

# Validity of the Assessment Instrument in Developing Picture Stories Based on Local Wisdom: Is it valid?

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**Abstrak** Penggunaan alat evaluasi memerlukan pembatasan pemerintah berikut ini. Oleh karena itu, sistem evaluasi memerlukan alat penilaian untuk mengukur keberhasilan pembelajaran secara andal. Mereka mungkin mengevaluasi semua keterampilan siswa, sehingga memerlukan lebih banyak keterlibatan siswa. Konsep pendidikan berbasis kearifan lokal memanfaatkan keunikan dan potensi masing-masing daerah untuk mengajarkan kecakapan hidup. Ini akan melindungi potensi daerah mana pun. Kajian ini mengevaluasi cerita bergambar yang menggambarkan Karawang, Kearifan Lokal Jawa Barat Peduli Lingkungan terhadap Kebenaran. Pengetahuan lokal sangat penting untuk mempelajari interaksi masyarakat-lingkungan. Diperlukan alat penilaian yang dapat dipercaya dan akurat untuk menganalisis keandalan dan keaslian kumpulan cerita bergambar tentang pelestarian lingkungan adat. Penelitian ini menggunakan proses pengembangan instrumen yang meliputi perencanaan, pengembangan, pengujian, dan analisis. Para peserta penelitian memahami secara mendalam Kearifan Lokal untuk Peduli Lingkungan di Karawang. Wawancara, tinjauan literatur, dan observasi naratif bergambar menyediakan data. Berdasarkan penelitian, instrumen evaluasi mengkuantifikasi kearifan lingkungan lokal dengan validitas yang sangat baik. Reliabilitas dan validitas instrumen dikonfirmasi melalui analisis statistik, sehingga dapat digunakan untuk menganalisis cerita bergambar serial dalam kearifan adat Karawang. Penelitian ini menyempurnakan alat penilaian bagi pemangku kepentingan untuk mengevaluasi keberlanjutan program pendidikan kearifan lokal di Karawang, Jawa Barat, dengan konsentrasi pada isu lingkungan hidup. Kajian ini juga dapat membantu akademisi dan profesional memahami dan menghargai kearifan adat dalam perlindungan ekologi.

**Kata kunci:** Anak Usia Dini, Cerita Bergambar, Kearifan Lokal, Kemampuan Komunikasi, Pengembangan Instrumen penilaian

**Abstract** Using evaluation tools requires following government restrictions. Thus, the evaluation system needs assessment tools to measure learning success reliably. They may evaluate all student skills, requiring more student engagement. The local wisdom-based education concept uses each region's unique strengths and potential to teach life skills. It will protect any area's potential. This study evaluates illustrated stories depicting Karawang, West Java's Local Wisdom of Environmental Care for Veracity. Local knowledge is essential for studying community-environment interactions. A trustworthy and accurate assessment tool is needed to analyze the reliability and authenticity of a collection of illustrated stories about indigenous environmental conservation. This study uses an instrument development process, including planning, development, testing, and analysis. The research participants deeply understood Local Wisdom for Environmental Care in Karawang. Interviews, literature reviews, and illustrated narrative observations provided data. According to studies, the evaluation instrument quantifies local environmental wisdom with excellent validity. The instrument's reliability and validity are confirmed by statistical analysis, allowing it to be used to analyze serial image stories within Karawang indigenous wisdom. This study improves assessment tools for stakeholders to evaluate the sustainability of local wisdom education



programs in Karawang, West Java, concentrating on environmental issues. This study can also help academics and professionals understand and value indigenous wisdom in ecological protection.

**Keywords:** Early Childhood, Picture Stories, Local Wisdom, Communication Skills, Development assessment instruments.

## Introduction

Education plays a crucial role in fostering the growth of pupils' abilities and shaping their character (Sugianto et al., 2017; Vidyastuti et al., 2018). An essential component of education is the creation of legitimate and suitable assessment tools that cater to specific local requirements (Ridwan et al., 2017; Yulianeta, 2017). One of these schools is located in Karawang, West Java, and mandates a learning outcomes test as part of their admission process. The learning outcomes exam is a tool used to measure and assess students' level of achievement in learning based on their characteristics. This can be accomplished when educators can create assessment tools.

A learning evaluation instrument is a metric tool to gauge students' proficiency in attaining the established learning objectives. Developing children's potential should be established as a primary objective in early childhood education (Fajriati et al., 2018; Zakaria & Yulianeta, 2018). Effective learning tactics are essential when using storybooks to enhance children's capabilities (Latukau & Yulianeta, 2018). Utilizing picture storybooks as a reading medium for young children can serve as an effective means of introducing vocabulary and linguistic concepts. Regular reading habits can enhance children's moral comprehension. Teachers can facilitate this endeavor by integrating indigenous knowledge from their respective localities.

The significance and use of local wisdom is contingent upon the willingness of the local population, who inherit the knowledge system, to embrace and acknowledge it as an integral aspect of their existence. Local wisdom, often known as the essence of local culture, is the practice of passing down knowledge from one generation to another. This study aims to create a tool for evaluating the authenticity of illustrated narratives that promote environmental consciousness and local wisdom in Karawang, West Java. This concerns the significance of creating picture storybooks that use local wisdom as a captivating educational tool. Creating picture storybooks drawing upon local wisdom can cultivate pupils' cooperative nature. Utilizing evaluation tools grounded in indigenous knowledge can enhance the authenticity of learning themes. Utilizing evaluation tools grounded in indigenous knowledge for theme instruction.

This study aims to combine a model for building assessment instruments that do not involve tests, as (Ferdiansyah & Yulianeta, 2018) proposed, with a proven effective approach for developing assessment instruments in educational settings. In addition, there is growing concern regarding the emphasis on using educational resources such as picture storybooks when designing assessment tools (Sugianto et al., 2017). Therefore, this study will employ a research development (R&D) methodology (Vidyastuti et al., 2018) to create a valid and reliable evaluation instrument.

Furthermore, it is crucial to consider elements of student learning motivation while creating evaluation tools (Cholily et al., 2018; Inganah et al., 2018; Permadi et al., 2018). This factor should be considered when designing academically sound assessment tools that can inspire student engagement in the learning process. In addition, there has been a significant emphasis on researching the use of technology in creating assessment



instruments (Debaryshe, 1993; Nodelman, 1988; Sumarsono et al., 2018). This can be taken into account while constructing new and inventive assessment tools.

The creation of evaluation tools is a crucial procedure within the educational setting. The development process encompasses multiple facets, commencing with creating instructional materials grounded in indigenous knowledge and cultivating and assessing students' higher-order thinking skills (HOTS). A study conducted by (Adrian, 2005; Park & Zuniga, 2016) demonstrated the efficacy of student-generated textbooks in reflecting individuals' characteristics. In addition, the development of evaluation instruments can also influence students' character education (Priyatna, 2017). Creating evaluation tools can also incorporate analytical descriptive research approaches (Adrián, 2007; Sénéchal, 1995). The study conducted by Suyadi and Selvi in 2019 focused on quantitative descriptive analysis. Moreover, qualitative methodologies that provide detailed descriptions (McCombs & Reynolds, 2002).

The creation of evaluation tools can also be linked to the creation of educational materials, such as illustrated storybooks (Bublitz, 2016). Animated narrative videos (Georgakopoulou, 2007) and satirical drawings (Somolu, 2007). (McAdams, 1996) suggest that assessment instruments can be used to quantify social attitudes. The pupils' spiritual attitude (Nawyn, 2011), discipline (Mandler, 2014), and tolerance (Simarmata et al., 2019) are noteworthy. The process of creating evaluation instruments can also be connected to the creation of learning modules. Current education research is mostly concerned with creating assessment tools for instructional materials, namely illustrated stories (Ermaida et al., 2016). Explores the creation of assessment tools for mathematics learning in Jambi culture, highlighting the significance of accurate assessment instruments. Maulana and Wulandari (2011) illustrated using the modified Sugiyono model to develop assessment instruments. They particularly underlined the significance of the validation process as a crucial phase. These studies offer an understanding of the creation and verification of assessment tools that can be used to construct instruments for evaluating the accuracy of illustrated stories regarding local environmental issues.

Moreover, the significance of incorporating local knowledge and cultural context in creating assessment tools is evident in a study conducted by Hasanah in 2016. The research aimed to design picture storybooks that use local wisdom to enhance reading skills in elementary school pupils (Hasanah et al., 2016). This underscores the significance of integrating indigenous knowledge into educational resources, corresponding to the emphasis on local ecological issues in Karawang. Furthermore, the research conducted by Mantra (2017) highlights the creation of a picture storybook rooted in indigenous knowledge, aiming to cultivate compassionate individuals. This underscores the significance of incorporating local wisdom into educational resources (GK Mantra et al., 2017).

Chandra et al. (2018) researched the development of picture story assessment tools. Their study focused on the validation process and highlighted the significance of validity in evaluating social attitudes. This is significant because it emphasizes the necessity of verifying the accuracy of assessment tools to analyze image stories' influence on societal attitudes toward environmental issues. In addition, Dewi et al. (2018) conducted research that emphasizes the validation process of picture storybooks. This research demonstrated the utilization of expert reviews to evaluate the excellence and appropriateness of educational materials, which is crucial in creating assessment tools for picture stories (Dewi et al., 2019). In addition, Nurazizah et al. (2018) also conducted research highlighting the need to utilize research and development techniques for creating educational materials,



such as assessment guidelines. This approach can also be used for designing picture story assessment tools (Nurazizah et al., 2018).

Assessing the authenticity of a collection of illustrated narratives concerning indigenous knowledge and ecological consciousness in Karawang, West Java, holds significant significance in preserving local wisdom and promoting environmental sustainability. The scientific community is increasingly interested in integrating local knowledge and community-based conservation activities. Integrating social changes and conservation efforts within communities surrounding national parks is of utmost significance (Setiawan & Triyanto, 2018). Furthermore, preserving traditional villages that rely on indigenous knowledge has emerged as a central concern within Indonesia's urban development framework. The involvement of local communities and the dedication of local organizations to save indigenous knowledge is crucial for ensuring the long-term viability of these settlements (Sukmawati, 2017).

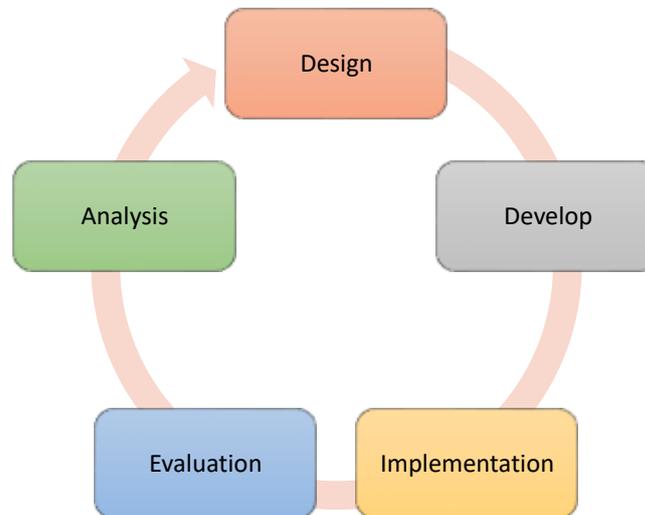
Multiple pertinent studies can bolster the study on illustrated narrative series incorporating indigenous knowledge and prioritizing environmental conservation. Suryandari and Wijayani (2018) studied environmental communication, local wisdom, and flood prevention. Their research offers valuable insights into the potential of local wisdom in addressing environmental concerns. Furthermore, Agustina et al. (2018) conducted a study that centers on creating a flipbook that addresses the issue of environmental pollution by incorporating local wisdom. This research offers significant insights into incorporating indigenous knowledge into educational resources for environmental preservation (Agustina et al., 2018). Moreover, Hanif et al. (2018) conducted a study investigating the enhancement of community-based disaster management in Indonesia using local wisdom. This research offers useful insights into effectively using local knowledge to mitigate disasters (Hanif et al., 2018). In addition, Henri et al. (2018) examined the community's indigenous knowledge in safeguarding the Pelawan Forest, offering pertinent illustrations of how such knowledge contributes to environmental conservation efforts (Henri et al., 2018). Furthermore, Maria's (2018) study investigates the indigenous groups' utilization of their customary land, focusing on the local knowledge they employ. The research offers a comparative analysis of different tribes in Indonesia, shedding light on the diverse ways in which local wisdom is applied in environmental management (María, 2018).

This research differs from previous studies in synthesizing significant insights into developing and validating assessment tools for instructional materials, particularly illustrated stories incorporating local wisdom content. The focus on indigenous knowledge, verification procedures, and research and development approaches from these studies can be utilized to create reliable assessment tools for illustrating narratives addressing local environmental issues in Karawang, West Java. Developing assessment instruments encompasses multiple facets, such as creating instructional resources and educational instruments, evaluating student attitudes, incorporating local knowledge, and employing data collection techniques. This process is a crucial component of efforts to enhance education's caliber and knowledge acquisition. This study will additionally aid in creating evaluation tools tailored to local requirements, facilitating genuine learning, and considering student motivating factors. By employing a rigorously tested approach to developing an assessment instrument and considering various pertinent factors, this research aims to create a valid assessment instrument for evaluating the impact of locally inspired environmental wisdom in Karawang, West Java, on the character development of young children. Show concern for the environment.



## Method

Researchers employ research and development (R&D) methodologies. The development model employs the ADDIE framework, specifically consisting of five distinct stages, as depicted in Figure 1 (Vidyastuti et al., 2018).



**Bagan 1.** ADDIE Models

Figure 1 in the ADDIE stage corresponds to the analysis phase. An analysis is required to determine the school's requirements for improving pupils' reading skills using graphical storytelling. This analysis entails reviewing the books employed, conducting a student analysis, performing task analysis, and completing initial and final assessments. Furthermore, exploratory investigations are carried out during this stage. The preliminary study involves a thorough analysis of indigenous knowledge, ecological responsibility, and the unique conditions of Karawang to gain a deeper understanding. Identify contemporary serialized illustrated narratives that are pertinent to the research objectives. The planning procedure entails identifying and selecting research targets representing schools in the Karawang district.

The second part pertains to design, wherein local expertise in Karawang is utilized to develop assessment tools, specifically focusing on student literacy content. Develop a sequential visual narrative assessment tool by integrating findings from an initial inquiry and creating a scenario or guide to enhance the instrument's usability. In the third step, developing storybooks based on indigenous knowledge begins. The primary objective is to develop picture narrative assessment tools in the context of product development. Furthermore, after the storybook assessment instrument is developed, it must undergo a validation process by validators. Engaging experts to assess the instrument's content, ensuring it appropriately expresses the local knowledge values prioritizing environmental care in Karawang. The testing step can commence once the assessment instrument is valid. The implementation entails collecting data from participants to evaluate the integrity of serialized illustrated stories and the degree to which they include indigenous knowledge. This is accomplished by conducting small-scale experiments after verifying the authenticity of the evaluation tool. This study aims to evaluate the effectiveness of the picture narrative assessment tool, with the last stage being the evaluation process. The aim is to evaluate the



specific areas that require attention when developing storybooks incorporating indigenous knowledge to improve pupils' awareness and reading abilities. This will be accomplished by thoroughly examining the assessment instrument, making necessary revisions, and implementing enhancements. Data analysis thoroughly validates the instrument's capacity to produce consistent and reliable results. Finally, the process of Revision and Refinement is carried out. The instrument is refined based on the data analysis findings and respondents' feedback.

The investigation was undertaken at a pilot location in one of the AUD schools in the Karwang district. The study included a group of 12 students who were diagnosed with AUD in the Karawang region. The research investigation was carried out utilizing a one-group pretest-posttest design. Students are given pretest questions, particularly those administered at the start of the learning journey. Afterward, students are given challenges or questions as part of the lesson's conclusion. Experts specializing in evaluating tools and materials perform design validation or product validation. Two groups of specialists gather design and product validation data: experts in evaluation instruments and materials. These experts employ questionnaires and tests as tools for gathering data. An evaluation was conducted to gauge the credibility of the assessment tool and the teacher's response to the development of the assessment tool. The test given to students was to determine the effectiveness of the assessment tool used in the educational process. The stages of data analysis encompass needs analysis, performance analysis, product feasibility analysis, research instrument analysis, product validity analysis, and product practicality analysis. Testing norms are determined using assessments that evaluate normalcy, homogeneity, and dependability.

## Results and Discussion

This study creates assessment tools for local knowledge-based picture storybooks to improve young children's literacy and environmental awareness in Karawan Regency. In Karawan Regency, picture storybooks based on local wisdom are assessed to improve infants' early reading and environmental awareness. Investigate student growth evaluation techniques' practicality, reliability, and efficacy. Student growth evaluation instrument feasibility, validity, and usefulness. This research can provide efficient items using the right development model and R&D techniques (Darmayanti, 2018). The ADDIE model examines basic design development's numerous phases. Simple, understandable evaluation tool. The ADDIE Model stands for Analysis, Design, Development, Implementation, and Evaluation, the main steps in learning system development. This strategy was chosen because it allows for continuous assessment and change. Systematic implementation makes this work easy.

### 1. *Analysis:*

The needs assessment of the school principal's response to picture story books based on local wisdom revealed that these books, which aim to enhance children's basic literacy, need more attention to be used as a foundation for policy-making. The principal has determined that picture storybooks based on local wisdom must be more suitable for learning. What is anticipated: Developing picture storybook assessment instruments rooted in indigenous knowledge is crucial for enhancing children's fundamental reading skills. Examining student achievement revealed teachers' need to enhance their ingenuity in producing literary resources in the shape of books tailored for primary school students. The issue at hand pertains to the need for more picture storybooks that draw upon local



wisdom, contributing storybooks to students' disinterest in storybooks due to their unappealing appearance. Consequently, children's awareness and understanding of local wisdom in Karawang Regency could be improved. According to the findings of this analysis, students' requirements will be addressed by tailoring the literary book materials (such as stories and fairy tales) used in oral communication classes. The aim is to create a picture storybook tool incorporating local wisdom.

## 2. *Design* :

Design is the subsequent stage in designing the creation of picture storybooks rooted in local wisdom and tailored to meet the specific requirements of pupils, hence enhancing the appeal of the picture books. The process involved developing a basic framework for the picture storybook assessment tool, considering several criteria outlined in Table 1.

*Table 1 . Aspects of Picture Story Assessment Instruments*

| No | Assessment Aspects                | Assessment Indicators   |
|----|-----------------------------------|---|
| 1  | Conformity with Local Wisdom      | 1. Describe local cultural values<br>2. Including local traditions and wisdom<br>3. Relevant to the context of Karawang society                     |
| 2  | Aspects of Environmental Care     | 1. Contains a message of caring for the environment<br>2. Encourage environmentally friendly behavior<br>3. Demonstrate a positive impact on nature |
| 3  | Creativity and Attractiveness     | 1. Unique and visually appealing<br>2. Be creative in telling stories<br>3. Can attract the attention of various ages                               |
| 4  | Suitability to Target Age         | 1. By age, cognitive development<br>2. Suitable for children and teenagers<br>3. Useful for environmental education                                 |
| 5  | Language and Visual Communication | 1. Use language that is appropriate and easy to understand<br>2. Effective in conveying messages<br>3. Use images that support the story            |

Table 1 outlines the measures performed to establish the validity and reliability of the assessment instrument before its administration to the total respondent group. Preliminary testing of samples facilitates the detection of potential issues and enables researchers to enhance the instrument before its implementation on a broader scope. The subsequent phase involves creating an evaluation tool by adapting a conventional book assessment instrument as a preliminary version and implementing it into an electronic device as an assessment instrument for evaluating picture books, specifically in the form of a laptop or computer. Next, the book will be created by typing the text and including illustrations in the picture storybook, following the outlined plan under the supervisor's guidance. The last stage involves printing the picture storybook assessment instrument and the subsequent product improvement. Upon completing the entire stage design process, the evaluation instrument product assessment instrument book is now prepared. The visual story will be executed in the subsequent phase, specifically the development phase 3.

## 3. *Develop (Development)*

This step encompasses developing the assessment instrument. Developing an assessment instrument includes various validation stages, beginning with creating the



concept and concluding with testing on representative samples. The series of illustrated stories, which are the main focus of the research, effectively incorporate the principles of local knowledge and environmental care. The primary determinant of the evaluation instrument's effectiveness is ensuring that each measured factor is grounded in the notions and values of local knowledge in Karawang. Conducting first tests on samples in instrument validity research is a crucial step to assess the practicality and efficacy of the instrument under development before its widespread utilization. This procedure is conducted by engaging a limited number of participants accurately representing the intended demographic.

The process involves reviewing the assessment instruments, which professionals in the field of assessment instruments and material have validated. This validation aims to solicit an evaluation and recommendations for enhancements from subject matter experts and experts in assessment instruments. Subsequently, researchers seek input from experts in evaluation instruments and materials to pinpoint any flaws that can be rectified. To facilitate the evaluation of a development product by experts, researchers must design a questionnaire to be administered to both material and assessment instrument experts to analyze the assessment instrument's practicality. Developed. We prepared questionnaires as assessment instruments and materials for feasibility evaluation to validate the product. Validation encompasses adherence to indigenous knowledge, environmental stewardship, ingenuity and appeal, and appropriateness for the intended age group. In the material validation questionnaire, the criteria for assessment include the material's substance, problem-solving capabilities, curriculum, and other factors. In addition to material validation questionnaires and questionnaire assessment tools, instructor and student response questionnaires are also available. The teacher response questionnaire encompasses many evaluation dimensions, including material content, learning facets, curriculum, interaction, feedback, and problem-solving. The student response questionnaire encompasses evaluation tools, utilization outcomes, and accompanying resources for products that have undergone revisions and garnered favorable endorsements from specialists, enabling the product to progress to the current phase.

**Table 2.** Validation results of the Picture Story Assessment Instrument

| No | Assessment Aspects                | Assessment Indicators   | Score |
|----|-----------------------------------|---|-------|
| 1  | Conformity with Local Wisdom      | 1. Describe local cultural values<br>2. Including local traditions and wisdom<br>3. Relevant to the context of Karawang society                     | 4.31  |
| 2  | Aspects of Environmental Care     | 1. Contains a message of caring for the environment<br>2. Encourage environmentally friendly behavior<br>3. Demonstrate a positive impact on nature | 4.64  |
| 3  | Creativity and Attractiveness     | 1. Unique and visually appealing<br>2. Be creative in telling stories<br>3. Can attract the attention of various ages                               | 4.43  |
| 4  | Suitability to Target Age         | 1. By age, cognitive development<br>2. Suitable for children and teenagers<br>3. Useful for environmental education                                 | 4.24  |
| 5  | Language and Visual Communication | 1. Use language that is appropriate and easy to understand<br>2. Effective in conveying messages<br>3. Use images that support the story            | 4.57  |



#### **4. Implementation (Small Scale Trial)**

Image, an evaluation tool in a storybook, has been created and will be used in early childhood education settings. Teachers and students will utilize the picture storybook assessment instrument throughout classroom instruction. The execution of this program will be conducted by educators and pupils belonging to Group B1 in Karawang Regency. During this implementation stage, preliminary trials are conducted on a limited scale. The researchers conducted this study at the B1 Early Childhood School, with a limited number of participants, specifically 1 or 2 youngsters. Subsequently, pupils are administered a pretest and posttest inquiries and complete a questionnaire to determine the Practicality of picture storybook learning evaluation tools. After completing a small-scale trial, pupils are provided with pretest questions. Preliminary experiment evaluating posttest evaluation outcomes. The assessment instrument employed is pragmatic.

#### **5. Evaluation**

The product's shortcomings are addressed throughout the development of the assessment instruments. The flaws in the assessment instrument are rectified to render it a suitable and enhanced evaluation tool before its use on a limited scale. Following the evaluation stage, the chosen assessment instrument is the storybook learning assessment instrument. These illustrations are based on local wisdom and emphasize caring for the environment. They have been deemed suitable as learning assessment tools and implemented in selected schools, specifically PAUD schools in Karawang Regency. Additionally, small-scale trials have been conducted.

### **Discussion**

The test evaluation findings, conducted at both institutions, indicated that before administering the posttest in class IV A, the average score was 62.86, falling under the "quite effective" category. The average score in the highly effective group after the posttest was 78.57. In class IVB, before the posttest, the average score attained in the pretest and posttest categories was 52.86. The mean value is 88.096 within the highly efficient category. These results underwent testing utilizing the normality, homogeneity, and t-tests. The results of the normalcy test for class IVA pupils yielded a significant outcome. The posttest yielded a result of 0.104, greater than the significance level of 0.05.

Similarly, the pretest yielded a result of 0.135, which is also greater than the significance level of 0.05. The normalcy test results for class IVB pupils yielded a significant value. In the posttest, the observed value of 0.100 was greater than the significance level of 0.05. The pretest yielded a result of 0.110, which is greater than 0.05. The null hypothesis test decision is accepted, allowing us to conclude that the sample originates from a population that follows a normal distribution. The acquired results are statistically significant. If the pretest and posttest values exceed 0.05, then the null hypothesis ( $H_0$ ) is accepted. The conclusion can be drawn that the variances of the two populations are homogeneous. The t-test findings for class IVA students showed a t count of 3.759, greater than the critical t value of 2.086 (with 20 degrees of freedom at a 5% significance level). Therefore, the null hypothesis ( $H_0$ ) was rejected, and the alternative hypothesis ( $H_a$ ) was accepted at a 5% significance level. The t-test conducted on class IVB students yielded a t-count value of 4.736, greater than the critical t-value of 2.080 (with 21 degrees of freedom



and a significance level of 5%). As a result, the null hypothesis (H<sub>0</sub>) is rejected, and the alternative hypothesis (H<sub>a</sub>) is accepted at a significance level of 5%. Therefore, the book's progression is a compelling narrative.

Teacher I achieved an average score of 92.3 in the highly effective category while utilizing the picture storybook assessment tool based on local wisdom. In terms of the different aspects, the first objective is to achieve a score of 90 using the evaluation instrument. The second element, grammar, is evaluated based on the student's abilities and receives a score of 92. Lastly, the third aspect, systematic demands that are clear and easy to grasp, receives a score of 95. Teacher I, in the practical category, had an average score of 92.3 based on the total findings.

Teacher II scored 92.3 in the highly effective category, utilizing the picture storybook assessment tool based on local wisdom. Therefore, based on the teacher's response, the total outcome is that the teacher is classified as "highly proficient." Regarding aspect point 1), the purpose aligns with using the assessment tool, resulting in a score of 95. 2) The student's grammar is aligned with their abilities, achieving a score of 88. 3) The systematic requirements, which are clear and easily understandable, received a score of 95. The practical category yielded an average score of 92.3 based on Teacher II's collective replies.

The student response questionnaire on using evaluation instruments for learning yielded an average score of 92 in the practical category. Overall, using storybooks provided to pupils has a high degree of efficacy, falling within the "very effective" range. The research findings indicated that using evaluation instruments during learning activities resulted in an average score of 88 in the practical category. This response demonstrates that picture storybooks that draw upon local wisdom align with the anticipated educational outcomes.

Expert evaluation of the assessment tool following its use to picture tale books that draw upon indigenous knowledge. A 5-item quiz is used to enhance children's fundamental literacy skills. The scale for each item ranges from 1 to 4, resulting in a maximum raw score of 100 and a minimum of 5. Teacher I is raw score is measured on a scale of 0 to 100. The picture storybook scored 92 in terms of its visual look. The layout and writing system received a score of 92.5. In terms of substance and materials, a score of 95 was achieved. The picture tale book received a score of 87 in the reaction category. Teacher I is response received an average score of 92 in the highly valid category. This remark suggests that picture storybooks are derived from indigenous knowledge and cultural traditions. Enhancing children's fundamental reading skills can serve as a foundation for policy development by educators. The feedback from material specialists who utilized an assessment instrument comprising book narrative illustrations rooted in local wisdom to enhance children's fundamental literacy skills is summarised through a 5-item questionnaire. The scale for each item ranges from 1 to 4, with a maximum raw score of 100 and a minimum of 5. Teacher I is raw score is measured on a scale of 0 to 100.

Regarding the appropriateness assessment, K.D. scored 92 in the aspect being evaluated. The material scored 92.5, while the proper language choice received a 95. The material was developed based on the ability to obtain a score of 95, and the description of the material is clear. A score of 92 was achieved based on the sub-theme. The image was evaluated based on the material and examples presented, resulting in a score of 95. The overall findings of Material Expert II yielded an average score of 92 in the highly valid category. The result suggests that picture storybooks that draw upon local wisdom can be a foundation for establishing educational policies to enhance children's fundamental literacy skills.

According to the expert evaluation of the development of the storybook, The assessment instruments and material specialists achieved a mean score of 92 in the highly



valid category, including implementation follow-up. According to the accepted development model for storybook development, the assessment instruments created by students can be classified as very valid based on decision norms. Material specialists have acquired findings in the very valid category, with scores ranging from 92.

In class B1 PAUD Karawang Regency, West Java, instructors are evaluated according to the practicality of the data, using a development methodology for creating storybook evaluation tools that the students have authorized. By creating storybooks for student utilization, they scored 92 in the highly applicable category. According to the validated storybook development model endorsed by instructors and validated in class B1 PAUD Karawang Regency, West Java, concerning the efficiency of data. Through the creation of storybooks by pupils, these can be utilized in various impactful classifications.

This research is pertinent to the contemporary desire for public consciousness regarding indigenous knowledge and environmental stewardship. Incorporating indigenous knowledge is employed in a collection of visual narratives as an innovative and instructive method to enhance individuals' comprehension, particularly in Karawang, West Java. Utilizing the Research and Development (R&D) methodology offers a structured framework for creating assessment instruments. This methodology enables researchers to involve stakeholders, verify content, and perform incremental experiments before further deployment. Incorporating indigenous knowledge in sequential visual narratives acknowledges the significance of safeguarding regional customs and principles. An environmentally conscious strategy directly responds to global challenges like climate change and the need for environmental sustainability.

Multiple pertinent sources can aid in creating a tool to evaluate the authenticity of a collection of illustrated narratives about local ecological knowledge. A suitable reference for this topic is the research conducted by (Morgan, 2004), which focuses on developing and verifying picture storybooks for early reading that draw upon local knowledge and traditions (Murray, 2017). This study presents data on a high validity score, suggesting that the book is appropriate for usage and can offer valuable insights in creating an assessment tool for evaluating the validity of a collection of illustrated stories about local environmental wisdom. In addition, the references provided by (Georgakopoulou, 2017) can also contribute to the advancement of instruments used for assessing validity (Acar, 2017). I can guide in collecting data to evaluate the authenticity of sequential visual narratives.

The developed instruments are anticipated to benefit education, particularly within the local context and cultural setting. Serial illustrated stories, including local wisdom values and environmental care, can enhance public understanding. Employing field trials with more representative samples enhances the external validity of the evaluation instrument. Field trial data offer firsthand feedback from end users, including children, teachers, and parents, regarding the efficacy and acceptance of the device. The outcome of this research has the potential to significantly enhance community awareness and engagement about local knowledge and environmental conservation in Karawang, West Java. This research holds significant value within education and environmental sustainability since it sheds light on the impact of evaluation instruments on individuals' comprehension and actions.

## **Conclusion**

This research succeeded in developing a valid assessment instrument to evaluate serial illustrated stories that integrate local wisdom and the spirit of environmental care in



the people of Karawang, West Java. By applying the Research and Development (R&D) methodology, this research received support from experts through content validation and involved field trials with more representative samples, including children, teachers, and parents. This research shows a positive level of acceptance from various parties, with a high average score for each assessment aspect. Conformity with local wisdom, environmental care, creativity, suitability to the target age, and language and visual communication were successfully assessed by respondents. This provides confidence that the assessment instruments developed can be applied effectively in the context of the Karawang community. This research significantly contributes to the development of local culture-based environmental education.

## Reference

- Acar, C. (2017). Effects of Mother-Delivered Social Stories and Video Modeling in Teaching Social Skills to Children With Autism Spectrum Disorders. *Journal of Special Education*, 50(4), 215–226. <https://doi.org/10.1177/0022466916649164>
- Adrián, J. (2007). Mothers' use of cognitive state verbs in picture-book reading and the development of children's understanding of mind: A longitudinal study. *Child Development*, 78(4), 1052–1067. <https://doi.org/10.1111/j.1467-8624.2007.01052.x>
- Adrian, J. E. (2005). Parent-child picture-book reading, mothers' mental state language and children's theory of mind. *Journal of Child Language*, 32(3), 673–686. <https://doi.org/10.1017/S0305000905006963>
- Bublitz, M. G. (2016). Transformative stories: A framework for crafting stories for social impact organizations. *Journal of Public Policy and Marketing*, 35(2), 237–248. <https://doi.org/10.1509/jppm.15.133>
- Cholily, Y. M., Inam, A., Inganah, S., & Effendi, M. M. (2018). Prakarya Listrik Energi Matahari untuk Siswa SMP. *PROSIDING SEMINAR NASIONAL & INTERNASIONAL*, 1(1).
- Debaryshe, B. (1993). Joint picture-book reading correlates of early oral language skill. *Journal of Child Language*, 20(2), 455–461. <https://doi.org/10.1017/S0305000900008370>
- Fajriati, T. N., Abidin, Y., & Yulianeta, Y. (2018). Representasi Nilai-Nilai Budaya NTT dalam Novel Anak Mata di Tanah Melus Karya Okky Madasari. *Seminar Internasional Riksa Bahasa*, 799–808.
- Ferdiansyah, C. A., & Yulianeta, Y. (2018). Nilai-Nilai Budaya Tradisi Upacara Adat Merlawuh di Gunung Susuru Desa Kertabumi. *Seminar Internasional Riksa Bahasa*, 441–448.
- Georgakopoulou, A. (2007). Small stories, interaction and identities. *Small Stories, Interaction and Identities*. <https://www.torrossa.com/gs/resourceProxy?an=5016598&publisher=FZ4850>
- Georgakopoulou, A. (2017). Sharing the moment as small stories the interplay between practices & affordances in the social media-curation of lives. *Narrative Inquiry*, 27(2), 311–333. <https://doi.org/10.1075/ni.27.2.06geo>
- Inganah, S., Cholily, Y. M., Taufik, M., & Ummah, S. K. (2018). Peningkatan koneksi matematis melalui pembelajaran berbasis masalah di MAN I Malang. *JINoP (Jurnal Inovasi Pembelajaran)*, 4(2), 151–159.
- Latukau, D. F., & Yulianeta, Y. (2018). "Joko Tingkir": Analisis Nilai Budaya dalam Cerita Rakyat Kabupaten Sragen. *Seminar Internasional Riksa Bahasa*, 455–462.
- Mandler, J. M. (2014). *Stories, scripts, and scenes: Aspects of schema theory*. [books.google.com](https://books.google.com).



- <https://books.google.com/books?hl=en&lr=&id=qaGYAgAAQBAJ&oi=fnd&pg=PP1&dq=picture+stories&ots=3-Itm15Km&sig=xL2SAPmwIwVnyOWpjB7Qw1xH04s>
- McAdams, D. P. (1996). Personality, modernity, and the storied self: A contemporary framework for studying persons. *Psychological Inquiry*.  
<https://www.jstor.org/stable/1448813>
- McCombs, M., & Reynolds, A. (2002). News influence on our pictures of the world. *Media Effects*.  
<https://books.google.com/books?hl=en&lr=&id=vBSQAgAAQBAJ&oi=fnd&pg=PA1&dq=picture+stories&ots=JgtXOl0yz9&sig=v0Vl3ydIYIFn1Vuh7RK9L8i6Jjc>
- Morgan, S. (2004). Using stories to reframe the social construction of reality: A trio of activities. *Journal of Management Education*, 28(3), 372–389.  
<https://doi.org/10.1177/1052562904264380>
- Murray, K. (2017). A new test of advanced theory of mind: The “Strange Stories Film Task” captures social processing differences in adults with autism spectrum disorders. *Autism Research*, 10(6), 1120–1132. <https://doi.org/10.1002/aur.1744>
- Nawyn, S. J. (2011). “I have so many successful stories”: Framing social citizenship for refugees. *Citizenship Studies*, 15(6), 679–693.  
<https://doi.org/10.1080/13621025.2011.600072>
- Nodelman, P. (1988). *Words about pictures: The narrative art of children’s picture books*. books.google.com.  
<https://books.google.com/books?hl=en&lr=&id=IdCwtcCmN9oC&oi=fnd&pg=PP1&dq=picture+stories&ots=hKyHcZsI39&sig=qGBFEWI91AAKXsjHoj2PBnE4gxs>
- Park, J., & Zuniga, J. (2016). Effectiveness of using picture-based health education for people with low health literacy: An integrative review. *Cogent Medicine*.  
<https://doi.org/10.1080/2331205X.2016.1264679>
- Permadi, A. E., Cholily, Y. M., & Rosyadi, A. A. P. (2018). Cooperative Models Practice Type Teams Games Tournaments (TGT) With a Saintific Approach on Material Opportunity. *MEJ Mathematic Education Journal*, 2(2), 127–136.
- Ridwan, I., Widiasturi, A., & Yulianeta, Y. (2017). Pandangan Pramoedya Terhadap Resistansi Perempuan dalam Novel Era Revolusi dan Reformasi. *Adabiyāt: Jurnal Bahasa Dan Sastra*, 15(1), 63–86.
- Sénéchal, M. (1995). Age-related differences in the organization of parent-infant interactions during picture-book reading. *Early Childhood Research Quarterly*, 10(3), 317–337. [https://doi.org/10.1016/0885-2006\(95\)90010-1](https://doi.org/10.1016/0885-2006(95)90010-1)
- Somolu, O. (2007). “Telling our own stories”: African women blogging for social change. *Gender and Development*, 15(3), 477–489.  
<https://doi.org/10.1080/13552070701630640>
- Sugianto, R., Darmayanti, R., Amany, D. A. L., Rachmawati, L. N., Hasanah, S. N., & ... (2017). Experiment on Ability to Understand Three Dimensional Material Concepts Related to Learning Styles Using the Geogebra-Supported STAD Learning Model. *Al-Jabar: Jurnal Pendidikan Matematika*, 8(2), 205–212.
- Sumarsono, P., Rahmi, D. F., Ekowati, D. W., Cholily, Y. M., Hakim, R. R., & ... (2018). Wall Chart Buta Aksara Baca, Tulis dan Hitung: Pembenhian. *Kementerian Hukum Dan Hak Asasi Manusia*.
- Vidyastuti, A. N., Darmayanti, R., & Sugianto, R. (2018). The Role of Teachers and Communication Information Technology (ICT) Media in the Implementation of Mathematics Learning in the Digital Age. *Al-Jabar: Jurnal Pendidikan Matematika*, 9(2), 221–230.



- Yulianeta, Y. (2017). Javanese Philosophy in the Shadow Puppet. *4th International Conference on Linguistics, Literature, and Arts (ICLLA 2017)*.
- Zakaria, F., & Yulianeta, Y. (2018). Representasi Ideologi Feminisme dalam Media Online TIRTO. ID. *Seminar Internasional Riksa Bahasa*, 491–496.