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STORY AS PEDAGOGY: LEVERAGING NARRATIVE DIGITAL LEARNING PRACTICES IN THE INSTRUCTIONAL DESIGN PROCESS

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Abstract

This paper examines the pedagogical value of using narrative digital learning practices (NDLP) in instructional design. Through a thematic review of the literature, the authors illustrate that NDLP, which are the intentional use of storytelling techniques to inform and enhance the student experience within digital learning environments, can increase student engagement and help them meet the outcomes and goals for instruction. It discusses the different ways in which NDLP can be used to support such practices as course mapping, digital storytelling, adaptive and/or differentiated learning, scenario-based and case-based learning, gameful learning, and the application of universal design for learning principles. Additionally, the authors present backward design as a way to ensure that narrative structures used in courses are supportive of learning objectives. The future of learning is discussed, including the role of NDLP in facilitating more personalized and immersive learning experiences. The paper concludes by noting that NDLP is a valuable tool for instructional designers and educators and has the potential to transform teaching and learning through the unique affordances of narrative structure and digital tools.

Keywords:

Narrative digital learning practices, digital learning, digital storytelling, narrative structures, narrative practices, online learning, instructional design, course mapping

Introduction

Across a multitude of teaching and learning contexts, educators continue to prioritize engagement, relevance, belongingness, and community as essential components of effective course design and facilitation. As a field, we constantly look for innovative practices for designing instruction that will capture the minds and hearts of our learners, particularly those historically marginalized students who may otherwise feel alienated or divorced from the learning experience. In reflecting on these barriers to encouraging students' connection to the learning process, designers and educators can hinge the educational experience around metaphors, such as building a modular course that is experienced as a book that you simply cannot put down (Gunder et al., 2019), or resituating learners as heroes within an epic journey where their trials are the assessments of the course (Gunder, 2016). This employment of metaphor within the educational process is an example of a narrative practice, which is the use of elements of storytelling within a specific context or use case (Bal & van Boheemenm 2009; Bruner, 1991; Bruner, 2004; Fisher, 1984; Herman, 2004; Hewett, 2021; Newman, 1851; Ricoeur, 1990). Employing narrative practices within teaching and learning contexts has a multitude of benefits, including achieving the goal of education to create an authentic and engaging experience for students by honoring their unique goals, needs, and lived experiences (Adams et al., 2021), as well as helping learners to encode and retain knowledge more deeply (Mayer, 2020; Weinschenk, 2011) to be applied within real-world environments. Narrative practices within education harken back to the traditions of storytelling within teaching and learning, particularly in their sociocultural roots for engendering a plurality of literacies and discourse modes within oral, written, and aesthetic contexts (Collins & Blot, 2003; Gee, 1999; Jewitt, 2009; Street, 1984; Street et al., 2009).

Building upon this rich and storied tradition of storytelling within education, digital learning environments have been established as uniquely situated to supporting the use of narrative practices for creating authentic points of relevance and engagement for students (Buckner, 2018; Robin, 2008). Authentically and powerfully incorporating

narrative practices in digital learning environments entails leveraging the unique affordances of digital learning environments to impart knowledge in deeper ways than simply presenting information transactionally or as a static didactic. These affordances include the ability to present content access multiple communicative modes, engage students in multimodal practices, and connect learners within a constructivist and experiential community of inquiry (Abrahamson, 2005; Hull & Nelson, 2005; Landrum et al., 2019; Vasudevan et al., 2010).

Using an ethnographically-informed approach, this paper illuminates the connection between narrative practices and digital learning as defined as narrative digital learning practices, which are the intentional use of storytelling techniques to inform and enhance the student experience in digital learning environments. Through a series of autoethnographic portraits celebrating the opportunities for educators to advance efficacy and impact through narrative digital learning practices, we offer 1) a brief, sociocultural contextualization of narrative digital practices within higher education, 2) a discussion of the diverse benefits of narrative digital learning practices with a focus on applications in higher education, and 3) a collection of applicable narrative digital learning practices that can be utilized within the instructional design process.

Narrative Digital Learning Practices (NDLP)

The origins of narrative digital learning practices take their roots in one of the oldest traditions for organizing and presenting information as a meaningful sequence of events. Newman's definition of the four rhetorical modes—narration, description, exposition, and argumentation—positions narrative as a tool for building engagement and connection with audiences through a logical organizational structure (Hewett, 2021; Newman, 1851). Scholars and educators have written about the sequencing process as a way to guide audiences in meaning-making within an educational process (Bal & van Boheemenm 2009; Bruner, 1991; Bruner, 2004; Fisher, 1984; Herman, 2004; Ricoeur, 1990). Narrative has also served as a core practice within the field of ethnography, allowing for the creation of stories rich with detail and description (Geertz, 1973), representative of sociocultural practices and perspectives of a specific context, environment, or time (Behar, 2022; Clifford, 1986). Across disciplines, narrative can be positioned as both a product (the creation of a story) and a process (the act of storytelling) (Hall, 2018), and the process of engaging in narrative practices can be employed within individual contexts, as well as group settings as collaborative, goal-oriented work (Gunder & Shellgren, 2022).

In the past few decades, educators have documented and reflected upon the impact of the narrative practice of storytelling as utilized within diverse teaching and learning contexts (Wu & Chen, 2020; Rodríguez et al., 2021). Digital learning, defined as the “use of technology and teaching practices enabled by digital tools to enhance learning” (Fox et al., 2021, p. 7), provides a limitless ethea for incorporating narrative practices, both in the design of instruction for online, blended, and digital environments, as well as student usage within activities, assessments, and collaborations with their peers. When digital learning and narrative are intentionally married within the educational experience, narrative digital learning practices (NDLP) emerge as the intentional uses of storytelling techniques to inform and enhance the student experience within digital learning environments. NDLP represent a wide variety of practices and methods, and are becoming increasingly ubiquitous within learning content, assessments, and community engagement activities in digital learning environments. The essential characteristics of NDLP include (but are not limited to) the following:

- **Outcomes Driven:** Engaging with NDLP helps educators align objectives to activities and assessments
- **Assessment Aligned:** NDLP within assessments help learners build critical-thinking, problem-solving, and collaboration skills
- **Humanized:** NDLP celebrate learner identity, providing them with opportunities to share experiences, perspectives, and goals
- **Socioculturally-Situated:** NDLP offer insights on the cultural contexts of sharing stories across different communities
- **Multimodal:** NDLP leverage the unique affordances of combining text, visuals, audio, and other semiotic modes as a means of imparting meaning
- **Constructivist:** NDLP support hands-on, experiential learning that centers on engaging in the active process of building knowledge

Benefits of Narrative Digital Learning Practices for Teaching and Learning

In that storytelling and narrative have long served as pedagogy in the creation of curriculum, the benefits of NDLP are actualized through the reimagining of course content through the lens of narrative structures. Narrative structures are the sequences of events within a story and involve the combination of story elements such as characters, plot, setting, and actions to help (Shaw, 2017; Weischenk, 2011; Weischenk, 2012). By designing courses to include an intentional and thoughtful flow of information, educators can draw learners in and help them follow along with the salient content (Shaw, 2017). The schema used to organize course content into narrative structures can take many forms, including linear and non-linear sequences, as well as formats that allow for interactivity and choice (Prosser, 2014; Shaw, 2017). From lectures and presentations to assessments and activities, educators can use metaphorical and/or literal elements such as characters, setting, plot, and action to increase cognition and retention of knowledge (Weischenk, 2011). Narrative elements can also be employed within digital environments to evoke specific emotions that build connections between learners, the course content, and their peers. This can include leveraging drama and suspense to maintain attention throughout instruction or sharing personal experiences to create empathy and connection within the class community. These connections to the content are supported by cognitive psychology—Mayer’s cognitive theory of multimedia learning describes the combination of narrative and digital media as a way to help students connect with prior knowledge, build mental maps of learning content, and create extensions from the content to their lived experiences (Mayer, 2020).

The usage of NDLP also support the development of a plurality of digital literacies, including cultural, creative, and critical literacies (Belshaw, 2016). From the use of multimodal tools and communicative modes within the expression of creative literacies to the interrogation of identity and meaning within narratives that employ critical literacies in their construction, NDLP are situated within specific sociocultural contexts, helping learners to not only understand their presence and engagement within digital learning spaces but also their growth in capabilities along a spectrum of learning (Goldstein & Driver, 2014). Within this model of growth, students also sit at a point of reflection in examining their role in conjunction with the role of their teacher. NDLP support character development within the classroom, allowing for the locus of control to be shifted from teacher to learner, engaging students in the metaphorical and literal creation of stories as part of the educational process (Gunder, 2016). Furthermore, storytelling within digital learning environments extends the accessibility and reach of the content, allowing online spaces to be inclusive across modalities. Lastly, and most importantly, NDLP honor the unique identities of students by creating space for enculturating belongingness and cultural representation. With the inclusive act of inviting learners to share their stories, we create environments for deeper understanding, connection, and collaborative growth, extending the benefits of the curriculum into the world.

Leveraging Narrative Digital Learning Practices for Instructional Design

Course Mapping

The use of NDLP in the design of instruction can be an indispensable tool for instructional designers and faculty, particularly when applied to the course mapping process. Thinking about the sequence of events within a course as a narrative arc of rising and falling actions can help to build engagement while also ensuring that students understand and meet the learning outcomes for the course. Course developers can also consider the relationship between objectives, assessment, and learning content plotted across a narrative structure by utilizing backward design. Backward design is a process that starts with the end goal in mind, and works backward to develop instructional strategies and assessments that support the attainment of the desired outcomes (Wiggins & McTighe, 2005). This process can be applied to the incorporation of narrative structures in a course, to ensure that the narrative arc supports the articulated learning objectives. Lastly, designers can utilize metaphors commonly employed within popular narrative structures, like character development and plot structure, to organize instruction around a compelling and engaging story format. The Monomyth Online Framework remixes Joseph Campbell’s monomyth and “the hero’s journey” into a course mapping tool that can be used to assign the parts of the course to different aspects of an epic narrative (Gunder, n.d.). The framework can also serve as a reflective tool for assessing and redesigning a course around learner agency, differentiation, and scaffolding content to help students build their skills throughout the course.

Digital Storytelling

Digital storytelling is the expansion of traditional storytelling techniques through the combination of media such as photos, audio, and videos into digital stories (Buckner, 2018). Digital storytelling engages individuals in creatively and skillfully leveraging NDLP to convey resonant meaning with the target audience (McLellan, 2007), coming alive when the NDLP are utilized as an assessment practice within courses (Buckner, 2018). When utilized as an authentic assessment practice, digital storytelling requires learners to apply creativity, problem-solving skills, and effective communication (Buckner, 2018). Digital storytelling also serves as a bridge between curricular and co-curricular activities, giving learners the opportunity to bring the cultural traditions and community wisdom they carry into the educational experience. These digital stories open up a dialogue about who can be an author, how can stories preserve and protect the wisdom passed down through communities, and how authentic stories can be used to build connection (Shuman, 2006).

Gameful Learning

NDLP have been increasingly used to create gameful learning environments that motivate learners and promote engagement. Gameful learning is a pedagogical approach that leverages game design to enhance student motivation, participation, and learning outcomes (Aguilar et al., 2018). The use of NDLP in gameful learning can offer learners an immersive experience that simulates real-life scenarios and promotes active participation. Furthermore, engaging with educational games and game-based narratives can be used to teach complex topics, and encourage students to utilize creative problem-solving to progress through the game (Schrier, 2016). One example of a tool that leverages NDLP in gameful learning is Gradecraft, a gamified LMS designed to enhance student motivation and engagement (Holman et al., 2013). Gradecraft uses a non-linear narrative structure with branched learning paths that enable students to navigate the learning environment according to their learning pace and interests (Holman et al., 2013).

Personalized and Adaptive Learning

NDLP also serve to create a highly-personalized learning experience through the use of adaptive and differentiated learning and provide a new perspective on how to uniquely address the needs of our students. One approach to using NDLP for adaptive learning is to incorporate branching storylines into digital learning materials. These storylines can offer students choices and alternate paths, allowing them to navigate content in a way that meets their individualized learning needs and goals. For example, a student who excels in a particular subject area might be directed down a more challenging storyline, while a student who struggles in that same area might be given more foundational material to work through.

In addition, the principles of universal design for learning (UDL) can be leveraged in conjunction with NDLP to make learning more accessible in a proactive and intentional way (Rose, 2000). UDL principles emphasize flexibility and provide multiple means of engagement, representation, and expression, allowing educators to create learning experiences that are accessible to all learners by design. By incorporating humanizing and inclusive narrative practices that emphasize diverse perspectives and learning preferences, educators can help ensure that all students are engaged and able to connect with material in ways that work best for them (Hall et al., 2014).

Scenario- and Case-Based Learning

Scenario-based learning and case-based learning both involve presenting learners with a realistic scenario that requires them to apply their knowledge and skills to solve a problem (Seren Smith et al., 2018). The use of case studies or scenarios in a course can provide students with an opportunity to analyze real-world situations and apply the knowledge learned in the course to solve problems, particularly when they are constructed through engaging and thought-provoking NDLP. Incorporating narrative structures into scenario-based or case-based learning can make the experience more engaging and memorable for learners. For example, a narrative arc can be used to create a storyline that is compelling and helps learners to relate to the scenario or case. This can be achieved by using tools such as Joseph Campbell's monomyth, which outlines the stages of a hero's journey and can be applied to create characters, setting, and plot for a course that unfolds like an epic journey where the learner is the hero (Gunder, 2016). Using digital tools such as interactive videos, animations, and simulations can also help to create a more immersive and interactive learning experience. By allowing learners to interact with the scenario or case, they can make decisions and see the consequences of their actions, which can help to reinforce learning.

Conclusion

In conclusion, the use of NDLP in the instructional design process can be a valuable tool for engaging students and helping them to meet the outcomes and goals for instruction. NDLP creates a more interactive and personalized learning environment that caters to the diverse needs of students. By incorporating storytelling techniques, students can relate to the material and understand it on a deeper level. As we move towards the future of learning, NDLP will play a crucial role in creating innovative and effective learning experiences. As technology continues to evolve, the use of NDLP will become more prevalent in education, redefining the ways in which we provide students with an impactful and equitable learning experience.

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