

Digital Folk Literature as a Need for Educational Transformation: A Literary Narrative

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Abstract

The folk literature is a traditional literature that is passed down from one generation to another. It is considered a shared ownership, reflecting the community's feelings. Folk literature possesses an intrinsic value that can be used as a lesson learned and build the internalization of values in students. Its significance and function make it an essential didactic resource, shaping the archetype of the Malaysian nation. Amid modernization, folk literature should evolve into a more innovative form to captivate the public's interest and deepen community appreciation. Thus, this concept paper was developed to systematically gather literature, demonstrating the necessity of digitizing education within the realm of folk literature. The conceptual study employed descriptive qualitative methods through a systematic literature review based on the two databases from the previous five years. The systematic literature review process comprised identification, screening, and eligibility. The findings of the systematic literature review revealed that digitalization in education have long been adopted in Western nations. Nevertheless, a digital gap in education persists in Malaysia, particularly concerning the digitization of literary fields such as folk literature. Therefore, to address this issue, it is evident that digitizing folk literature is imperative for the transformation of education in our country.

Keywords: Folk Literature, Digital Education, Systematic Literature Review.

Introduction

The new education's era has made technology and digitization as a basis of a new teaching and facilitation. In the wake of such technological development, educational digitization formulated by the Malaysian Ministry of Education to create skilled students which gives a comprehensive benefit including teachers, policymakers, educational leadership and all stakeholders. (The Ministry of Education's Digital Education Policy, (2023)). This matter is further supported through Khalisafri's writing (2023), which explains that digitization has a significant impact on all elements of education, particularly students, by providing facilities in terms of access to knowledge and information. This is also clearly stated by the Minister of

Education, the Honorable Fadhlina Sidek in the Digital Education Policy (Ministry of Education, 2023)

“The Digital Education Policy will serve as a guide for all stakeholders in facing the digital era”

Considering the ongoing digitization efforts in education, there remains a significant gap in the digital development of teaching materials, particularly in areas involving language, such as literature. This gap is evident in previous studies, such as those conducted by Elavarassan (2021) and German (2021), which highlight the need for intensified digitization of literary aspects to enhance learning interest and student motivation.

Much of the digitization occurring in education is primarily aimed at materials related to the teaching of subjects such as science, mathematics, and psychology, but with limited attention given to digitization development in the field of language. This observation is substantiated by research conducted by Wahid & Ain (2023), and Ahmad Fikri & Mohamad Zambri (2022), which highlights a substantial gap in digital progress within literature, including traditional genres such as folk literature.

Folk literature, as described by Piah et al. (2002), is a component of oral literature that emerges from and is passed down within a social entity. It is characterized by its transmission through oral tradition among various types of societies, including primitive, civilized, urban, rural, and even within smaller dominant groups, as highlighted by literary scholar Francis Lee Utley (1965). According to Taib (1974), folk literature is described as a genre of Old Malay Literature that predated written traditions, while Ismail (2008), characterizes folk literature as creations appreciated by people beyond the aristocratic class. A comprehensive definition of folk literature concludes that it serves as a reflection of a community's ideas and sentiments, conveying specific messages aimed at educating the community.

For that reason, folk literature, which encompasses various genres, whether narrative or non-narrative, needs to be developed in a more innovative form so that it impacts student outcomes as well as student development. This aligns with technological advancements and digital education policies transforming the country's educational landscape. The significance of integrating folk literature into educational practices constitutes a primary reason for the creation of this concept paper. It highlights a substantial increase in the demand for folk literature within public awareness, particularly in education. Such examination will gauge the extent of changes and the specific needs related to folk literature in our nation's educational context.

Problem Statement

In line with technological advancements, learning using learning materials and facilitation through convergent methods are no longer suitable in the current situation. They need to be updated in digital form and also published in various media to bring literary works closer to the community, especially among teenagers. This issue is supported by the studies of Madiawati et al. (2021) and Rosmani (2019), which highlights the need to change folk literature into digital mediums. Transforming folk literature into digital formats is a necessity in education. According to Normaliza et al. (2016), there is still no major and effective

initiative in distributing literary texts. As technology advances, folklore is being sidelined. Therefore, research on folklore needs to be addressed.

The need for digitization stems from its capacity to enhance the significance and impact of lessons. Various studies across different educational domains have demonstrated the superior efficacy of learning resources and methodologies that leverage new technologies, fostering student-centered learning environments (Fikri & Zamri Mahamod, 2019; Madiawati et al., 2021). Traditional, text-based learning approaches tend to be less engaging for students, contributing to a diminished motivation for learning. The problem on unengaging educational materials has been shown to adversely affect students' interest in reading, as evidenced by the findings of Geraman (2019) and Norly (2021). Furthermore, Zemke and Zemke (1984), as cited by Halili (2020), have discussed issues related to contemporary student trends, highlighting the evolving needs and preferences of learners.

"They easily feel bored when teaching activities only involve long lectures, and they do not have the opportunity to interact during the session."

This highlights the need for student teaching methods to be reinvented using new approaches like integrating technology into teaching and facilitation. Environments for learning that leverage technology and IT should be integrated to foster effective modern learning experiences. Emphasizing creative and technology-infused learning methods will undoubtedly differentiate and enrich the learning trends.

Research in the literary field, predominantly in the form of conventional analysis, generally emphasizes textual analysis rather than the development of educational modules. This matter is confirmed by studies from Ishak (2018), Ghani & Mohamed (2020), and Ab Rahman & Mahamod (2022). The development of digital books has begun to progress, but the analysis is solely centred on books available in the market, neglecting students' learning materials in schools. Moreover, the attention is exclusively directed towards popular folk tales such as Si Tanggang, Mahsuri, and Puteri Santubong (Rosmani et al., 2019), overlooking the potential for numerous educational works to be developed in digital modules, thereby adding value to the enhancement of national education. Literary works need to be published in various mediums to more effectively connect the public with literary values (Madiawati et al., 2021). Similarly, efforts towards setting up digital book publishing are still not widespread.

Methodology

The method employed for this research is the systematic literature review (SLR), abbreviated as the SLR hereafter, which ensures a thorough search process. As Nursalam (2020) outlined, this method involved collecting, evaluating, integrating, and critically analyzing findings from various sources. According to Nursalam (2020), this method was comprised of collecting, evaluating, integrating, and critically analyzing findings from various sources. This process offered the advantage of systematically identifying and reviewing journals by following detailed steps. (Ferby et al., 2022) The systematic search strategy was conducted in two forms: firstly, through an advanced process, and secondly, through the manual SLR process. According to Shaffril et al. (2018), the SLR method encompassed three key steps: identification, screening, and eligibility, aimed at obtaining relevant articles. The SLR was conducted systematically and comprehensively by implementing these three processes. The

systematic search strategy was implemented in two modes: the first involves an advanced process, and the second requires a manual SLR process.

The Summary of Research Questions

This research will formulated two research questions, drawing the ideas presented in previous studies by Rosmani et al., (2019), Madiawati et al., (2021), and Rohaya et al., (2019). These articles explore the definition and significance of folk literature across different aspects, emphasizing the necessity of its digitization. As outlined in Table 1, the guiding questions for this SLR research are as follows:

- (a) What is the narrative form of folk literature and its importance in education?
- (b) How is digital education and folk literature important to students?

Identification

Identification is the process of identifying synonyms, related terms, and variations for the main keywords of the study. This diverse selection aims to broaden the database search and uncover more pertinent articles for review. Relevant keywords need to be established first and the identification process depends on several alternatives such as online thesaurus applications. Second is keywords used from the past studies, and third is a keyword search through recommendations by experts. For the advanced SLR method (*advance searching*), the search process is performed on major databases using the main keywords and advanced search techniques. This involves utilizing Boolean operators, phrase searching, truncation, wildcards, and field code functions, either separately or in combination. The technique used in a full search string is shown in Table 2. The technique is detailed in Table 2. The manual search technique includes self-selection (handpicking), snowball (reference tracking), and sending emails to authors (author keywords) to request relevant articles from colleagues. In the identification process, a total of 306 potential articles were found. All articles have subsequently undergone the second process, which is screening.

Table 1
Summary of Research Questions and Keywords Identify

Sub	Main keyword	Other keywords	Literature Search Technique employed.	Database being employed	The number of articles (n) potentially discovered in the identification process
Topic 1	Folk Literature Narrative & Significance in education	folk literature OR oral literature OR digital folklore OR digital literature OR "folk literature oral tradition"	Manual searching (handpicking, snowballing, reference tracking)	Support database used : Google Scholar	NA

Topic 2	Folklore Malay literature	Main databases used	n=306
The Need for Digitization of Folk Literature Education	Digital Education Oral literature Digital folklore E-learning Digital education literature	Search string development (Refer to Table 2)	Scopus

Table 2
String for Article

Database	String
Scopus	TITLE-ABS-KEY (("folklore" OR "Malay folklore tales" OR "oral literature") AND ("digital*" OR "programmed" OR "digital media" OR "cybernated" OR "digital folklore" OR "e-learning") AND ("learning" OR "study" OR "literature" OR "research"))

In the advanced searching process, all 306 articles underwent screening based on predetermined selection criteria, which were applied automatically through the sorting functions available in the selected databases. The same criteria were consistently applied across all selected databases. Where a sorting function was absent, articles were excluded manually.

Given the impracticality of reviewing all published articles, Okoli & Schabram (2010), recommends that researchers establish a specific time frame for their review. Conversely, Higgins and Green (2011), argue that restricting the publication timeline should only be considered if it is evident that relevant studies are limited to a specific period.

Based on the search process on the selected database, it was found that that an increase in studies on the digitization of folk literature beginning in 2020, albeit relatively low. The rationale for starting the identification process in 2020 is to observe the digitalization transformation in all fields following the outbreak of pandemic nationwide.

Based on this rationale, the timeframe between 2020 and 2023 was selected as one of the entry criteria. Additionally, to uphold the review's quality, only articles containing empirical data and published in journals were chosen. Moreover, only articles published in English were included to ensure clarity and comprehension, as indicated in Table 3. This process resulted in the exclusion of 174 articles that did not meet the inclusion criteria, leaving 132 articles for further evaluation.

Table 3

Inclusion and Exclusion Criteria for the Article Identification Process

Criteria	Inclusion	Exclusion
Timeline	2020 to 2023	Before 2020
Publication type	Article journal	Conference proceeding, newspaper, book chapter in book, review paper
Language	Malay, English	Non-english

Eligibility

Eligibility is the third stage, during which the authors manually monitor the retrieved articles to ensure alignment with the predetermined criteria. This involves reviewing the title and abstract of each article. If ambiguity persists regarding its relevance to the study, the article is excluded. This phase led to the exclusion of 123 documents due to various reasons, including the format being a review paper, duplicate records across databases, the selected article's focus not being on students, publication in a language other than English, and the subject matter not pertaining to literature and humanities studies. For the SLR extension, seven (7) articles have been selected to address the second research question. The systematic search strategy employed in this process is depicted in Figure 1.

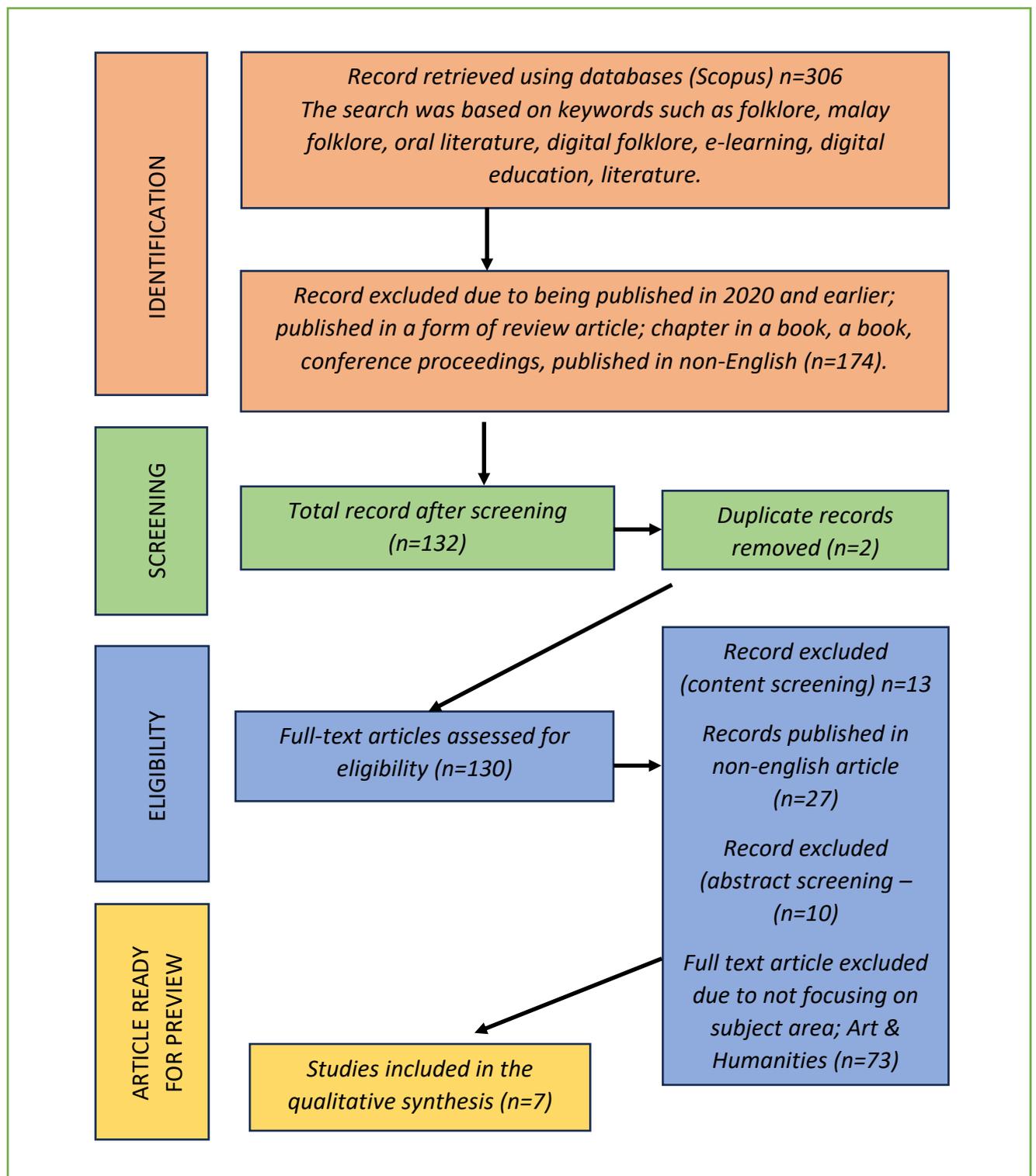


Fig 1 : Flow Diagram of the Searching Process

Data Extraction and Analysis

To address and examine the first research question, a manual Systematic Literature Review (SLR) was conducted. This process involved the identification, screening, and eligibility assessment of 23 relevant articles. Keywords used for this search included "folk literature," "oral literature," "folklore," "digital literature," "folk tales," and "oral tradition." From the years 2018 to 2023, a total of 804 articles were identified to be potentially identified for

manual selection. This manual article search utilized the supporting data from Google Scholar. The screening process —strictly manual—filtered out documents based on specific criteria: the article's format, inclusion of articles in both Malay and English, content strictly related to folk literature, and exclusion of unrelated studies. This process resulted in the exclusion of 781 documents. The 23 manually-selected articles (manual handpicking), detailed in Table 4, are directly related to the first research question's focus on past studies, reference tracking, and keyword identification. The justification for this manual SLR approach is due to the majority of Malay folk literature studies being available in Malay and extensively listed in databases like Google Scholar. All 23 manually selected articles were written in Malay, with most focusing on the scope of folk literature relevant to our country.

The manual Systematic Literature Review (SLR) was carried out to delve into the initial query, selecting 23 pertinent articles that had passed through processes of identification, screening, and eligibility. This was achieved using key terms like “folk literature, oral literature, folklore, digital literature, folk tales, and oral tradition.” From the years 2018 to 2023, a total of 804 articles were identified as potential candidates for manual selection, with Google Scholar serving as the primary source for data. The screening process—strictly manual—filtered out documents based on specific criteria: the article's format, inclusion of articles in both Malay and English, content strictly related to folk literature, and exclusion of unrelated studies, resulting in 781 documents being discarded. Table 4 displays the 23 articles chosen through manual selection, which relate to previous studies, reference tracing, and keyword identification pertinent to the primary query. The rationale for this manual SLR approach is due to the majority of Malay folk literature studies being available in Malay and extensively listed in databases like Google Scholar. All 23 manually selected articles were written in Malay, with most focusing on the scope of folk literature specific to our country.

Table 4

The Extraction and Analysis of Supporting Data for the Concept of Folk Literature and Its Importance in Education

No	Article Author	Country	Research Design	Theme “Digital Folk Literature”			Research Gap
				Design of Digital Teaching for Folk Literature	Work analysis /Literary texts	Creative Work	
1	Rosmani Omar et al., (2019)	Malaysia	QL	✓	✓		The study revolves around investigation of the extent to which the dissemination of folklore in Malaysia aligns with technological advancements through the analysis of digital folklore books for children.
2	Rohaya Md Ali et al.,(2019)	Malaysia	QL	✓	✓		Implications of literary works in digital form. A proposal to develop folk literature in the form of

3	Muhamad Nur Al-Hakim & Mohd Firdaus (2021; 2022)	Malaysia	QL		✓	digital media for children with the aim of educating them.
4	Dilah (2022)	Malaysia	QL		✓	The analysis of folklore Pasir Mas district (works) explains the positive values in the potential of providing education
5	Abu Bakar (2020)	Singapore	QN	✓	✓	Appreciation of folkore and culture in Sarawak serves as a reflection of local wisdom, with the aim of social adaptation. The folklore and Digital Singapore applications "Dilanggar Todak" in T&F encourage fun scenarios among students
6	Anis & Norazimah (2022)	Malaysia	QL		✓	The study of the Communicative Malay Literature course focuses on the T&FL capabilities (PdPc) of this course, which are highlighted to students through the "Novel Saudagar Besar from Kuala Lumpur"
7	Tuan Siti Nurul Suhadah et al., (2021).	Malaysia	QL		✓	The effectiveness of folklore animation media in attracting the interest of children's groups. The study focuses on the impact of folktale for child development and not on module development. The study on the low level of reading awareness among students. Audiobook technology is suggested as a solution to the
8	Madiawati et al., (2021)	Malaysia	QL		✓	problem. Recommendations to enhance audio and digital books to benefit the community.
9	Muhamad Nur Al-Hakim &	Malaysia	QL		✓	The study revolves around the analysis of 366 folktales in Malaysia, focusing on the development of Islamic

	Mohd Firdaus (2021)					values inherent in these folktales, which are used as exemplary models.
10	Fathin & Azhar (2018)	Malaysia	QL		✓	The study focuses on the effects of Malay Literature education on the development of student character, with the anticipation that there is an influential relationship between the reading materials and the attitudes of students.
11	Mohd Hanipah, et al., (2021)	Malaysia	QL		✓	The study revolves around the rituals portrayed in folk tales originating from Mukim Bebar, Pekan, Pahang. It analyzes these folk tales to adapt them to the community's way of life. The study centres on exploring the potential of folk literature as a valuable asset for the nation's economy. The proposal is to utilize folk literature as a medium to foster the growth of the creative economy industry, making it accessible to the contemporary generation through technological adaptation.
12	<i>Rohaya</i> (2018)	Malaysia	QL		✓	This study focuses on implementing various theories as a foundation for designing and developing digital folk literature. It provides recommendations to create a more innovative digital format for folk literature.
13	Wahid, M., & Ain, R. (2023)	Malaysia	QL	✓	✓	The investigation into textual works, specifically myths and legends, showcases folk literature's capacity for education and as a representation of local wisdom..
14	<i>Kembaren et al</i> (2020)	Indonesia	QL		✓	

15	Lutge, C et al., (2019)	German	QL		✓	✓	The call for a typology of digital literature stems from understanding how digital narratives are received, leading to an exploration of literature's spatial and aesthetic experiences.
16	Amelia & Purwaningsih,(2021)	Indonesia	QL	✓		✓	The necessity for the design of digital comic adaptations of folk tales stems from folk literature's ability to serve as the identity and icon of the community.
17	Nurul & Norazimah (2021)	Malaysia	QL	✓		✓	The research examines the low level of student engagement and interest in Malay literature studies. It aims to explore the connection between the use of multimedia in Malay literature and its impact on students' attitudes and interest.
18	Bakhril & Aziz (2018).	Malaysia	QL	✓		✓	The research proposal creating a folk tale comic Raja Bersiong with the aim of sparking interest, educating, and introducing folk tales to the audience, especially children.
19	Mohd Shuib, & Wan Abdul Hamid (2022)	Malaysia	MM	✓		✓	The study focuses on the capability of interactive digital comics with the adaptation of Argumented Reality (AR) to one of Terengganu's local folk tales (Sujuh Puteri) with the intention of fostering the interest of teenagers.
20	Mohd Zahari et al. (2020)	Malaysia	QL	✓		✓	Focusing on PdPc creative techniques in Communicative Malay Literature subject , the aim is to foster creative, innovative, and meaningful learning methods to engage students' interest in literature studies.
21	Rusli & Abdullah (2022)	Malaysia	QL			✓	The study revolves around analyzing folk tale and folk humour works as

22	Ioannakis et al.,(2020)	Greece	QL	✓	✓	✓	instrumental in shaping culture and societal heritage. Enriching digital content for the Folk Literature Museum (Greece) using mobile devices. The study found that a hybrid approach enhances performance and capabilities of the content. The explanation of the functional aspects of digital technology as a catalyst for the preservation of cultural heritage, encompassing customs, culture, architecture, anthropology, and folklore. Proposals for the creation of a hybrid system integration and digitization.
23	Psychogios (2018)	Greece	QL	✓	✓	✓	

QN= Quantitative Method; QL=Qualitative Method ; MX = Mixed Method

Next, the extraction and analysis of findings from the SLR conducted through advanced searching are directed towards examining the second question: highlighting the necessity for digitizing folk literature within the educational context. The background information and findings derived from the articles are compiled in Table 5 as detailed below.

Table 5
Extraction and Analysis for the needs of Literary Digitization

No	Article authors	Country	Design	Tema "Sastera Rakyat Digital"			Research Gap
				The Design of Folk Literature Teaching	Analysis of Literary Works / Texts	Creative works	
1	Flinterud, G. (2023)	UK	QL	✓	✓	✓	The Need for Folk Literature Modules as Teaching Materials This study suggests that digitization plays an important role in developing folklore but is still new. We can understand and analyze rayat stories in the digital space. The digital development of folk literature can also reflect human thought in reality while preserving the literary works and community culture.
2	Syahrul, N. et al.,2023	Indonesia	QL	✓	✓	✓	This interview study aims to revitalize local works as digital library references.

3	Hwaites (2019)	Malaysia	QL	✓	✓	✓	<p>This study focuses on the approach used to form a digital reference that is a literary work.</p> <p>The study revolves around the approach of using digital media to introduce works and cultural heritage to shape user experience and increase awareness of the importance of cultural heritage</p> <p>The study revolves around the digital manuscript project, a community-based project to digitize music, texts, folklore, dance for dissemination to communities and cherished heritage.</p>
4	Malin (2022)	US	QL	✓	✓	✓	<p>This study discusses the positive effects of digitization on the works of folk literature in introducing and conserving the works.</p>
5	Guzel, U.H (2022)	Iran	QL	✓	✓		<p>The study explains the process of change that takes place in oral folk literature to digital form. Research studies on digital literary works such as Instagram Poetry (Instapoetry)</p>
6	Lotman, R (2021)	Estonia	QL	✓	✓		<p>This study explains the development of folk literature developed in digital form especially in the context of data collection and analysis. Genres such as animation developed with the narrative function of folk tales at the same time giving a profound influence to the culture of society.</p>
7	Aslan, E (2021)	Cyprus	QL	✓	✓	✓	

QN= Quantitative Method; QL= Qualitative Method ; MX = Mixed Method

Research Findings

Folk Literature Narratives & Their Significance in Education

Broadly defined by scholars and national writers like Harun Mat Piah (2000), folk literature is categorized under oral literature. "*Kesusasteraan Melayu Tradisional*" (Piah et al.,2000) presents the notion that folk literature is a collective possession of a particular

community group and it undergoes a dissemination process from one generation to another orally. This mode of transmission is why it is termed 'oral literature'. The terminology 'folk', akin to 'rakyat', signifies a group of individuals with distinct and unique cultural traits of a locality. Hence, folk literature is also referred to as 'folklore', literally translating to 'oral tradition', which has a broader meaning in terms of cultural scope. Nonetheless, the term 'folk' in this setting specifically refers to the general public and the majority.

Folk literature is described as a composition that symbolizes the civilization of the Malay community (Rohaya et al., 2019), inherited from one generation to another through oral transmission (Dilah, 2022; Suhadah et al., 2021). It is capable of shaping the identity and archetype of a nation, serving as a measure of the beliefs and convictions of the community that shapes it. Traditional folk literature, adapted by the Malay community in the past (Hanafiah & Yaacob, 2019; Suhadah et al., 2021), is considered a heritage of society (Rusli & Zali, 2020) originating from rural farming communities and has served as both entertainment (Ismail 2018) and education (Hanafiah & Che Yaacob, 2019) for rural and farming communities. Folk tales undoubtedly possess rich moral values to serve as didactic mediums, providing universal education, and depicting local wisdom.

Next, from another perspective, the importance of folk literature in education is evident as it is filled with good values, including Islamic values that should be embraced and instilled within individuals (Al-Hakim & Firdaus, 2021). It also serves as a medium capable of shaping the spirituality, knowledge, and noble character of a person. (Suhadah et al., 2021). The evolution of folk tales can be observed over time, passed from one generation to another orally (Amelia & Purwaningsih, 2021) and is also referred to as *Nusantara* narrative folk literature. (Noorzatulhidayah et al., 2021). This significance clearly indicates the capability and importance of folk literature in our country's education system.

This clearly points out the potential of transforming folk literature into a digital module due to its content-rich nature that catalyzes the moral and character development in youth, as previously highlighted. This viewpoint is substantiated by Hanafiah & Yaacob (2022) and Al-Hakim & Firdaus (2021), who argued that folk literature enhances students' intrinsic values and morality. The stories portrayed in folk literary works predominantly depict positive elements, serving as didactic reflections of social life. Research on folk literature also delves into its significance for the development and character building of students (Fathin & Azhar, 2018). Furthermore, stories with positive character traits have proven to resonate well with audiences (Suhadah et al., 2021). The previous studies provide a cornerstone as well as strong evidence that the transformation of education in our country should include folk literature as a specialization applied and taught to students.

The Need for Educational Digitization

The current era has experienced significant technological advancements that have profoundly affected social and economic behaviors, including the realm of education (Toquero, 2020) These advancements continue to impact the educational sector, positioning technology as a pivotal force capable of enhancing and enriching the country's educational system. The transition from traditional educational methods to e-learning, and the current shift towards m-learning (Zahari et al., 2021), illustrates the education sector's alignment with

technological progression, despite experiencing a relatively lengthy process and period of time. This ongoing transition is steering the education sector towards digitization.

Digital development in education is progressing steadily, offering diverse alternatives and perspectives to ensure the continuity of the teaching and learning process (Gunawan et al., 2020). Essentially, this push towards digitization in education aims to cultivate a valuable human asset for the advancement of the fourth industrial revolution (Industry 4.0). It's understood that the development of Industry 4.0, which commenced in 2016, introduces new skill requirements in education that may require substantial time to attain, but it has become a top priority following the pandemic phase

During the pandemic, issues such as challenges and constrained responses stemming from specific social factors in digital learning (Nilavani & Azhar, 2021) and the tendency to opt for traditional face-to-face teaching methods prompted the Ministry of Education to take action. They aimed to build innovation by augmenting digital assets, the automation of teaching and learning processes to be more socio-technologically compatible, teacher readiness, and a few changes in digitalization policies in education.

Digitization is permeating various sectors, initially taking root in Western countries and gradually extending its reach to developing nations. In education, digital learning yields significant implications, streamlining tasks (Ain, 2019), enhancing motivation and academic performance and enhancing overall educational development (Radkowitz et al., 2020). This underscores the invaluable utility of digital capabilities in education at large. Digital tools supporting learning are referred to as Digital Learning Objects, abbreviated as DLO (Wiley, 2002). Digital integration in education manifests through several distinct characteristics.

Highlights from the literature by Wiley, (2002) revealed several criteria that should be aligned in educational digitization. Effective educational digitization should have high criteria of reusability, durability, manageability, usability, and accessibility criteria. The primary aim of digital education is to produce students with contemporary characteristics, enable meaningful student achievement, and stimulate creative learning. Additionally, educational digitization should also establish a relevant learning environment and undoubtedly, the digital learning environment serves as a catalyst for the teacher-student relationship as good learning partners (Abeni, 2020).

Numerous digital writings and research highlight how various factors affected the necessity and impact of digital advancements on today's educational transformation. One notable example is Kolb.L's (2020) study on the Triple E Framework, which examined the relationship between students' knowledge and skills and technological resources. Moreover, the link between technology and skill development is identified as a key factor in cultivating digital literacy. Seufert et al. (2021) explained that the importance of integrating and acknowledging the role of future teachers in leveraging technology to base educational content, alongside possessing the effective skills and attitudes required to meet contemporary challenges. Furthermore, research by Sailer et al. (2021) revealed that teacher effectiveness was crucial in maximizing the utility and educational impact of digital tools through pedagogies that promoted meaningful learning for students. The study on the impact of the development of digital in schools by Sailer et al., (2021) also revealed that teacher

effectiveness was necessary to ensure that this digitalization achieves usability and impact on meaningful student learning through meaningful learning pedagogy.

The education system in Malaysia has also undergone rapid technological changes and modernization due to the explosion of information and communication technology (ICT) (Zahari et al., 2021). Information technology is the main reason for the need to change teaching methods and approaches through educational inputs. The shift from traditional to post-mediamorphosis forms of education has been introduced in line with technological changes and developments. Interactive learning forms, gamification, e-learning, and learning applications accessible through smartphones and computers have become the choice for students and teachers today (Nilavani & Khairul, 2021). This context strongly reinforces the necessity of digitalization as a prioritized goal in educational transformation.

The Need for Digital Folk Literature in Education: Implementation & Recommendations

Within student education, the emphasis on Malay Literature increasingly revolves around the effective utilization of visual aids and engaging teaching methodologies for mastering traditional literary forms like *pantuns*, *gurindam*, and folklore (Lasan and Mahamod, 2018; Fikri and Zamri, 2019). The dimension and behaviour of learning through gamification, multimedia, and videos not only make learning more enjoyable but also spark students' interest in studying literature. A prevalent recommendation is to adopt more inclusive and contemporary teaching approaches by integrating multimedia elements into the teaching of Malay Literature, thus ensuring a meaningful and impactful learning experience for students.

Based on the systematic literature review (SLR), employing advanced searching, in regard to the needs for digital folk literature, indicated that there had been a modest advancement in the field, from 2020 to 2023, as depicted in Figure 2. However, this research was confined to a select group of countries and was characterized by a limited volume of published articles. Attention towards digital folk literature studies was notably scant, with only a few countries contributing to a relatively small number of research studies. Overall, merely seven articles were eligible for this review. These articles focussed on research specific which were specific to certain countries, namely, the United Kingdom (Fliterud, 2023), Indonesia (Syahrul, et al., 2023), Malaysia (Hwaites et al., 2019), the United States (Malin et al., 2022), Iran (Guzel, 2022), Estonia (Lotman, 2021), and Cyprus (Aslan, 2021).

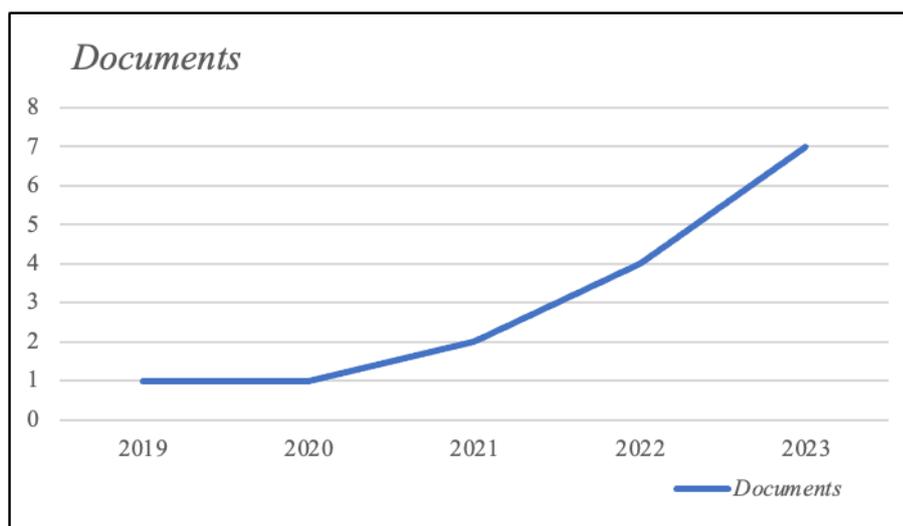


Fig 2: Increased research pertinent to the digitization of folk literature by year based on qualification documents

The findings obtained through the systematic literature review (SLR) revealed that the narrative potential of digitalization in education, particularly in the literary aspect, extend beyond student development. Its significance is also acknowledged for the broader community. For instance, studies explored into the digitization of cultural manuscripts such as folk tales (Malin et al., 2022), the enrichment of digital content for visits to the Folk Literature Museum using mobile devices in a hybrid approach (Ioannakis et al., 2020), the implementation of digital media to introduce literary works and cultural heritage (Hwaites et al., 2020), and the functional role of digital technology in preserving cultural heritage, including customs, culture, architecture, anthropology, and folk tales (Psychogyios, Poulakis 2018). These studies underscored the digital capability as fundamental for enhancing identity heritage and public education, capable of engaging youth interest in cultural heritage, particularly in folk tales, and providing more meaningful experiences through technology and digitization.

Based on the SLR, researchers have unanimously concurred that the digitization of folk literature is a necessity for educational transformation. According to Flintereud, (2023), through digitization, we can understand and analyze folk tales in a broader context. Digitization of literature can shape imagination and interactions that captivate human attention. He also clearly stated that the digital space provided a more realistic environment while creating and preserving literary resources that bring many benefits. Reconstruction, revitalization, and digitization of folk literature are necessary to ensure collective awareness in enriching culture and ethnic understanding (Syahrul, (2023), and digitization of literature also brings positive effects in introducing folk culture and spreading it to new generations (Guzel (2022).

The study by Lotman (2021) offers a detailed insight into the transformation of the oral poetry medium, i.e., folk tales, which are no longer in written book form but have evolved into digital poetry, such as Instagram poetry (instapeotry). He also explained the necessity of digitizing folk literature, which also has led to an increase in the writing of poetry books. The popularity of both poetry sub-genres is associated with the emergence of new media: the first

platform being audio and visual media (SoundCloud, Spotify, YouTube), and the second being text and visual media (initially Tumblr, now mainly Twitter, Instagram, and Facebook).

Aslan (2019), emphasized the necessity of digitizing literature for educational transformation, pointing out that radical technological advancements had profoundly influenced various disciplines, especially in the social sciences, including folktales. His research demonstrated that folktales increasingly utilized digital methods for both data collection and analysis. According to his study, genres such as animation, which emerged due to technological evolution, served as contemporary "folk narrative" mediums in the 21st century, reflecting embedded cultural elements.

The digitization of folk literature is believed to have a positive impact on students' knowledge and arouse their curiosity. The issues are explored through the studies related to language learning problems highlighting the aspects of multiple intelligences and motivation (Rahmad & Mahmud, 2021), the acceptance of the subject content of Malay Literature (Geraman & Wahid, 2019), students' attitudes and competence in thinking skills (Yahya, 2020), and students' acceptance levels towards the facilitation of technology-based literature (Aziz & Zakaria, 2021). Based on these findings, the digitization of folk literature is seen as a positive transformation that needs to be undertaken. This is further supported by research (Lutge et al., 2019) which states that the integration of education and digital technology ensured opportunities for experiential and aesthetic experiences among students.

Conclusion

The findings derived from two systematic literature reviews (SLRs), conducted via advanced searching and manual searching, clearly demonstrated the need for developing folk literature in digital mediums, taking a pivotal step in the transformation of digital education within our nation. The examination and development of folk literature in educational contexts can yield profound impacts in terms of values, morality, and national identity, warranting continuous attention. While the digitization of folk literature has made significant strides in Western countries, a significant gap persists within our own country. Hence, the current research suggests that the development of folk literature in digital form should be given great attention from the academic community in light of these findings.

References

- Rahman, A. F. A. & Mahamod, Z. (2022). Implementation of Selected Theories for the Research of Pan- tun in Malay Language Education. *Creative Education*, 13, 717-730. <https://doi.org/10.4236/ce.2022.133045>
- Abeni, E.-A. (2020). Andragogy: A Theory in Practice in Higher Education. *Journal of Research in Higher Education*, 4(2), 54–69. <https://doi.org/10.24193/JRHE.2020.2.4>
- Abu Bakar, M. R. (2020). Making the joy of learning alive in the learning of Malay language using the Legenda Singapura apps [Menyemarakkan keseronokan dalam pembelajaran bahasa Melayu melalui aplikasi Legenda Singapura]. *Muallim Journal of Social Sciences and Humanities*, 4(2), 1-16. <https://doi.org/10.33306/mjssh/60>
- Tanisha, A. & Zakaria, N. (2022). Penerapan Elemen Pengurusan Dalam Pembelajaran Novel Saudagar Besar Dari Kuala Lumpur. *Jurnal Dunia Pendidikan*, 4(1), 452-458. Retrieved from <https://myjms.mohe.gov.my/index.php/jdpd/article/view/18136>

- Amelia, P., & Purwaningsih, H. (2021). Desain Komik Digital Cerita Rakyat Desa Arjowilangun. *Brikolase*, 13(2), 1–21. <https://doi.org/10.33153/brikolase.v13i2.3829>
- Aslan, E (2021). A Look at the History of Animation (Cartoon) in Terms of Cultural Uluslararası Kibris University Fen-Edebiyat Fakültesi. <http://doi.org/10.22559/folklor.1953>
- Bakhr, N. M., Bidin, M.O., & Aziz, A.A. (2018). Preserving and Promoting Malay Folklores and Legends Using Interactive Motion Comic: The Fang King (Raja Bersiong) <https://doi.org/10.1051/shsconf/20184507001>
- Lasan, C. and Mahamod, Z. (2018). *Pembelajaran timbal balik bahasa Melayu dalam kalangan murid peribumi Bidayuh di Sarawak*. Jurnal Pendidikan Malaysia, 43 (2). pp. 1-15. ISSN 0126-6020 / 2180-0782
- Tuah, D. (2022). Sastera Rakyat daripada Perspektif Kearifan Tempatan dan Potensinya kepada Pelancongan Budaya di Sarawak. *Akademika*, 92(2), 153-168.
- Supiah, E. M. & Hamzah, N. (2021). Analisis Elemen Menjana Minda Falsafah Pendidikan Kesusasteraan Melayu dalam Teks Cerpen Moden Kesusasteraan Melayu Komunikatif: An Analysis of Malay Literature Education Philosophy Mind Generating Elements in Communicative Malay Literature Modern Short Stories Texts. *International Journal of Language Education and Applied Linguistics*, 11(2), 45–55. <https://doi.org/10.15282/ijleal.v11i2.6884>
- Febry, O., Santi, D. E., & Muhid, A. (2022). Pendekatan Pembelajaran Heutagogy untuk Meningkatkan Kreativitas Siswa: Systematic Literature Review. *Lectura : Jurnal Pendidikan*, 13(2), 206-220. <https://doi.org/10.31849/lectura.v13i2.10532>
- Ramli, F. N. A. & Wahid, A. (2018). Pendidikan Sastera Melayu memperkukuhkan pembinaan karakter pelajar: Malay Literature Education in Strengthening the Construction of Student Characteristics. *Jurnal Peradaban Melayu*, 13, 1–14. <https://doi.org/10.37134/peradaban.vol13.1.2018>
- Geraman, C. L., & Wahid, A. (2019). Prinsip pembelajaran mentalis dalam pengajaran dan pembelajaran teks Kesusasteraan Melayu Sekolah Menengah. *Jurnal Peradaban Melayu*, 14, 22–34. <https://doi.org/10.37134/peradaban.vol14.3.2019>
- Gunawan, G., Suranti, N. M. Y., & Fathoroni, F. (2020). Variations of Models and Learning Platforms for Prospective Teachers During the COVID-19 Pandemic Period. *Indonesian Journal of Teacher Education* 1(2): 61-70.
- Ghani, M. K. A., & Mohamed, N. (2020). Analisis semantik inkuisitif: Simbol “bunga” dalam pantun Melayu. *BITARA International Journal of Civilizational Studies and Human Sciences*, 3, 36-48
- Güzel, Hasan (2022). Khalaj Literary Production In An Electronic Cultural Environment In The Context of Cultural Sustainability. *Milli Folklor*, vol. 17, no. 136, pp. 94-108, [doi:10.58242/millifolklor.1038429](https://doi.org/10.58242/millifolklor.1038429).
- Flinterud, G. (2023). ‘Folk’ in the Age of Algorithms: Theorizing Folklore on Social Media P Syahrul, N., Yetti, E., Sunarti, S., Suryami, S., Atisah, A., & Khasanah, U. (2023). Journal of the International Society for the Study of Vernacular Settlements Scopus Indexed Since. *Badan Riset Dan Inovasi Nasional*, 10(7). <https://doi.org/10.61275/ISVSej-2023-10-10-27>
- Piah, H. M. (1989). Puisi Melayu Tradisional: Satu Pembicaraan Genre dan Fungsi. Dewan Bahasa dan Pustaka.

- Hwaites, H., Santano, D., Esmaeili, H., See, Z. S. (2019). A Malaysian cultural heritage digital compendium, *Digital Applications in Archaeology and Cultural Heritage*, Volume 15, e00116, ISSN 2212-0548, <https://doi.org/10.1016/j.daach.2019.e00116>
- Higgins, J. P. T., Altman, D. G., Gotzsche, P. C., Juni, P., Moher, D., Oxman, A. D., Savovic, J., Schulz, K.F., Weeks, L., Sterne, J.A.C. (2011) The cochrane collaboration's tool for assessing risk of bias in randomised trials. *BMJ* 343(7829), 1–9 <https://doi.org/10.1136/bmj.d5928>
- Ishak, A. Q. (2018). Semiotik ruffaterre dalam pantun kanak-kanak. [The Semiotic Riffa- terre in the Child's Pantun]. Doctoral Thesis, Academy of Malay Studies, Universiti Malaya.
- Yusoff, I. (2008). Kesusasteraan Melayu Lama dan Baru. Penerbit Universiti Utaraa Malaysia
- Ioannakis G., Bampis L., Koutsoudis A. (2020) Exploiting artificial intelligence for digitally enriched museum visits, *Journal of Cultural Heritage*, Volume 42, Pages 171-180, ISSN 1296-2074, <https://doi.org/10.1016/j.culher.2019.07.019>
- Haslin, K. M. & Hamzah, M. I. (2023). Pendigitalan Pendidikan: Kesiediaan Dan Cabaran Terhadap Murid Dalam Pembelajaran [Digitization Of Education: Readiness And Challenges For Students In Learning]. *QALAM International Journal of Islamic and Humanities Research*, 3(1), 41-57.
- Kembaren, M. M., Nasution, A. A., & Lubis, M. H. (2020). Cerita rakyat Melayu sumatra utara berupa mitos dan legenda dalam membentuk kearifan lokal masyarakat. *RUMPUN Jurnal Persuratan Melayu*, 8(1), 1 - 12. <https://rumpunjurnal.com/jurnal/index.php/rumpun/article/view/117>
- Kolb, L. (2020). Keynote: The Triple E Framework: Using Research-Based Strategies for Technology Integration. In L. Elizabeth Langran (Ed.), *Proceedings of SITE - Society for Information Technology & Teacher Education International Conference 2020*. Association for the Advancement of Computing in Education (AACE). Retrieved March 25, 2022 from <https://www.learntechlib.org/primary/p/216133/>.
- Lutge, C., Merse, T., Owczarek, C., & Stannard, M. (2019). Crossovers: Digitalization and literature in foreign language education. *Studies in Second Language Learning and Teaching*. <https://doi.org/10.14746/sslit.2019.9.3.5>
- Lotman, R (2021). The Semiotics of New Era Poetry; Estonian Instagram and Rap Poetry. *Studia Metrica of Poetica*, 8(2), 58-79, <http://doi.org/10.12697/SMP.2021.8.2.04>
- Muhammad Nur Al-Hakim Mohamad Hanafiah, & Mohd Firdaus Che Yaacob, (2021) *Penemuan nilai-nilai Islam dalam cerita lisan Melayu: satu penelitian terhadap pendekatan karya dan khalayak. Jurnal Melayu*, 20 (1). pp. 79-92. ISSN 1675-7513. <https://doi.org/http://doi.org/10.46754/jbsd.2021.03.005>
- Osman, M. T. (1991). Pengkajian Sastera Rakyat Bercorak Cerita. Percetakan Rina Sdn.Bhd
- Mamat, M. & Hazari, Nur & Ali, T. M., Marlina, T. I. & Mustaffa, Madiawati, & Hashim, N. (2021). Buku Audio Sastera sebagai alternatif Pembacaan Karya Sastera dalam era digital *Journal of Malay Islamic Studies*. 32. 15-28. 10.22452/JOMAS.vol32no1.2.
- Mohd Hanipah, N., Daeng Jamal, D. H., & Abdillah, N. (2021). Ritual Dalam Cerita Rakyat Di Mukim Bebar, Pekan, Pahang, Malaysia. *International Journal of Creative Future and Heritage (TENIAT)*, 9(1), 18–29. <https://doi.org/10.47252/teniat.v9i1.396>
- Hanafiah, M. N. A. H. M. & Yaacob, M. F. C. (2021). *Penemuan nilai-nilai Islam dalam cerita lisan Melayu: satu penelitian terhadap pendekatan karya dan khalayak. Jurnal Melayu*, 20 (1). pp. 79-92. ISSN 1675-7513. <https://doi.org/http://doi.org/10.46754/jbsd.2021.03.005>

- Malin, Y., Crowder, C., Byom, C., & Shanahan, D. (2022). Community Based Music Information Retrieval: A Case Study of Digitizing Historical Klezmer Manuscripts from Kyiv. *Transactions of the International Society for Music Information Retrieval*, 5(1), 208–221. DOI: <https://doi.org/10.5334/tismir.135>
- Hanafiah, M. M. N. A. H., & Che Yaacob, M. F. (2022). Sastera Rakyat Sebagai Medium Didaktik Kepada Golongan Desa. *PENDETA*, 13(1), 103-114. <https://doi.org/10.37134/pendeta.vol13.1.9.2022>
- Shuib, M. A., & Hamid, W. A. W. (2022). Promoting The Forgotten Local tales of Terengganu "Tujuh Puteri " in digital Interactive Comic Book for Teenagers.. *Ideology Journal*, 7(2), 139-145. doi:10.24191/idealogy.v7i2.374
- Zahari, M. M. A., Amirul, A. A. Yaakub, R. ., & Sarudin, A. (2020). Kewajaran Penggunaan Produksi Teater Dalam Pembelajaran Genre Drama Melalui Mata Pelajaran Kesusasteraan Melayu Komunikatif: Appropriateness Of The Use Of Genre Drama Theater In Learning Towards Communicative Malay Literature Subject. *Jurnal Gendang Alam (Ga)*, 10. <https://doi.org/10.51200/Ga.V10i.2250>
- Nilavani, Azhar, K. (2021) Impak dan Cabaran Pelaksanaan Pengajaran dan Pembelajaran atas Talian semasa Perintah Kawalan Pergerakan. *Jurnal Dunia Pendidikan* 3(4):104-115
- Rahim, N. A., Halim, H. A., Mamat, R., Mansor, N. S. (2017). Wacana Cerita Rakyat Melayu Dalam Kalangan Pelajar Korea. *Jurnal Kemanusiaan*, 14(1). <https://jurnalkemanusiaan.utm.my/index.php/kemanusiaan/article/view/85>
- Nursalam. (2020) *Pedoman penyusunan literature dan systematic review*. Surabaya: Universitas Airlangga.
- Abdul Aziz, N. S. & Zakaria, N. (2021). Kajian Awal Adaptasi Pengajaran dan Pembelajaran Menggunakan Multimedia Dalam Pembelajaran Teks *Sulalatus Salatin*. *Journal of Modern Education*, 3(8), 167-181.
- Othman, N. (2021). Reka Bentuk Modul IMPAT dalam Penghasilan Puisi dan Pembinaan Papan Cerita Pelajar KMK (Unpublished Doctoral dissertation). Pulau Pinang, Universiti Sains Malaysia
- Okoli, C., Schabram, K.: A guide to conducting a systematic literature review of information systems research. *Philos. Methodol. Econ. eJ.* (2010) <https://doi.org/10.2139/ssrn.1954824>
- Psychogyios, D., Poulakis, N. (2018). Glocal Participatory System for the Recording, Documentation and Promotion of Cultural Heritage: A Greek Case-Study. *Heritage* 1, no. 1: 88-99. <https://doi.org/10.3390/heritage1010007>
- Radkowsch, A., Vogel, F., & Fischer, F. (2020). Good for learning, bad for motivation? A meta-analysis on the effects of computer-supported collaboration scripts. *International Journal of Computer-Supported Collaborative Learning*, 15, 5e47. <https://doi.org/10.1007/s11412-020-09316-4>
- Omar, R., Mustafa, M. S. A. I. D. S. E. (2019). Daripada Cetak kepada digital: Rekonstruksi Cerita Rakyat di Malaysia. *Melayu: Jurnal Antarabangsa Dunia Melayu* 12(2), 291-319
- Rusli, H., & Abdullah, M. (2022). Tujuan dan Fungsi dalam Konteks Kesusasteraan Rakyat dan Cerita Jenaka Melayu. *Ideology Journal*, 7(2), 146-153. <http://doi.org/10.24191/idealogy.v7i2.368>
- Rusli, H. M., & Zali@Zalay, A. A. (2020). Adaptasi Kesusasteraan Rakyat (Cerita Si Luncai) Dalam Karya Seni Cetakan. *Ideology Journal*, 5(1), 17–29. <https://doi.org/10.24191/idealogy.v5i1.181>

- Ali, R. M., Deng, P. A., Dan, M. F. Y. R. M., Ibrahim, N. (2019) Adaptasi Sastera Rakyat Kanak-Kanak dalam Media Digital: Membangun Modal Insan Negara Adaptation Of Children's Folk Literature To Media Digital: Human Capital Development.
- Ali, R. M. (2018). Sastera Rakyat Kanak-Kanak Media Digital. International Seminar on Islam, Culture and Heritage: Socio-Political and Economic Issues, "Sustainability of Knowledge", 30 – 31 October 2017, Universiti Utara Malaysia
- Ain, R. (2019). Application Technology: Literary Medium through Smartphone. *International Journal of Academic Research in Business and Social Sciences*, 9(8), 163–172. <https://doi.org/10.6007/ijarbss/v9-i8/6232>
- Halili, S. H., (2020) Konsep Dan Teknik Pembelajaran Orang Dewasa Era Revolusi Industri 4.0. Penerbit Universiti Malaysia (2020)
- Adnan, T. S. N. S. T., Mohd Firdaus Che Yaacob, Nur Samsiah Mazlan (2021). Dalam Kalangan Kanak-Kanak Dan Remaja Melalui Media Animasi. *Jurnal Melayu*, 20(2)
- Toquero, C. M. (2020). Challenges and Opportunities for Higher Education amid the COVID-19 Pandemic: The Philippine Context. *Pedagogical Research*, 5(4), em0063. <https://doi.org/10.29333/pr/7947> .
- Sailer, M., Murböck, J., & Fischer, F. (2021). Digital Learning in schools: What does it take beyond digital technology? *Teaching and Teacher Education*, 103, 103346. <https://doi.org/10.1016/j.tate.2021.103346>
- Seufert, S., Guggemos, J., & Sailer, M. (2021). Technology-related knowledge, skills, and attitudes of pre- and in-service teachers: The current situation and emerging trends. *Computers in Human Behavior*, 115, 106552. <https://doi.org/10.1016/j.chb.2020.106552>
- Syahrul, N., Yetti, E., Sunarti, S., Suryami, S., Atisah, A., & Khasanan, U. (2023). Revitalization of Community-based Oral Traditions in Gowa, South Sulawesi, Indonesia. *Journal of the International Society for the Study of Vernacular Settlements*. Badan Riset Dan Inovasi Nasional10(7), <http://doi.org/10.61275/ISVSej-2023-10-10-27>
- Wiley, D. A. (2002). Connecting learning objects to instructional design theory: A definition, a metaphor, and a taxonomy. In D. Wiley (Ed.), *The Instructional Use of Learning Objects*. Bloomington: Association for Educational Communications and Technology
- Wahid, M., & Ain, R. (2023). Theoretical Implementation As Folklore Digital Reconstruction In Malay Literature Education. *Ideology Journal*, 8(2). doi:10.24191/ideology.v8i2.447
- Yahya, M. S. S., Masdar, N. F., & Samat, N. (2020). Tahap persepsi, penilaian dan kompetensi Pembelajaran Berasaskan Masalah (PBM) dan Kemahiran Berfikir Aras Tinggi (KBAT) dalam kalangan pelajar tingkatan enam di daerah Pontian. *Perspektif: Jurnal Sains Sosial Dan Kemanusiaan*, 12(2), 29- 41.