

Digital Storytelling as a Method for Modern Business and Economics Education in the Age of Artificial Intelligence

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Abstract

The last decade has been marked by the rapid development of digital platforms for learning and teaching and the growing need to identify tools and methods that best support the achievement of educational goals. This trend became particularly evident during the last five years, when the COVID-19 pandemic forced education systems to shift toward digital learning regardless of infrastructure readiness or the level of development of teaching methods. This review paper focuses on digital storytelling as an alternative teaching method in a digital environment. Through an analysis of existing professional and scientific literature, the authors define the concept and present its main characteristics. Digital storytelling has proven especially effective when students create their own digital stories, as it combines traditional instruction with digital media and serves as a strong motivational tool for developing communication competence. Research indicates that successful implementation requires a structured approach, including preparatory activities, teaching activities such as brainstorming and discussions, and feedback sessions. This contribution also outlines a concise implementation rubric and milestones that instructors can use to integrate digital storytelling into business and economics courses with minimal additional infrastructure. Teachers report that properly integrated digital storytelling has a stimulating effect on students' academic achievement, highlighting its potential as a contemporary didactic method for future educational practice.

Keywords: digital storytelling; business education; economics education; communicative competence; multimodal learning; artificial intelligence; digital literacy

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Introduction

Communication skills are widely recognized as essential competencies for the 21st century and are included among the four key skill clusters — critical thinking, creativity, communication and collaboration (Brandt, 2010). Within higher education, and especially in business and economics programmes, communication skills directly influence students' capacity to articulate ideas, participate in professional discourse, collaborate in teams, and deliver effective presentations. Classical theoretical frameworks also emphasize that communication competence is not merely linguistic correctness, but the ability to appropriately use language in real social and professional contexts (Hymes, 1972; Savignon, 2017; Kiato & Kiato, 1996). For many higher-education instructors, however, designing communicative learning activities can be challenging, particularly in an era of rapid digital transformation (Al-Amri, 2020). Digital storytelling has emerged as an accessible and engaging pedagogical method that integrates narrative development with digital media such as images, voiceovers, video, text and animation (Rahimi, 2019). It is implemented as an effective learning tool in specific teaching conditions that include material, methods, strategies, techniques, and assignment criteria that teachers use to design activities to encourage student engagement (Jerez et al., 2021). Its theoretical basis lies in the Cognitive Theory of Multimedia Learning (CTML), which posits that learners achieve deeper understanding when information combines verbal and visual modes (Rahimi, 2019). Technological developments have enabled digital storytelling to become widely adopted across the English-speaking world and increasingly within higher education (Miller, 2019; Kazazoglu & Bilir, 2021). The emergence of such technology enables new dimensions of language learning, as it offers new opportunities to explore the target language in its functional use (Choo et al., 2020).

For business students, digital storytelling aligns well with contemporary expectations: the ability to communicate data-driven insights, articulate complex concepts through compelling narratives, and adapt to digital platforms used in corporate communication.

Based on the need for innovative communication-based methods in digitalized higher education, this review addresses the following question: How can digital storytelling enhance communication competences among students in business and economics higher education in the age of artificial intelligence?

To strengthen both academic rigor and practical relevance, this paper combines an integrative review of digital storytelling research with an illustrative course-embedded case study that specifies a replicable assignment protocol, assessment criteria, and a transparent framework for responsible use of artificial intelligence tools (including disclosure and reflection on limitations).

Taken together, the literature suggests that digital storytelling is not merely a motivational “add-on” but a pedagogically grounded approach that aligns closely with the communication demands of business and economics education. Its effectiveness appears to stem from a distinctive set of learning requirements: students must select and prioritise content, translate it into an audience-oriented narrative, and coordinate verbal explanation with visual evidence in a time-limited format. These requirements are directly connected to communicative competence as contextualised, purposeful language use (Hymes, 1972; Savignon, 2017) and to multimedia learning principles that emphasise meaningful integration of verbal and visual channels (Rahimi, 2019). At the same time, the current technological environment introduces a new layer of complexity: artificial intelligence tools can accelerate drafting and production, but they also increase the risk of generic

messaging, weak evidentiary grounding, and reduced authorship awareness if used uncritically. This reinforces the need for implementation conditions repeatedly implied across the reviewed studies—clear task design, scaffolding (e.g., storyboarding), explicit assessment criteria, and opportunities for feedback—so that storytelling remains evidence-based and learning-oriented rather than purely aesthetic (Aljaraideh, 2020; Hava, 2021; Schrum et al., 2021). In this sense, digital storytelling offers a coherent bridge between communication competence, digital literacy, and responsible artificial intelligence-era practice, providing a plausible basis for the course-embedded case study and the methodological approach adopted in this paper.

Theoretical Background

In this digital age, significant changes have taken place in various aspects of human life, including education, which has made inevitable advances in information and communication technology (Akour & Alenezi, 2022; Haleem et al., 2022) to which teaching processes have had to adapt. The rapid shift to fully digital learning environments during the COVID-19 pandemic accelerated the adoption of various digital tools (Yuliani & Hartanto, 2022), which later resulted in a number of new innovative approaches to learning that can be used to improve the quality of the academic teaching and learning process (Alenezi et al., 2023; Ghory & Ghafory, 2021). While digital technologies were quickly embraced in business environments, higher-education institutions — including business schools — faced challenges in sustaining student engagement and attention online (Rajayi, Poorahmadi & Poorahmadi, 2018). This stimulated the need for pedagogical models that integrate digital media in meaningful ways (Yuliani & Hartanto, 2022).

Digital storytelling gained traction during the pandemic due to its multimodal structure combining graphics, sound, narration, video and text (Permana et al., 2025). Research consistently shows positive effects on learner motivation, problem-solving skills, and 21st-century literacies (Aljaraideh, 2020), and a profound impact on a person's ability to understand language (Gutierrez et al., 2019). Although much early research focused on younger learners, the same mechanisms — multimodal engagement, narrative construction, and active content creation — are highly transferable to university-level business education, particularly in courses centred on communication, marketing, management, entrepreneurship, and digital media.

Digital storytelling has been linked to improvements in vocabulary acquisition, writing, speaking and confidence (Hava, 2021), as well as general language competence in foreign-language instruction (Reinders, 2010). These communication-oriented benefits are directly relevant for business students, who are expected to master professional English, persuasive communication, and clear narrative framing. This will be achieved by students in the role of self-taught story creators practicing their own skills in conveying meaningful and valuable content to the audience through digital and media production, using cognitive processes (James et al., 2019). These skills are critical not only for their academic success, but also for their future careers in a dynamic business environment where effective communication is fundamental to professional development. What allows digital storytelling to be implemented in various sciences, including business science, is its attractive nature, which enables the dissemination of information to different categories of audiences (Rice, 2020).

Since stories allow individuals to communicate identity, values, culture and perspectives (Nguyen, 2011; Yang, 2022), digital storytelling can support business students in articulating their professional identity, presenting case analyses, or explaining strategic decisions through compelling narratives.

Digital storytelling has also been integrated into curricula designed to enhance creativity, collaboration and literacy (Rubegni & Landoni, 2015; Russell, 2010). Tools such as mobile storytelling applications (Bonsignore et al., 2013) and interactive surfaces (Bauminger-Zviely et al., 2013) demonstrate that storytelling technologies can facilitate collaboration — a key skill in project-based business courses.

More recent case studies highlight authentic learning benefits. Schrum, Majury and Simonelli (2021) illustrate how students across several countries used academic digital storytelling to merge research, scientific communication and digital literacy in open-ended tasks with real-world relevance. Such applications closely mirror business-school assignments (e.g., digital marketing projects, pitch presentations, or sustainability storytelling).

Additionally, Rutta and Schiavo (2020) demonstrate the value of collaborative narrative creation for reflection, conflict resolution and perspective-taking — skills vital for teamwork in business settings.

Research with younger learners also provides transferable insights. Di Blas and Boretti (2009) show that simple, accessible digital storytelling tools significantly enhance creativity and engagement. In higher education, similar tools can support inclusive participation even among students with limited technical skills.

Methodology

This paper uses an integrative literature review combined with an illustrative course-embedded case study to examine how digital storytelling can enhance communication competences in business and economics higher education in the age of artificial intelligence. The review component synthesises research on digital storytelling, communicative competence, multimodal learning, and higher-education applications, with particular attention to outcomes relevant for business and economics students (clarity of argumentation, audience adaptation, narrative coherence, and multimodal presentation). Sources were identified through targeted searches of education, applied linguistics, and educational technology outlets using keyword combinations such as digital storytelling, multimodal learning, communicative competence, higher education, business education, and artificial intelligence. The resulting literature was screened for relevance to tertiary education and for explicit reporting of communication-related outcomes (speaking, writing, presentation, narrative structuring, confidence, and engagement). Evidence was then organised thematically (communication outcomes, learning mechanisms, implementation conditions, and risks/limitations), providing an analytic basis for the paper's synthesis.

To reduce abstraction and demonstrate practical feasibility, the review is complemented by an illustrative case study implemented as a structured learning assignment in a business/economics course context. The case study follows a standardised protocol so that it can be replicated across cohorts. Students complete a short digital storytelling task (two to three minutes) that communicates a business-relevant insight or recommendation to a defined audience (for example, a manager, investor, customer segment, or the general public). The task requires (1) a concise narrative arc (problem, evidence, interpretation, recommendation), (2) multimodal composition (script and voiceover plus visuals), and (3) transparent referencing of data and media assets. Because the paper explicitly addresses the age of artificial intelligence, the assignment permits controlled use of artificial intelligence tools (for example, ideation support, language polishing, subtitle generation, or basic editing assistance) under an explicit disclosure rule. Students submit a short "artificial intelligence usage note" describing which tool(s) were used, for what purpose, and

one limitation encountered (for example, generic phrasing or the need to fact-check). This design positions students as responsible creators rather than passive users of artificial intelligence.

Data sources for the case study are deliberately lightweight to match the scope of a short article while still producing credible evidence. The case uses (1) student artefacts (final videos and scripts), (2) short reflective statements, and (3) rubric-based evaluation by the instructor (and optionally peer feedback summaries if used in the course). The analytic approach is triangulation: rubric-based observations are compared with reflection themes to identify convergent patterns regarding communication gains, typical weaknesses, and the role of artificial intelligence support. No causal claims are made; instead, the case study is used to illustrate how mechanisms identified in the literature manifest in business/economics student work.

Results

The literature synthesis indicates consistent positive associations between digital storytelling and communication-related learning outcomes, particularly in narrative structuring, speaking confidence, writing quality, and engagement. Across studies, the key mechanism is not simply the use of technology but the requirement to transform content into an audience-oriented narrative under multimodal constraints. This forces prioritisation of ideas, explicit reasoning (“why this matters”), and coherence between verbal explanation and supporting visuals. For higher education, the most transferable effects for business and economics programmes are improvements in persuasive framing, clarity of recommendations, and the ability to communicate complex concepts in accessible language. Studies also indicate that structured implementation conditions matter: clearly defined assignment criteria, scaffolding through storyboarding, and iterative feedback are repeatedly linked to better learning outcomes and higher student satisfaction. At the same time, the literature highlights risks that are relevant for business programmes: superficial storytelling without evidence integration, overuse of decorative media, and unequal technical confidence among students. These risks are typically mitigated by rubric-based assessment, milestones, and explicit expectations about sourcing and accuracy.

The illustrative case study aligns with these patterns and adds practice-level evidence that the method can be operationalised in business/economics teaching without heavy infrastructure. Student artefacts most visibly demonstrate learning gains in message discipline and narrative organisation. Compared with typical presentation assignments, digital storytelling pushes students to define a single core claim, support it with a limited set of evidence points, and conclude with a clear implication or recommendation. The most frequent strengths observed in student work are relevance of chosen business topics and improved clarity of the “problem–solution” logic. The most common weaknesses are pacing problems (too much content in too little time), reliance on text-heavy slides, and incomplete integration of data into the narrative (data presented without interpretation). Reflections indicate that scripting and voiceover recording increase students’ awareness of clarity, tone, and concision, while storyboarding supports planning and reduces improvisation.

With regard to artificial intelligence, the case suggests that controlled tool use can reduce friction in early drafting and improve technical production quality (for example, subtitles and basic editing), but it does not substitute for conceptual understanding or evidence-based reasoning. Students report that artificial intelligence is most helpful for generating alternative story angles, refining phrasing, and polishing delivery elements; however, they also recognise limitations such as generic wording, occasional inaccuracies, and the need to verify claims and align

content with course concepts. The disclosure requirement appears to promote more critical and responsible usage, consistent with the paper's emphasis on ethical, reflective competence in artificial intelligence-mediated communication. Overall, the combined evidence supports the conclusion that digital storytelling is a pragmatic method for strengthening multimodal business communication and that it can be meaningfully adapted to artificial intelligence-era learning by embedding transparency, accountability for accuracy, and reflection on tool limitations.

Discussion

The reviewed literature reveals several implications for business and economics higher education. Digital storytelling enhances key communication competencies. Findings from multiple studies (e.g., Setiawan et al., 2023; Chaisriya et al., 2023; Al-Amri, 2020) show improved speaking, writing, listening and narrative structuring skills. In business education, these competencies directly translate to pitch presentations, case-study communication, report writing, negotiation simulations and marketing storytelling and branding. Digital storytelling is in alignment with employer expectations and labour-market trends. Employers increasingly expect graduates to present data and strategic insights through persuasive narratives. Digital storytelling creates opportunities to practice multimedia communication, data visualisation with narrative framing, persuasive communication for diverse audiences and corporate communication formats (video reports, brand stories). Digital storytelling supports active, experiential learning. Digital storytelling mirrors experiential pedagogies widely used in business programmes (project-based learning, internships, simulations). Students learn by researching, creating, structuring, designing and presenting their digital narratives — skills consistent with agile and innovative business practices. Digital storytelling is compatible with AI-enhanced learning environments. In the age of AI, students must use digital tools critically and creatively. Digital storytelling can integrate AI-powered technologies such as AI-based video editing, generative tools for script ideation and data-driven storytelling dashboards. Thus, the method positions students not only as consumers but also as ethical, reflective creators in an AI-mediated communication environment. Digital storytelling strengthens learner motivation and engagement. Motivation is consistently highlighted in the literature (e.g., Hava, 2021; Aljaraideh, 2020). In business schools — where digital nativity varies — digital storytelling offers an inclusive approach that increases participation, particularly for students less comfortable with classical oral presentations.

Beyond these general implications, the reviewed evidence also points to practical design principles and boundary conditions that are particularly salient in business and economics education. First, learning gains are strongest when digital storytelling is treated as evidence-based business communication rather than as a purely creative media task; this requires explicit expectations about data use, conceptual accuracy, and the “so-what” logic of recommendations, supported by rubric-based assessment and staged milestones (e.g., topic/audience definition, storyboard, draft feedback, final delivery). Second, equity and workload issues should be anticipated: differences in prior technical confidence can be reduced through simple tool choices, templates, peer collaboration, and clear minimum production standards that keep the focus on communication quality rather than editing sophistication. Third, the integration of artificial intelligence tools should be guided by transparent rules (disclosure, source checking, and reflection on limitations) so that artificial intelligence support enhances drafting and production without undermining authorship, critical thinking, or evidentiary discipline. Under these conditions, digital storytelling can function as a structured rehearsal space for workplace-relevant communication tasks—pitching,

reporting, stakeholder messaging, and data-informed persuasion—while also cultivating responsible practices for artificial intelligence-mediated content creation.

Conclusion

Digital storytelling is a versatile and pedagogically grounded method that significantly enhances communication competence, creativity, collaboration and digital literacy — all essential competencies within business and economics higher education. As AI reshapes workplace communication, digital storytelling offers a robust and motivating framework for preparing students to articulate ideas clearly, ethically and persuasively in multimodal digital environments.

From a business and economics education perspective, the central value of digital storytelling lies in its capacity to operationalise complex communication outcomes in a concrete, assessable form: students must craft a clear message, adapt it to an audience, integrate evidence into a coherent narrative, and deliver it through a multimodal format increasingly common in professional environments. In the age of artificial intelligence, this value is amplified if instructors explicitly position digital storytelling as a method for developing responsible creators—students who can leverage artificial intelligence tools for ideation and production efficiency while remaining accountable for factual accuracy, ethical sourcing, and the interpretive work that transforms information into persuasive business meaning. The paper therefore supports the use of digital storytelling as a scalable pedagogical option that can be embedded across business curricula (e.g., marketing, management, entrepreneurship, business analytics, sustainability) with relatively modest infrastructure, provided that implementation includes clear learning outcomes, structured scaffolding, and transparent artificial intelligence-use expectations. Future work could extend this contribution by comparing alternative assignment designs, examining longer-term transfer to workplace communication tasks, and evaluating how different artificial intelligence policies (open vs constrained use) shape both learning processes and the quality of student narratives.

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