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The Effect of Using the Pop Up Book "Exotic Insects"

on the Vocabulary Skills of Children Aged 5-6 Years

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ABSTRACT

This study aims to describe: Implementation of the Entrepreneur Kids Program with Gresik Traditional Snacks (Pudak) to Develop Social Emotional Skills in Early Childhood. This type of research is qualitative research with a descriptive method. Data sources come from primary data, which is data received directly by researchers and secondary data is complementary or supporting data related to the research. Data collection techniques are observation, interviews, documentation. Data analysis techniques are data collection, data reduction, data presentation, and drawing conclusions. Data validity testing uses triangulation of sources, techniques and time. The results of this study indicate that entrepreneur kids activities with traditional snacks to develop social emotions in early childhood can increase insight into Gresik local culture, one of which is introducing pudak, as well as gaining experience in learning how to make pudak and developing social emotions in children, especially being able to be responsible for completing activities from start to finish.

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Introduction

Language ability is one of the essential aspects in the growth and development process of early childhood. Language functions as the primary means for children to convey ideas, emotions, and establish social relationships with those around them (Paujiah, 2022). In this process of language development, vocabulary mastery plays a crucial role as the foundation of language skills that will later influence children's communication abilities in the future (Iswara, 2024).

In today's modern era, challenges in children's language development are becoming increasingly complex. The rapid advancement of technology and changing patterns of social interaction have had a significant impact on early childhood language learning. This phenomenon demands innovation in learning methods that are not only effective but also engaging and suited to the characteristics of early childhood learning, which tends to be concrete and interactive (Setiadi, 2024).

Vocabulary learning for young children requires strategies that are aligned with their developmental stage, particularly since they are still in the preoperational cognitive phase. Even from the prenatal stage, children are introduced to language through one-way communication initiated by parents, which can even be responded to by the fetus through certain movements. After birth, children begin to show interest in sounds or speech and respond with joyful expressions to the voices they hear. Therefore, at this age, children need concrete, enjoyable

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learning media that can simultaneously stimulate multiple senses. The choice of appropriate learning media is crucial for the successful stimulation and development of vocabulary from an early age (Novitasari, 2020).

Innovative learning media that involve active interaction, such as pop-up books, have proven effective in increasing children's interest and learning motivation. Pop-up books are designed with movable elements or three-dimensional displays, presenting stories in a more lively and engaging manner. These books feature illustrations that pop up or change shape when opened, often enhanced with textures resembling real objects, as well as interactive components that children can manipulate (Rosyadi, 2024).

One of the main strengths of pop-up books as learning media lies in their ability to present content interactively and non-traditionally. Each page contains a surprise element that appears when opened, sparking curiosity and increasing children's interest in the story. This characteristic aligns well with early childhood learning principles that emphasize learning through play, providing joyful and meaningful learning experiences (Faradila, 2023). Based on observations and interviews with teachers at TK Pertiwi Petak, it was found that teachers faced challenges in introducing vocabulary to children. Teachers revealed that children's responses to language learning were relatively low.

During classroom observations, the researchers found that teachers

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only used regular picture storybooks as supplementary media in language learning. Furthermore, the methods applied were limited to writing words on the board and asking children to read them together, without consistency or routine. This highlights the need for more engaging media to support the process of language learning, particularly in introducing new vocabulary. To address this condition, the researchers selected the pop-up book entitled "Exotic Insects" as suitable for children aged 5-6 years. This book not only provides attractive three-dimensional visuals but also encourages imagination, aids understanding through supportive illustrations, and trains fine motor skills as children turn each page. The surprise elements on each page also help children stay focused and motivated during learning activities. With this potential, the use of this medium is expected to serve as a new alternative in kindergarten learning while also measuring children's vocabulary skills before and after using the "Exotic *Insects"* pop-up book.

Previous research has confirmed that pop-up books are effective learning tools. Several studies demonstrate that their use not only enhances children's cognitive aspects but also contributes positively to their learning motivation. The three-dimensional visual presentation in pop-up books helps children grasp concepts and remember new vocabulary more effectively compared to traditional learning media (Karumpa, 2022; Nurhidayah, 2023; & Serliana, 2024). In relation to vocabulary learning, pop-up books provide distinct advantages. The

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moving three-dimensional images offer a concrete visualization of the words being learned, enabling children to directly connect vocabulary with meaning in a more engaging and comprehensible manner. This fosters deeper understanding while enhancing memory retention of new vocabulary (Serliana, 2024).

The selection of themes, visual design, and content in pop-up books must take into account child development aspects and targeted learning objectives. Learning approaches that emphasize creativity, exploration, and children's freedom in play have been proven to stimulate language development more effectively. For instance, research by Istim et al. (2022) found that loose-part media, which are open-ended and flexible, encourage children to express their ideas verbally while exploring, thereby supporting vocabulary development in a natural and enjoyable context.

A study by Diniyati (2023) demonstrated that the use of pop-up books improved vocabulary mastery in Arabic language learning among students. The findings showed that this medium provided more effective stimulation in helping learners grasp new concepts and terms. Similarly, Wahyuni, as cited in Wathan (2022), concluded that developing pop-up books as learning media for Indonesian cultural diversity material had a positive impact on students' learning outcomes, with very high media validity. These findings reinforce the argument that pop-up books are flexible learning media applicable across various subject areas to enhance vocabulary mastery.

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Furthermore, research conducted by Simbolon and Fajriah et al. (2022) supports earlier findings, stating that pop-up books significantly improve student learning outcomes. Their results indicate that pop-up books can be an effective alternative for motivating and improving student achievement. The effectiveness of pop-up books is also evident in their ability to increase active participation during the learning process. According to Fajriah et al. (2022), this medium creates a more engaging and interactive learning environment, motivating students to participate optimally.

Vocabulary development in early childhood plays a vital role not only in supporting current communication skills but also in significantly influencing future academic achievement. Studies show that children with broader vocabularies tend to demonstrate stronger reading skills and higher academic performance in later education. Thus, designing effective learning strategies to support vocabulary development is essential, one of which is utilizing learning media such as pop-up books. The use of such media must be carefully planned and adapted to children's developmental characteristics—theme selection, visual elements, and content must align with the intended learning objectives.

In this context, several studies have examined the effectiveness of visual-based storytelling media, such as flannel board story sequences, which were found to increase children's active participation in learning activities (Jannah & Setyowati, 2014). Likewise, media such as big books

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and educational games like puzzles have proven both enjoyable and effective in supporting language development. Puzzle activities encourage interaction, questioning, and verbal expression, all of which reinforce expressive language abilities. Such activities also involve analytical thinking and simple reasoning, indirectly contributing to the development of language foundations as gateways to other types of knowledge. This helps children build early literacy skills, including listening, speaking, reading, and writing, which are essential for future education. Visual and interactive media also encourage children to listen attentively and retell information orally, creating enjoyable and meaningful learning experiences.

Introducing the concept of insects through the "Exotic Insects" popup book offers an interesting and effective way to enhance children's vocabulary. There are several reasons why the exotic insect theme was chosen for this study, namely children's visual engagement and imagination. Exotic insects often feature unique forms, colors, and characteristics that stimulate curiosity. The "Exotic Insects" pop-up book used in this research was designed to include various learning components that support early childhood vocabulary development. This book not only presents attractive, movable illustrations but also provides storylines close to children's daily experiences. The combination of bright colors, detailed images, and diverse pop-up elements is expected to optimize the vocabulary learning process in a more effective and enjoyable way.

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This study aims to thoroughly examine the influence of using the "Exotic Insects" pop-up book on the vocabulary development of early childhood. The study considers several indicators, including the effectiveness of the medium in learning, children's responses and engagement during the learning process, and changes in vocabulary ability before and after using the medium. It is expected that the findings will provide a comprehensive understanding of the extent to which pop-up books can be optimally utilized to support language learning, particularly in enriching the vocabulary of children aged 5–6 years.

Methods

This research employed a quantitative approach using a quasi-experimental design with a Nonequivalent Control Group Design (Abraham & Supriyati, 2022). The study involved dividing the sample into an experimental group, which used the *Exotic Insects* pop-up book, and a control group, which did not. The purpose was to determine the comparative outcomes between the two groups after the research implementation.

The study was conducted in the even semester at TK Pertiwi Petak in the 2024–2025 academic year, involving class B with a sample of 30 children. Data collection techniques included observation and pretest–posttest. The research instrument was a vocabulary skill assessment sheet designed to evaluate whether the use of the *Exotic Insects* pop-up book influenced children's vocabulary skills.

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This research also underwent item validity and reliability testing during a preliminary study, as well as content validity testing by media and material validators. To measure effectiveness, data analysis was conducted using SPSS version 25, with procedures including normality testing, homogeneity testing, and the t test (Nurhaswinda et al., 2025).

Result and Discussions

This study aimed to examine whether the use of the *Exotic Insects* pop-up book influenced children's vocabulary skills. Before the research process was carried out, content validity testing was conducted by material and media experts. Based on the results of validation by the material expert, a final percentage of 81% was obtained, categorized as valid, with an average score of 3.25. This indicated that the content in the *Exotic Insects* pop-up book was appropriate in terms of relevance and educational value. Meanwhile, the media validator's results showed a final percentage of 82%, categorized as valid, with an average score of 3.28. This indicated that the pop-up book was appropriate in terms of appearance, presentation, and usability.

After expert validation, item validity and reliability testing was conducted during a limited trial with 10 children in class B at TK Pertiwi Kendal. The validity results are as follows:

Table 1. Data Validity Results

No Item	r-count	r-table (5%)	Sig.
1	0.830	0.632	0.003

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2	0.833	0.632	0.003
3	0.969	0.632	0.000

Based on the Pearson Correlation test results, all items (1, 2, and 3) were categorized as valid, with significance values less than 0.05 and r-count values greater than the r-table (with 10 respondents). This indicates that the data could be used in the field trial.

Reliability testing was conducted using Cronbach's Alpha to measure the reliability of the developed instrument. The results are as follows:

Table 2. Data Reliability Results

Cronbach's Alpha	Number of Items
0.756	4

Based on SPSS results, data are considered reliable if Cronbach's Alpha > 0.6. The score of 0.756 exceeds 0.6, indicating that the instrument was reliable and could be used in the field trial.

After the preliminary tests, the field experiment was carried out. The first step was the pretest, conducted to measure the children's vocabulary ability regarding the influence of the *Exotic Insects* pop-up book. The pretest was conducted once to determine the children's abilities before treatment. In this stage, children were shown three pictures of insects and asked to describe each using simple sentences. The subjects consisted of class B students at TK Pertiwi Petak: one experimental class of 15 students with limited vocabulary development, and one control class of 15 students.

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The pretest results of the experimental class are as follows:

Table 3. Pretest Results of the Experimental Class

Indicator	Total	Average
MMG (Ability to Describe Words)	25	1.67
MMKB (Ability to Mention Nouns)	29	1.93
MMKS (Ability to Mention Adjectives)	24	1.60
Total	78	5.20

The table shows that the children's average scores were rounded to 2, categorized as "beginning to develop." For MMG, children were able to understand word meanings and describe images appropriately. For MMKB, they were able to mention 1–5 nouns. For MMKS, they were able to mention 1–5 adjectives. This encouraged the researchers to apply the *Exotic Insects* pop-up book as a solution to improve the children's vocabulary.

The pretest results of the control class are as follows:

Table 4. Pretest Results of the Control Class

Indicator	Total	Average
MMG	25	1.67
MMKB	29	1.93
MMKS	24	1.60
Total	78	5.20

The control class also achieved an average rounded score of 2 ("beginning to develop"), with similar descriptions for MMG, MMKB, and MMKS.

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The treatment stage consisted of three storytelling sessions using the *Exotic Insects* pop-up book. Treatment 1 featured beetles and scorpions; Treatment 2 featured bees and crickets; Treatment 3 featured spiders and grasshoppers.

On the first day, children showed great enthusiasm when the researcher introduced the pop-up book. Their curiosity was very high. As the researcher opened the first page with a beetle illustration, the children eagerly mentioned its name. While the story was being read, children listened attentively and focused on the illustrations. Afterward, they shared personal experiences of encountering the insect. At the end of each session, the researcher conducted a recalling activity, asking questions such as "What does the beetle eat?", "Where does it hide?", and "How many legs does it have?". This process was repeated for other insects as well. The same procedures were applied in the second and third treatments.



Figure 1. Media Pop Up Book Treat ment 1

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After the treatments, a posttest was conducted in the experimental class using the same assessment as the pretest. The results are as follows:

Table 5. Posttest Results of the Experimental Class

Indicator Total Average

			_
MMG	50	3.33	
MMKB	44	2.93	
MMKS	42	2.80	
Total	136	9.07	

The data show that the children's scores increased by one point, with averages rounded to 3 ("developing as expected").

 Table 6. Recapitulation of Experimental Class Pretest and Posttest

Test	Total Score	Average	Difference
Pretest	78	5.20	_
Posttest	136	9.07	+58

The data reveal a significant improvement in the vocabulary skills of 5–6-year-old children in TK Pertiwi Petak, with a score increase of 58 points. For the control class, the posttest results are as follows:

Table 7. Posttest Results of the Control Class

Indicator	Total	Average
MMG	44	2.93
MMKB	37	2.47
MMKS	36	2.40
Total	117	7.80

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The data show improvements, but not as significant as in the experimental class, with average scores still rounded to 2 ("beginning to develop").

Table 8. Recapitulation of Control Class Pretest and Posttest

Test	Total Score	Average	Difference
Pretest	75	5.00	_
Posttest	117	7.80	+42

Although the control group showed improvements (42-point increase), the results were still less favorable than those of the experimental group. To further confirm the findings, statistical tests were conducted, including normality, homogeneity, and paired t-tests.

Table 9. Normality Test Results

Test	Statistic	df	Sig.
Pretest Experimental	0.213	15	0.066
Posttest Experimental	0.187	15	0.169
Pretest Control	0.167	15	0.200
Posttest Control	0.192	15	0.141

Data are considered normally distributed if Sig. > 0.05. The results confirmed that all experimental and control class data were normally distributed.

Table 10. Homogeneity Test Results

Levene Statistic	df1	df2	Sig.
Based on Mean	0.925	1	28

Data are considered homogeneous if Sig. > 0.05. The results

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indicated that the data were homogeneous.

Table 11. Paired t-Test Results

Comparison	Sig. (2-tailed)
Pretest–Posttest Experimental	0.000
Pretest–Posttest Control	0.000

According to the criteria, differences are significant if Sig. < 0.05. The results confirmed significant differences in both experimental and control groups, though the experimental group showed greater improvement. Based on these findings, the use of the *Exotic Insects* popup book significantly improved the vocabulary skills of children aged 5–6 at TK Pertiwi Petak. The experimental group's total pretest score was 78, which increased to 136 posttest, showing a 58-point difference. This indicates that the pop-up book contributed to children's language development, particularly vocabulary acquisition.

The relationship between the use of pop-up books and vocabulary skills can be explained through cognitive and language development theory. As an independent variable, the pop-up book provides visual, verbal, and kinesthetic stimuli simultaneously. At ages 5–6, children are in Piaget's preoperational stage, relying heavily on concrete objects and direct experiences to grasp new concepts. Therefore, the three-dimensional illustrations, narrative stories, and physical interactivity of the pop-up book are highly suitable for stimulating vocabulary acquisition and reinforcement.

Furthermore, quantitative data showing significant posttest

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improvements strengthen the causal link. The treatment caused changes in the dependent variable: the number of words mastered, comprehension of meaning, and ability to construct simple sentences. This demonstrates a strong cause-and-effect relationship. Thus, the use of visual-kinesthetic learning media such as pop-up books is empirically proven to improve receptive and expressive aspects of early childhood language development.

The study revealed not only quantitative improvements in vocabulary acquisition but also qualitative developments, particularly in the use of nouns and adjectives. After using the *Exotic Insects* pop-up book, children learned nouns like tree, leaf, stone, honey, and thorn, as well as adjectives such as hard, strong, big, long, and sharp. These words were directly associated with the three-dimensional illustrations in the book.

Children integrated nouns and adjectives into descriptive sentences, such as "The beetle is big and black" or "The grasshopper has long, sharp legs." This demonstrated that they not only recognized nouns but also connected them with adjectives and expressed them in complete sentences.

The learning experience using the pop-up book provided synergistic visual and verbal stimuli, making it easier for children to link words with meaning. They became more active in observing, imitating, and expressing information. The medium also encouraged emotional and cognitive engagement, as children enjoyed turning colorful, three-

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dimensional pages. As a result, vocabulary learning became meaningful, enjoyable, and effective—not rote memorization but direct, playful experience.

This experience strongly supports vocabulary learning, aligning with early childhood learning principles based on exploration and imagination. Thus, the pop-up book is not merely a visual aid but an interactive tool that effectively bridges concrete concepts to verbal expression.

The results are consistent with previous studies confirming the effectiveness of pop-up books in improving vocabulary. Rahmawati (2014) found that pop-up books significantly increased vocabulary mastery due to engaging visuals and contextual narratives. This was reinforced by the present study, in which children showed significant posttest gains and improved sentence construction, such as "Bees make honey" or "Beetles have six legs."

This study also supports Putri (2020), who found that pop-up books improved the speaking abilities of children aged 3–4 by encouraging them to form complete sentences and describe objects orally. Similarly, in this research, children not only named insects but also described their physical characteristics, habitats, and behaviors after using the pop-up book.

The findings also align with Istim et al. (2022), who demonstrated that loose-part media enhanced vocabulary through exploratory and active play. Although different in form, both media share characteristics

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of being visual, concrete, and interactive, stimulating verbal expression. In this study, the pop-up book encouraged active engagement, reinforced memory, and improved listening and speaking skills in meaningful activities.

In conclusion, the *Exotic Insects* pop-up book proved to be an effective learning tool for improving early childhood vocabulary, especially in TK Pertiwi Petak, a semi-rural environment. The medium provided enjoyable, imaginative, and meaningful learning experiences, highly consistent with the principles of learning through play, the cornerstone of early childhood education.

Conclusion

This study aimed to determine the effect of using the *Exotic Insects* pop-up book on the vocabulary skills of children aged 5–6 years. Based on the results of data analysis, it can be concluded that the pop-up book had a significant influence on improving children's vocabulary. This was evidenced by the pretest and posttest results in the experimental group. Before the treatment (pretest), the total score obtained by the children was 78. After the treatment using the *Exotic Insects* pop-up book (posttest), the total score increased to 136, with a difference of 58 points. Meanwhile, the control group, which did not receive the treatment, did not show a meaningful improvement. Statistical testing using the t-test showed an Asymp. Sig. (2-tailed) value of 0.000 < 0.05, indicating a highly significant difference.

In addition to quantitative results, qualitative findings also

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indicated positive changes. After the treatment, children were able to mention more new vocabulary, understand word meanings, and construct simple sentences such as "Bees produce honey" or "Beetles have six legs." This proves that the pop-up book not only enriched children's vocabulary but also helped them understand and use words in meaningful contexts. Thus, it can be concluded that the use of the *Exotic Insects* pop-up book is effective in improving the vocabulary skills of children aged 5–6 years and can serve as an enjoyable, interactive, and developmentally appropriate alternative learning medium in early childhood education.

References

- Abraham, I., & Supriyati, Y. (2022). Desain Kuasi Eksperimen Dalam Pendidikan: Literatur. *Jurnal Ilmiah Mandala Education*, 8(3). http://dx.doi.org/10.58258/jime.v8i3.3800
- Diniyati, A. I., Suparmanto, S., Wipqi, I. R., & Anggara, W. H. (2023).

 Pengembangan Media Pop Up Book Dalam Penguasaan Kosakata
 Bahasa Arab Di Mts Al-Muslimun Nw Tegal. Fashohah: Jurnal
 Ilmiah Pendidikan Bahasa Arab, 3(2).

 https://doi.org/10.33474/fsh.v3i2.20047
- Fajriah, A. A., Sadiah, H., & Setiabudi, D. I. (2022). Penggunaan Media Pembelajaran Pop-Up Book Dalam Meningkatkan Hasil Belajar Siswa Di Sekolah Dasar. *Jurnal Riset Sosial Humaniora Dan Pendidikan*, 1(2), 51-58. https://doi.org/10.56444/soshumdik.v1i2.74
- Faradila, C., Lubis, M. D. A. K., Depari, S. P., & Jamaludin, J. (2023). Eksplorasi Media Pembelajaran Ppkn Melalui Pop Up Book Untuk Meningkatkan Kompetensi Pedagogik Guru Smp. *Kompetensi*, 16(2), 465-476.
- Istim, N., Hendratno, H., & Setyowati, S. (2022). Pengaruh Penggunaan Media Pembelajaran Loose Part Bahan Plastik Terhadap

⁶⁶⁴ | How to cite: Wahyuningrum, A. P., Adhe, K. R., Safitri, D. G. L., & Setyowati, S. (2025). The Effect of Using the Pop Up Book "Exotic Insects" on the Vocabulary Skills of Children Aged 5–6 Years. *Ceria: Jurnal Program Studi Pendidikan Anak Usia Dini*, 14(3), 646-666. http://dx.doi.org/10.31000/ceria.v14i3.14552

- Perkembangan Bahasa Dan Fisik Motorik Pada Anak Usia 5-6 Tahun. *Jurnal Basicedu*, 6(5), 8572–8584. Https://Doi.Org/10.31004/Basicedu.V6i5.3793
- Iswara, D. M., Zahro, U. A., & Laeli, S. (2024). Perkembangan Emosi Dan Bahasa Terhadap Anak Sekolah Dasar. *Karimah Tauhid*, 3(6), 7179-7191. https://doi.org/10.30997/karimahtauhid.v3i6.13985
- Jannah, A. R., Hamid, L., & Srihilmawati, R. (2020). Media pop up book untuk meningkatkan kemampuan membaca pada anak usia dini. *Al-Urwatul Wutsqo: Jurnal Ilmu Keislaman Dan Pendidikan*, 1(2), 1-17. https://doi.org/10.30997/karimahtauhid.v3i6.13985
- Karumpa, A., Halimah, A., & Sulastri, S. (2022). Efektivitas Penggunaan Media Pop Up Book Dan Big Book Terhadap Kemampuan Siswa Memahami Isi Bacaan. *Jurnal Onoma: Pendidikan, Bahasa, Dan Sastra*, 8(2), 818-825.
- Novitasari, Y., & Fauziddin, M. (2020). Perkembangan Kognitif Bidang Auditori Pada Anak Usia Dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 5(1), 805-813.
- Nurhaswinda, N., Zulkifli, A., Gusniati, J., Zulefni, M. S., Afendi, R. A., Asni, W., & Fitriani, Y. (2025). Tutorial uji normalitas dan uji homogenitas dengan menggunakan aplikasi SPSS. *Jurnal Cahaya Nusantara*, 1(2), 55-68. https://jurnal.cahayapublikasi.com/index.php/jcn/article/view/25
- Nurhidayah, A. B., Nur'afifah, U. U., & Dimas, A. (2023). Efektivitas Penggunaan Media Pop- Up Book Terhadap Keterampilan Membaca Siswa Kelas I Di Sdn Wonokerto 1 Tahun Pelajaran 2022/2023. *Global Education Journal*, 1(2), 319-326. https://doi.org/10.59525/gej.v1i2.245
- Paujiah, T. S., Muslihin, H. Y., & Rahman, T. (2022). Peran Lingkungan Dalam Menstimulasi Perkembangan Bahasa Serta Menumbuhkan Karakter Anak Usia Dini. *Pelangi: Jurnal Pemikiran Dan Penelitian Pendidikan Islam Anak Usia Dini*, 4(1), 103-122.
- Rahmawati, N. (2014). Pengaruh Media Pop-Up Book Terhadap Penguasaan Kosakata Anak Usia 5-6 Tahun Di Tk Putera Harapan Surabaya. JURNAL MAHASISWA.

^{665 |} How to cite: Wahyuningrum, A. P., Adhe, K. R., Safitri, D. G. L., & Setyowati, S. (2025). The Effect of Using the Pop Up Book "Exotic Insects" on the Vocabulary Skills of Children Aged 5–6 Years. *Ceria: Jurnal Program Studi Pendidikan Anak Usia Dini*, 14(3), 646-666. http://dx.doi.org/10.31000/ceria.v14i3.14552

- Ceria: Journal of the Childhood Education Study Program, 14(3), pages 646-666. DOI: http://dx.doi.org/10.31000/ceria.v14i3.14552
- Rosyadi, R. N., Wardani, S., & Doyin, M. (2024). Studi Literatur: Pemanfaatan Buku Pop Up Untuk Meningkatkan Literasi Sains Dan Motivasi Siswa. *Didaktika: Jurnal Kependidikan*, 13(3), 3365-3378. https://doi.org/10.58230/27454312.769
- Serliana, N. A. (2024). Efektivitas Penggunaan Media Pop Up Book Terhadap Kemampuan Membaca Permulaan Pada Anak Usia 4-5 Tahun. *Asghar: Journal Of Children Studies*, 4(1), 1-9. https://doi.org/10.28918/asghar.v4i1.7465
- Setiadi, F. M., Maryati, S., & Mubharokkh, A. S. (2024). Analisis Dampak Penggunaan Gadget Terhadap Perkembangan Psikologis Dan Keagamaan Anak Usia Dini (Tk Dan Sd) Dalam Perspektif Pendidikan Agama Islam. *Muaddib: Islamic Education Journal*, 7(1), 1-11. https://doi.org/10.19109/muaddib.v7i1.24432
- Wahyuni, N. S., & Saharudin. (2022). Pengembangan Media Pop Up Book Pada Materi Keberagaman Budaya Indonesia Untuk Meningkatkan Hasil Belajar Siswa Kelas IV MI NW Bagik Payung. https://doi.org/10.51806/al-mujahidah.v3i2.53