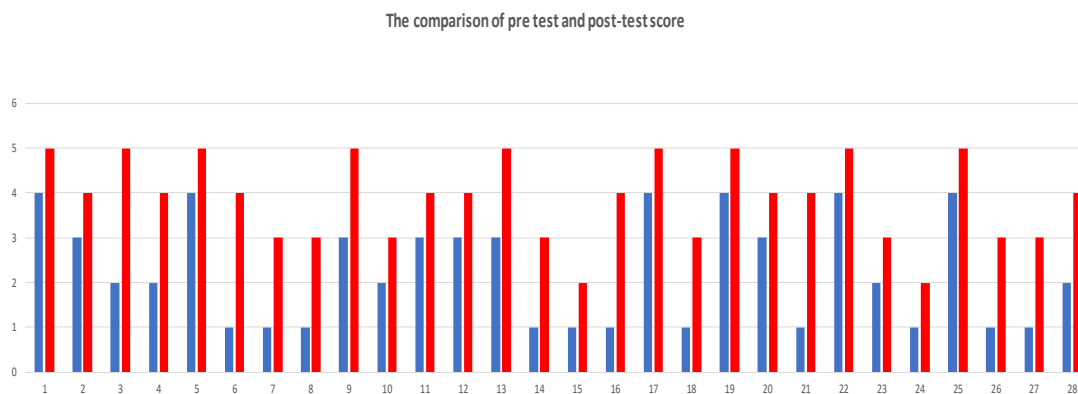


Figure 1. The result of students' pre-test score

In the figure 1 above shows a comparison of the pre-test and post-test scores of 28 students. The pre-test score is the score that the students had before they received the treatment, while the post-test score is the score that the students had after they received the treatment. From the figure above, we can see that the average pre-test score is 2. This means that the students generally have a reasonably good understanding of the material before they receive the treatment. Meanwhile, the average post-test score is 4.5. This means that the students' understanding of the material has increased after the treatment. A significant increase in scores can be seen for students with low pre-test scores. For example, students with a pre-test score of 2 increased to 3 after receiving the treatment. This shows that the treatment given was successful in improving the students' understanding, even for 37 those who started with a low level of understanding. The increase in score can also be seen in students with high post-test scores. For example, students with a pre-test score of 2 increased to 4 or 5 after the treatment. This shows that the treatment was successful in improving the students' understanding.

The highest score on the pre-test was 4, and the lowest was 1. A total of 11 students scored 1 on the pre-test, and then 5 students scored 2 on the pre-test. Meanwhile, 6 students

scored 3 and the rest scored 4 on the pre-test. Furthermore, in the post-test, the highest score was 5, achieved by 9 students, as well as by students who got a score of 4. There were 8 students who got a score of 3 in the pre-test and 2 in the post-test. The preliminary conclusion is that there is a similarity in the average between the pre-test and post-test results, which means that there is an effect of this 3- N learning concept on improving the students' speaking ability, especially in the vocabulary aspect. Overall, the graph shows that the treatment was successful in improving the students' understanding of the material. The increase in students' understanding was seen in all students, both those with low initial understanding and those with high initial understanding.

The results of the t-test (significance test) for the independent sample test, to determine the significant difference between the students' pretest and post-test results. and it can be concluded that there is a significant difference between the students' pre-test and post-test scores. Derived from the 95% confidence interval, the difference in scores between the students' pre-test and post-test is in the range of 1.35940 to 19.2632. In other words, it can be concluded that the average post-test score is at least 1.35940 points higher than the average pre-test score. In addition, this t-test is also to test

whether the hypothesis is true or false. According to Widarjono (2015) The t-test is used to determine whether each independent variable affects the dependent variable. The researcher must decide whether to use one-sided or two-sided testing. More specifically, the mean pre-test score was 1.64286 with a standard deviation of 7.3102. Meanwhile, the mean post-test score was 11.892 with a standard deviation of .13815. The difference in scores between the two groups was 10.25, with a standard error of .13815. The sig. (2-tailed) to show that whether there is an influence or significant difference in each sample with the conditions below

- If the significance value (2-tailed) t test < 0.05 then H_0 is rejected and H_a is accepted. Which means there is a significant difference between the pre- test and post-test learning outcomes, which means the implementation of the 3-N (*Niteni, Nirokke, Nambahi*) as the teaching concept significantly improve students' speaking skills. - If the significance value (2-tailed) of the t -test > 0.05 then H_0 is accepted and H_a is rejected. Which shows that the implementation of the 3-N (*Niteni, Nirokke, Nambahi*) as the teaching concept cannot significantly improve students' speaking skills.

Through *Niteni* students become more fluent by practicing conversations or conversations in pairs or groups. In such activities, students can take turns talking about a specific topic, ask and answer questions, or act out different scenarios, and also practicing introducing oneself based the model being watched. Through regular practice, students can improve their speaking skills by gaining confidence, fluency, and vocabulary (Hussin, Gani, & Muslem, 2020). By doing *Nirokke*: This can be a technique to improve pronunciation and intonation. This may include exercises such as repeating phrases or sentences after a model, focusing on imitating their tone, accent and rhythm. By listening carefully and imitating native speakers, students can hone their

pronunciation and develop a more natural speaking style. And lastly, *Nambahi*: This can be about expanding vocabulary and improving speaking skills through activities that involve adding detail, examples or elaboration to one's speech. Students can practice describing objects, events or experiences in greater detail, using adjectives, adverbs and descriptive language to enrich their communication. This can help students become more expressive and enunciate their words more clearly. Integrating these techniques into language learning activities can provide students with opportunities to practice and improve their speaking skills in a supportive and engaging environment. Additionally, providing feedback and corrections when needed can help students identify areas for improvement and continue to progress in their language skills.

These teaching strategies are therefore relevant to students in their learning process (Sutarsyah, Kumaravadivelu, & Wahyudi, 2018; Liu, Han, Ma, Zhang, Yang, Tian, & Ge, 2023; Windriani, Jaya, & Prasrihamni, 2023). Not only that, the age of the child also determines the acquisition that he hears and imitates, the more active and younger the child is, the easier he will remember what he heard and he also imitates it. However, in contrast to older children, they will not only listen and imitate, but they will also modify and develop what they have heard and seen (Caldwell-Harris, et al., 2023). The research that has been conducted by the researcher took 2 months, with dates that have been listed in each pre-test, treatment, and post-test showing that there are significant differences. This means that the treatment given has a significant effect. There are differences, the author uses the same teaching concept, namely 3-N, which is applied to English language learning to improve students' speaking skills. The results are positive, so the research above has supported the results of the application of this method that has been applied by researchers, where the 3-N teaching concept is

suitable and can be applied in learning. There is significance or influence in the treatment of this 3-N concept. Where the H_0 testing hypothesis is rejected and H_a is accepted, which means that there is a significant influence on students' pre-test and post-test scores that increase after being given treatment. 3-N can also be attributed to the theory of the mirror neuron system (Hamilton, 2013; Nisa, Prasetyo, & Istiningsih, 2019). This theory focuses on specialised neurons in the brain that are activated when observing the actions of others. Mimicry; When learners watch others speak, their mirror neurons activate as if they were performing the act of speaking themselves (Amalia Mashlulah, & Fernandez, 2017; Poverbio & Zani, 2023). This helps learners to imitate and learn the muscle movements needed to produce speech sounds, and the results obtained by the students above are not far from this theory to improve their speaking skills.

■ CONCLUSION

The study concluded that the use of Niteni, Nirokke, and Nambahi (3-N) strategies improved students speaking skills. The increase in students' understanding was seen in all students, both those with low and high initial understanding. The application of 3-N in English-speaking learning can be one of the effective ways to improve students' speaking skills. This method can help students understand the learning materials better, improve their speaking skills, express themselves in English, and develop their creativity. In learning, the use of 3-N should be done following the sequence, starting with Niteni which means observing, Nirokke which means imitating, and Nambahi, adding to the effectiveness and smoothness of the stages of learning that students will go through. Therefore, the implementation of 3-N is very important for learning to speak English. It can help students understand the learning materials better, improve their English speaking skills, express themselves in English, and develop their creativity.

■ REFERENCES

- Amalia I. F., Mashlulah, M. I., & Fernandez, M. F. (2017, May). *Pengaruh metode pembelajaran 3N (Niteni, Nirokke, Nambahi) terhadap keterampilan menulis puisi pada mata pelajaran bahasa Indonesia siswa sekolah dasar*. In *Seminar Nasional Teknologi Pembelajaran dan Pendidikan Dasar 2017* (pp. 304-309).
- Baker, M. A., Robinson, J. S., & Kolb, D. A. (2012). Aligning Kolb's experiential learning theory with a comprehensive agricultural education model. *Journal of Agricultural Education*, 53(4), 1-16.
- Budiati, N., Purnami, A. S., & Agustito, D. (2018). *Penerapan konsep 3N (Niteni, Nirokke, Nambahi) dalam pembelajaran matematika*.
- Caine, T. M. (2008). Do you speak global: The spread of English and the implications for English language teaching. *Canadian Journal for New Scholars in Education/Revue canadienne des jeunes chercheurs et chercheurs en éducation*, 1(1).
- Caldwell-Harris, C. L., & MacWhinney, B. (2023). Age effects in second language acquisition: Expanding the emergentist account. *Brain and language*, 241, 105269.
- Crystal, D. (2003). *English as a global language*. Cambridge university press.
- Coxhead, A., Parkinson, J., Mackay, J., & McLaughlin, E. (2019). *English for vocational purposes: Language use in trades education*. Routledge.
- Damayanti, S., & Rochmiyati, S. (2019). *Telaah penerapan 3-n (Niteni, Nirokke, Nambahi) pada buku bahasa indonesiakelas ix smp*. *Jurnal Muara Pendidikan*, 4(2), 388-397.
- Devi, K. S. (2019). Constructivist approach to learning based on the concepts of Jean Piaget and lev Vygotsky. the NCERT and no matter may be reproduced in any form

- without the prior permission of the NCERT, 44(4), 5-19.
- Dincer, A., & Yesilyurt, S. (2017). Motivation to speak english: a self-determination theory perspective. *PASAA: Journal of Language Teaching and Learning in Thailand*, 53, 1-25.
- Ermawati, E., & Rochmiyati, S. (2020). *Implementasi 3-N (Niteni-Nirokke-Nambahi) dan Ppk (penguatan pendidikan karakter) pada perangkat pembelajaran teks deskripsi kelas VII di SMP*. *Jurnal Pendidikan Bahasa dan Sastra Indonesia*, 9(1), 8-13.
- Guilherme, M. (2007). English as a global language and education for cosmopolitan citizenship. *Language and Intercultural communication*, 7(1), 72-90.
- Hamilton, A. F. D. C. (2013). Reflecting on the mirror neuron system in autism: a systematic review of current theories. *Developmental cognitive neuroscience*, 3, 91-105.
- Hussin, R. A., Gani, S. A., & Muslem, A. (2020). *The use of YouTube media through group discussion in teaching speaking*. *English Education Journal*, 11(1), 19-33.
- Hamilton, C. (2013). *Earthmasters: the dawn of the age of climate engineering*. Yale University Press.
- Hincks, R. (2010). Speaking rate and information content in English lingua franca oral presentations. *English for specific purposes*, 29(1), 4-18.
- Kemendikbudristek. (2023). *Pembelajaran bahasa Inggris di sekolah ditingkatkan menjadi 6 jam per minggu. [Siaran Pers]*. Kemendikbudristek.
- Kolb, D. A., Boyatzis, R. E., & Mainemelis, C. (2014). Experiential learning theory: Previous research and new directions. In *Perspectives on thinking, learning, and cognitive styles* (pp. 227-247). Routledge.
- Kolb, D. A. (2013). The process of experiential learning. In *Culture and processes of adult learning* (pp. 138-156). Routledge.
- Liu, Y., Han, T., Ma, S., Zhang, J., Yang, Y., Tian, J., ... & Ge, B. (2023). Summary of chatgpt-related research and perspective towards the future of large language models. *Meta-Radiology*, 100017.
- McKay, S. L. (2004). Teaching English as an international language: The role of culture in Asian contexts. *Journal of Asia TEFL*, 1(1).
- Muslem, A., Zulfikar, T., Ibrahim, I. H., Syamaun, A., Saiful, & Usman, B. (2019). *The Impact of Immersive Strategy with English Video Clips on Efl Speaking Performance: An Empirical Study at Senior High School*. *Teaching English with Technology*, 19(4), 90-103.
- Nisa, A. F., Prasetyo, Z. K., & Istiningsih, I. (2019). *3 N (Niteni, Niroake, Nambahake) dalam mengembangkan kreativitas siswa sekolah dasar*. 11(2), 101-116.
- Nguyen, D., & Ng, D. (2020). Teacher collaboration for change: Sharing, improving, and spreading. *Professional Development in Education*, 46(4), 638-651.
- OECD. (2019). *PISA 2018 Indonesia Country Note*: OECD Publishing.
- Oya, A. O., & Haryanto, L. (2022). *Penerapan video recording task untuk meningkatkan speaking skill bahasa inggris mahasiswa Pgsd STKIP Harapan Bima*. *Jurnal Ilmiah Mandala Education*, 8(4).
- Proverbio, A., & Zani, A. (2023). Mirror neurons in action: erps and neuroimaging evidence. *Social and Affective Neuroscience of Everyday Human Interaction*, 65-84.
- Putri, N. L. P. N. S., Artini, L. P., & Nitiasih, P. K. (2017). Project-based learning

- activities and EFL students' productive skills in English. *Journal of Language Teaching and Research*, 8(6), 1147-1155.
- Rahmah, A., & Sodiq, S. (2021). *Identifikasi faktor penyebab kesulitan belajar keterampilan berbicara kelas VII-C SMP Negeri 15 Gresik Dan Solusinya*. *Jurnal Bapala*, 8(06).
- Rao, P. S. (2019). The importance of speaking skills in English classrooms. *Alford Council of International English & Literature Journal (ACIELJ)*, 2(2), 6-18.
- Rochmiyati, S., & Putro, D. B. W. (2020). The application of Tri-N in genre-based Indonesian textbook for junior high school. *Tamansiswa International Journal in Education and Science (TIJES)*, 1(2), 9-15.
- Rumjaun, A., & Narod, F. (2020). Social Learning Theory—Albert Bandura. *Science education in theory and practice: An introductory guide to learning theory*, 85-99.
- Sutarsyah, C., Kumaravadivelu, B., & Wahyudi, R. (2018). *The Application of the 3-N method to teach speaking*. *International Journal of Language Education and Culture Review*, 4(2), 69-80.
- Vargas, E. A. (2017). BF Skinner's theory of behavior. *European Journal of Behavior Analysis*, 18(1), 2-38.
- Vygotsky, L., & Cole, M. (2018). *Lev Vygotsky: Learning and social constructivism. Learning Theories for Early Years Practice*. UK: SAGE Publications Inc, 68-73.
- Xiaohong, Z., & Zeegers, M. (2010). Redefining the role of english as a foreign language in the curriculum in the global context. *Changing English*, 17(2), 177-187.
- Widarjono, A. (2015). *Ekonomie3ka: teori dan aplikasi*. Edisi 4. BPFE.
- Windriani, N., Jaya, A., & Prasrihamni, M. (2023). *Pengaruh metode pembelajaran 3n (Niteni, Nirokke, Nambahi) terhadap keterampilan menulis puisi pada pembelajaran bahasa indonesia siswa sd*. *Pendas: jurnal ilmiah pendidikan dasar*, 8(2), 1139-1150.
- Waite-Stupiansky, S. (2022). Jean Piaget's constructivist theory of learning. In *Theories of early childhood education* (pp. 3-18). Routledge
- Widyawati, A., Setyawan, N., & Kuncoro, K. S. (2019). The design of e-book natural science practicum guide based tri-n (niteni, nirokke, nambahi). *Jurnal Ilmiah Pendidikan Fisika*, 6(2), 46-57.
- Wijayanto, Z. (2019). Implementation of 3N (Niteni, Nirokke, Nambahi) in stimulating critical thinking ability. *Proceeding: Intercultural Collaboration Indonesia "Malaysia" Implementation of Tamansiswa Philosophy*, 146-157.