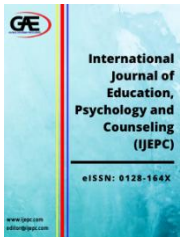
International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 62 (March 2026) PP. 702-722



INTERNATIONAL JOURNAL OF EDUCATION, PSYCHOLOGY AND COUNSELLING (IJEPC)
https://gaexcellence.com/ijepc

MAPPING A LANDSCAPE OF DIGITAL STORYBOARDING IN EDUCATION: A NEW SYSTEMATIC LITERATURE REVIEW

Sri Roshini Devi Theva Manoharam[1], Farah Natchiar Mohd Khaja[2*]

[1]Department of English Language and Literature, Faculty of Language and Communication, Universiti Pendidikan Sultan Idris (UPSI), 35900 Tanjong Malim, Perak, MALAYSIA
roshinidev82@gmail.com https://orcid.org/0009-0007-2289-5115

[2]Department of English Language and Literature, Faculty of Language and Communication, Universiti Pendidikan Sultan Idris (UPSI), 35900 Tanjong Malim, Perak, MALAYSIA
farah.natchiar@fbk.upsi.edu.my https://orcid.org/0000-0001-7184-1243

*Corresponding Author

Article Info:

Article history:
Received date: 31.12.2025
Revised date: 12.01.2026
Accepted date: 26.02.2026
Published date: 11.03.2026

To cite this document:

Manoharam, S. R. D. T. & Mohd Khaja, F. N. (2026). Mapping A Landscape of Digital Storyboarding in Education: A New Systematic Literature Review. *International Journal of Education, Psychology and Counselling, 11*(62), 702-722.

Abstract:

The intensive development of technology, particularly the widespread application of video platforms on social media among youth, highlights the need to implement digital technology into education. Regardless of the increasing scholarly interest, current research is spread across the fields, contexts, and applications of technology, which hinders establishing a unified vision of present research patterns and disciplinary focus. In this respect, the specified systematic review of the literature will serve as an attempt to chart the research space of the sphere of digital storyboarding in education by synthesising the recent empirical studies and expounding on the current themes in research. The systematic search was designed and formulated based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol, and two primary databases, such as Scopus and ERIC, were utilized with the assistance of the advanced keyword, which is "digital storyboarding." Peer-reviewed journal articles published between 2023 and 2025 were restricted in the search strategy to capture the current developments in the field. After applying the inclusion and exclusion criteria, screening, and eligibility checking, 26 primary studies were chosen to be studied in detail. The results reveal three major themes that appear across the literature: (1) the pedagogical application of digital storytelling and storyboarding to improve learning and skill acquisition, indicating the improvements in cognitive, creative, and communicative learning outcomes; (2) digital storytelling as a means of identity, culture, inclusion and social interaction, which underlines the voice of the learner, sense of belonging, and more culturally responsive practice;

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 62 (March 2026) PP. 702-722

and (3) technology-enhanced and novel innovations in visual storytelling, which revolves around the incorporation of Artificial Intelligence (AI), immersive media, and interactive platforms to make them more accessible and engaging to learners. On the whole, the review suggests that there is a visible trend toward replacing traditional skill-based practices with more inclusive, identity-affirming, and technology-oriented applications of digital storyboarding. This contribution presents a systematic overview of recent studies, determines the gaps in the areas of longitudinal influence and pedagogical architecture, and suggests future research areas that could contribute to the development of theory, practice, and innovation in the field of digital storyboarding in educational settings.

DOI: 10.35631/IJEPC.1162042

Keyword:

Digital Narrative; Digital Storyboarding; Education; Educational Technology; Instruction; Teaching; Learning; Storyboarding; Visual Storytelling

© The authors (2026). This is an Open Access article distributed under the terms of the Creative Commons Attribution (CC BY NC) (http://creativecommons.org/licenses/by-nc/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For commercial re-use, please contact ijepc@gaexcllence.com.

Introduction

Since digital storyboarding is a recognition of interactive learning technology, it has undergone considerable expansion as a pedagogical method of educating people of various disciplines. This approach focuses on the production of imaginative stories with the help of digital technologies, combining texts, images, audio, and video to deliver engaging yet informative narratives. In digital storytelling practices, digital storyboarding can be perceived as a scaffold of the planning and design process that allows learners to plan ideas, order narratives and systematically combine multimodal information before production. The digital storytelling concept in education is driven by the possibility of fomenting critical thinking, creativity, and interaction between students, which has the effect of making learning more interactive and meaningful.

The ability to engage the students on a profound level is one of the main advantages of digital storytelling in education. Digital storytelling encourages students to learn actively and connect with the material personally by allowing them to create and share their stories. An example can be observed in mathematics learning, where the use of digital stories has been found to support engagement, understanding, and meaningful learning experiences; foster cognitive and emotional growth; enhance competency development; promote collaboration; and support constructivist learning (Talati et al., 2025). Similarly, digital storytelling has been implemented in language learning to increase speaking proficiency, improve students' reading of literature, and support the development of creativity and critical thinking

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 62 (March 2026) PP. 702-722

(Nourhane & Mészáros, 2025; Sangeetha, 2025). Still, there are no limitations on the age of this group or subject, since digital storytelling has been successfully utilized in the preschool and higher education, in fields like health education, business, and environmental studies (Asli, 2025; Ellison et al., 2025; Qasim et al., 2025).

The adoption of digital storytelling in education is challenging, although it has a number of benefits. Another major challenge relates to the coordination of digital storytelling projects with the standards of the curriculum and the incorporation of technology into current instructional trends. Teachers find it challenging to find the right digital stories, handle legal concerns, and evaluate the learning in students (Watson et al., 2025; Benvenuti et al., 2025). Moreover, the effectiveness of digital storytelling projects may be influenced by technological barriers, including low technological self-efficacy among teachers and students, as well as possible cultural and curricular differences (Talati et al., 2025; Suryani et al., 2025). Hence, to address these problems, teachers should be provided with proper training and resources so that they can easily accommodate digital storytelling into their instructional repertoire.

Digital storytelling also enhances the acquisition of 21st-century skills in students. Through the process of establishing digital stories, learners acquire information technology, graphic design, and media literacy competencies. To illustrate, research on ESL [H1.1] [ST1.2] student-teachers revealed that they could improve their writing, critical thinking, self-confidence, and intercultural awareness through the creation of digital stories (Branson et al., 2025). Also, digital storytelling may be used as a career coaching instrument, allowing students to get to know and follow valuable career paths depending on their interests and abilities (Marzuki et al., 2025). Digital storytelling ability is a useful tool in the development of diverse skills needed in the modern digital age by virtue of its flexibility.

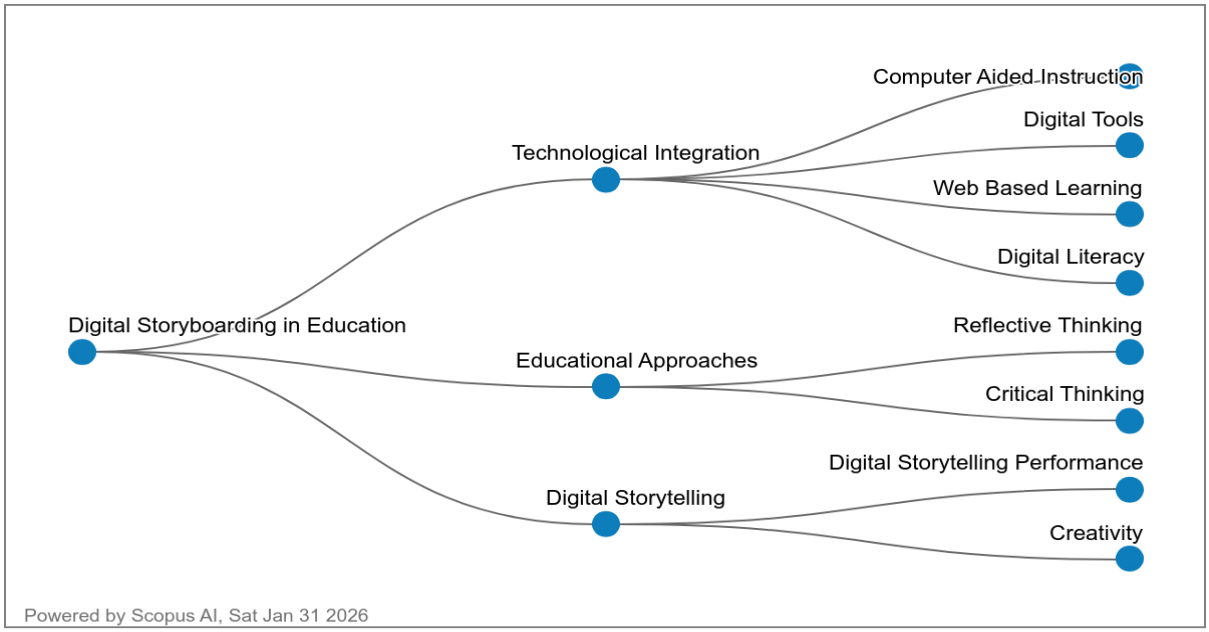


Figure 1: Conceptual Map of Digital Storyboarding in Education

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 62 (March 2026) PP. 702-722

A concept map provided in Figure 1 locates digital storyboarding in education as a core pedagogical phenomenon that is upheld by three interconnected areas: technological integration, educational practices, and digital storytelling. Technological integration highlights that computer-aided instruction, digital tools, web-based learning, and digital literacy are the means of facilitating the organized, meaningful learning process, and that pedagogical methods focus on higher-order learning as the development of the skills of reflection and critical analysis. At the same time, digital storytelling prefigures learning outcomes, specifically learners' performance and creativity in the context of narrative-based multimodal writing, which indicates how multimodal production, based on narrative, can improve student engagement and self-expression. The concept map, on the whole, demonstrates that digital storyboarding is not just an application of technology but an integrated approach to instruction that combines technology, pedagogy, and the development of cognitive skills and, thus, makes it a worthy tool to be used as a solid framework of modern teaching and learning processes.

In conclusion, it is possible to say that digital storyboarding in learning is a powerful tool that can push the educational process by making it more interesting, interactive, and meaningful. Despite the issues surrounding the implementation, this is a promising initiative due to the benefits of furthering critical thinking, creativity, and 21st-century skills among learners. Providing teachers with the necessary training and resources and changing the digital storytelling projects to match the curriculum requirements, the maximum innovative instructional strategy will be attained. The role of digital storytelling in the new educational landscape is projected to be even more significant due to the further growth of the world of technology.

Research Question

In Systematic Literature Reviews (SLRs), research questions are essential since they outline the conceptual framework and the orientation of the entire process of a literature review. They describe the scope and focus of the review by informing how the relevant studies shall be identified, included and excluded to ensure that the objectives of the review are achieved. Well-stated research questions help use a systematic and extensive search strategy that will mitigate the risk of omission, minimize potential bias and provide an opportunity to thoroughly map the current evidence. Moreover, research questions offer an analytical outline through which the results of the studies can be organised, compared, and synthesised to allow coherent interpretation and valuable conclusions. Clear research questions also help make the review more transparent, clear, and reproducible, so that other researchers can repeat the process or advance the inquiry into a different field. As a result, research questions are an inseparable part of a well-constructed and methodologically viable SLR that underlies the identification of research trends, the assessment of pedagogical practices, and the identification of gaps in the literature.

Research question development is generally considered the most important step in designing an SLR, as it directly influences the review methodology and data analysis (Kitchenham & Charters, 2007). Considering that the purpose of this SLR is to find out and examine the state of the art in relation to digital storyboarding in education, it was structured around the elaboration of directed, conceptually based research questions. In order to do so, the Population, Interest, and Context (PICo) framework suggested by Lockwood et al. (2015) was implemented. The PICo framework is specifically adapted to qualitative and exploratory reviews, since it facilitates systematizing research questions regarding clearly defining the

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 62 (March 2026) PP. 702-722
target population, the phenomenon of interest, and the contextual limits of the study. The use of this framework helped make the research questions clear and consistent with the objectives of the review, and it allowed the researcher to develop an effective literature search strategy that could be replicated. In line with this method, the current research came up with three research questions to inform the systematic review procedure.

RQ1: How do digital storyboarding and digital storytelling, when used as a teaching approach, support learners' learning outcomes and skills development (e.g., writing, communication, critical thinking, creativity, collaboration) across educational contexts?
RQ2: In what ways do digital storytelling and storyboarding shape learners' identity expression, cultural understanding, inclusion, and social engagement within inclusive educational and community contexts?
RQ3: What benefits and implementation challenges are reported when emerging technologies (e.g., Artificial Intelligence (AI)-assisted storytelling, AR/VR, interactive platforms) are integrated into digital storyboarding and visual storytelling activities in educational settings?

Materials and Methods

The framework of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) provided the guide for this SLR to ensure transparency, methodological rigour, and consistency in evidence synthesis (Page et al., 2021). The PRISMA guidelines provide a systematic and reproducible method for selecting, screening, and including relevant studies, which increases the reliability and validity of the review procedure and eliminates the potential selection bias. Despite the methodological robustness of randomised studies acknowledged by PRISMA, the leading strength of this methodology is that it encourages both complete and impartial reporting of any research design. In the selection of databases to use in this review, Scopus and ERIC were chosen as the two main databases because they cover a wide range of peer-reviewed scholarly research on education and are credible in their respective fields.

The PRISMA process has four sequential steps, which include identification, screening, eligibility, and data abstraction. The identification phase is used to do extensive searches on the database in order to isolate all potentially interesting studies. Records are evaluated against set inclusion and exclusion criteria during the screening to remove irrelevant and poor-quality sources. The eligibility phase demands full-text analysis to ensure that one is fit to be included, and data abstraction involves the logical identification and gathering of essential data for the final list of studies. Together, these measures help to provide a strict and open review process that can help to produce sound and reliable results to inform future research and teaching practice.

Identification

According to the PRISMA system, the first phase of the SLR process is the identification phase, as it determines the extent to which the evidence base will be exhaustive. The identification phase of this study was carried out since two large academic databases, namely, Scopus and ERIC, were searched using structured searches using the core keywords of the research, *"digital storyboarding"* and *"education,"* presented in Table 1. The databases that were chosen were selected for their reputations for indexing high-quality, peer-reviewed research in the fields of educational technology and pedagogy. The initial search resulted in 770 records in Scopus and 225 records in ERIC, which provided a total of 995 publications. The list of viewed

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 62 (March 2026) PP. 702-722

documents indicates that the body of research on digital storyboarding and related practices has attracted scholarly attention in recent years, particularly in education. Notably, the combination of the two databases allowed providing extensive disciplinary and methodological coverage that minimized the risk of database-specific bias during the initial phase of the review.

Along with the numerical results, the identification findings give a substantial reason for the systematic synthesis performed in this paper. The high number of records retrieved indicates that scholarly investigation into digital storyboarding is highly scattered across journals, academic ranks, and research traditions, to the extent that an educator and a researcher cannot produce a comprehensive image of the discipline using a single research study. Additionally, the increased number of records in Scopus indicates greater interdisciplinary attention, whereas ERIC provides domain-specific depth by hosting studies that are education-specific and may be omitted in other indexes. Combined, these findings have indicated the importance of stringent screening and eligibility procedures to narrow the evidence base and single out the studies that actually comment on pedagogical uses of digital storyboarding. Therefore, the identification phase not only confers transparency in the search procedure but also delivers a firm methodological justification for undertaking a systematic review to trace patterns in research, methodological trends, and educational findings as a result of digital storyboarding.

Table 1: The Search String

Scopus	TITLE-ABS-KEY (("digital storyboarding" OR "storyboarding" OR "digital narrative" OR "visual storytelling") AND (education OR "educational technology" OR "learning" OR "teaching" OR "instruction")) AND (LIMIT-TO (PUBYEAR , 2023) OR LIMIT-TO (PUBYEAR , 2024) OR LIMIT-TO (PUBYEAR , 2025)) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (SRCTYPE , "j")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (PUBSTAGE , "final")) **Date of Access: January 2026**
ERIC	(“digital storyboarding" OR "storyboarding" OR "digital narrative" OR "visual storytelling”) AND (education OR "educational technology" OR "learning" OR "teaching" OR "instruction”) **Date of Access: January 2026**

Screening

After the identification phase, a screening process was conducted to narrow the original set of records and validate conceptual fit with the stated objectives of the systematic review. Before the screening, entries detected in the Scopus and ERIC databases were filtered out (n = 12) to remove redundancy and reduce potential bias from overlapping database coverage. The rest of the records were then screened at the title- and abstract-level against the predefined inclusion and exclusion criteria. At this phase, the number of records that were eliminated for not meeting the eligibility criteria was 839. Specifically, non-English language publications, released before 2023, which are conference proceedings, books, or review articles, were not considered or were termed in-press publications. These criteria were to make sure that the studies that were

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 62 (March 2026) PP. 702-722

retained were up to date, peer-reviewed, and end-stage empirical research works that were in line with the current trends in digital storyboarding in education.

The dataset was then filtered by the screening criteria, and eventually, a new set of 156 records that would be utilized in subsequent evaluation was generated, comprising 119 Scopus articles and 37 ERIC articles. The refining process, as indicated in Table 2, increased the methodological rigor of the review by narrowing down the evidence base to studies that were timely and methodologically appropriate. The inclusion of non-empirical and non-journal material enhanced the consistency and comparability of the findings, and the emphasis on current articles gave the review current digital storyboarding practices and trends. In addition to this, the supplementary use of Scopus and ERIC contributed to an interdisciplinary breadth, as well as an education-centered depth, making the screening procedure even more powerful. These choices, combined with each other, provide a sensible methodological justification for the corpus that is retained and an appropriate and defensible starting point for the further steps of eligibility and data abstraction in the systematic review.

Table 2: The Selection Criterion is Searching

Criterion	Inclusion	Exclusion
Language	English	Non-English
Time line	2023 – 2025	< 2023
Literature type	Journal (Article)	Conference, Book, Review
Publication Stage	Final	In Press
Subjects	Social Sciences Arts and Humanities	Besides Social Sciences Arts and Humanities

Eligibility

At the stage of the PRISMA workflow, 144 full-text articles were taken into account during the eligibility phase in the third stage. The critical analysis of the articles at this stage was done considering the content of the study, its research objectives, and empirical backdrop, ensuring that they are aligned with the review objectives. Full-text analysis allowed a more intensive review than title and abstract screening, thus being able to exclude those studies that did not properly incorporate the idea of digital storyboarding into the learning environment.

After the eligibility test, 117 articles were eliminated on the basis of a lack of inclusion criteria. These exclusions were largely due to studies that were outside the scope of the field, titles that did not have substantive relevance, abstracts that did not correspond with the review objectives, no access to full-text, or no empirically backed evidence. As a result, 27 articles met the eligibility criteria and proceeded to the end phase of the review. This eligibility procedure maintained the conceptual, methodological and direct alignment of the chosen corpus with the aims of the research, which enhanced the validity and reliability of the analysis and synthesis that followed.

Data Abstraction and Analysis

The methodology used was an integrative analytic approach to systematically analyse and synthesize the empirical studies that utilized a qualitative research design. The approach applied an integrative analytic method to critically examine and integrate the empirical studies

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 62 (March 2026) PP. 702-722

that employed a qualitative research design. The primary aim of the analytic method was to identify recurrent patterns, themes, and sub-themes that can be applied to digital storyboarding in learning contexts. The analytical process began with a comprehensive evaluation of the selected corpus, during which the 27 eligible studies were read, and the information was recorded to identify statements, findings, and evidence that addressed the purpose of the review. Figure 2 demonstrates that all of the publications were attentively analysed, and methodological approaches, along with the critical research outcomes, were considered in the synthesis process.

Findings of the report and the methodological nature of the studies included therein were then subject to analysis to draw meaningful comparisons among the studies incorporated in the report, in terms of settings and research designs. The themes were collaboratively made by the authors, and all interpretations were founded on the evidence and put in the educational context of digital storyboarding. In the analysis, an audit log was maintained to document analytical decisions, lessons learned, reflexive observations and places of doubt, which enhanced transparency and analytical rigor. In order to bring uniformity and validity in the development of the themes, the authors critically matched interpretations, and any discrepancies were resolved through consensus and debate. This cooperative, repetitive exercise strengthened the plausibility of the thematic findings and made the final themes a true representation of the group evidence presented by the selected studies.

Quality of Appraisal

By following the specifications outlined by Kitchenham and Charters (Kitchenham, 2007), the quality of the potential primary studies was determined in a systematic way in order to conduct a rigorous comparison and synthesize evidence. Quality Assessment (QA) is among the most crucial stages of the SLR process, as it ensures the acceptability of the methodological quality of the studies used and contributes a credible portion to the outcomes of the review. Consequently, the QA framework applied in the current study was proposed by Abouzahra et al. (2020) and consists of six QA criteria that were applied in all the selected studies.

The criteria were assessed by a three-level scoring scale in a transparent and consistent manner. The score of **1 (Yes)** was applied when the criterion met the requirements completely, **0.5 (Partly)** was applied when the criterion was met partially with several minor shortcomings, and **0 (No)** was applied when the criterion was not addressed. The systematic assessment approach offered a systematic comparison of the quality of the study and strengthened the quality and validity of the evidence synthesis in general.

- QA1. Is the purpose of the study clearly stated?
- QA2. Is the interest and the usefulness of the work clearly presented?
- QA3. Is the study methodology clearly established?
- QA4. Are the concepts of the approach clearly defined?
- QA5. Is the work compared and measured with other similar work?
- QA6. Are the limitations of the work clearly mentioned?

The table describes a QA process that is employed to measure a study according to particular criteria. The study is evaluated by three experts using the enumerated criteria, and each criterion is rated as "Yes" (Y), "Partly" (P), or "No" (N). The following is the detailed explanation:

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 62 (March 2026) PP. 702-722

The three experts independently evaluated each study based on the set QA criteria, and the respective individual scores were summed up to achieve a total quality score. The next step in the review involved only those studies with a cumulative score of over 3.0, by considering the collective judgment of all three experts. This quality criterion was used to filter out studies that did not meet a decent standard of methodological rigor and reporting quality for further analysis.

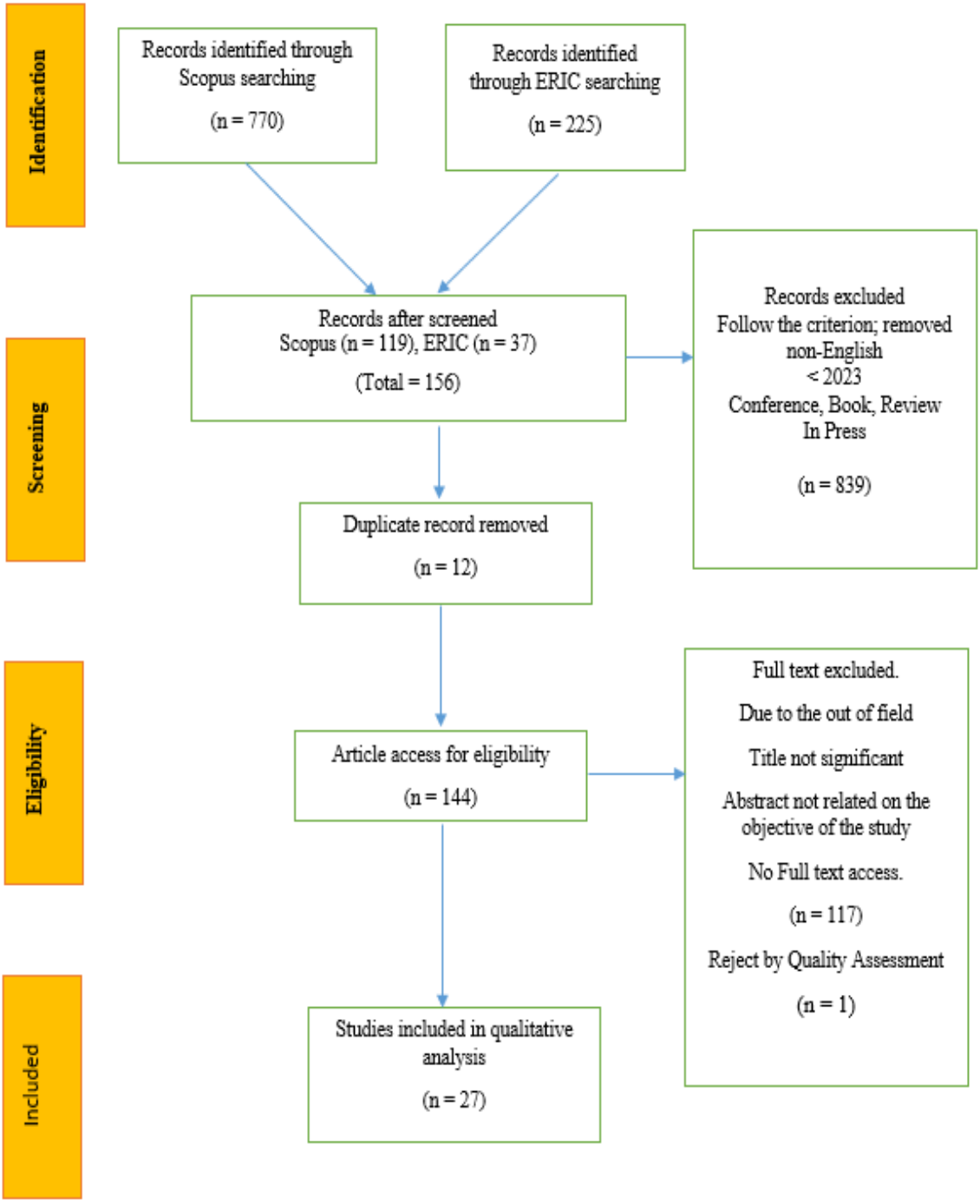


Figure 1: Flow Diagram of the Proposed Searching Study

Source: Moher D, Liberati A, Tetzlaff J, (2009)

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 62 (March 2026) PP. 702-722

Result and Finding

The QA outcomes for PS1-PS27 in Table 3 show that a satisfactory standard of methodology was observed across the examined studies, with most of them meeting or surpassing the established acceptable threshold of 50%. Among the 27 studies evaluated, a single study (PS1) received a score of less than 50% (41.7%) and thus could not be subjected to any future analysis, as per the QA protocol. Two studies (PS13 and PS18) had a 50.0% success rate and were retained, having reached the minimum quality criterion. The vast majority of studies fell in the moderate level of quality (58.3%-75.0%), which states that the purpose and relevance of research (QA1 and QA2) were well-defined and represented in almost all studies, limits were rarely reported (QA6), and comparisons with related works (QA5) were not well developed. The smaller group of studies indicated high-quality methodology, with PS6, PS15, PS16, and PS22 scoring over 80%, indicating a clear description of methodology, a well-described conceptual framework and greater analytical rigor. Generally, these results indicate that the evidence base for digital storyboarding and associated visual storytelling practices is generally robust but differs in the level of reporting and critical reflection. The use of a rigorous quality criterion enhanced the validity of the review as only methodologically well-founded and adequately reported studies were used to finalize the synthesis.

Table 3: Performance of Quality Assessment

PS	QA1	QA2	QA3	QA4	QA5	QA6	Total Mark	Percentage (%)
PS1 (Talati et al., 2025)	Y	Y	N	P	N	N	2.5	41.7
PS2 (Nourhane & Mészáros, 2025)	Y	Y	Y	P	N	N	3.5	58.3
PS3 (Sangeetha, 2025)	Y	Y	Y	P	N	N	3.5	58.3
PS4 (Ellison et al., 2025)	Y	Y	P	Y	N	N	3.5	58.3
PS5 (Asli, 2025)	Y	Y	Y	P	Y	N	4.5	75.0
PS6 (Qasim et al., 2025)	Y	Y	Y	Y	Y	N	5.0	83.3
PS7 (Watson et al., 2025)	Y	Y	P	Y	N	N	3.5	58.3
PS8 (Benvenuti et al., 2025)	Y	Y	Y	P	Y	N	4.5	75.0
PS9 (Suryani et al., 2025)	Y	Y	Y	P	N	P	4.0	66.7

PS10 (Branson et al., 2025)	Y	Y	Y	P	Y	N	4.5	75.0
PS11 (Marzuki et al., 2025)	Y	Y	Y	P	N	N	3.5	58.3
PS12 (de las Mercedes Martínez, 2025)	Y	Y	Y	P	N	N	3.5	58.3
PS13 (van Hoven, 2025)	Y	Y	P	P	N	N	3.0	50.0
PS14 (Illingworth et al., 2025)	Y	Y	Y	P	N	N	3.5	58.3
PS15 (Tsankov & Levunlieva, 2024)	Y	Y	Y	P	Y	P	5.0	83.3
PS16 (Estrella, 2024)	Y	Y	Y	P	Y	Y	5.5	91.7
PS17 (Khoo et al., 2024)	Y	Y	Y	P	N	N	3.5	58.3
PS18 (Modi et al., 2024)	Y	Y	P	P	N	N	3.0	50.0
PS19 (Mou, 2024)	Y	Y	Y	P	Y	N	4.5	75.0
PS20 (Hazaymeh & Saleem Khasawneh, 2024)	Y	Y	Y	P	Y	N	4.5	75.0
PS21 (Nik et al., 2024)	Y	Y	Y	P	N	P	4.0	66.7
PS22 (Avello-Martínez et al., 2024)	Y	Y	Y	Y	Y	P	5.5	91.7
PS23 (Pears et al., 2023)	Y	Y	Y	P	N	P	4.0	66.7
PS24 (Von Reumont & Budke, 2023)	Y	Y	Y	P	Y	N	4.5	75.0
PS25 (Morgado,	Y	Y	P	Y	N	N	3.5	58.3

& Vesala-Varttala, 2023)								
PS26 (Buragohain et al., 2023)	Y	Y	Y	P	N	N	3.5	58.3
PS27 (Lavrysh et al., 2023)	Y	Y	Y	P	P	N	4.0	66.7

Pedagogical Use of Digital Storytelling and Storyboarding for Learning and Skills Development

The pedagogical effects of digital storytelling and storyboarding have been observed to yield positive educational results across educational settings, especially in aiding conceptual learning, participation, and learning abilities in the context of visual-narrative structures. Research on comics and visual storytelling in science and environmental education indicates that cognitive and affective learning is highly positive in comparison to text-based instruction. Sangeetha (2025) indicated significant gains in the awareness of wind energy in the fourth-grade students using a comic-based teaching method at the end of the intervention, with large effect sizes for increased conceptual knowledge and continued interest. Likewise, von Reumont and Budke (2023) concluded that the use of comics, combined with maps, diagrams, and a narrative, yielded better outcomes than natural texts in facilitating understanding and retention of climate change concepts among young learners. These results are supported by Mou (2024), whose research in the visual storytelling of STEM topics demonstrated that structured storytelling tasks positively influenced creative self-efficacy and the use of disciplinary knowledge, especially when the students were involved in analogy-based visual narration. Taken together, these papers indicate that visual narration and storyboarding can be useful in the learning process by enhancing meaning-making and abstraction, as well as by promoting participation among learners using multimodal representations. The remarkable focus throughout these works implies that narrative images do not serve only as motivational aids but also as cognitive support systems that encourage more thorough processing of complex information.

In language teaching and literacy-oriented settings, digital storytelling and storyboarding have been reported to help develop writing, structure the narrative and develop higher-order skills. Research that has been developed within both EFL and ESP contexts has consistently found an improvement in the ability of learners to formulate, structure and refine written ideas with the help of visual planning aids. As shown by Suryani et al. (2025), the incorporation of Storyboard That into project-based learning allowed Indonesian EFL students to engage, develop their creativity, and form their narratives in a coherent fashion, despite the technological limitations at the beginning. Similar results were obtained by Estrella (2024), who discovered that writing comics promoted brainstorming, drafting and peer feedback, resulting in an increase in writing confidence and genre awareness among Ecuadorian undergraduates. Other conceptualisations of digital storytelling as a form of participatory pedagogy were further developed by Morgado and Vesala-Varttala (2023), who demonstrated that goal-oriented stages of scripting and storyboarding facilitated purposeful language application and teamwork as well as digital literacy in ESP classes across various European settings. In line with these results, Hazaymeh and Saleem Khasawneh (2024) indicated that the use of visual storytelling on the YouTube

platform strongly improved the reading and writing scores of foreign language learners with students reporting a substantial effect in terms of reading comprehension and writing expression. In these works, storyboarding is presented as a mediating activity that connects visual thinking and language production and helps learners to organize their ideas, match the content with audience requirements, and acquire the 21st-century skills to think critically and collaboratively.

In addition to student learning outcomes, some studies note the importance of digital storyboarding in teacher education, professional development, and metacognitive development. Illingworth et al. (2025) used storyboarding as a form of self-reflection in the context of CPD for academic staff, finding possible enhancements in the aspects of inclusive teaching, engagement with students, and the relevance of learning. Such application of storyboarding was not limited to instructional design but was a reflective tool that helped educators see professional learning paths and how they would affect students. In a similar way, Tsankov and Levunlieva (2024) explored how preservice kindergarten teachers planned their multimodal digital resources and revealed inconsistencies between intuitive design practices and the expectations of experts, especially those related to coherence, audience awareness, and symbolic representation. Their results highlighted the necessity of formal education in storyboarding and multimodal design during teacher training programmes. Regarding learner development, Lavrysh et al. (2023) showed that the development of the digital narratives enhanced metacognitive skills, including planning, monitoring, and evaluation, particularly when instructional practices focused on reflective collaboration between students and instructors. Lavrysh et al. (2023) and Buragohain et al. (2023) also demonstrated that when digital storyboarding is incorporated into the larger e-learning tasks, it improves writing, reading comprehension, vocabulary growth, and learner autonomy among Malaysian engineering students. Combined, these studies place digital storytelling and storyboarding as flexible educational methods in both their ability to support academic skills, reflective thinking, career development, and learner agency across academic fields and levels.

Digital Storytelling for Identity, Culture, Inclusion, and Social Engagement

Digital storytelling and digital storyboarding are becoming established as pedagogical practices that promote identity formation, cultural cognition, and socialization across a variety of educational settings. Synthesising evidence of digital narratives to foster learner motivation, self-confidence, cultural exposure, expressive capacity and analytical thinking, Nourhane and Mészáros (2025) illustrated the application of digital narratives in African higher education, describing it as a space of identity confirmation and intellectual development. The same trends are reflected in youth and community-based learning settings. Ellison et al. (2025) showed that in multimodal community journaling, Black and Latino girls were able to express personal and collective identities through writing, drawing, and photography, in addition to challenging the hegemonic narratives in STEAM learning. Digital storytelling here served as an agency-building and social-justice advocacy, but not as an add-on literacy activity. Extending the role of identity construction to transnational digital space, Watson et al. (2025) analysed digital stories of African and Asian immigrants on social media platforms and found that identity is negotiated within algorithmically mediated spaces. Their findings revealed that digital narratives facilitate community-building across borders and challenge fixed notions of belonging, home, and place. Together, these studies indicate that digital storytelling and storyboarding support identity work by enabling learners to represent lived experiences, negotiate cultural positioning, and participate in broader social discourses. This is particularly

true when narrative production is situated within meaningful cultural and community contexts (Nourhane & Mészáros, 2025; Ellison et al., 2025; Watson et al., 2025).

Cultural transmission, values education, and intercultural understanding also emerge as prominent outcomes within digital storytelling research. Marzuki et al. (2025) reported that interactive Islamic visual storytelling, supported by augmented reality and multimedia elements, enhanced young learners' engagement and comprehension of moral values embedded in Surah Luqman. The findings suggest that digital narratives can mediate religious and cultural learning by aligning moral concepts with developmentally appropriate visual and interactive forms. In teacher education, de las Mercedes Martínez (2025) suggested that intercultural awareness and understanding of cultural identity among preservice teachers were attained through reflection and academic writing of digital stories and life narratives focusing on Roma culture. Life stories served as cultural bridges, creating valuable interactions with marginalised communities and aiding in the inclusion of views in the educational practice. The emotional and affective aspects of cultural learning are further demonstrated by van Hoven (2025), in which the arts-based participatory project indicated that visual storytelling enabled students to interact with disability and inclusive urban spaces by experiencing discomfort, struggle, and joy. The presentation of these emotional reactions as part of learning and not as barriers implied the use of digital storytelling as a means of creating pedagogical spaces where empathy, reflexivity, and ethical awareness are developed. In these studies, the digital telling of stories is depicted to aid the cultural learning through the integration of narrative, emotion and multimodality thus allowing learners to experience the cultural knowledge as lived, relational and contextualized as opposed to abstract or decontextualised (de las Mercedes Martínez, 2025; Marzuki et al., 2025; van Hoven, 2025).

Digital storytelling helps in inclusion, belonging, and social participation, particularly for migrant, refugee, and socioeconomically marginalised learners. It also points out structural constraints that influence implementation. Khoo et al. (2024) demonstrated that, in cases where teachers produced digital stories, this assisted reflection and enhanced pedagogical consciousness regarding the experiences of migrant and refugee children at home in the early childhood environment. Digital stories can provide educators with space to explore their professional identity, values and relational practices, resulting in intentional teaching rooted in belonging. Modi et al. (2024) also discovered, at the policy level, that digital storytelling encourages global citizenship and awareness of sustainability, whereby more people are engaged, cross-culturally understand, and align with global responsibility. However, access and equity are still a challenge. Nik et al. (2024) reported that while digital storytelling enhanced engagement in widening participation programmes, digital divides related to infrastructure, technological access, and digital literacy limited equitable participation. These are echoed by a larger concern regarding institutional preparedness and resource allocation, which is also observed by Nourhane and Mészáros (2025). Together, the literature indicates that digital storytelling and storyboarding may be helpful for inclusion, social interaction, and learning as participatory practices, but their long-term effects are contingent on the structural assistance, teacher training, and equal access to digital materials. In the absence of these, the social and inclusive possibilities of narrative-based digital pedagogies stand a risk of being disproportionately fulfilled among the groups of learners (Khoo et al., 2024; Modi et al., 2024; Nik et al., 2024; Nourhane & Mészáros, 2025).

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 62 (March 2026) PP. 702-722

Technology-Enhanced and Emerging Innovations in Visual Storytelling

Digital storytelling and storyboarding, when examined through the lenses of identity, culture, inclusion, and social engagement outcomes, show consistent value as communicative scaffolds that help diverse learners participate in meaning-making tasks. In patient education, Benvenuti et al. (2025) indicated that culturally tailored animated narratives can reduce cultural and language barriers in complex genomic communication. At the same time, the post-viewing data indicate increased interest and knowledge, high openness to diverse ethnic representation in characters, and a strong preference for emotionally impactful dramatic narrative structures among many participants. In higher education learning design, Branson et al. (2025) reported that visual storytelling, aesthetic design, and dashboard design are dominant emphases across many data visualization courses. This suggests that narrative communication is becoming a mainstream academic literacy that supports wider participation across disciplines, even when statistical inference is not strongly foregrounded. In graduate learning settings, Avello-Martínez et al. (2024) established that the use of ChatGPT did not enhance the digital storytelling skills in the short term. Nevertheless, the research noted that there was a considerable decrease in the germane cognitive load, which indicated that AI assistance could make storytelling more available by decreasing mental effort to combine and use learning in the act of narrative scripting. Collectively, these results indicate that digital storytelling is not only a creative process but also an inclusion-based strategy: cultural representation facilitates belonging and engagement (Benvenuti et al., 2025), ubiquitous adoption of the curriculum legitimises narrative expression as an academic process (Branson et al., 2025), and complexity in composition reduction can help learners who experience barriers to it (Avello-Martínez et al., 2024).

In both professional and specialised training, digital storytelling practices relate to inclusion and socialisation through voice, confidence, and creative involvement in an area that may otherwise be perceived as defended by technical language and performance pressure. According to Qasim et al. (2025), Digital Narratives in Translation Training improved cognitive creativity, with the highest benefits in conceptual or ideational fluency. It means that there is a higher ability to produce numerous new ideas during translation tasks. Associative reasoning was enhanced relatively, whereas visual structuring displayed relatively small advances, indicating persisting difficulties in converting spatial-visual characteristics into interpretation cognition. In clinical training, Pears et al. (2023) outlined a VR-based application of non-technical skills, created through scenario design, storyboarding, and refinement through several rounds of expert feedback. There were moderate usability and positive perceptions of learning and confidence as reported by users. These results are consistent with the perspective on storyboarding as a social practice that enables professional identity: the organization of the situations and sequences of narratives provides safe platforms for communication, decision-making, and collaboration (Pears et al., 2023). In the meantime, translation training based on narratives enhances adaptability of thought and interpretative creativity, which promotes involvement in multifaceted linguistic communities (Qasim et al., 2025). Meanwhile, Avello-Martínez et al. (2024) proposed that inclusion can be aided by AI tools by taking the mental load off, even in cases where the immediate effect on storytelling performance remains unobserved, and that process support can be achieved before the product benefits are realized. These abstracts, combined, suggest that digital storytelling and storyboarding can broaden access to professional learning, by reducing barriers to entry, building confidence, and practicing the identity-relevant communicative roles, and also indicate that certain sub-skills

(like visual structuring) can be more effectively taught (Pears et al., 2023; Avello-Martínez et al., 2024; Qasim et al., 2025).

According to a cross-study synthesis, there are three interconnected identity, culture, inclusion, and social engagement mechanisms, namely: (a) culturally responsive representation, (b) cognitive and procedural scaffolding, and (c) institutional legitimisation of storytelling as disciplinary literacy. The most explicit examples of cultural responsiveness appear in Benvenuti et al. (2025), in which acceptability and perceived emotional impact were influenced by narrative form (linear versus dramatic) and character diversity, which confirms the statement that the design choices reflecting the audience identities and cultural context promote inclusiveness in storytelling to some extent. Digital narratives and AI support result in cognitive and procedural scaffolding in Qasim et al. (2025) and Avello-Martínez et al. (2024), as the ideational fluency and cognitive load are affected, and the implication of the study is that inclusive participation can be reinforced in case learners are assisted in generating ideas and managing mental load in the process of complex writing. The concept of institutional legitimisation can be seen in Branson et al. (2025), where visual storytelling is common in data-visualisation courses. This places narrative competence as an appreciated form of communication across all disciplines, where learners have opportunities to offer information in forms that are easily comprehensible. Nevertheless, the relative lack of focus on inference is an indication that there should be a balance between persuasive storytelling and the responsible use of evidence. Pears et al. (2023) also broadened the concept of belonging to professional circles and demonstrated that storyboarding can structure immersive training that instills confidence and acceptance, two important prerequisites for working in high-pressure environments.

Conclusion

This literature review is a systematic mapping of the modern state of digital storyboarding in education, as it summarizes peer-reviewed empirical research published in 2023-2025. Following the PRISMA structure and using the Scopus and ERIC records, we analysed the conceptualisation, implementation, and research of digital storyboarding in the educational environment. We conducted the analysis using 27 high-quality studies through rigorous identification, screening, eligibility and quality appraisal. The review addressed three fundamental research questions that involved pedagogical applications, identity-oriented inclusive practices, and technology-enhanced innovations in visual storytelling. The fragmentation of current research is addressed through the organisation of the literature into three coherent thematic areas, which contribute to making the review coherent and a structured synthesis that elucidates the current trends, methodological trends, and the functions of digital storyboarding in education. It helps to see the role of digital storyboarding as a more effective method for developing a better comprehension of digital storyboarding as a technological tool that combines narrative, visuality, and learning design.

The results suggest that digital storyboarding is most evidently used as a pedagogical tool to facilitate learning and skills acquisition in disciplines, levels of learning and groups of learners. Digital storyboarding, as part of this theme, is always an instance of cognitive and organisational scaffolding that facilitates conceptual comprehension, narrative integrity, creativity, teamwork, and reflective thinking. The great focus on multimodal composition and learner-centred design indicates a more general movement toward constructivist and participatory methods of learning. Besides the development of skills, recent studies present

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 62 (March 2026) PP. 702-722
digital storytelling as an aspect of identity, culture, inclusion, and social engagement. It has been found that digital storyboarding creates important learning spaces where students can make personal and group identities, engage with cultural information and feel part of the learning and social settings. Emotional involvement, cultural representation and learner voice may be regarded as significant mechanisms that may result in inclusion. At the same time, the review identifies a growing body of research that evaluates the use of technologies, including technology-enhanced and new technologies, like AI, immersive spaces, and interactive platforms. The research articles underline the potential of new technologies to enhance access, reduce cognitive load, personalise the learning experience, and get more engaged in more detailed narrative tasks. A combination of the three themes shows a clear change in the traditional usage of instruction toward more positive, identity-oriented, and technologically enhanced uses of digital storyboarding.

The review makes some huge contributions to the field. Firstly, it integrates a rapidly expanding methodologically diverse literature into a single thematic lens to offer a detailed image of the current role of digital storyboarding in the educational literature. Secondly, it signifies a change in the direction of conceptual change in literature, utilizing skill acquisition as one rooted in the results instead of more abstract goals of education, which are inclusive, identity, and social interaction. Their practical implications for educational practice, curriculum design, and policy suggest that multimodal learning, teaching everyone, and the acquisition of digital competence can be handled at a strategic level through digital storyboarding. Nevertheless, there are a number of constraints that have to be recognized. It was limited to English-language journal articles from databases and a specified period of publication, which could have resulted in the omission of other studies that were published in other languages or earlier. Besides, the short-term and qualitative designs mainly suggest that longitudinal and comparative studies should be conducted to investigate the impact of sustained learning and pedagogical effectiveness. The design principles, teacher development, and equity-focused implementation strategies should also be studied in the future. In general, the review highlights the importance of evidence synthesis systems in promoting theoretical knowledge and informing future research. With the ongoing development of digital stories in line with advances in educational technologies, systematic reviews are significant for shaping evidence-based innovation and providing meaningful guidance for research and practice.

Acknowledgements: The authors would like to express their sincere gratitude to Universiti Pendidikan Sultan Idris for providing the necessary resources and support throughout the course of this research. Special appreciation is extended to colleagues and peers who contributed valuable insights and constructive feedback, which greatly enhanced the quality of this paper.

Funding Statement: There is no funding for this study.

Conflict of Interest Statement: The authors declare that they have no conflicts of interest to report regarding the present study.

Ethics Statement: This study did not involve any human participants, animals, or sensitive data requiring ethical approval. The authors confirm that the research was conducted in accordance with accepted academic integrity and ethical publishing standards.

Author Contribution Statement: All authors contributed significantly to the development of this manuscript. Sri Roshini Devi d/o Theva Manoharam was responsible for the conceptualization, methodology, and overall supervision of the study. All authors handled data collection, analysis, and interpretation of results. Farah Nachiar contributed to the literature review, drafting, and critical revision of the manuscript. All authors read and approved the final version of the manuscript prior to submission.

International Journal of Education, Psychology and Counseling
IJEPC
EISSN : 0128-164X
Volume 11 Issue 62 (March 2026) PP. 702-722

References

Asli, S. (2025). Enhancing wind energy awareness among fourth-grade students: The impact of comic-based learning on environmental education. *Sustainability, 17*(10), 4636. https://doi.org/10.3390/su17104636

Avello-Martínez, R., Gajderowicz, T., & Gómez-Rodríguez, V. G. (2024). Is ChatGPT helpful for graduate students in acquiring knowledge about digital storytelling and reducing their cognitive load? An experiment. *RED-Revista de Educación a Distancia, 24*(78). https://doi.org/10.6018/red.604621

Benvenuti, D., Dai, J., & Fitriyah, N. H. (2025). Patient stories: Animation and visual storytelling for the communication of complex genomic concepts to reduce cultural and language barriers. *International Journal of Film and Media Arts, 10*(1), 76-98. https://doi.org/10.24140/ijfma.v10i1.10733

Branson, Z., Paz Parra, M., & Yurko, R. (2025). The landscape of college-level data visualization courses, and the benefits of incorporating statistical thinking. *Journal of Statistics and Data Science Education, 33*(4), 390-406. https://doi.org/10.1080/26939169.2025.2537049

Buragohain, D., Punpeng, G., Jaratjarungkiat, S., & Chaudhary, S. (2023). Impact of e-learning activities on English as a second language proficiency among engineering cohorts of Malaysian higher education: A 7-month longitudinal study. *Informatics, 10*(1), 31. https://doi.org/10.3390/informatics10010031

de las Mercedes Martínez, A. (2025). An intercultural education experience focused on Roma culture: empirical evidence from the teacher training at a public Spanish university. *Intercultural Education, 36*(6), 657-672. https://doi.org/10.1080/14675986.2025.2535857

Ellison, T. L., Qiu, T., & Robinson, B. (2025). Black and Latina girls' compositions of multimodal community journaling as multimodal artifactual literacies about STEAM. *Journal of Adolescent & Adult Literacy, 69*(1), e70012. https://doi.org/10.1002/jaal.70012

Estrella, F. (2024). Exploring the efficacy of writing comics as a tool for enhancing EFL writing skills of undergraduate Ecuadorian polytechnic students. *Quality Education for All, 1*(1), 106-128. https://doi.org/10.1108/QEA-12-2023-0028

Hazaymeh, W. A., & Saleem Khasawneh, M. A. (2024). Leveraging YouTube visual storytelling for fostering richer reading and writing proficiency by foreign language undergraduates. *Eurasian Journal of Educational Research (EJER), 111*, 181–196. https://doi.org/10.14689/ejer.2024.111.11

Illingworth, S., Cowan, J., Graham, C., Shan, S. S., & Swanton, K. (2025). Illustrating improvement: storyboards as tools for exploring staff CPD and its benefits to students in a Scottish university. *Teaching in Higher Education, 30*(8), 2009-2036. https://doi.org/10.1080/13562517.2025.2507857

Khoo, E., Mitchell, L., & Sammons, M. (2024). Teacher use of digital stories to promote reflective practice supportive of migrant and refugee children's sense of belonging. *Early Childhood Education Journal, 52*(8), 1993-2007. https://doi.org/10.1007/s10643-023-01538-z

Kitchenham, B., & Charters, S. (2007). *Guidelines for performing systematic literature reviews in software engineering* (Technical Report EBSE-2007-001). Keele University & Durham University.

Lavrysh, Y., Leshchenko, M., & Tymchuk, L. (2023). Development of metacognitive skills through digital narratives in higher education. *Revista electrónica de investigación educativa, 25*. https://doi.org/10.24320/redie.2023.25.e07.5028

Lockwood, C., Munn, Z., & Porritt, K. (2015). Qualitative research synthesis: methodological guidance for systematic reviewers utilizing meta-aggregation. *International Journal of Evidence-Based Healthcare, 13*(3), 179–187. https://doi.org/10.1097/XEB.0000000000000062

Marzuki, I. N., Ahmad Azaini, A. M., Guan, T. T., Azmul Fadhli, K., & Md Ariff, A. (2025). The exploration of interactive Islamic visual storytelling illustration through Surah Luqman. *Global Journal Al-Thaqafah, 15*(1), 148-164. https://doi.org/10.7187/GJAT072025-10

Modi, S., Gupta, T., & Rahmatullah, M. (2024). Digital storytelling as a tool for global citizenship and sustainability: Enhancing cross-cultural understanding in education. *Journal of Interdisciplinary Studies in Education, 13*(S1), 65-104. https://doi.org/10.32674/s817ax14

Morgado, M., & Vesala-Varttala, T. (2023). Digital storytelling as practice-based participatory pedagogy for English for specific purposes. *Language Learning in Higher Education, 13*(1), 175-200. https://doi.org/10.1515/cercles-2023-2014

Mou, T. Y. (2024). The practice of visual storytelling in STEM: Influence of creative thinking training on design students' creative self-efficacy and motivation. *Thinking Skills and Creativity, 51*, 101459. https://doi.org/10.1016/j.tsc.2023.101459

Nik, E., Gauci, R., Ross, B., & Tedeschi, J. (2024). Exploring the potential of digital storytelling in a widening participation context. *Educational Research, 66*(3), 329-346. https://doi.org/10.1080/00131881.2024.2362336

Nourhane, S., & Mészáros, G. (2025). Digital Storytelling in African Higher Education. *Athens Journal of Education, 12*(4), 747-764. https://doi.org/0.30958/aje.12-4-10

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., McGuinness, L. A., … Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ (Clinical research ed.), 372*, n71. https://doi.org/10.1136/bmj.n71

Pears, M., Rochester, M., Wadhwa, K., Payne, S. R., Konstantinidis, S., Hanchanale, V., ... & Doherty, R. (2023). A pilot study evaluating a virtual reality-based nontechnical skills training application for urology trainees: usability, acceptability, and impact. *Journal of Surgical Education, 80*(12), 1836-1842. https://doi.org/10.1016/j.jsurg.2023.08.012

Qasim, R. S., Suleiman, O. W., & Ismail, I. A. (2025). Enhancing innovative thinking skills via digital narratives in translation training. In *Forum for Linguistic Studies* (Vol. 7, No. 1, pp. 902-912).

Sangeetha, S. (2025). Storyboarding as a pedagogical tool: Fostering language, literacy, and creativity through visual narratives. *ShodhKosh: Journal of Visual and Performing Arts, 6*(2), 13–20. https://doi.org/10.29121/shodhkosh.v6.i2.2025.5700

Suryani, N. Y., Nugroho, H., Syahbani, M. H., Gartina Husein, I., & Rifaat, A. A. (2025). Integration Technology of Project-Based Learning on Digital Story-Writing to Help Students Writing Skills. *Asian Journal of Human Services, 29*, 318-337. https://doi.org/10.14391/ajhs.29.318

Talati, B. J., Jain, G., Brar, M., K Prakash, Yadav, V., J P Yadav, & Mundada, K. (2025). The role of AI in democratizing visual storytelling. *ShodhKosh: Journal of Visual and Performing Arts, 6*(4s), 76–86. https://doi.org/10.29121/shodhkosh.v6.i4s.2025.6860

Tsankov, N., & Levunlieva, M. (2024). Designing digital multimodal resources for the kindergarten: From intuition to awareness. *International Journal of Cognitive Research in Science, Engineering and Education, 12*(3), 657-667. https://doi.org/10.23947/2334-8496-2024-12-3-657-667

van Hoven, B. (2025). "Break out"–learning about disability and the inclusive city through emotion and affect. *Journal of Geography in Higher Education, 49*(4), 543-556. https://doi.org/10.1080/03098265.2025.2533268

Von Reumont, F., & Budke, A. (2023). Learning about climate change with comics and text: a comparative study. *Sustainability Science, 18*(6), 2661-2676. https://doi.org/10.1007/s11625-023-01398-x

Watson, V. W., Jung, J. K., Berends, J. E., Boateng, S., & Hall, L. A. (2025). Envisioning Transbordered Algorithmic Identities Across African and Asian Immigrants' Digital Narratives. *AERA Open, 11*, 23328584251403502. https://doi.org/10.1177/23328584251403502