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Development of Storybird-Based MPQT Textbooks to Enhance Students' Productivity in Visual Tafsir Learning in Islamic Higher Education

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Abstract: The research was motivated by the low productivity of students in producing creative and contextual tafsir, influenced by the limited availability of innovative and technology-integrated teaching materials. This study aims to develop and evaluate a Storybird-based textbook for the Metode Pengajaran Al-Qur'an dan Tafsir (MPQT) course to improve students' productivity in tafsir learning in Islamic higher education. Using a Design-Based Research (DBR) approach with the Plomp model, the study involved 25 fifth-semester students of the Ilmu Al-Qur'an dan Tafsir Program at Universitas Nahdlatul Ulama Blitar. Data were collected through validation sheets, tests, observations, questionnaires, interviews, and visual tafsir rubrics, then analysed using descriptive statistics, gain scores, paired sample t-tests, effect size, and thematic analysis. The findings show that the Storybird-based textbook is highly feasible, achieving an expert validation score of 82.25%. Students' post-test scores improved significantly from 64.20 to 83.40, with a strong effect size (Cohen's d = 0.87). The textbook increased student engagement, motivation, and creativity in producing contextual visual tafsir projects. Qualitative results indicate that Storybird helps students transform Qur'anic meanings into meaningful visual narratives and supports active knowledge construction. The study concludes that Storybird-based learning is an effective innovation for visual tafsir pedagogy in Islamic higher education.

Keywords: Storybird; Visual Tafsir; students' productivity; Islamic higher education; MPQT textbook development.

Abstrak: *Penelitian ini dilatarbelakangi oleh rendahnya produktivitas mahasiswa dalam menghasilkan karya tafsir kreatif dan kontekstual yang dipengaruhi oleh keterbatasan bahan ajar inovatif yang terintegrasi teknologi. Penelitian ini bertujuan mengembangkan dan mengevaluasi buku ajar berbasis Storybird pada mata kuliah Metode Pengajaran Al-Qur'an dan Tafsir (MPQT) guna meningkatkan produktivitas mahasiswa dalam pembelajaran tafsir di Perguruan Tinggi Islam. Penelitian ini menggunakan pendekatan Design-Based Research (DBR) dengan model Plomp yang melibatkan 25 mahasiswa semester lima Program Studi Ilmu Al-Qur'an dan Tafsir, Universitas Nahdlatul Ulama Blitar. Data dikumpulkan melalui lembar validasi, tes, observasi, angket, wawancara, dan rubrik tafsir visual yang selanjutnya dianalisis menggunakan statistik deskriptif, gain score, paired sample t-test, effect size, dan analisis tematik. Hasil penelitian menunjukkan bahwa buku ajar berbasis Storybird sangat layak digunakan dengan skor validasi ahli sebesar 82,25%. Nilai post-test mahasiswa meningkat secara signifikan dari 64,20 menjadi 83,40 dengan effect size kuat (Cohen's d = 0,87). Buku ajar ini meningkatkan keterlibatan, motivasi, dan kreativitas mahasiswa dalam menghasilkan produk tafsir visual yang kontekstual. Hasil kualitatif menunjukkan bahwa Storybird membantu mahasiswa mentransformasikan makna Al-Qur'an ke dalam narasi visual yang bermakna serta mendukung konstruksi pengetahuan secara aktif. Penelitian ini menyimpulkan bahwa pembelajaran berbasis Storybird merupakan inovasi yang efektif dalam pedagogi tafsir visual di perguruan tinggi Islam.*

Kata Kunci: *Storybird; Tafsir Visual; produktivitas mahasiswa; Perguruan Tinggi Islam; pengembangan buku ajar MPQT.*

INTRODUCTION

This study is situated within the domain of Islamic higher education pedagogy, particularly in the teaching of Qur'anic interpretation (tafsir) in the Ilmu Al-Qur'an dan Tafsir (IAT) Study Program at Universitas Nahdlatul Ulama Blitar. Tafsir itself is not merely understood as the activity of explaining the meaning of Qur'anic verses, but also as a pedagogical process that enables students to reconstruct, contextualise, and communicate Islamic values in contemporary forms.[1] In this context, students are expected not only to master classical interpretative theories but also to produce innovative learning materials that make Qur'anic teachings more accessible and relevant to modern society.

However, in practice, students in many Islamic higher education institutions encounter difficulties in developing productive and creative tafsir outputs.[2] This challenge is particularly evident in the "Metode Pengajaran Al-Qur'an dan Tafsir" (MPQT) course, where students are required to design teaching materials and visual interpretations based on Qur'anic verses. Preliminary observations in the IAT Study Program at Universitas Nahdlatul Ulama Blitar reveal that students' productivity in producing tafsir-based learning media remains relatively low. This problem is not merely related to students' general interpretative ability, but is strongly influenced by the limited availability of teaching materials that are both pedagogically relevant and technologically integrated.

Existing MPQT textbooks tend to emphasise theoretical explanations while providing minimal opportunities for practical and creative engagement. As a result, students often struggle to transform abstract tafsir concepts into applicable teaching products such as visual tafsir, contextual learning media, or digital-based interpretation projects.[3] This limitation reduces student motivation and weakens their ability to connect Qur'anic interpretation with contemporary educational needs.

The rapid development of digital learning technologies offers opportunities to address these challenges through more innovative pedagogical approaches. One promising tool is Storybird, a digital storytelling platform that

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[1] Kusroni Kusroni and Mukhammad Zamzami, "Revisiting Methodology of Qur'anic Interpretation: A Thematic Contextual Approach to the Qur'an," *Mutawatir : Jurnal Keilmuan Tafsir Hadith* 11, no. 1 (2021): 177–202, https://doi.org/10.15642/mutawatir.2021.11.1.177-202.

[2] M. Amin Abdullah, "Islamic Studies in Higher Education in Indonesia: Challenges, Impact and Prospects for the World Community," *Al-Jami'ah* 55, no. 2 (2017): 391–426, https://doi.org/10.14421/ajis.2017.552.391-426.

[3] M. Alinurdin, Nursyamsi Nursyamsi, and Ali Reza, "Digital Transformation in Qur'anic and Hadith Pedagogy: Implications for Millennial Engagement," *Journal of Islamic Education Students (JIES)* 5, no. 2 (2025): 388–98, https://doi.org/10.31958/jies.v5i2.15895.

integrates text, images, and narrative construction in a visually engaging environment.[4] In the context of tafsir learning, Storybird can function as a medium for developing visual interpretation (tafsir visual), enabling students to transform the meanings of Qur'anic verses into short narratives supported by visual representation. This process not only deepens students' understanding of tafsir but also enhances their creativity, productivity, and pedagogical competence by encouraging them to reconstruct Qur'anic messages in more contextual and communicative forms.

Despite its potential, previous studies on Storybird have largely focused on language learning, writing skills, and general digital storytelling practices.[5] Previous studies have demonstrated that digital storytelling platforms enhance student engagement, motivation, and learning outcomes. There is still limited research examining its use as a pedagogical tool in religious studies, particularly in supporting tafsir learning in Islamic higher education. Moreover, few studies have explored how Storybird can be systematically integrated into the development of teaching materials for MPQT courses using a design-based learning approach. Therefore, this study addresses this gap by developing and examining innovative, Storybird-based teaching materials aimed at improving students' productivity in producing visual tafsir and contextual Qur'anic learning media.

Furthermore, prior research rarely addresses the development of Storybird-based teaching materials for the MPQT (Metode Pengajaran Al-Qur'an dan Tafsir) course, where students are expected to produce innovative

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[4] Mamdouh Alenezi, Saja Wardat, and Mohammed Akour, "Kebutuhan Integrasi Pendidikan Digital Dalam Pendidikan Tinggi: Tantangan Dan Peluang," *Sustainability* 15, no. 6 (2023): 4782, https://doi.org/https://doi.org/10.3390/su15064782; May Portuguez Castro and Marcela Georgina Gómez Zermeño, "Challenge Based Learning: Innovative Pedagogy for Sustainability through e-Learning in Higher Education," *Sustainability (Switzerland)* 12, no. 10 (2020), https://doi.org/10.3390/SU12104063.

[5] Cristina Navas Romero, "User-Friendly Digital Tools: Boosting Student Engagement and Creativity in Higher Education," *European Public and Social Innovation Review* 10 (2025), https://doi.org/10.31637/epsir-2025-963; Senny Suzanna Alwasilah, "The Optimization of the Potential of Digital Storytelling: A Curriculum for Teaching Creative Writing," *Jomantara: Indonesian Journal of Art and Culture* 4, no. Vol. 4 No. 2 July 2024 (2024): 144–64, https://doi.org/10.23969/jijac.v4i2.14157; Suresh Banoth and Udaya Muthyala, "Using Digital Storytelling as a Tool to Enhance Vocabulary for Young Learners," *Journal of English and Applied Linguistics* 4, no. 1 (2025), https://doi.org/10.59588/2961-3094.1182; Beatriz Peña-Acuña and Óscar Navarro-Martínez, "The Promotion of Originality Perceived in Two Multimodal Storytelling Applications: Storybird and Scratch," *Education Sciences* 14, no. 1 (2024), https://doi.org/10.3390/educsci14010021; Min Hsun Chiang, "Exploring the Effects of Digital Storytelling: A Case Study of Adult L2 Writers in Taiwan," *IAFOR Journal of Education* 8, no. 1 (2020): 65–82, https://doi.org/10.22492/ije.8.1.04.

instructional media such as visual tafsir. This reveals a clear pedagogical gap between the broader field of digital storytelling research and the specific instructional needs of religious education. To address this gap, the present study focuses on the development and validation of a Storybird-based MPQT textbook designed to support students in producing innovative visual tafsir. The study contributes theoretically by demonstrating how digital storytelling can function as a form of pedagogical innovation in Islamic higher education, particularly in strengthening design-based learning approaches within Qur'anic interpretation courses.

This study contributes to Islamic higher education pedagogy by integrating Storybird into tafsir learning to make it more creative, contextual, and productive. The study develops and evaluates a Storybird-based MPQT textbook that supports students in producing visual tafsir and innovative Qur'anic teaching materials. It also extends the use of digital storytelling from general literacy into Islamic pedagogy and demonstrates how design-based learning can improve students' creativity and productivity in tafsir instruction. Therefore, Storybird is positioned not only as a writing tool but also as a pedagogical medium for strengthening tafsir learning in higher education.

LITERATURE REVIEW

Tafsir learning in Islamic higher education requires students not only to master Qur'anic interpretation but also to contextualise and communicate Qur'anic values creatively in response to contemporary educational needs.[6] In the MPQT (Metode Pengajaran Al-Qur'an dan Tafsir) course, however, learning is still largely textbook-oriented, limiting students' opportunities to develop innovative and contextual teaching materials. This condition highlights the need for pedagogical approaches that encourage active participation, creativity, and productive learning outcomes.

One relevant approach is digital storytelling, which integrates text, visuals, and multimedia to support interactive learning and meaning construction.[7] Storybird, as a digital storytelling platform, enables students to transform Qur'anic concepts into visual narratives, thereby fostering creativity, reflection, and higher-order thinking in tafsir learning. Although Storybird has been widely implemented in language learning contexts, its application in

[6] Tedi Supriyadi et al., "DEEP-AI Pedagogical Model for Strengthening Al-Qur'an Interpretation Literacy in Islamic Religious Education," *Jurnal Pendidikan Agama Islam* 22, no. 1 (2025): 275–94, https://doi.org/10.14421/jpai.v22i1.11053.

[7] Maria Palioura and Charalampos Dimoulas, "Digital Storytelling in Education: A Transmedia Integration Approach for the Non-Developers," *Education Sciences* 12, no. 8 (2022), https://doi.org/10.3390/educsci12080559.

Qur'anic interpretation and Islamic higher education remains limited. Therefore, this study investigates the use of Storybird as a pedagogical medium for visual tafsir learning.

The study is theoretically grounded in Mayer's Cognitive Theory of Multimedia Learning, which emphasises that learning becomes more effective through the integration of verbal and visual information.[8] Through Storybird, students actively construct meaning by combining narratives and images, making Qur'anic interpretation more contextual and understandable. This perspective is strengthened by generative learning theory, which views students as active participants in knowledge construction.

In addition, the study adopts Kress's Multimodality Theory, which argues that meaning is produced through multiple modes such as text, images, and symbols.[9] Within tafsir learning, Storybird facilitates the development of visual tafsir by allowing students to reconstruct Qur'anic messages through multimodal narratives. This process supports higher-order thinking, interpretative skills, and communication abilities in digital learning environments. From the perspective of Islamic pedagogy, tafsir education should encourage contextual understanding, reflection, and practical application of Qur'anic teachings.[10] Through a design-based learning approach, Storybird bridges classical tafsir with contemporary instructional media, enabling students to create meaningful and innovative Qur'anic teaching materials.

Previous studies on Storybird mainly discuss writing skills, reading comprehension, and student motivation in language education.[11] Research on

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[8] Richard E. Mayer and Roxana M. Moreno, "Nine Ways to Reduce Cognitive Load in Multimedia Leaming," *Educational Psychologist: A Special Issue of Educational Psychologist: Volume 38* 38, no. 1 (2016): 43–52, https://doi.org/10.4324/9780203764770-6; Richard E. Mayer, "The Past, Present, and Future of the Cognitive Theory of Multimedia Learning," *Educational Psychology Review* 36, no. 1 (2024): 1–25, https://doi.org/10.1007/s10648-023-09842-1.

[9] G. Kress, "Recognizing Learning: A Perspective from a Social Semiotic Theory of Multimodality Author: Gunther Kress, Institute of Education, London. Book Chapter Published In:," *Multilingualism and Multimodality. Current Challenges for Educational Studies* 3 (2013): 1–30; Gunther Kress et al., "Multimodal Teaching and Learning: The Rhetorics of the Science Classroom," *Multimodal Teaching and Learning: The Rhetorics of the Science Classroom*, 2014, 1–223, https://doi.org/10.5040/9781472593764.

[10] Ikhwanudin, Rahardjo, and Roselina Ahmad Saufi, "Civic Education in Contextual Interpretation through Qur'anic Learning in Pesantren and Schools," *Al-Fahmu: Jurnal Ilmu Al-Qur'an Dan Tafsir* 4, no. 2 (2025): 498–507, https://doi.org/10.58363/alfahmu.v4i2.581.

[11] Suzanna Alwasilah, "The Optimization of the Potential of Digital Storytelling: A Curriculum for Teaching Creative Writing"; Banoth and Muthyala, "Using Digital Storytelling as a Tool to Enhance Vocabulary for Young Learners"; Peña-Acuña and Navarro-Martínez, "The Promotion of Originality Perceived in Two Multimodal Storytelling Applications: Storybird and Scratch."

multimedia learning also highlights the importance of visual–verbal integration, yet its application in tafsir education remains underexplored. Likewise, studies in Islamic pedagogy have paid limited attention to digital storytelling as a pedagogical tool. In this study, productivity refers not only to the quantity of student output but also to the ability to create meaningful, coherent, and pedagogically valuable tafsir products effectively. Productivity in MPQT learning includes generating ideas, constructing visual tafsir narratives, and developing innovative Qur'anic teaching materials. Therefore, Storybird is positioned not only as an instructional medium but also as a productivity-enhancing tool that supports students in producing academically grounded, visually meaningful, and contextually relevant tafsir outputs.

RESEARCH METHOD

This study employs a Design-Based Research (DBR) approach using the Plomp development model, supported by a mixed-methods design to evaluate the effectiveness of the developed product. The research is positioned as pedagogical innovation research in Islamic higher education, specifically in the development of a Storybird-based textbook for the MPQT (Methods of Teaching Al-Qur'an and Tafsir) course. The objective is not only to produce valid and feasible teaching material but also to examine its effectiveness in improving students' productivity in developing visual tafsir and Qur'anic teaching materials.

The use of Design-Based Research is appropriate because this study focuses on the iterative development, implementation, and evaluation of an educational product in a real classroom context. The Plomp model was selected because it provides a systematic structure for product development through three main phases: preliminary research, development or prototyping phase, and assessment phase.[12]

Research Design

This study employed a Mixed-Method Design-Based Research (DBR) approach to develop and evaluate a Storybird-based textbook for the Metode Pengajaran Al-Qur'an dan Tafsir (MPQT) course in the Ilmu Al-Qur'an dan

[12] Deny Hadi Siswanto and Nur Robiah Nofikusumawati Peni, "Publication Trend on the Plomp Development Model in Mathematics Education," *Asian Pendidikan* 2, no. 3 (2023): 71–80, https://doi.org/10.53797/aspen.v3i2.9.2023; Irwin Hidayat, Nur Naziha, and Atmaranie Dewi Purnama, "Increased Learning Outcomes in Effective Learning Models Application According To the Plomp," *JLE: Journal of Literate of English Education Study Program* 3, no. 02 (2022): 41–45, https://doi.org/10.47435/jle.v3i02.1343; Jan van den Akker et al., *An Introduction to Educational Design Research*, ed. Tjeerd Plomp Nienke Nieveen (Netherlands: Netzodruk, Enschede, 2010).

Tafsir (IAT) Study Program at Universitas Nahdlatul Ulama Blitar. Design-Based Research was chosen because the study aimed not only to produce an educational product but also to examine its pedagogical effectiveness in real classroom settings. Following Plomp and Nieveen (2013), the DBR process consisted of three main phases: (1) preliminary research, (2) development or prototyping, and (3) assessment.

This research integrates both qualitative and quantitative data to provide comprehensive findings. Quantitative data were used to measure textbook effectiveness through pre-test and post-test scores, student activity percentages, and expert validation results.[13] Meanwhile, qualitative data were collected through classroom observations, interviews, and open-ended student responses to explore how Storybird supports the learning process and enhances students' productivity in interpretation tasks.[14] Thus, this study is categorised as Design-Based Research with Mixed Methods Evaluation, combining product development, empirical effectiveness testing, and pedagogical reflection within the framework of innovation in Islamic higher education.

Participant

The study was conducted in the Ilmu Al-Qur'an and Tafsir Studies Program at Universitas Nahdlatul Ulama Blitar during the even semester of the 2024/2025 academic year. The participants were 25 fifth-semester students enrolled in the MPQT course, selected through purposive sampling because they were the primary users of the developed textbook.

In addition, the study involved two expert validators: a content expert in Qur'anic and tafsir pedagogy and a learning media expert in instructional design, as well as one course lecturer who contributed to the validation process. For the implementation stages, five students participated in the small-group trial, while all 25 students were involved in the field testing phase.

Development Procedure

This study follows the three stages of the Plomp model:

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[13] Sidra Shahid, Wajiha Kanwal, and Khalida Parveen, "Effectiveness of Science Textbook Activities for Conceptual Understanding of Students," *Journal of Management Practices, Humanities and Social Sciences (JMPHSS)* 7, no. 2 (2023): 1–8, https://doi.org/10.33152/jmphss-7.2.1.

[14] Sriram Chintakrindi et al., "Beyond the Numbers: Qualitative Analysis of Open-Ended Responses for Identifying Student Success Indicators," *Intersection: A Journal at the Intersection of Assessment and Learning* 3, no. 1 (2022): 1–16, https://doi.org/10.61669/001c.32398; Kori A. LaDonna, Taryn Taylor, and Lorelei Lingard, "Why Open-Ended Survey Questions Are Unlikely to Support Rigorous Qualitative Insights," *Academic Medicine* 93, no. 3 (2018): 347–49, https://doi.org/10.1097/ACM.0000000000002088.

1. Preliminary Research Phase

In this stage, the researcher identified learning needs through classroom observations, interviews with the lecturer, and student questionnaires. The results showed that the existing MPQT textbook was too theoretical, lacked practical activities, and did not include digital media suitable for modern tafsir learning. This phase also involved reviewing relevant literature to understand how Storybird can support visual tafsir.

2. Development (Prototyping) Phase

Based on these findings, the researcher developed a Storybird-based MPQT textbook. The prototype included practical modules, project-based tasks, visual tafsir assignments, and guidelines for using Storybird.

The product was then evaluated step by step through:

a. Self-evaluation

b. Expert review

c. One-to-one evaluation (2 students)

d. Small group evaluation (5 students)

Revisions were made after each stage based on feedback from experts and students.

3. Assessment Phase

The final textbook was tested in a class of 25 students. Its effectiveness was measured using pre-test and post-test results, observation of student activities, and assessment of students' visual tafsir projects.

Research Instruments

The study employed six instruments to collect both quantitative and qualitative data:

1. Expert Validation Sheet

Used to evaluate content validity, language clarity, instructional design, presentation quality, and Storybird integration.

2. Pre-test and Post-test

Administered to measure students' understanding of MPQT materials and visual tafsir production before and after the intervention.

3. Visual Tafsir Assessment Rubric

Applied to assess students' project outputs based on interpretation accuracy, contextual relevance, visual quality, creativity, and pedagogical clarity, using a 4-point scale.

4. Student Questionnaire

Used to examine students' perceptions regarding relevance, attractiveness, usability, engagement, motivation, and overall usefulness of the textbook.

5. Observation Sheet

Used to document student participation, interaction, and task engagement during the learning process.

6. Semi-Structured Interview Guide

Used to obtain in-depth qualitative data from students and lecturers concerning their experiences and challenges during implementation.

Instrument Validity and Reliability

Instrument validity was established through expert judgment involving two specialists in Qur'anic education and instructional design. They evaluated the alignment of instrument items with research objectives and assessed content validity across didactic quality, content relevance, language clarity, presentation structure, and Storybird integration. Revisions were made based on their feedback.

Construct validity was ensured through the alignment between research objectives, indicators, and assessment criteria.[15] The pre-test and post-test items were also reviewed in terms of difficulty level, clarity, and relevance to MPQT learning outcomes. The reliability of the student questionnaire was tested using Cronbach's Alpha, yielding a coefficient of $\alpha = 0.82$, indicating high internal consistency and acceptable reliability for educational research.

Data Collection Procedure

The study was conducted in two main phases:

Phase 1: Product Development

This phase included needs analysis, textbook design, prototype development, expert validation, one-to-one evaluation, and small-group trials.

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[15] Melissa S. Sutcliffe and Krestin J. Radonovich, "Psychological Assessment," *Pediatric Rehabilitation: Principles and Practice*, 2020, 53–77, https://doi.org/10.1891/9780826147073.0004; Miza Nina Adlini et al., "Metode Penelitian Kualitatif Studi Pustaka," *Edumaspul: Jurnal Pendidikan* 6, no. 1 (2022): 974–80, https://doi.org/10.33487/edumaspul.v6i1.3394.

Phase 2: Product Implementation and Effectiveness Testing

Students completed a pre-test before the implementation and a post-test after using the Storybird-based textbook. They also produced visual tafsir projects, completed questionnaires, and participated in interviews to support qualitative triangulation. Classroom observations were conducted to document student engagement and interaction during learning.

Data Analysis

1. Quantitative Analysis

Quantitative data were analysed using descriptive and inferential statistics. Descriptive statistics were used to calculate mean scores, feasibility percentages, student response levels, and classical learning mastery.[16] Student responses were analysed using percentage scores:

$$\text{Response Score (\%)} = (\text{Total Score Obtained} / \text{Maximum Score}) \times 100$$

The interpretation criteria followed Arikunto (2006):

85%–100% = Very Active

70%–84% = Active

60%–69% = Fairly Active

50%–59% = Less Active

<50% = Inactive

Classical learning mastery was calculated using:

$$P = (f / N) \times 100$$

Where **p** is the percentage of mastery, **f** is the number of students achieving mastery, and **N** is the total number of students. Students were considered successful if they achieved a minimum score of 70, while class mastery was achieved if ≥75% of students met this criterion.

To determine learning effectiveness, pre-test and post-test scores were analysed using:

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[16] Virginia Braun and Victoria Clarke, "Can I Use TA? Should I Use TA? Should I Not Use TA? Comparing Reflexive Thematic Analysis and Other Pattern-Based Qualitative Analytic Approaches," *Counselling and Psychotherapy Research* 21, no. 1 (2021): 37–47, https://doi.org/10.1002/capr.12360; Sardin et al., "Developing Digital Descriptive Statistics Modules Through Hybrid Flipped Classroom Learning to Improve Students' Statistical Thinking Skills," *Journal of Cultural Analysis and Social Change* 10, no. 2 (2025): 2831–41, https://doi.org/10.64753/jcasc.v10i2.2020.

a. Paired sample t-test to identify significant differences ($p < 0.05$)
b. Gain score analysis to measure improvement
c. Effect size (Cohen's d) to evaluate practical significance, with 0.2 (small), 0.5 (medium), and 0.8 (large)

2. Qualitative Analysis

Qualitative data from interviews, observations, and student projects were analysed using thematic analysis following Braun and Clarke, which included data familiarisation, coding, theme development, review, and interpretation.[17]

The analysis focused on key themes such as cognitive support from Storybird, development of visual interpretation skills, and improvement in student productivity. Triangulation across multiple data sources was conducted to enhance the credibility and trustworthiness of the findings.

Success Criteria

The textbook was considered effective if the following criteria were achieved:

1. Expert validation score ≥ 80% (valid category)
2. Student post-test scores ≥ 70
3. Classical learning mastery ≥ 75%
4. Paired t-test results significant at $p < 0.05$
5. Effect size indicating medium or large improvement
6. Qualitative findings confirming increased engagement and productivity

RESULT AND DISCUSSIONS

This study evaluated the effectiveness of the Storybird-based MPQT textbook using both quantitative and qualitative analyses. The results are presented through expert validation, pre-test and post-test comparisons, student activity observation, and analysis of students' visual tafsir products. In addition, the findings are critically compared with previous studies to strengthen the theoretical and empirical contribution of this research.

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[17] Braun and Clarke, "Can I Use TA? Should I Use TA? Should I Not Use TA? Comparing Reflexive Thematic Analysis and Other Pattern-Based Qualitative Analytic Approaches"; Virginia Braun and Victoria Clarke, "Using Thematic Analysis in Psychology," *Qualitative Research in Psychology* 3, no. 2 (2006): 77–101, https://doi.org/10.1191/1478088706qp063oa.

Product Validation Results

The development of the Storybird-based MPQT textbook followed the Design-Based Research (DBR) model, consisting of preliminary analysis, prototyping, and assessment phases. As part of the assessment stage, the product was evaluated through expert validation to determine its feasibility for classroom implementation.

Two validators were involved: a content expert in Qur'anic interpretation and tafsir pedagogy, and an instructional design (learning media) expert. The validation focused on four key aspects: content relevance, language clarity, presentation structure, and Storybird-based media integration.

Table 1. Expert Validation Results

No	Validation Aspect	Score (%)	Category
1	Content relevance	84%	Very Valid
2	Language clarity	81%	Valid
3	Presentation structure	79%	Valid
4	Media integration (Storybird)	85%	Very Valid
	Average	**82.25%**	**Highly Feasible**

The average validation score of 82.25% indicates that the textbook is highly feasible for implementation with only minor revisions. The highest score was obtained in the media integration aspect, demonstrating that the use of Storybird effectively supports visual storytelling in tafsir learning.

Validators also highlighted the strength of the textbook in promoting practical, project-based activities that encourage students to produce visual tafsir rather than relying solely on theoretical understanding. This finding aligns with Mayer's Cognitive Theory of Multimedia Learning, which emphasises that the integration of visual and verbal elements enhances comprehension and supports deeper meaning construction.

Pre-Test and Post-Test Results

To measure the effectiveness of the Storybird-based MPQT textbook, students completed pre-tests before the implementation and post-tests after the learning intervention. The assessments focused on conceptual understanding and the ability to produce visual tafsir.

Table 2. Student Learning Outcome Improvement

Indicator	Pre-test Mean	Post-test Mean	Gain Score	Category
Understanding of MPQT concepts	64.2	82.7	0.52	Moderate
Ability to develop visual tafsir	58.4	80.1	0.61	Moderate–High
Interpretation accuracy	61.5	79.8	0.48	Moderate
Overall Mean	**64.20**	**83.40**	**19.20**	**Significant**

The results indicate a substantial improvement in students' learning outcomes, with an overall gain of 19.20 points. The gain score analysis shows moderate to high effectiveness, particularly in students' ability to develop visual tafsir.

A paired sample t-test confirmed that the improvement was statistically significant ($p < 0.05$), indicating that the implementation had a meaningful impact on student learning. Furthermore, the effect size calculation (Cohen's $d = 0.87$) indicates a large practical effect, demonstrating that the Storybird-based textbook significantly enhanced students' productivity in developing visual tafsir. This finding extends previous studies, which primarily reported improvements in narrative writing.[18] In this study, the impact goes beyond writing skills to include interpretive depth and pedagogical production in Qur'anic studies.

Student Activity and Learning Motivation

Student engagement was observed during the implementation of Storybird-based, project-oriented tafsir learning.

Table 3. Student Activity Observation

No	Activity Indicator	Percentage	Category
1	Participation in discussion	86%	Very Active
2	Completion of Storybird project	88%	Very Active
3	Ability to present tafsir visually	83%	Active
4	Collaboration in group interpretation tasks	79%	Active
	Average	**84%**	**Active-Very Active**

[18] Bernard R. Robin, "The Power of Digital Storytelling to Support Teaching and Learning," *Digital Education Review*, no. 30 (2016): 17–29; Bernard R. Robin and Sara G. McNeil, "What Educators Should Know about Teaching Digital Storytelling," *Digital Education Review* 22, no. 1 (2012): 37–51.

These results show that students were actively involved in the learning process. The use of Storybird reduced passive learning behaviour and fostered higher engagement, collaboration, and participation. Student questionnaire data further supported these findings, indicating increased motivation (80%), improved understanding of tafsir (78%), ease of use (84%), and strong relevance to contemporary learning (87%).

A key outcome of this study was the production of student-generated visual tafsir projects using Storybird. These projects were evaluated using a structured rubric.

Table 4. Visual Tafsir Assessment Results

Assessment Criteria	Mean Score
Interpretation accuracy	3.6
Contextual relevance	3.8
Visual representation quality	3.5
Creativity	3.9
Pedagogical clarity	3.7

The highest score was achieved in creativity (3.9), indicating that students were able to reconstruct Qur'anic meanings in innovative and contextually meaningful ways. For example, in interpreting Surah Al-Ma'un, a student created a visual narrative illustrating acts of social care, such as helping neighbours and supporting orphans. The accompanying explanation connected the Qur'anic message with contemporary social realities, demonstrating strong contextual interpretation and pedagogical relevance.

Compared to conventional written assignments, these outputs showed deeper interpretive engagement, stronger integration of text and visuals, and higher pedagogical value. This supports multimodality theory (Kress), which emphasises that meaning becomes richer when learners integrate multiple modes of representation.

Qualitative Findings

Qualitative data from interviews and observations revealed three major themes:

1. Visual Representation Facilitates Understanding

   Students reported that transforming abstract Qur'anic meanings into visual narratives made interpretation easier and more concrete.

2. Increased Learning Engagement

Storybird created a more interactive and creative learning environment, making students more motivated and involved.

3. Students as Active Knowledge Producers

   Students moved beyond passive reading to actively constructing and justifying their own interpretations through visual storytelling.

These findings align with design-based learning theory, which emphasises learning through authentic product creation and active knowledge construction.

Effect Size and Overall Effectiveness

The effectiveness analysis showed a moderate to strong educational impact (Cohen's d = 0.87), indicating that the improvement was not only statistically significant but also practically meaningful for classroom implementation. Overall, the integration of Storybird proved to be more than a supplementary tool; it functioned as an effective pedagogical approach that enhanced students' conceptual understanding, interpretive skills, creativity, and learning engagement in tafsir education.

Discussion

This study demonstrates that the Storybird-based MPQT textbook significantly enhances students' productivity in Qur'anic interpretation learning, as reflected in improved learning outcomes, higher-quality visual tafsir products, and increased engagement. Importantly, productivity in this context extends beyond output quantity to include interpretive depth, contextualization, and the ability to transform Qur'anic meanings into pedagogically meaningful representations.

The findings extend prior research that primarily framed Storybird as a literacy and writing tool (Smeda et al., 2014; Al Murshidi, 2021). While earlier studies reported improvements in narrative skills and writing motivation, the present study shows that Storybird can function effectively within Islamic higher education, particularly in tafsir pedagogy. Students were not merely composing narratives but engaging in interpretive reconstruction, integrating textual understanding with visual representation. This shift from reproduction to construction of meaning aligns with Robin's (2016) view of digital storytelling as a medium for active knowledge construction.

From a cognitive perspective, the results can be explained through Mayer's Cognitive Theory of Multimedia Learning.[19] The integration of visual and verbal elements appears to reduce cognitive load and facilitate deeper understanding of abstract tafsir concepts. Students were better able to connect Qur'anic verses with contemporary contexts, suggesting that visual scaffolding plays a critical role in supporting comprehension. This supports Mayer's (2021) assertion that meaningful learning occurs when learners actively organise and integrate multimodal information.[20]

However, this study goes beyond cognitive explanations by highlighting the role of multimodality in interpretive practice. Drawing on Kress's theory, the findings indicate that meaning-making becomes more complex and nuanced when learners move across representational modes. Students demonstrated higher-order interpretive skills—such as inference, symbolism, and contextual adaptation—when producing visual tafsir. Unlike conventional written assignments, these multimodal outputs required students to negotiate meaning actively, rather than simply summarise existing interpretations.

The results also partially align with Cohn (2020), who found that visual prompts improve narrative coherence.[21] Yet, the current study suggests a broader pedagogical implication in tafsir education: visual storytelling does not only support expression but also enhances interpretive reasoning. This is a critical distinction, as Qur'anic interpretation involves theological, ethical, and contextual dimensions that exceed general language learning outcomes.

From the perspective of Islamic pedagogy, the integration of Storybird addresses a key limitation in traditional tafsir instruction, which often emphasises textual analysis without sufficient attention to application and communication. Tafsir, however, requires *tafakkur* (critical reflection) and the ability to relate Qur'anic values to contemporary life. The use of visual storytelling enables students to bridge this gap by translating abstract meanings into socially relevant narratives. In this sense, Storybird serves not merely as a technological tool but as a medium for pedagogical transformation.

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[19] Richard E. Mayer, "The Promise of Multimedia Learning: Using the Same Instructional Design Methods across Different Media," *Learning and Instruction* 13, no. 2 (2003): 125–39, https://doi.org/10.1016/s0959-4752(02)00016-6.

[20] Robin, "The Power of Digital Storytelling to Support Teaching and Learning."

[21] Neil Cohn, "Your Brain on Comics: A Cognitive Model of Visual Narrative Comprehension," *Topics in Cognitive Science* 12, no. 1 (2020): 352–86, https://doi.org/10.1111/tops.12421; Neil Cohn, "Visual Narrative Comprehension: Universal or Not?," *Psychonomic Bulletin and Review* 27, no. 2 (2020): 266–85, https://doi.org/10.3758/s13423-019-01670-1.

Practically, the findings suggest that the developed textbook provides a viable and replicable model for MPQT courses. Compared to conventional textbook-centred approaches, the Storybird-based design promotes project-based learning, increases student motivation, and fosters active participation. Students' positive responses further indicate that relevance, creativity, and hands-on tasks are key drivers of engagement in tafsir learning contexts.

Nevertheless, this study has limitations. The implementation was conducted within a single institutional context, which may limit generalizability. Additionally, the focus on short-term effectiveness does not capture long-term retention or transfer of interpretive skills. Future research should involve broader samples, longitudinal designs, and comparative studies with other digital platforms to further validate the findings.

CONCLUSION

This study concludes that the development and implementation of a Storybird-based MPQT textbook is both feasible and effective in improving students' understanding of Qur'anic interpretation, interpretive accuracy, and ability to produce visual tafsir. The integration of digital storytelling also increases student engagement, creativity, and active participation in learning. The findings highlight a shift from text-centred instruction to a more student-centred learning model in which students actively construct and communicate Qur'anic meaning through visual narratives.

Theoretically, this study contributes to the integration of multimedia learning, multimodality, and Islamic pedagogy by demonstrating how visual–verbal interaction supports deeper interpretation and contextual understanding. It also positions Storybird not merely as a writing tool, but as a pedagogical medium for visual tafsir and digital storytelling in Islamic higher education.

Practically, the developed textbook offers a replicable model for MPQT and similar courses. Lecturers are encouraged to adopt project-based and multimodal approaches to make tafsir learning more interactive, contextual, and relevant to 21st-century education. However, this study is limited to a single institutional context and short-term implementation. Future research should examine broader applications, long-term impacts, and comparisons with other digital platforms.

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