International Journal of Education, Vocational and Social Science
https://e-journal.citakonsulindo.or.id/index.php/IJEVSS
E-ISSN : 2963 4954
IJEVSS

The Effectiveness Of Problem-Based Learning (PBL) Model On Anecdotal Text Writing Skills: A Quasi-Experimental Study

Izyana Maziyah
Universitas Negeri Yogyakarya, Indonesia
Anwar Efendi
Universitas Negeri Yogyakarya, Indonesia

Corresponding Author: izyanamzy@gmail.com

Abstract

This study aims to determine students' ability in writing anecdotal texts by applying the Problem-Based Learning (PBL) model. This research design involves comparing the anecdotal text writing skills of class X students between classes using the Problem-Based Learning (PBL) model and without the Problem-Based Learning (PBL) model. The approach used in this study is quantitative, with experimental methods. The research design used is a quasi-experimental pretest-posttest design with a control group. The research population consisted of class X students at MA Ali Maksum, while the research sample consisted of class X IPS C as the control group and class X IPS D as the experimental group. The data collection technique utilized the results of pretest and posttest assessments of students' anecdotal text writing skills. Prerequisite tests in the form of normality tests using Shapiro-Wilk and homogeneity tests using Levene's test, were conducted using SPSS version 24.0. The data analysis technique applied was an independent sample t-test on the pretest results of the control group and the experimental group as well as the posttest results of the control group and the experimental group, followed by a paired sample t-test on the pretest-posttest results of the control group and the pretest-posttest results of the experimental group.

Keywords: Problem Based Learning (PBL), Anecdotal Text, Writing Skills.

INTRODUCTION

The development of the Indonesian language curriculum is inseparable from the development of language learning and teaching theories. Indonesian language instruction aims to improve students' ability to communicate effectively and accurately, both orally and in writing, and to foster an appreciation for literary works (PERATURAN MENTERI PENDIDIKAN DAN

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

KEBUDAYAAN REPUBLIK INDONESIA NOMOR 24 TAHUN 2016, 2016). The scope of the subject matter in this subject is an elaboration of three main aspects: language, literature, and literacy. The language aspect includes an understanding of linguistic variation as part of Indonesia's multilingual society, as well as the study of the structure and organization of texts (Cross et al., 2022; Usanova & Schnoor, 2022). The literary aspect includes the study of literary context, formulation of responses, evaluation, and creation of literary works. Understanding literary context encompasses events within literary works that are influenced by historical, social, and cultural factors. The literacy aspect includes the ability to understand texts in their context, interact with others, and interpret, analyze, and evaluate texts (Usanova & Schnoor, 2021). Students are trained to produce discourse through a process of planning, practice, and presentation, both orally and in writing, paying attention to the accuracy of word choice, presentation structure, and the use of multimodal elements (Lim et al., 2022).

Writing skills are understood not only as focusing on mastering grammar or sentence structure, but as a social practice that involves interactions between writers, texts, and readers in certain contexts. Writing is generally defined as the ability to convey ideas to others through written words. Imron Rosidi defines writing as an activity in which a person conveys ideas to a reader in written language so that they can be understood. Writing is a language skill used for indirect communication through written language; it is an activity of thinking and using language that begins with the process of exploring ideas, thoughts, or feelings, then expressing them in written form so that they can be understood by the reader (Graham & Perin, 2007). This is reinforced by research in journals which states that writing skills are a cognitive process that involves critical thinking (Kim et al., 2021; Kormos, 2023), organizing ideas, and using language effectively in written form (Napitupulu et al., 2025). Therefore, writing skills need to be practiced continuously so that students are able to express their ideas effectively and communicatively.

One of the writing skills taught to grade X high school students is writing anecdotal texts. Anecdotal texts are texts that contain short and interesting stories that combine elements of humor along with criticism of social phenomena. In the Indonesian language textbook for grade X, teaching anecdotal texts aims to direct students to evaluate the messages contained in the text, identify its structure accurately, and interpret the information in it as a means to convey criticism. Learning to write anecdotes requires not only creativity in creating humor and conveying messages, but also critical thinking skills to analyze, evaluate, and respond to various social realities that occur in the surrounding environment (Yeh et al., 2023).

Research by Bayu et al. explains that the teaching of anecdotal texts is currently hampered

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

by the lack of interesting teaching methods, so that students feel bored and have difficulty understanding the material (Sari et al., 2023). This results in poor writing skills, especially when it comes to expressing ideas in writing. Many students struggle to generate ideas, develop narrative plots, and structure anecdotal texts correctly (Rajaguk-guk et al., 2024). In addition, the use of ineffective language and lack of humor present challenges in writing anecdotal texts (Buuolo, 2024; Hayati, 2020). This situation is exacerbated by the learning process which is still dominated by teachers, which means that students are given fewer opportunities to actively explore ideas and develop their creativity (Saptari et al., 2024). This is in line with the view of Rabina et al. who stated that learning that fails to actively involve students can hinder the development of thinking skills (Fajra et al., 2023).

The solution to this learning challenge lies in implementing a learning model that encourages students to be more active, creative, and able to think critically at every stage of the learning process. One learning model that can be used to develop anecdotal writing skills is Problem-Based Learning (PBL). The Problem-Based Learning (PBL) model is a learning approach that focuses on presenting real-world problems as the learning context. The Problem-Based Learning (PBL) model places students at the center of the learning process through activities that involve actively constructing knowledge, seeking and processing information, engaging in discussions, and solving problems both independently and collaboratively (Li et al., 2022; Tan & Tee, 2021).

The application of the Problem-Based Learning (PBL) model in teaching writing is believed to provide a more meaningful learning experience. Through the PBL model, students not only understand concepts but are also able to develop writing ideas based on contextual problems. Furthermore, this model can foster critical and creative thinking skills, as well as improve students' communication skills. This is in line with research findings showing that Problem-Based Learning (PBL) has been proven effective in improving students' writing skills by strengthening their critical thinking skills, developing their ideas, and enhancing their ability to organize those ideas into a more systematic and argumentative writing structure (Misnah et al., 2023). Other research shows that PBL can improve descriptive writing skills as well as encourage student collaboration and engagement in learning (Suharti et al., 2024). In addition, recent research findings show that the implementation of PBL can improve writing skills while increasing students' active participation in expressing ideas through writing.

Although learning models continue to evolve, most previous research found by the author focuses primarily on descriptive texts or general writing skills, creating a research gap related to

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

anecdotal texts. Therefore, this study aims to address this gap by examining the effectiveness of the PBL model in improving students' ability to write anecdotal texts.

RESEARCH METHODS

The research method used was a quantitative experimental approach with a quasi-experimental design using a pretest-posttest control group model. The data collection technique used was the results of the pretest and posttest in writing anecdotal texts. The test was administered to two groups: a control group (a class that did not receive the Problem-Based Learning intervention) and an experimental group (a class that received the Problem-Based Learning intervention). The study population consisted of students at MA Ali Maksum. The researcher then selected a sample using a purposive sampling technique, students from class X IPS D as the experimental group and students from class X IPS C as the control group. The criteria for assessing anecdotal texts included content, text structure, language and comprehension, humorous elements, and the message or criticism contained within the anecdotal text.

Before conducting data analysis, data analysis requirements were required, including a normality test to determine whether the data obtained were normally distributed and a homogeneity test to ensure that the samples drawn came from the same population (homogeneous) and did not show significant differences. Data analysis techniques included an independent sample t-test on the pre-test results of the control and experimental groups, as well as the post-test results of the control and experimental groups. This was followed by a paired sample t-test on the pre-test and post-test results of the control group as well as the pre-test and post-test results of the experimental group, using SPSS version 24.

RESULTS AND DISCUSSION

RESULTS

Uji Normalitas

To determine whether the data obtained is normally distributed or not, a normality test must be performed on the data in question. Since the sample size in the control group and the experimental group were each less than 50, the statistical analysis of the normality test in this study used the Shapiro-Wilk formula with the help of SPSS version 24.0; the data tested in the normality test consisted of the pre-test and post-test results of the control class as well as the pre-test and post-test results of the experimental class. If the Sig. (2-tailed) value is greater than the 5% significance level (Sig. (2-tailed) > 0.05), then the data comes from a normally distributed

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

population. Conversely, if the Sig. (2-tailed) value is smaller than the 5% significance level (Sig. (2-tailed) < 0.05), then the data comes from a non-normally distributed population.

Homogeneity Test

The homogeneity of variance test aims to determine whether the samples taken come from the same population (homogeneous) and do not show significant differences from each other. The homogeneity test was conducted on the post-test scores of anecdotal text writing in the control and experimental groups. The success of the homogeneity test can be seen from the Sig. value. Data is said to be homogeneous if the significance is greater than 0.05 (Sig. > alpha 5%); in this case, the variances are significantly different (homogeneous). However, if the significance is smaller than the 5% alpha significance level (Sig. < 0.05), it can be concluded that the variances are significantly different or not homogeneous. The following are the results of the normality and homogeneity tests, which are presented in Table 1.

Table 1. Results of normality and homogeneity tests

Prerequisite Test	Class	Sig Value Results.
Normality Test	Pre-test and control test	0,153
	Post-test and control test	0,333
	Pre-experimental test	0,302
	Post-experimental test	0,100
Homogeneity Test	Post-test for control and experimental groups	0,928

The data in the table above shows that the data distribution in this study is normal. The results of the Shapiro-Wilk test for the pre-test of the control group (0.153), post-test of the control group (0.333), pre-test of the experimental group (0.302), and post-test of the experimental group (0.100) show that Sig. (two-tailed) is greater than the 5% significance level (Sig. (two-tailed) > 0.05), so it can be concluded that the data comes from a normally distributed population. Furthermore, the homogeneity test for the post-test results produces a significance value of 0.928. Therefore, it can be concluded that the data is homogeneous because the Sig.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

value of 0.928 is greater than 0.05 (Sig. > 5%)

T-Test Calculation Results to Test the First Hypothesis

The first hypothesis to be tested is whether there is a significant difference between the skill outcomes of students who use the Problem-Based Learning (PBL) model and those who do not use the Problem-Based Learning (PBL) model in learning to write anecdotal texts. The analysis technique used is an independent sample t-test to test whether there is a significant difference between the average pretest and posttest scores of the control group and the experimental group. Data can be considered significant if the p-value is smaller than the 0.05 significance level (Sig<alpha).

Table 2. Results of independent sample t-test

Independent Samples T-Test	Value
Pre-test scores for the control group and the experimental group	0,876
Post-test scores for the control and experimental groups	0,001

A t-test of the pre-test scores for anecdotal writing skills was conducted to determine students' initial abilities before the intervention and to determine whether there were differences between students in the control and experimental groups. Based on the results of the Independent Samples t-test, the Sig. (two-tailed) for the pre-test scores of the control and experimental groups was 0.876 (Sig. (two-tailed) > 0.05). These pre-test score data indicate that there was no difference in anecdotal writing skills between the control and experimental groups before the intervention. Therefore, it can be concluded that the initial abilities of the control and experimental groups were similar.

A post-test t-test of the anecdotal writing skills was conducted to determine students' final proficiency after the intervention and to determine whether there were differences between students in the control and experimental groups. Based on the results of the Independent Samples t-test, the Sig. (two-tailed) for the post-test scores of the control and experimental groups was 0.001 (Sig. (two-tailed) < 0.05). Post-test score data showed a significant difference in the ability to write anecdotal texts between the control group and the experimental group after the intervention. It can be concluded that the ability to write anecdotal texts between the experimental group (using the Problem-Based Learning (PBL) model) and the control group (without the Problem-Based Learning (PBL) model) differed after the intervention.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

T-Test Calculation Results to Test the Second Hypothesis

The second hypothesis tested was whether learning to write anecdotal texts using the Problem-Based Learning (PBL) model was effective compared to learning to write anecdotal texts without the PBL model. The analysis technique used was a Paired Samples t-test to determine differences in abilities before and after treatment in each class, by analyzing the pretest-posttest results of the control group and the pretest-posttest results of the experimental group. Data were considered significant if the p-value was less than the 0.05 level of significance (Sig<alpha).

Table 3. Results of the paired sample t-test

Paired Samples T-Test	Value
Pre-test and post-test for the control group	0,183
Pre-test–post-test for the experimental group	0,000

The results of the paired sample t-test produced a Sig. (two-tailed) value of 0.183. This value is greater than the 0.05 significance level (Sig > 0.05). This means that there is no significant difference in the ability to write anecdotal texts before and after the intervention in the control group. Meanwhile, the pre-test and post-test results for the experimental group produced a Sig. (2-tailed) value of 0.000. This value is smaller than the 0.05 significance level (Sig < 0.05). This shows that the use of the Problem-Based Learning (PBL) model in the experimental group resulted in a significant increase in the ability to write anecdotal texts.

DISCUSSION

The first step in data analysis in this study was to test the first hypothesis: whether there is a significant difference between the writing skills of students who used the Problem-Based Learning (PBL) model and those who did not use the Problem-Based Learning (PBL) model when learning to write anecdotal texts. The data analysis technique used was an independent sample t-test to measure the initial abilities of the control and experimental groups in writing anecdotal texts. The results of the independent sample t-test on the pre-test scores of the control and experimental groups showed that the pre-test abilities of both groups were similar before the intervention. This indicates that there was no significant difference in the ability to write anecdotal texts before the intervention. This is evidenced by the results of the independent sample t-test on

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

the pre-test scores of the control and experimental groups, which was 0.876. Data can be considered significant if the p-value is less than the 0.05 significance level (Sig < α). Therefore, the pre-test score data (0.876 > 0.05) indicates that there was no significant difference in the ability to write anecdotal texts between the control and experimental groups before the intervention was given.

After conducting a pre-test to assess the initial abilities of the control and experimental groups, the study continued with different interventions for the two groups in writing anecdotal texts. In this activity, the control group used conventional methods, while the experimental group implemented Problem-Based Learning (PBL). According to Arends, There are five phases in implementing PBL, namely: (1) directing students to the problem; (2) organizing students to conduct research; (3) facilitating independent and group investigations; (4) developing and presenting results; (5) analyzing and evaluating the problem-solving process (Yu & Zin, 2023). The teacher's role is to present a problem which is then discussed collectively by students, and students translate the results of this discussion into the form of anecdotal text (Fawaid & Huda, 2024; Tatiana, 2021).

An independent sample t-test was then conducted to assess the anecdotal writing skills of students in the control and experimental groups after the intervention. The post-test independent sample t-test for the control and experimental groups showed a significant difference in the anecdotal writing skills of both groups. This was evidenced by the post-test scores of the control and experimental groups, with a significance level (Sig) of 0.001. This means that, because the significance level (Sig) is less than 0.05, the anecdotal writing skills of the experimental group (using the Problem-Based Learning (PBL) model) and the control group (without the Problem-Based Learning (PBL) model) differed after the intervention.

These findings align with a number of international studies demonstrating the superiority of PBL over conventional methods in developing writing skills. Alghamdy (2023) in his study of 38 high school students in Saudi Arabia found that PBL strategies significantly improved EFL students' paragraph development and grammar skills, while also fostering higher learning motivation (Zannan Alghamdy, 2023). In addition, a meta-analysis conducted on 41 data from 36 unique studies concluded that PBL has a significant positive effect on academic achievement in learning English as a foreign language (EFL), with the emphasis that PBL provides a real-world problem context that encourages active participation and collaboration among students (Orhan, 2025).

This was followed by testing the second hypothesis, namely whether learning to write anecdotal texts using the Problem-Based Learning (PBL) model was effective compared to learning

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

to write anecdotal texts without the PBL model. Data analysis was conducted using a paired-sample t-test on the pre-test and post-test results of the control group and the pre-test and post-test results of the experimental group. The results of the paired-sample t-test on the pre-test and post-test of the control group showed that there was no significant difference in the ability to write anecdotal texts in the control group (Sig. (2-tailed) = 0.183 > 0.05), indicating that without special treatment, students' abilities did not improve. In contrast, in the experimental group, the Sig. (2-tailed) value was 0.000 < 0.05, indicating a very significant increase in the ability to write anecdotal texts after the implementation of the Problem-Based Learning (PBL) model. Therefore, it can be concluded that the PBL model is effective and has a positive influence on improving students' abilities in writing anecdotal texts.

This finding is supported by research by Misnah et al. (2023) showed that the implementation of PBL significantly influenced students' writing performance while simultaneously improving their critical and creative thinking skills, as reflected in the significant increase in posttest scores in the experimental group of this study (Misnah et al., 2023). Furthermore, a systematic review by Loyens et al. (2023) confirmed that PBL consistently supports the development of higher-order thinking skills, which are the main foundation for producing critical, structured, and argumentative writing (Loyens et al., 2023). In the context of writing anecdotal texts in particular, these critical thinking skills are highly needed because students must be able to analyze social reality, develop critical perspectives, and humorously package their criticisms into systematic texts.

CONCLUSION

The Problem Based Learning (PBL) model has been proven to be significantly effective in improving anecdotal text writing skills compared to conventional methods. Initial analysis (Independent Sample Pretest T-Test) with a Sig. 0.876 (greater than 0.05) confirmed that both groups had equivalent initial abilities before treatment, thus maintaining the validity of the research results. After treatment, the results of the Independent Sample Posttest T-Test showed a very significant difference (Sig. 0.001 < 0.05) between the experimental group (PBL) and the control group. Furthermore, internal testing (Paired Sample T-Test) strengthened this research, where the control group did not show a significant increase (Sig. 0.183 > 0.05), while the experimental group experienced a very significant increase in ability (Sig. 0.000 < 0.05). Cumulatively, this research proves the hypothesis that the implementation of Problem Based Learning (PBL) has a strong positive influence (effective) on improving students' skills in writing

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

anecdotal texts.

REFERENCES

Buuolo, J. (2024). ANALISIS KESALAHAN EJAAN PADA TEKS ANEKDOT. *KOHESI: Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, *5*(1), 58–72.

Cross, R., D'warte, J., & Slaughter, Y. (2022). Plurilingualism and language and literacy education. *The Australian Journal of Language and Literacy*, *45*(3), 341–357. https://doi.org/https://doi.org/10.1007/s44020-022-00023-1

Fajra, R. R., Syachruroji, A., & Rokmanah, S. (2023). Metode pembelajaran aktif untuk meningkatkan keterampilan berpikir kritis siswa sekolah dasar. *Jurnal Dunia Pendidikan*, *4*(1), 122–129. https://doi.org/https://doi.org/10.55081/jurdip.v4i1.1468

Fawaid, A., & Huda, M. (2024). Implementing Problem-Based Learning to improve collaborative writing skills through lesson study in the Indonesian language subject. *KEMBARA: Jurnal Keilmuan Bahasa, Sastra, Dan Pengajarannya*, *10*(1), 197–212. https://doi.org/https://doi.org/10.22219/kembara.v10i1.29649

Graham, S., & Perin, D. (2007). A meta-analysis of writing instruction for adolescent students. *Journal of Educational Psychology*, *99*(3), 445. https://doi.org/. https://doi.org/10.1037/0022-0663.99.3.445

Hayati, C. (2020). Penerapan kemampuan berpikir kritis dalam pembelajaran menulis teks anekdot berorientasi sense of humor melalui media karikatur pada siswa Smk Kelas X. *Wistara: Jurnal Pendidikan Bahasa Dan Sastra*, *1*(2), 199–209. https://doi.org/https://doi.org/10.23969/wistara.v1i2.2310

Kim, M., Tian, Y., & Crossley, S. A. (2021). Exploring the relationships among cognitive and linguistic resources, writing processes, and written products in second language writing. *Journal of Second Language Writing*, *53*, 100824. https://doi.org/https://doi.org/10.1016/j.jslw.2021.100824

Kormos, J. (2023). The role of cognitive factors in second language writing and writing to learn a second language. *Studies in Second Language Acquisition*, *45*(3), 622–646. https://doi.org/10.1017/S0272263122000481

Li, A., Bilgic, E., Keuhl, A., & Sibbald, M. (2022). Does your group matter? How group function impacts educational outcomes in problem-based learning: a scoping review. *BMC Medical Education*, *22*(1), 900. https://doi.org/10.1186/s12909-022-03966-8

Lim, F. V., Toh, W., & Nguyen, T. T. H. (2022). Multimodality in the English language classroom: A

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

systematic review of literature. *Linguistics and Education*, *69*, 101048. https://doi.org/https://doi.org/10.1016/j.linged.2022.101048

Loyens, S. M. M., Van Meerten, J. E., Schaap, L., & Wijnia, L. (2023). Situating higher-order, critical, and critical-analytic thinking in problem-and project-based learning environments: A systematic review. *Educational Psychology Review*, *35*(2), 39. https://doi.org/https://doi.org/10.1007/s10648-023-09757

Misnah, M., Duwi, P., & Hengki, W. (2023). AN INVESTIGATION INTO THE EFFECT OF PROBLEM-BASED LEARNING ON LEARNERS'WRITING PERFORMANCE, CRITICAL AND CREATIVE THINKING SKILLS. *Journal of Language and Education*, *9*(2 (34)), 101–117. https://doi.org/https://doi.org/10.17323/jle.2023.14704

Napitupulu, A. T., Sinurat, B., & Silalahi, D. E. (2025). Students' Perception of the Use of ChatGPT in English Writing Skills for Grade Ten at Senior High School. *JURNAL PENDIDIKAN BAHASA*, *15*(3), 461–472. https://doi.org/https://doi.org/10.37630/jpb.v15i3.3428

Orhan, A. (2025). Investigating the effectiveness of problem based learning on academic achievement in EFL classroom: A meta-analysis. *The Asia-Pacific Education Researcher*, *34*(2), 699–709. https://doi.org/https://doi.org/10.1007/s40299-024-00889-4

PERATURAN MENTERI PENDIDIKAN DAN KEBUDAYAAN REPUBLIK INDONESIA NOMOR 24 TAHUN 2016 (2016).

Rajaguk-guk, S. B., Boeriswati, E., & Rohman, S. (2024). Gambaran Keterampilan Menulis Teks Anekdot di Siswa SMK Negeri 5 Penerbangan Waibu. *Jurnal Pendidikan Indonesia*, *5*(10). https://doi.org/https://doi.org/10.59141/japendi.v5i10.5693

Saptari, A. A. T., Nurhayatin, T., & Fitriani, R. S. (2024). Implementasi Pendekatan Berdiferensiasi pada Pembelajaran Menulis Teks Anekdot dan Pengembangannya ke dalam Bentuk Visual terhadap Siswa Kelas X SMA Negeri 11 Bandung. *Jurnal Pesona*, *10*(1). https://doi.org/https://doi.org/10.52657/jp.v7i1.1956

Sari, B. P., Helda, T., & Rahmi, A. (2023). Efektivitas Model Pembelajaran Problem Based Instruction Berbantuan Audio Visual terhadap Keterampilan Menulis Teks Anekdot. *Indonesian Journal of Instruction*, *4*(1), 1–9. https://doi.org/https://doi.org/10.23887/iji.v4i1.44565

Suharti, S., Handini, O., & Trisiana, A. (2024). The Problem Based Learning Model Can Improve Students' Writing Ability in Class XI Descriptive Texts. SP5 SMA Negeri 1 Sumberlawang. *Jurnal Inovasi Pendidikan Guru*, *2*(1), 56–61. https://doi.org/https://doi.org/10.33061/jipg.v2i1.13205

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Tan, S. C., & Tee, M. Y. (2021). In-service educators co-constructing knowledge in a PBL setting: Phases of interaction. *Interdisciplinary Journal of Problem-Based Learning*, *15*(2). https://doi.org/https://doi.org/10.14434/ijpbl.v15i2.28769

Tatiana, P. (2021). The collaborative discussion model: Developing writing skills through prewriting discussion. *Journal of Language and Education*, *7*(1 (25)), 156–170. https://doi.org/https://doi.org/10.17323/jle.2021.10748

Usanova, I., & Schnoor, B. (2021). Exploring multiliteracies in multilingual students: Profiles of multilingual writing skills. *Bilingual Research Journal*, *44*(1), 56–73. https://doi.org/https://doi.org/10.1080/15235882.2021.1890649

Usanova, I., & Schnoor, B. (2022). Approaching the concept of multiliteracies: Multilingual writing competence as an integrated model. *Canadian Journal of Applied Linguistics*, *25*(3), 144–165. https://doi.org/https://doi.org/10.37213/cjal.2022.32598

Yeh, H.-C., Yang, S., Fu, J. S., & Shih, Y.-C. (2023). Developing college students' critical thinking through reflective writing. *Higher Education Research & Development*, *42*(1), 244–259. https://doi.org/https://doi.org/10.1080/07294360.2022.2043247

Yu, L., & Zin, Z. M. (2023). The critical thinking-oriented adaptations of problem-based learning models: a systematic review. *Frontiers in Education*, *Volume 8-2023*. https://doi.org/10.3389/feduc.2023.1139987

Zannan Alghamdy, R. (2023). Efficacy of problem-based learning strategy to enhance EFL learners' paragraph writing and grammar skills. *Arab World English Journal (AWEJ) Volume*, *14*. https://doi.org/https://doi.org/10.2139/ssrn.4431211

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License