Assessing the Impact of Tacit Knowledge Transfer through Storytelling in Educational Settings

Molefi Motsoenyane[1] 🆔 **, Nicolaas Luwes[2]** 🆔

[1]Information Technology Department, Central University of Technology, South Africa, [2]Electrical/Electronic/Comp Eng Department, Central University of Technology, South Africa.

Abstract

Storytelling is an ancient human activity that aids in understanding complex information and facilitating knowledge transfer. It captures and transfers tacit knowledge, often more challenging to formalise and communicate than explicit knowledge. This paper investigates the impact of storytelling as a powerful tool for knowledge sharing in educational institutions. Using a systematic literature review from 1998 to 2023, the research aims to understand how storytelling can enhance tacit knowledge sharing in educational settings. The systematic literature review approach provides a comprehensive and rigorous analysis of existing research findings, enabling conclusions about the effectiveness of storytelling as a knowledge management tool.

The study explores storytelling in educational institutions, proposing a taxonomy for classifying stories and facilitating knowledge sharing. It reveals that traditional and digital storytelling enhance knowledge retention, engagement, and collaborative learning, but maintaining live storytelling quality is crucial.

Keywords: Storytelling, Tacit Knowledge, Knowledge Transfer, Digital Storytelling, Knowledge Management.

1. Introduction

In the context of knowledge management (KM), Wilson (2002) emphasises the distinction between personal knowledge, which resides in individuals' minds, and organisational knowledge, which includes documented resources such as patents and videos, as outlined by Bratianu (2010). KM is vital for maintaining competitive advantage and fostering innovation, particularly through the transfer of tacit knowledge that is difficult to articulate. This challenge is exacerbated by the impending retirement of experienced employees (Bratianu, 2010). In South Africa, the education sector exhibits the lowest KM maturity due to a culture of knowledge hoarding, where knowledge is viewed as a strategic asset, contributing to ineffective

sharing practices. Kruger and Johnson (2009) note that this culture is perpetuated by a lack of knowledge-sharing platforms and a mindset among senior management that undervalues KM, with one manager highlighting the "knowledge is power" syndrome as a barrier to effective collaboration in educational institutions.

Traditional Western approaches to KM focus on analytical methods and documentation, while Eastern philosophies value experiential learning and storytelling for knowledge transfer. According to Tobin and Snyman (2004), storytelling is a powerful medium for conveying meaning and tacit knowledge, with narratives, myths, and fables playing a crucial role in human relationships by engaging reason and emotion. The rise of digital media in education presents new opportunities for enhancing cultural competency and critical thinking through digital storytelling, as Grant and Bolin (2016) noted. This research emphasises how educational institutions can utilise storytelling techniques to preserve and disseminate expertise, thereby improving competitive advantage and fostering a culture of continuous learning and innovation, ultimately contributing to a deeper understanding of KM practices in sustaining organisational wisdom.

2. Methodology

This study employs a systematic literature review (SLR) methodology to investigate the effectiveness of storytelling as a tool for capturing and transferring tacit knowledge within educational institutions. The SLR approach is chosen for its rigour and comprehensive nature, enabling the synthesis of existing research findings to draw well-supported conclusions about the effectiveness of storytelling as a knowledge management tool (Biggam, 2011). This methodology involves a structured process of identifying, evaluating, and synthesising relevant literature, ensuring the review is transparent, reproducible, and objective.

As illustrated in Figure 1 below, a systematic literature review followed a predefined protocol to identify relevant storytelling and tacit knowledge transfer studies. Academic research databases such as Google Scholar, PubMed, Scopus, and Web of Science were utilised to ensure a comprehensive search. Keywords included combinations of terms such as "storytelling," "tacit knowledge," "knowledge management," "education," and "knowledge transfer." Boolean operators (AND, OR) were used to refine the search. Peer-reviewed articles, conference papers, and books published in English. Studies focusing on the use of storytelling in education contexts. Research that addresses the transfer of tacit knowledge. Non-peer-reviewed articles, editorials, and opinion pieces. Studies not directly related to storytelling or tacit knowledge transfer were excluded. The study was limited to articles published between 1998 and 2023 to ensure relevance, and only 25 of the 375 studies evaluated were deemed significant for the research conducted. Most of the literature that was excluded did not address tacit knowledge in

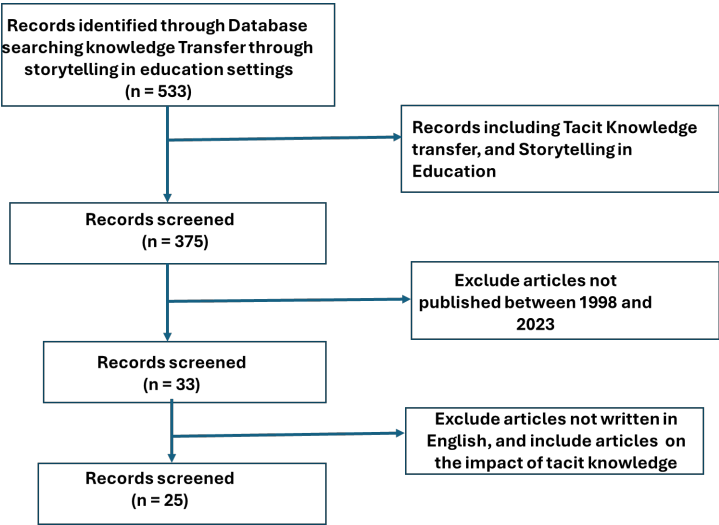the educational context, but in the generic organisational context, and some was not written in English.

Figure 1: The PRISMA selection process of relevant literature

This literature review addresses the effectiveness of storytelling in capturing and transferring tacit knowledge within corporate and educational environments. By examining critical studies and theories, this review aims to answer the following research questions: What is the practical impact of knowledge sharing through storytelling in education? What are the implications of knowledge sharing through storytelling for educational practice? In the subsequent section, the author will present the research findings.

3. Results

The studies reviewed employ a range of qualitative methods, including narrative inquiry and thematic analysis, to examine participants' experiences with storytelling. Carvalho et al. (2020), Jamissen et al. (2017), Tajeri et al. (2017), and Martinez-Maldonado et al. (2020) focus on the emotional dimensions that enhance student engagement and collaboration. Some research uses mixed-methods approaches to better understand storytelling's impact (Nestor-Baker & Hoy, 2001; Katušáková & Katusak, 2013; Nader, 2023). Specific interventions are explored in case studies by Wijetunge (2012), Kaminskiene & Khetsuriani (2019), and Dvir (2021), while systematic literature reviews by Fischer et al. (2020) and Rodríguez et al. (2021) synthesise the findings on storytelling effectiveness. Additionally, Katušáková (2015) compares oral and digital storytelling formats, and Hayne (2009) utilises experimental designs to evaluate storytelling intervention outcomes.

Nestor-Baker & Hoy (2001), Antunes et al. (2019), Carvalho et al. (2020), and Rodríguez et al. (2021) have all contributed to the understanding of storytelling in various educational settings. Kaminskienė and Khetsuriani (2019) tinted its effectiveness in primary and secondary education, while others focused on higher education. Nestor-Baker & Hoy (2001) highlighted its effectiveness in professional training environments. Antunes et al. (2019) analysed its use in community and organisational contexts for knowledge sharing and collaboration. Digital storytelling (DST) was a key intervention, enhancing learners' engagement and knowledge transfer. Personal narratives were used to enhance emotional engagement and relatability. Collaborative storytelling promoted teamwork, and multimedia integration enhanced engagement (Coulter et al., 2007; Koivula et al., 2019; Martinez-Maldonado et al., 2020).

Dincelli & Chengalur-Smith (2023), Dvir (2021), and Duveskog et al. (2012) have all draw attention to the significance of storytelling in education. They argue that it enhances learning experiences, fosters collaboration, and promotes meaningful knowledge transfer. McLellan (2007) and Denning (1998) emphasized the practicality of digital storytelling in higher education, as it encourages students to be creative and share experiences. Tajeri et al. (2017) and Denning (1998) underscore the importance of storytelling in enhancing learning outcomes and fostering a supportive environment.

4. Practical impact of knowledge sharing through storytelling in education

The systematic literature review highlights the significant role of knowledge sharing through storytelling in education, demonstrating its positive effects on the learning experience. Carvalho et al. (2020) note that digital storytelling enhances student engagement, collaboration, emotional intelligence, and digital literacy, creating a supportive environment for sharing personal narratives. Additionally, Jamissen et al. (2017) emphasise the importance of facilitator expertise and cultural context in storytelling interventions, encouraging active reflection and critical thinking among students.

Farooq et al. (2023) further demonstrate that storytelling enhances reflective learning, reducing distractions and deepening understanding by making complex concepts more relatable through real-life examples. Kaminskienė and Khetsuriani (2019) add that digital storytelling enhances literacy skills and creates personalised learning experiences, promoting creativity and critical thinking. Rodríguez et al. (2021) discuss how digital storytelling develops narrative skills and self-expression and encourages community engagement and inclusivity, making it a valuable tool for addressing social justice issues in education. These studies collectively illustrate how storytelling is an effective pedagogical strategy, enriching the educational landscape and fostering deeper connections between students and their learning material. The following section explores the key differences in storytelling approaches between developed and developing countries.

4.1. Technological Integration

Tajeri et al. (2017) tinted the importance of digital storytelling in developing countries, where traditional oral storytelling is limited due to limited access to technology. They used Adobe Premiere Pro 5 software to teach students how to create storyboards, edit, and sync narration with media. This innovative teaching approach allows students to express themselves creatively and engage with the story. Carvalho et al. (2020) emphasized the benefits of digital storytelling in fostering collaboration, critical thinking, emotional intelligence, and digital literacy. Duveskog et al. (2012) emphasized the need for digital tools in Tanzania.

4.2. Cultural Context

In developed nations, storytelling reflects diverse cultural narratives and promotes themes of social justice. Jamissen et al. (2017) emphasise that interventions in places like Norway and the USA aim to include marginalised voices and foster inclusivity. Conversely, in developing countries, narratives emphasise local traditions and communal values. Farooq et al. (2023) note that telling stories connects educational content with cultural heritage in Pakistan, thereby enhancing student engagement through relatable narratives.

4.3. Educational Frameworks

Developed countries incorporate narrating stories as a pedagogical strategy to enhance critical thinking and reflective learning, with the effectiveness depending on the facilitators' expertise (Jamissen et al., 2017). In developing countries, the focus is primarily on foundational literacy and numeracy, with relating stories often serving as a supplementary tool. Tajeri et al. (2017) found that storytelling improves vocabulary in language classes in India but may not be systematically integrated across all subjects.

The practical impact of sharing expertise through narrating stories in education highlights its potential to foster deeper engagement, enhance understanding, and bridge cultural or contextual gaps in learning environments. The following section examines the implications of experience sharing through telling stories for educational practice, focusing on its potential to transform teaching methodologies and enhance learner outcomes.

5. Implications of knowledge sharing through storytelling for educational practice

The following section presents various implications of knowledge sharing through storytelling for educational practice, revealing critical insights into how storytelling can be effectively integrated into educational settings.

Several studies underscore the significant benefits of telling tales in enhancing learning outcomes and student engagement. Carvalho et al. (2020) found that digital storytelling boosts

engagement, collaboration, digital literacy, and emotional intelligence. Farooq et al. (2023) noted that it fosters critical thinking and curiosity, promoting a deeper understanding of complex concepts. Additionally, Katuščáková (2015) emphasised that storytelling can lead to better retention and comprehension compared to traditional lectures, advocating for its integration into educational practices to create more effective and enjoyable learning experiences.

Tajeri et al. (2017) stressed the importance of telling tales in promoting reflective and transformative learning. They noted that digital storytelling enhances preservice teachers' understanding of pedagogical issues and fosters emotional engagement. They also noted that digital storytelling amplifies marginalised voices and supports social justice, contributing to inclusive education. Koivula et al. (2019) found that telling tales enhances children's emotional expression and social skills, which are crucial for self-regulation and interpersonal interactions. Dickinson-Delaporte et al. (2020) emphasised the role of telling narratives in promoting learner engagement. Nestor-Baker and Hoy (2001) and Denning (1998) stressed its effectiveness in transferring know-how and sharing, which is essential for collaborative learning in educational contexts. McLellan (2007) emphasized the benefits of digital storytelling in language classes, with Tajeri et al. (2017) highlighting its value as a method for vocabulary learning.

The implications of expertise sharing through narratives for educational practice are profound. Telling narratives enhances learning outcomes, promotes reflective and transformative learning, fosters collaborative and inclusive environments, develops social-emotional skills, and facilitates knowledge transfer. Integrating storytelling into educational practices can lead to more engaging, interactive, and practical learning experiences, as supported by various authors in the literature. These findings underscore the potential of storytelling as a powerful pedagogical strategy that can enrich the educational landscape.

6. Conclusion

The literature review underscores storytelling's substantial influence on education, showing that it enhances academic performance, knowledge retention, and comprehension of complex concepts while promoting critical thinking, creativity, and student engagement. Digital storytelling develops essential 21st-century skills such as digital literacy and emotional intelligence, contributing to collaborative and inclusive learning environments. It aids children's emotional expression and self-regulation while facilitating the transfer of tacit knowledge in educational and organisational contexts. The report advocates integrating techniques for telling narratives into knowledge management to enhance learning and reduce knowledge loss. Furthermore, it underscores digital storytelling's role as a research method and teaching tool that can amplify marginalised voices, urging university educators to adopt these practices to foster engagement and promote social change within underrepresented communities.

This study indicates that storytelling applies across various disciplines, but its impact and prevalence vary. The provided paper highlights storytelling as a management tool, including its use in problem-solving, action research, advertisement and knowledge transfer within businesses and educational institutions. Specifically, it is used for informal education, training, and socialisation of new employees and to maintain institutional history and decision-making. In the context of a library, storytelling can transfer tacit knowledge, such as knowledge of the library's culture or past successes and failures. In conclusion, storytelling is a versatile and practical expertise transfer and management method that enhances educational experiences and organisational communication. Its ability to engage emotions and provide context makes it valuable for conveying complex ideas and fostering a deeper understanding of shared expertise.

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