



## Improving Reading Comprehension Skills Through UDL-Based Illustrated Text Media in Slow Learner Students

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### ABSTRACT

This research aims to improve the learning process and reading comprehension skills through picture-based text media. *Universal Design for Learning* (UDL) in students *slow learners* in elementary schools. The study used the Classroom Action Research (CAR) method, which was implemented in two cycles, including planning, implementation, observation, and reflection. The research subjects consisted of two students *slow learner*. Data were collected through observations of teacher activities, observations of student activities, and reading comprehension tests, then analyzed quantitatively and qualitatively. The results of the study showed an increase in reading comprehension skills, marked by the increase in student S scores from 71.87 to 87.50 and student T scores from 65.62 to 78.12. Teacher activity increased from 67.50%-75.00% to 85.00%-92.50%, while student activity increased from 64.28%-71.42% to 85.71%-92.85%. These findings indicate that UDL-based pictorial text media is effective in improving the learning process and students' reading comprehension skills *slow learner*.

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## INTRODUCTION

Reading comprehension is a basic competency that determines the learning success of elementary school students because it is the basis for understanding information in various subjects. However, students still face various obstacles in reading comprehension, such as identifying main ideas, connecting information between sentences, and summarizing the text's content. This condition requires learning services tailored to their learning characteristics and structured support to enable them to optimally participate in the learning process (Ultabaini & Pujaningsih, 2024; Al Majid & Wachidah, 2025). In addition to impacting academic ability, reading comprehension difficulties also affect students' learning motivation, activeness, and self-confidence in participating in learning activities (Madrid, Balawag, & Franca, 2025).

Initial observations in the fourth grade at SDN 2 Sababilah showed that reading comprehension learning still focused on lecture methods and the use of reading texts without adequate visual media support. Of the 10 students who participated in the learning, two students were indicated to have *slow learner*. Having difficulty understanding the content of the reading, determining the main idea, making inferences, and answering questions based on the text. The teacher has attempted to provide support through rereading activities, explaining the material, and practicing answering questions, but the results obtained are not optimal because the learning media used are not yet able to accommodate the students' learning needs *slow learner*.

Various studies have shown that the use of pictorial media can help increase student engagement and facilitate comprehension of reading content (Husna, Salimi, & Suryandari, 2023; Sari, Nikmah, & Ruby, 2023). Furthermore, this approach *Universal Design for Learning*(UDL) provides various alternatives for presenting material, engaging students in learning, and ways for them to express their understanding, making learning more inclusive and tailored to diverse learning needs (Ahmad, Shabbir, & Shahzad, 2024; EL Boukhrissi & Brigui, 2025). Based on these conditions, this study applies picture-based text media *Universal Design for Learning*(UDL) as a solution to improve the quality of the learning process as well as students' reading comprehension skills *slow learners* in elementary schools through the Classroom Action Research (CAR) approach.

This research aims to improve the learning process and students' reading comprehension skills *slow learner* through image-based text media *Universal Design for Learning*(UDL). The research results are expected to provide theoretical benefits as a development of studies on the application of *Universal Design for Learning*(UDL) in learning reading comprehension, and practically becomes an alternative for teachers in designing more inclusive learning, helping to improve students' reading comprehension skills *slow learner*, and become a reference for future researchers in developing similar research.

## LITERATURE REVIEW

### Definition of Child *Slow Learner*

Students at risk *slow learner* Students with intellectual disabilities are those whose intellectual potential is slightly below average but not yet classified as an intellectual disability. Consequently, their learning ability is slower than that of their peers and they require more time and repetition to complete academic and non-academic tasks. This condition requires a more conscious, enjoyable, and meaningful learning approach to optimize their potential. Research shows that learning strategies that emphasize gradual reinforcement of concepts, repetition of material, and the application of contextual learning can accommodate students' limitations *slow learner* and increase the effectiveness of understanding the material Suparno, S., Praptiningrum, N., & Purwandari, E. (2019)

According to Wahyuningsih and Suranti (2023), students *slow learners* require learning strategies tailored to their characteristics and learning needs. This is because they require more time to receive, understand, and process information compared to their peers. Therefore, learning strategies that are considered effective include flexible classroom management, the use of concrete learning media, providing continuous repetition of material, and adjusting the time and assessment techniques according to the abilities of each student. According to Ma'idah, Ekawati, and Arifin (2025), differentiated instruction or differentiated learning plays an important role in inclusive education, especially for students *slow learner* This approach adapts the methods, materials, and forms of assessment to each student's abilities, so they can participate in the learning process without experiencing delays compared to their classmates.

### Understanding Reading Comprehension

Reading is the act of pronouncing or vocalizing written text with the goal of understanding its content. Essentially, reading involves more than simply recognizing or interpreting written words; it also involves various complex processes, such as thinking, visual processing, psycholinguistics, and metacognitive abilities. This demonstrates that reading is a process that involves various cognitive aspects in comprehending text (Rahim, 2021). In addition, reading is a cognitive process carried out by individuals to obtain, understand, and process information conveyed through written language so that they can build an understanding of the content of the reading (Fadhillah & Novianti, 2021).

Based on these various opinions, it can be concluded that reading is a complex cognitive process that is not only limited to pronouncing or recognizing words in writing. Reading also involves various interrelated mental activities, such as the thinking process, visual activity in recognizing language symbols, psycholinguistic processes in understanding the relationship between language and meaning, and metacognitive abilities to control and understand the reading process itself. Through reading activities, a person can obtain, understand, and interpret various information or messages conveyed by the author through written language. Therefore, reading is not only seen as a mere mechanical activity, but as a process of understanding that is important in developing thinking skills and acquiring knowledge.

Based on these various opinions, it can be concluded that reading comprehension is a reading ability that aims to understand the content and meaning contained in a text as a whole. This activity is not only limited to the mechanical process of reading, but also involves cognitive processes that enable readers to connect the information contained in the reading with their previous knowledge and experiences. Through the process of reading comprehension, readers can obtain various information, grasp the ideas or concepts conveyed by the author, and use this information as a source of knowledge in learning activities. Therefore, reading comprehension is one of the important skills that need to be developed in students, especially at the elementary school level.

### **Understanding Media Text with Pictures**

Learning media are any tools, materials, or resources used in the learning process to convey material or information, making the teaching and learning process more effective and efficient, and stimulating student understanding, motivation, and engagement in learning activities. These media help explain lesson concepts, facilitate communication between teachers and students, and increase active student engagement in learning (Azhura et al., 2024).

The use of interactive picture storybook media has been proven effective in improving elementary school students' reading comprehension and communication skills, because this media is able to help students understand the contents of the text while simultaneously training their ability to convey information coherently and expressively (Nisa et al., 2026).

In conclusion, illustrated text media is a learning medium that integrates text and images to convey information or learning materials more clearly and engagingly. This combination can help students understand concepts more concretely, increase learning motivation, and strengthen memory of the material studied. Furthermore, this medium is also effective in improving literacy skills, particularly reading comprehension and the ability to communicate the content of reading. Therefore, illustrated text media can be an appropriate alternative for creating interactive, enjoyable, and meaningful learning.

## **METHODOLOGY**

This research uses a Classroom Action Research (CAR) design with the Kemmis and McTaggart model, which consists of four stages, namely planning(*planning*), implementation of actions (*acting*), observation (*observing*), and reflection (*reflecting*). PTK was chosen because it is a reflective research that aims to improve the learning process and increase student learning outcomes through actions implemented in stages over several cycles.

This research was conducted in the fourth grade of SDN 2 Sababilah, located in Dusun Selatan District, South Barito Regency, Central Kalimantan Province. The school was chosen as the research location because the researcher is a teacher at the school, making it easier for the researcher to conduct research activities and directly observe the learning process in the classroom.

The subjects of this study consisted of two students *slow learner* Fourth grade students of SDN 2 Sababilah in the 2025/2026 academic year who experienced difficulties in reading comprehension. The subject determination

was based on the results of initial observations, information from the class teacher, and the results of the identification of reading abilities which showed that the two students experienced difficulties in understanding the content of the reading compared to other students. The learning action was carried out in a classical manner involving all 10 fourth grade students, consisting of 3 male students and 7 female students, using a problem-solving approach. *Universal Design for Learning* (UDL). However, the research data analyzed only came from test results and observations of two students. *slow learner*, while all students continue to follow the learning and evaluation process.

## RESEARCH RESULT

### a. Research result

Application of image-based text media *Universal Design for Learning* (UDL) has been proven to improve the process of learning to read comprehension in students. *Slow learner* This is indicated by an increase in teacher activity from 67.50%–75.00% in Cycle I to 85.00%–92.50% in Cycle II, as well as student activity from 64.28%–71.42% to 85.71%–92.85%. These results indicate that learning has become more active, interactive, and in line with students' learning needs.

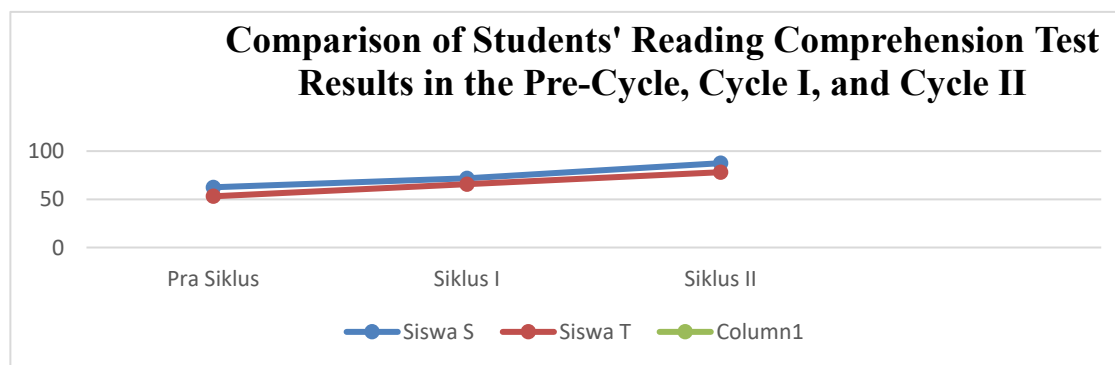
Application of image-based text media *Universal Design for Learning* (UDL) also improves students' reading comprehension skills *slow learner*. Student S's score increased from 62.50% (pre-cycle) to 71.87% (Cycle I) and 87.50% (Cycle II), while student T's score increased from 53.12% to 65.62% and 78.12%.

This improvement indicates that students are increasingly able to understand the content of the reading, identify important information, draw conclusions, and provide responses to the reading. Thus, picture-based text media *Universal Design for Learning* (UDL) effectively improves students' reading comprehension skills to achieve the established success indicators.

**Table 1. Comparison of Reading Comprehension Ability Test Results of Pre-primary Students Cycle, Cycle I, and II**

| Research Stage | S-value | Category  | T-value | Category   |
|----------------|---------|-----------|---------|------------|
| Pre Cycle      | 62,50   | Enough    | 53,12   | not enough |
| Cycle I        | 71,87   | Good      | 65,62   | Enough     |
| Cycle II       | 87,50   | Very good | 78,12   | Good       |

Based on Table 1, students' reading comprehension skills improved at each stage of the study. Student S's score increased from 62.50 in the initial data to 71.87 in Cycle I and 87.50 in Cycle II. Meanwhile, student T's score increased from 53.12 in the initial data to 65.62 in Cycle I and 78.12 in Cycle II.



**Figure 1. Comparison Chart of Reading Comprehension Test Results Pre-Cycle, Cycle I and II Students**

Application of image-based text media *Universal Design for Learning (UDL)* provide a positive impact on improving students' reading comprehension skills *slow learner*. This is evident from the improvement in reading comprehension test results for both research subjects, from the initial conditions, Cycle I, to Cycle II. Furthermore, observations indicate that teacher and student activities also increased in each cycle, resulting in a more focused learning process, more active student participation, and optimal achievement of learning objectives.

The improvement in reading comprehension skills is not only influenced by the use of illustrated text media, but also by the integration of principles. *Universal Design for Learning (UDL)* at every stage of learning. The media used not only presents text and images, but is also designed with various forms of visual representation that suit the learning characteristics of students *slow learner*. *Flipbook* includes illustrations on each page, the use of different colors as story line markers, small image cuts above each word to clarify the meaning, color coding for the Subject, Predicate, Object, and Description (SPOK) elements, as well as arrow images and images of happy and sad expressions to help students understand the cause and effect relationship in the story.

Presenting information through various visual forms makes it easier for students to connect the information they read with the illustrations they observe, making the content of the reading more concrete and easier to understand. Thus, the application of the principle *multiple means of representation* providing more than one way for students to receive and understand information according to their learning needs. In addition to presenting diverse information, improving reading comprehension skills is also supported by the application of the principle *multiple means of engagement* which aims to increase student engagement during the learning process. The teacher provides guiding questions, repeats important information, provides reinforcement in the form of praise and appreciation, and *scaffolding* gradually according to student needs.

## DISCUSSION

Application of image-based text media *Universal Design for Learning (UDL)* provide a positive impact on improving students' reading comprehension skills *slow learner*. This is evident from the improvement in reading

comprehension test results for both research subjects, from the initial conditions, Cycle I, to Cycle II. Furthermore, observations indicate that teacher and student activities also increased in each cycle, resulting in a more focused learning process, more active student participation, and optimal achievement of learning objectives.

The improvement in reading comprehension skills is not only influenced by the use of illustrated text media, but also by the integration of principles. *Universal Design for Learning (UDL)* at every stage of learning. The media used not only presents text and images, but is also designed with various forms of visual representation that suit the learning characteristics of students *slow learner*. *Flipbook* includes illustrations on each page, the use of different colors as story line markers, small image cuts above each word to clarify meaning, color coding for Subject, Predicate, Object, and Description (SPOK) elements, as well as arrows and images of happy and sad expressions to help students understand the cause and effect relationships in the story. Presenting information through various visual forms makes it easier for students to connect the information they read with the illustrations they observe so that the content of the reading becomes more concrete and easier to understand. Thus, the application of the principle of multiple *means of representation* provide more than one way for students to receive and understand information according to their learning needs.

Apart from presenting diverse information, improving reading comprehension skills is also supported by the application of principles. *Multiple means of engagement*, which aims to increase student engagement during the learning process. The teacher provides guiding questions, repeats important information, provides reinforcement in the form of praise and appreciation, and *scaffolding* gradually according to student needs. Learning is also carried out through heterogeneous group discussions by pairing students *slow learner* with regular students so that peer support is created (*peer support*). Through these activities, students get the opportunity to discuss, help each other understand the content of the reading, and actively participate in completing group assignments. Reinforcement activities use *Wordwall* also provides a more interesting learning experience so that students' attention and motivation are maintained during the learning process.

Next, the application of the principle *multiple means of action and expression* provides students with opportunities to demonstrate their understanding through various learning activities. Students not only answer questions based on the content of the reading, but also sequence events using page colors as plot markers, arrange colored word cards based on SPOK, present the results of group discussions, explain cause-and-effect relationships in the story, assess character behavior, and express opinions verbally. During the evaluation stage, teachers also adjust the implementation of tests according to student characteristics *slow learner*. Students who are still able to read take the test in writing with limited assistance in understanding the instructions, while students who are not yet able to read independently receive assistance in the form of reading the text and questions by the teacher. For simple questions, students write their answers with spelling assistance if necessary, while for more complex questions, students

provide their answers orally. This adjustment provides each student with the opportunity to demonstrate their reading comprehension skills without changing the objectives or assessment indicators.

Integration of the three principles *Universal Design for Learning (UDL)* This makes learning more flexible and able to accommodate students' learning needs *slow learner*. Presenting material through various visual forms helps students understand the information contained in the reading. Group discussions, *peer support*, scaffolding helps students reorganize the information they receive so they can sequence the story and find supporting ideas. Furthermore, the use of arrows and images of happy and sad expressions helps students understand the cause-and-effect relationships between events, thereby developing inferential skills. At the evaluative stage, students are also able to assess the character's behavior and provide simple solutions based on the content of the reading. These findings indicate that the application of illustrated text media integrated with the principles of *Universal Design for Learning (UDL)* not only helps students understand information literally, but also develops reorganizational, inferential, and evaluative skills in reading comprehension.

The findings of this study align with the theory proposed by Henry Guntur Tarigan (2015) which states that reading is a process undertaken by readers to obtain and understand the message conveyed by the author through written language. In this study, the process of obtaining and understanding the message is made easier because the information is not only conveyed through text, but is also reinforced with various visual supports, such as image illustrations, the use of color, small image cuts for each word, SPOK color codes, and images that help students understand the relationship between information. Thus, students not only read language symbols, but also connect verbal information with visual representations so that the process of understanding the content of the reading becomes more effective.

The results of this study also align with research by Magdalena, Fadhilah, and Gusmawati (2023), which showed that picture storybooks effectively improve elementary school students' reading comprehension skills by increasing student engagement, facilitating comprehension, and creating a more meaningful learning experience. Research by Diana and Marta (2025) also showed that the use of picture media contributes to improving reading comprehension skills through a more concrete and engaging presentation of material. Furthermore, research by Dwiyasari et al. (2023) and Suprpto (2021)

Based on the results of this study, it can be understood that increasing students' reading comprehension skills *slow learning* only due to the use of pictorial text media, but also by the application of principles *Universal Design for Learning (UDL)* integrated into every stage of learning. Presentation of information through various forms of representation, active student involvement through scaffolding, group discussions, and peer assistance, as well as providing various ways for students to demonstrate their understanding make learning more appropriate to student characteristics *slow learner*. Therefore, the media text based on images *Universal Design for Learning (UDL)* proven to be able to support improving students' reading comprehension skills *slow learner* more optimally.

## CONCLUSIONS AND RECOMMENDATIONS

Based on the results of classroom action research carried out in two cycles at SD Negeri 2 Sababilah, it can be concluded that the application of picture-based text media Universal Design for Learning (UDL) effectively improve the learning process and students' reading comprehension skills *slow learner*. Improvements were evident in the increasingly better teacher and student activities in each cycle, as well as the improved reading comprehension test results from pre-cycle to Cycle II. These results indicate that UDL-based pictorial text media can help students better understand reading content and achieve the established success indicators.

## ADVANCED RESEARCH

It is recommended that further research involve more subjects, be carried out over a longer period of time, and develop learning media based on Universal Design for Learning (UDL) more diverse in order to obtain more comprehensive results regarding the effectiveness of illustrated text media in improving students' reading comprehension skills *slow learner*.

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