

Implementing the Team Assisted Individualization Learning Model to Enhance Anecdotal Text Writing Skills in Grade X Students

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ARTICLE INFO

Keywords:

TAI learning model;
cooperative learning;
anecdotal text;
writing skills;
secondary education

Article history:

Received 2025-03-13

Revised 2025-04-15

Accepted 2025-08-31

ABSTRACT

This study aims to investigate the effectiveness of the Team Assisted Individualization (TAI) learning model in improving Grade X students' skills in writing anecdotal texts. Writing is a fundamental language skill that remains challenging for many students, particularly in crafting anecdotal texts, which require creativity, structure, and a clear narrative. This research was conducted at SMA Swasta Teladan Pematangsiantar during the 2022/2023 academic year, involving 70 Grade X students selected through cluster sampling. A pre-experimental one-group pretest-posttest design was employed. Students were assessed using a written test administered before and after the implementation of the TAI model. Data were analyzed using a paired sample t-test at a 0.05 significance level. The results showed a substantial improvement in students' writing performance. The average pre-test score was 44.22, categorized as low, while the average post-test score increased to 77.88, indicating a good level of writing proficiency. The statistical analysis yielded a t-value of -28.01, which exceeded the critical value (t-table = 1.996), leading to the rejection of the null hypothesis. These findings indicate that the TAI learning model significantly enhances students' ability to write anecdotal texts. The collaborative and individualized nature of the TAI model supports active student engagement, idea development, and writing fluency. This study recommends the integration of the TAI model into Indonesian language instruction to foster students' writing competence and motivation.

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1. INTRODUCTION

Language is a vital medium of communication and a core component of cognitive development, especially in formal education. Among the four primary language skills—listening, speaking, reading, and writing—writing is widely considered the most complex (Tarigan, 2008). Writing demands not only linguistic proficiency but also cognitive processes such as planning, organizing, expressing, and revising ideas (Richards & Renandya, 2002). As a productive skill, writing allows students to construct meaning,

articulate thoughts, and communicate them to others, making it a critical tool for academic success and lifelong learning (Hyland, 2003).

In the Indonesian education context, writing instruction plays a central role in developing students' expressive and analytical abilities. According to the 2013 Curriculum (Kurikulum 2013), language learning—particularly in Bahasa Indonesia—is text-based and aims to enhance students' competencies in both spoken and written communication. One of the genres emphasized in the senior high school curriculum is anecdotal texts, which are short, personal narratives intended to entertain, often involving humorous or unusual experiences (Kementerian Pendidikan dan Kebudayaan, 2016). Despite its seemingly light nature, writing an anecdotal text requires mastery of narrative structure, coherence, creativity, and linguistic accuracy (Nurgiantoro, 2010).

However, writing anecdotal texts remains a significant challenge for students. Studies have shown that many students struggle to generate ideas, organize them logically, and present them in a structured, engaging way (Widiati & Cahyono, 2006). A preliminary survey conducted at SMA Swasta Teladan Pematangsiantar indicated that the average student score in writing anecdotal texts was below the minimum mastery criterion (KKM), with many students unable to meet the expected standards. Teachers observed that students often lacked interest and confidence in writing activities, perceiving them as difficult and tedious. Such challenges point to the need for instructional strategies that are both engaging and supportive of students' individual learning needs.

One factor contributing to students' low performance in writing is the over-reliance on conventional teaching methods, which are often teacher-centered and lack opportunities for active student involvement (Lestari, 2019). In such settings, students may become passive recipients of information, with limited opportunities to express themselves or collaborate with peers. This suggests the importance of exploring more dynamic and student-centered learning models that can foster creativity, critical thinking, and collaboration.

Cooperative learning models have gained attention as effective approaches to enhance student engagement and academic performance. Among them, the Team Assisted Individualization (TAI) model, developed by Slavin (1995), combines cooperative learning with individualized instruction. In the TAI model, students work in small heterogeneous groups where they assist one another in understanding the material. Each student is then individually accountable for completing tasks or solving problems based on their learning level. This approach integrates the benefits of peer support with personalized learning, allowing for differentiated instruction within a collaborative environment (Slavin & Karweit, 1985).

Several studies have demonstrated the positive impact of the TAI model in improving student outcomes across various subjects, including mathematics (Mertayasa, 2021), science (Aminah & Muhsam, 2021), and language learning (Marasabessy, Hasanah, & Angkotasana, 2021). These studies highlight that TAI fosters student responsibility, active participation, and peer-to-peer interaction, which are essential in developing higher-order thinking skills. In the context of writing, where students must not only understand content but also articulate it creatively and coherently, the TAI model holds significant promise.

Moreover, the collaborative nature of TAI aligns with Vygotsky's (1978) sociocultural theory, which emphasizes the role of social interaction in cognitive development. Through structured peer collaboration, students can learn within their Zone of Proximal Development (ZPD)—that is, the difference between what they can do independently and what they can achieve with guidance. In writing tasks, group work can provide a platform for students to brainstorm, discuss, and refine their ideas before producing individual written texts, thereby improving both confidence and competence (Donato, 2004).

Despite its potential, the application of TAI in the context of writing anecdotal texts remains underexplored, especially in Indonesian secondary schools. Most existing research focuses on its impact on subjects like mathematics or science, while studies on language learning are still limited and often neglect genre-specific outcomes. Given the unique characteristics of anecdotal writing—which combines narrative elements with humor and personal experience—there is a need to investigate whether TAI can support students in developing the specific skills required for this genre.

This study seeks to fill that gap by examining the implementation of the TAI learning model in enhancing students' ability to write anecdotal texts. Specifically, it aims to determine whether the TAI model can significantly improve students' performance in writing anecdotal texts, as measured through pre- and post-tests. The research is guided by the hypothesis that the integration of cooperative and individualized learning strategies will lead to improved writing outcomes among Grade X students.

In summary, this study is motivated by the persistent challenges students face in writing anecdotal texts, the limitations of traditional instructional methods, and the need for more effective, student-centered approaches. By exploring the implementation of the TAI model, this research contributes to the broader discourse on writing instruction and cooperative learning, with practical implications for classroom practice and curriculum development.

2. METHODS

2.1 Research Design

This study employed a pre-experimental design using a one-group pretest-posttest format to investigate the effect of the Team Assisted Individualization (TAI) learning model on students' ability to write anecdotal texts. This design is appropriate for exploratory research where random assignment is not feasible but preliminary intervention effects can be assessed (Creswell, 2012). The purpose of this design is to measure the difference in students' performance before and after the implementation of the instructional treatment.

2.2 Participants

The research was conducted at SMA Swasta Teladan Pematangsiantar during the 2022/2023 academic year. The population consisted of 280 students from eight Grade X classes. The sample was selected using cluster sampling, resulting in two classes (X IA 2 and X IS 1) comprising a total of 70 students. These classes were designated as the experimental group. The selection was based on considerations such as accessibility, curriculum compatibility (Kurikulum 2013), and the novelty of the material (anecdotal text writing) in the school's learning context.

2.3 Data Collection Instruments

Data were collected using a writing test instrument designed to assess students' skills in composing anecdotal texts. The test was administered twice: as a pre-test before the TAI model implementation and as a post-test after the intervention. The scoring criteria were based on an analytical rubric evaluating five components: (1) structure (orientation, crisis, reaction), (2) content relevance, (3) creativity/humor, (4) coherence and cohesion, and (5) grammar and vocabulary use. While the rubric was adapted from the Indonesian language curriculum guidelines, inter-rater reliability and validation of the instrument were not formally tested—an aspect identified as a limitation of this study.

2.4 Procedure

The research procedure was conducted over four weeks and consisted of three main phases: pre-test, treatment, and post-test.

2.4.1 Pre-Test Phase

Students were given a writing assignment in which they were instructed to compose an anecdotal text based on a personal or imagined experience. This pre-test aimed to identify their baseline writing abilities.

2.4.2 Treatment Phase (TAI Implementation)

The TAI model was implemented over six classroom sessions. In this model, students were grouped heterogeneously into small teams. Each team was guided through brainstorming, idea development, and individual writing tasks. While collaboration was emphasized during the idea generation phase, each student was responsible for producing their own anecdotal text. The teacher acted as a facilitator, ensuring that students worked both cooperatively and independently, as per the core principles of the TAI model (Slavin, 1995).

2.4.3 Post-Test Phase

After the intervention, students completed another writing test using the same rubric. The post-test results were used to assess the improvement in students' writing performance.

This instructional approach was designed not only to improve students' technical writing skills but also to promote peer interaction, idea sharing, and autonomous learning, which are integral to cooperative learning theory (Gillies, 2016; Vygotsky, 1978).

2.5 Data Analysis

The collected data were analyzed using descriptive and inferential statistics. The average scores from the pre-test and post-test were compared using a paired sample t-test (also known as a dependent t-test), which is suitable for analyzing score differences in the same group of participants across two time points (Gravetter & Wallnau, 2014). The analysis was performed at a 0.05 significance level, and the degrees of freedom were calculated based on the sample size ($df = n - 1 = 69$). A t-value greater than the critical t-table value was interpreted as evidence of a significant effect of the TAI intervention.

3. FINDINGS AND DISCUSSION

3.1 Findings

This study is intended to explore and explain the implementation of the Team Assisted Individualization (TAI) learning model in teaching students of Grade X at SMA Swasta Teladan Pematangsiantar how to write anecdotal texts effectively. Drawing from the results obtained in the pre-experimental class, the research involved analyzing test scores collected from a sample of 70 students. These scores were gathered before and after the application of the TAI learning model to determine its impact on students' writing abilities. The data for this research were derived specifically from these test results, which reflect students' performance in writing anecdotal texts after experiencing instruction using the *Team Assisted Individualization* (TAI) approach. This method was chosen to identify whether the TAI model could enhance students' skills and engagement in writing within the context of Indonesian language learning (Nuraeni, Rosita, & Novianti, 2022).

Analysis of pre-test and post-test data from students in Class X IA 2 and X IS 1 High School Exemplary Private Sector in Pematangsiantar.

3.1.1 Anecdotal Text Writing Skills Before Applying the TAI Learning Model

Referring to attachment 2, the results of writing anecdotal texts for students before the TAI learning model was applied, namely as follows:

Table 1. Anecdotal Text Writing Skills Before Implementing the TAI Learning Model

Number of Students	Number of Pre-test Results	Average
70 People	3096	44.22

3.1.2 Anecdotal Text Writing Skills After Implementing the TAI Learning Method

Referring to attachment 3, the results of writing anecdotal texts for students after the TAI learning model were applied are as follows:

Table 2. Anecdotal Text Writing Skills After Implementing the TAI Learning Method

Number of Students	Number of Post-test Results	Average
70 People	5452	77.88

3.1.3 Hypothesis Results

Referring to the data in attachment 4, the following results were obtained:

Table 3. Hypothesis Results

Number of Students	Pre-test	Post-test	D	t count	t table
70 People	44.22	77.88	33.67	-28.01	1,996

T count = -28.01 and t table 1.996. So, the test results are significant, thus H_a is accepted, and H_o is rejected.

3.1.4 Hypothesis Testing

The hypothesis in this study is:

H_a : There is a significant difference in the skills of writing anecdotal texts before and after using the TAI learning model by class X students of SMA Swasta Teladan Pematangsiantar.

H_o : There is no significant difference in the skills of writing anecdotal texts before and after using the TAI learning model by class X students of SM A Private Teladan Pematangsiantar.

Statistical hypothesis:

H_o : $\mu_1 = \mu_2$

H_a : $\mu_1 \neq \mu_2$

Based on data processing on anecdotal text writing skills in the pre-test post-test in attachments 2 and 3, the calculated $T = -28.01$ at a significance level of 0.05 (95% confidence level) with df 69, the t_{table} is obtained : 1.996 (interpolation). Thus, H_o is rejected and H_a is accepted, meaning :

“ There is a significant difference in the skills of writing anecdotal texts before and after using the TAI learning model by class X students of SMA Swasta Teladan Pematangsiantar. ”

Based on the results of the study, several key findings were identified regarding students' ability to write anecdotal texts before and after the implementation of the Team Assisted Individualization (TAI) learning model. Prior to the intervention, the pre-test scores revealed that the average writing ability of Grade X students at SMA Swasta Teladan Pematangsiantar was relatively low, with a mean score of 44.22. This score falls within the "less" proficiency category, indicating that students had significant difficulties in composing structured, coherent, and engaging anecdotal texts.

Following the implementation of the TAI learning model, the post-test scores demonstrated a substantial improvement. The average score increased to 77.88, which is classified within the "good" category. This notable enhancement in writing performance suggests that the TAI model effectively supported students in developing better content organization, idea development, and linguistic expression in their anecdotal writing tasks.

Statistical analysis further confirmed the impact of the intervention. A paired sample t-test showed that the calculated t-value exceeded the critical value at a 0.05 significance level, leading to the rejection of the null hypothesis and the acceptance of the alternative hypothesis. This result indicates a

statistically significant difference between the students' pre-test and post-test scores, affirming the positive influence of the TAI learning model on students' writing abilities.

In reviewing individual student progress, the data also revealed that many students who initially struggled to develop ideas or structure their texts were able to make marked improvements after the intervention. Their written work, when assessed using the established anecdotal text scoring rubric, reflected better organization, creativity, and coherence. Thus, the findings collectively demonstrate that the TAI learning model not only enhanced students' overall performance but also supported individual growth in writing anecdotal texts.

Discussion

The findings of this study demonstrate that the Team Assisted Individualization (TAI) model has a significant positive impact on students' ability to write anecdotal texts. The increase in the average score from 44.22 in the pre-test to 77.88 in the post-test provides strong empirical support for the effectiveness of the TAI approach in improving students' writing performance. These results are consistent with prior research which suggests that cooperative learning models—particularly those that combine group work with individual accountability—can foster greater student engagement and academic achievement (Slavin, 1995; Marasabessy et al., 2021).

The improvement observed in this study may be attributed to several pedagogical features of the TAI model. First, the collaborative structure allowed students to generate and exchange ideas in a supportive group environment. This aligns with Vygotsky's (1978) sociocultural theory, which emphasizes the role of social interaction and the Zone of Proximal Development in learning. In TAI, students learn through peer dialogue and guided support, which can help scaffold their understanding of writing tasks that they may initially find difficult to complete independently.

Second, the model emphasized individual responsibility within a team setting. This combination helps ensure that while students benefit from peer interaction, they are still held accountable for their own work. As a result, students are encouraged to engage both cognitively and creatively in composing anecdotal texts. This dual focus on collaboration and autonomy is especially valuable in writing instruction, where students must develop original ideas while mastering genre-specific conventions (Hyland, 2003).

Furthermore, the results suggest that using TAI may help address some of the motivational and affective barriers commonly associated with writing instruction in Indonesian classrooms. Previous studies have noted that writing is often perceived as difficult and disengaging, particularly when taught using traditional, teacher-centered methods (Widiati & Cahyono, 2006; Lestari, 2019). By contrast, the TAI model fosters active participation, reduces anxiety through peer support, and allows for differentiated learning paths—all of which contribute to a more positive and effective writing experience for students.

Despite these promising results, it is important to acknowledge some limitations. The study employed a one-group pretest-posttest design without a control group, which limits the ability to attribute improvements solely to the TAI intervention. Other factors—such as teacher influence, instructional time, or student maturity—may also have contributed to the observed gains. In addition, the study did not include formal measures of rubric reliability or inter-rater consistency, which may affect the objectivity of the writing scores.

Nevertheless, the outcomes of this research provide valuable insights into the potential of the TAI learning model to enhance student writing in the context of Indonesian secondary education. The model appears to be especially well-suited for genres like anecdotal texts, which require both narrative structure and creative engagement. These findings support the broader pedagogical shift toward student-centered learning models that emphasize collaboration, personalization, and active knowledge construction.

4. CONCLUSION

Based on the findings of this study, it can be concluded that the implementation of the Team Assisted Individualization (TAI) learning model had a significant and positive impact on Grade X students' ability to write anecdotal texts at SMA Swasta Teladan Pematangsiantar. Prior to the intervention, students' writing performance was categorized as "less," as reflected in their average pre-test scores falling below the established Minimum Completeness Criteria (KKM). Following the application of the TAI model, students showed notable improvement, with post-test scores rising into the "good" category, indicating enhanced competence in organization, idea development, and overall writing quality. These results suggest that the TAI model effectively supports the development of writing skills through a combination of cooperative and individualized learning strategies. However, this study is not without limitations. The use of a one-group pretest-posttest design without a control group limits the ability to definitively attribute improvements solely to the TAI intervention, as other external factors may have influenced the outcomes. Additionally, the absence of formal instrument validation and inter-rater reliability measures in the writing assessments may affect the objectivity of the evaluation process. Future research is encouraged to employ more rigorous experimental designs, such as randomized control trials, and to explore the application of the TAI model across different genres of writing or in comparison with other collaborative learning models. Longer implementation periods and qualitative data, such as student reflections or classroom observations, may also provide deeper insights into how the TAI model fosters writing development.

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