

## **“Map ourselves through Digital Storytelling”: pedagogical tool to develop self-knowledge skills in advanced practice psychiatric-mental health nursing**

**Carlos Laranjeira<sup>1,2</sup>, João Gomes<sup>2,3</sup>, Paula Carvalho<sup>2,4</sup>, Ana Querido<sup>1,2</sup>**

<sup>1</sup>Center for Innovative Care and Health Technology (ciTechcare), Polytechnic of Leiria, Portugal, <sup>2</sup>School of Health Sciences, Polytechnic of Leiria, Portugal, <sup>3</sup>Hospital Center of Leiria, Leiria, Portugal, <sup>4</sup>Hospital Center of Médio Tejo, Tomar, Portugal.

---

### **Abstract**

*By creating digital stories people are encouraged to reminisce about events with an impact on their life and personal and professional development. This paper aims to determine nurses' perspectives regarding a pedagogical tool – Digital StoryTelling (DST). Our qualitative study design used video focus groups involving 20 master's students in mental health nursing during the academic year 2020/2021. Students highlighted the creative content of digital stories and their potential to develop self-awareness, socio-emotional regulation and interpersonal relationships. The scarce digital literacy and the difficulty in putting emotion in the content of the stories stood out as the main barriers. Thus, a more individualized follow-up will be necessary to help students. Further research may benefit from exploring how the DST tool can assist a more diverse group of users.*

**Keywords:** *Digital stories; self-care; nurses; self-awareness; learning strategy.*

---

## **1. Introduction**

Telling stories is a way to disseminate information, and is a form of learning that calls for sharing and reflection on what has been lived. Digital StoryTelling (DST) has been used as a pedagogical strategy in different populations (children, elderly, students, and ill people), educational contexts (primary, secondary, and higher education), and therapeutic settings (Home Care for the elderly, Palliative Care, Mental Rehabilitation Units) (Mojtahedzadeh, et al., 2021). A recent systematic review by Moreau et al. (2018) reaffirms the power of the co-creation of digital stories in the training of health professionals, with a positive impact on creative and reflective learning.

DST can broadly perpetuate the knowledge and sharing of the individual's lived experience, either in archives for later viewing or through dissemination on digital platforms. The use of DST combines first-person narrative with the use of multimedia (images, sounds, animation) to produce a short video (3 to 5 minutes). In an era of people-centered care and increasing pressure on care providers, particularly nurses, digital stories can have a positive effect in the education and self-care behaviors of health professionals (Jáuregui-Lobera et al., 2020; Laranjeira et al., 2021). According to Lambert and Hessler (2018), the development of DST can be achieved through 7 stages, namely:

1. Start with an idea - Story cycle - writing the narrative. The cycle has a symbolic meaning representing trust, integrity, and eternity. Participation in a group of students and teachers helps to choose the theme and determine the story: What story do I want to tell? What do I want the story to tell? What do I want to convey with the story? – The student’s experiential content is shared in a group, replicating the traditional environment of “storytelling” and can start from a theme of their own or one suggested by the teaching team based on real cases, or common themes of the team (team-based learning);
2. Dramatic question - Select the emotions to share in the story - this step helps to identify emotions in the narrative and to raise awareness of the emotions that you want to share and include in the story;
3. “Finding the moment” and shaping the narrative – After identifying the theme and the story, it is necessary to choose the scene and respective dramatic tension created with the story. The moments of dramatic change and tension are the most impactful on the audience;
4. Visualizing the story – involves choosing the images that best convey the explicit and implicit message of the story. It involves the student putting himself in the other's shoes and perceiving how the scenes can have a more significant impact on the target audience;
5. Listening to the story – allows one to see the advantage of using the voice and the emotion it conveys. The student chooses to use their voice or that of others to convey authenticity to the narrated story;

6. Composition of the story using software – ensuring the combination of the various elements of the story (voice, background sound, music, images) to maintain the sense of the narrative;

7. Sharing the story – carried out with the group, the school community, and the target audience for whom it is intended, on the internet. Sharing will be all the richer when it is carried out and contextualized with the target audience.

During the story cycle, students are encouraged to reminisce about rescue stories with an impact on their life and personal and professional development. The self-reflection and the impact of their behavior on others will determine the assessment of how these situations can contribute to the construction of desirable professional behavior. Reflecting upon the action during the DST's different stages can potentiate the development of metacognition skills.

### ***1.1. Development of DST-Map approach***

Regarding the innovation and creativity of training processes centered on students and with a high potential for applicability in curricular flexibility, DST can be used as a pedagogical strategy in the training of future health professionals and the advanced training of health professionals, based on a low-complexity digital tool with high sustainability.

Its application can be enhanced with the re-creation of pedagogical environments, by adapting spaces for the simulation of informal scenarios, and using video recording and high-fidelity reproduction. In this sense, the communication laboratory was adapted with material resources that allow the approximation of the current space to informal settings, with the possibility of carrying out audiovisual recordings and autoscropy. Evidence shows that the realism of high-fidelity scenarios promotes the development of clinical reasoning, clinical competence, confidence, the integration of theory into clinical practice and the identification of learning needs (Hanshaw & Dickerson, 2020). The use of video recording allows the review of interactions during the story cycle, particularly the fleeting and non-repeatable events that, in sharing, would very likely escape direct observation. Video recording enhances learning by facilitating the emotional distance necessary for the reflective analysis of the recorded material, which is very common in highly complex contexts.

This pedagogical tool has the following learning outcomes/educational objectives:

- Develop critical-reflexive self-analysis skills and potential for change;
- Develop narrative and reflective writing skills through the construction of the story script;
- Develop instrumental skills within the scope of digital literacy;
- Contribute to the consolidation of students' soft skills, particularly teamwork, emotional competence and creativity.

## **1.2. Aim**

This paper aims to determine nurses’ perspectives regarding a pedagogical tool – DST-Map – which gives voice to those involved in the teaching-learning process in order to contribute to self-knowledge and foster self-care behaviors.

## **2. Method**

### **2.1. Study design**

A descriptive qualitative study using online Focus Group Discussion (FGD) was performed to gather information on students’ perceptions of DST. The Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist was used to report the study.

### **2.2. Participants**

In the academic year (2020/2021), a purposive sampling strategy was used to enroll 20 master’s students in mental health nursing from the School of Health Sciences of Polytechnic of Leiria (Portugal). Two FGDs were run (13 in the first group and 7 in the second group) using Krueger and Casey’s (2015) methodological framework. Participants were selected in accordance with the following inclusion criteria: (1) be a registered nurse enrolled in the curricular unit "Personal Development and Therapeutic Communication", part of the Mental Health Nursing master’s program; (2) can communicate in Portuguese; and (3) consent to participate in an FGD. We excluded participants who had no access to any electronic device to join the online interview.

### **2.3. Procedures**

The online FGD sessions took place over two months (from February 2021 to March 2021) using the videoconferencing application Zoom. The duration of FGDs lasted between 70 and 90 minutes. All FGDs were moderated by a clinical nurse and a nurse educator with a Ph.D. degree and experience in conducting qualitative studies. Informed consent was obtained at the start of each FGD. The focus group interview guide was based on the Gibbs reflexive cycle (an integral part of reflexive analyses) (Li et al., 2020) and included three main questions: a) What was your impression of the digital stories?; b) How has DST influenced how you see yourself?; c) What did you feel/learn when you executed your DST? Probing and supplementary questions were also asked.

The FG sessions were recorded with the participant’s permission and then transcribed for a more efficient analysis of the discussion content and answers. Data analysis was performed using the conventional content analysis method according to the procedure proposed by Elo and Kyngas (2008). This method proposes three stages: open coding, creating categories, and abstracting for data analysis. All the FG interviews were transcribed and imported into

WebQDA qualitative software program for data management. The findings were reviewed by co-authors (researcher triangulation) to legitimately capture the essence of the findings.

### 3. Findings

The mean age of participants was 37 years (SD=9.2). Most of the focus group participants were female. All participants had more than two years of nursing experience. The analysis of the FGDs resulted in two main categories “Potentialities of DST” and “Barriers associated with DST”.

#### *Theme 1 - Potentialities of DST*

The possibility of developing active strategies such as DST allowed for exploring the creativity of the participants: “This strategy was very different (*out of the box*), I had never imagined that the creative potential was so great” (FGD2). Additionally, there were numerous reports highlighting the contributions of DST in the development of self-awareness, self-reflection, and self-knowledge, essential components for the development of specialized skills in Mental Health and Psychiatric Nursing. FGD1: “Understanding our emotions, we can be more attentive to the emotions of others”; “I became more aware of my potential and limitations”. FGD2: “The moments of self-analysis contributed to my personal development”; “Looking back, I realize some of my reactions at the time I lived that story”.

At the same time, participants verbalized DST’s contribution to strengthening interpersonal relationships with peers, and also to socio-emotional regulation. FGD1: “We can express ourselves and express our feelings”; “Developing DST allowed us to explore the emotional dimension of the facts, and that helps us achieve greater well-being. Sometimes, tackling sensitive topics awakens experiences that I thought I had resolved.”. FGD2: “The cycle of stories was useful to get to know my colleagues better and thus understand their attitudes and behavior.”

The possibility of preserving history in time was mentioned by participants as a way of ensuring its legacy for others: “That story was not only an academic work but also a kind of legacy that I left for my children and for my family” (FGD1); “through my story, I was able to honor a person who was very important in my life” (FGD2).

The potential of DST also makes it possible to develop skills that allow nurses to deal with the therapeutic impasses that often arise in contact with people with mental illness: “I became more sensitive to transferential impasses in my relationship with patients”, “I understand better the difficulty of sharing what we feel and how much it sometimes affects therapeutic relationships” (FGD1).

#### *Theme 2 - Barriers associated with DST*

During the FGD, several participants were unaware of the DST strategy, which caused them anxiety in the initial phase of choosing the story: “The first impact was really the need to expose something from the private sphere to the group of people who were strangers” (FGD1); “as it was a pedagogical strategy that I didn’t know about, it caused me fear and anxiety” (FGD2). On the other hand, the participants highlighted the lack of digital skills in the operationalization of the stories, which led to high consumption of time and resources for their realization. FGD1: “The biggest challenge stemmed from my difficulty in using digital tools” and “I’m not info-excluded, but having to use digital resources to build the story was time-consuming, I even had to buy a program to help me with the DST”. FGD2: “I felt many limitations in the construction of the final product, due to the lack of technical and digital competence”, and “I realized that not everything that exists on the internet can be used”.

Several participants also mentioned the difficulty in selecting stories to share with their peers, either because of the fear of exposure to others: “I felt uncomfortable and even uncomfortable, knowing that I was going to share a story of my life” (FGD1); either because of the difficulty of putting emotional content and affective tone in the stories “transmitting emotion in the construction of my DST was the biggest challenge” (FGD1), “we are not used to exploring emotions in an open way, and when we do that it creates fears”, “I had difficulty identifying a significant experience that could be shared” (FGD2). This is because events that arouse emotions tend to be remembered more easily than neutral events devoid of emotions.

#### **4. Discussion**

Given the rising complexity of the health care system in which nurses are needed to work, educating future nurses capable of providing better quality care has become critical. Assessment by competencies aims to verify the student’s ability to manage concrete situations. The focus is not merely on the specific task, but also on the strategies for solving problems, mobilizing and articulating the resources that the student needs. These resources are related to the domains of knowledge (knowledge of facts and concepts), knowing how to do (mastery of skills and abilities), and knowing how to be (attitudinal posture and mastery of situational relationships) (Panchenko, 2021).

Similarly to previous research, the DST tool was highly valued by the participants (Henrickson et al., 2022). However, participants considered that more time was needed to deepen and improve this methodology in the resource production phase, in order to fill small gaps that were detected. Possibly, a more individualized follow-up would be necessary, helping the students, case by case.

Based on our findings, education, and learning using DST can become extraordinarily transformative and emancipating, through empathy, openness to experience, and a positive orientation toward life (Laranjeira et al., 2021). Teaching the languages of images and

promoting critical readers of these images is an increasingly current challenge, as we move towards a digital world, with audiovisual technology capable of creating virtual visual scenarios, where the line that separates the mental image from the real one is very tenuous. Learning is constructing meaning; meaning is what makes experience comprehensible and coherent. Learning is a process through which meaning is attributed, starting from the experiences and knowledge already acquired; it is a re-interpretation of an experience. Making meaning is a fundamental element of adult learning (Panchenko, 2021).

DST contributes to understanding the learning process. Its purpose is to help professionals become critically reflective and to participate more fully in discourse and action. Given the effectiveness of digital storytelling, the educational application of this method is recommended to improve social and emotional competencies among mental health nurses. While the DST tool is a technique to enhance the learning processes in higher education, it is also a strategy for enabling digital literacy. Finding audio or images with great symbolism, especially in free services covered by Creative Commons licenses, requires time, patience, and knowledge to refine searches (Hwang et al., 2023). This is a process that requires dedication and persistence, in an attempt to find the ideal resource, which has the ability to convey feelings, emotions, and the desired message. Finally, the almost generalized idea that everything that exists on the Internet can be used is a frequent mistake. While it possible to download content in the most diverse ways, the diversity of licenses means that not all content is free to use.

## 5. Final remarks

DST is a robust and exciting methodology that allows for capturing, sharing, and preserving stories. This path implies a break with some paradigms of traditional pedagogy, often too closed in on itself. It is necessary to create openness and flexibility for informal learning, which the vast majority of students today acquire through different technologies. The recognition that these new technological and didactic skills are an essential ally to exploring new ways of promoting the teaching/learning process and dynamizing new virtual learning environments will have to be done naturally and not as an obligation enforced by technological evolution. This study was performed only in a single higher education institution and needs to be implemented on a broader scale. Further research may benefit from exploring how the needs of more diverse groups of users could be met through the DST tool.

## References

- Elo S, Kyngäs H. (2008). The qualitative content analysis process. *J Adv Nurs.* 62(1):107-115. doi:10.1111/j.1365-2648.2007.04569.x

- Hanshaw, S. L., Dickerson, S.S. (2020). High fidelity simulation evaluation studies in nursing education: A review of the literature. *Nurse Educ. Pract.*, 46, 102818. doi.10.1016/j.nepr.2020.102818
- Henrickson, L., Jephcote, W., & Comissiong, R. (2022). Soft skills, stories, and self-reflection: Applied digital storytelling for self-branding. *Convergence*, 28(6), 1577–1597. <https://doi.org/10.1177/13548565221091517>
- Hwang, GJ., Zou, D., Wu, YX. (2023). Learning by storytelling and critiquing: a peer assessment-enhanced digital storytelling approach to promoting young students’ information literacy, self-efficacy, and critical thinking awareness. *Education Tech Research Dev.* [online first] doi.10.1007/s11423-022-10184-y
- Jáuregui-Lobera I, Martínez-Gamarra M, Montes-Martínez M, Martínez-Quiñones JV. (2020). Storytelling como instrumento de comunicación en contextos de salud. *JONNPR*, 5(8):863-90. doi:10.19230/jonnpr.3488
- Krueger, R.A., Casey, M.A. (2015). *Focus Groups: A Practical Guide for Applied Research*, 5th ed.; SAGE Publications: Thousand Oaks, CA, USA.
- Lambert, J., Hessler, B. (2018). *Digital storytelling: Capturing lives, creating community* (5th ed.). Amsterdam: Routledge.
- Laranjeira C, Carvalho P, Querido A. (2021). Digital Storytelling: Art-Based Pedagogy to Improve Professional Development for Nurses. *J Contin Educ Nurs.*, 52(10), 454-456. doi: 10.3928/00220124-20210913-04.
- Li, Y., Chen, W., Liu, C., Deng, M. (2020). Nurses’ Psychological Feelings About the Application of Gibbs Reflective Cycle of Adverse Events. *American Journal of Nursing Science*, 9(2), 74-78. doi: 10.11648/j.ajns.20200902.17
- Mojtahedzadeh, R., Mohammadi, A., Hossein Emami, A., Zarei, A. (2021). How Digital Storytelling Applied in Health Profession Education: A Systematized Review. *J. Adv. Med. Educ. Prof.*, 9(2), 63–78. doi.10.30476/jamp.2021.87856.1326
- Moreau K, Eady K, Sikora L, Horsley T. (2018). Digital storytelling in health professions education: a systematic review. *BMC Medical Education*. 10;18(1):208. doi: 10.1186/s12909-018-1320-1.
- Panchenko, L. (2021). Digital storytelling in adult education: barriers and ways to overcome them. *Educational Technology Quarterly*, 2021(4):673–688. doi.10.55056/etq.41