Storality: when your story becomes my story

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Introduction

The era of universal access to Artificial Intelligence, combined with the re-oralization of the West driven by the rise of generations of digital natives, demands a rethinking of pedagogical methods and practices. In this context, storality emerges as an educational alternative that combines a return to traditions with a step towards the future.

Storality is a pedagogical method developed by the author centered on the internalization of oral narratives. The goal of the methodology is to promote deep, experiential, and holistic learning. Storality recognizes narrative cognition as the standard process of human learning. Intrinsic and natural, narrative-based thought is inherent to humanity, independent of age, formal education, and cultural background. Storality takes advantage of the centrality of orality and

narrative thinking in human cognition, using them as a methodological foundation. Here is a definition:

> Storality, a combination of the terms story and orality, is a pedagogical method centered on the internalization of oral narratives through listening, interweaving, and performing them. The objective is to promote deep, experiential, and holistic learning, designed mainly for primary oral learners and digital natives.

Storality is not just about telling stories. The use of storytelling itself as a pedagogical strategy is by no means a novelty. Storality, however, goes beyond that. The key distinction of storality compared to regular storytelling is its methodical and intentional structuring. While storytelling is a broad term that refers to the act of narrating, storality necessarily involves the internalization of narratives by the learners.

Storality goes beyond the simple incorporation of stories in the classroom. In the proposed method, students do not merely listen to an illustrative story that aids in the understanding of expository teaching; they actively engage in a structured, narrative-based methodology that guides them in the process of assimilating all the principles intentionally embedded in a story. This process culminates in the student's competence to perform the story for an audience, using their own words, and making connections, articulating the principles and concepts embedded in the narrative.

Abstractive Learning versus Narrative Learning

Here we introduce a useful distinction between narrative learning and abstractive learning. Storality is anchored in narrative learning and uses abstractive learning only as a complement when appropriate. To understand the method, it is important to grasp the distinction between narrative learning, which is intrinsic to human thought, and abstractive learning, generally acquired through formal schooling.

Abstractive learning involves concepts and information that have been deliberately abstracted or extracted from their original contextual environments. This approach is characterized by decontextualized analysis, where analytical thinking, categorization, and the manipulation of abstract symbols and theories are the focus. These skills are often developed through formal education, marking abstractive learning as a specialized and acquired mode of cognition. It contrasts sharply with narrative learning, which is prevalent in human experience and relies on the integration of information within a rich tapestry of stories and lived experiences. Abstractive learning focuses on the ability to dissect and understand concepts in isolation, prioritizing the manipulation of ideas without their narrative or contextual anchors.

Narrative learning immerses individuals in the acquisition and sharing of knowledge from stories, life events, culture, history, and traditions. This approach represents a holistic, non-linear mode of processing, integrating information into personal and community narratives, and promoting a comprehensive, interconnected perspective of the world.

Far from being an inferior form of cognition, narrative learning incorporates analytical thinking through an intuitive and implicit approach. It allows people to naturally synthesize and infer meaning from the continuous flow of narratives that define their cultural and personal realms. This inherent and widespread method highlights the human propensity to construct and understand reality in a narrative framework, emphasizing the importance of stories and experiential learning in shaping our perception of the world.

The methodology of storality is fundamentally rooted in narrative learning. By emulating real-world learning outside the classroom, it engages deep cognitive processes and supports neural plasticity.

Three Steps of Storality: Listening, Interweaving, and Performing

The internalization of stories in storality happens through three complementary steps: listening, interweaving, and performing. These steps are designed to engage students in a deep, reflective, and interactive learning process, making the content meaningful and long-lasting.

Step 1: Listening

Listening to the story is the foundational step where students are exposed to the narrative in its entirety. This step ensures that students gain a comprehensive view of the plot, characters, and main themes. The story is typically presented in audio or video format, and students listen to it multiple times to familiarize themselves with the overall narrative. Additionally, specific parts of the story are revisited several times to reinforce understanding.

Cognitive Functions and Brain Areas Engaged:

- **Auditory Processing**: Engages the auditory cortex in the temporal lobes, which is responsible for processing sounds and speech.

- **Comprehension**: Involves the Wernicke's area in the left hemisphere, which is crucial for understanding language.

- **Memory Formation**: Activates the hippocampus, essential for transferring information from short-term to long-term memory.

- **Emotional Engagement**: Involves the amygdala, which helps attach emotional significance to the story, making it more memorable.

This repetitive listening lays the groundwork for deeper cognitive processing and a more profound grasp of the story's details and nuances, promoting the formation and strengthening of neural synapses associated with these functions.

Step 2: Interweaving

Interweaving activities involve three distinct but complementary ways of engaging with the story. These activities include focusing on the whole story, its parts, and random highlights. Each activity promotes critical thinking, reflection, and a deeper understanding of the narrative, engaging different cognitive processes and areas of the brain.

Focus on the Whole: The teacher guides the students in a conversational reflection on the complete story to understand the narrative in its entirety before delving into specific details.

Cognitive Functions and Brain Areas Engaged:

- **Holistic Cognition**: Involves the medial prefrontal cortex, which integrates information into a coherent whole.

- **Global Understanding**: Engages the default mode network, which is active during reflective and introspective thought.

- **Memory Consolidation**: Strengthens neural pathways in the hippocampus and related cortical areas.

This approach helps students retain information and develop a global understanding of the content.

Focus on the Parts: The teacher guides the students in a conversational reflection on specific parts of the story. This involves dividing the story into smaller segments and exploring each one in detail. Students work in sessions addressing specific chapters or sections, analyzing each part meticulously to understand the context, details, and meaning.

Cognitive Functions and Brain Areas Engaged:

- **Analytical Thinking**: Activates the prefrontal cortex, which is involved in higher-order thinking and problem-solving.

- **Detail-Oriented Processing**: Involves the parietal lobes, which help in processing and integrating sensory information.

- **Critical Analysis**: Engages the lateral prefrontal cortex, important for dissecting and understanding complex information.

This approach stimulates analytical thinking and detailed comprehension.

Focus on the Random: The teacher guides the students in a conversational reflection on specific elements or highlights of the story unpredictably. Instead of following a linear order, instructors emphasize different aspects or events of the narrative randomly or respond to spontaneous questions about the story.

Cognitive Functions and Brain Areas Engaged:

- **Cognitive Flexibility**: Engages the anterior cingulate cortex, which is involved in switching attention and adapting to new information.

- **Creative Thinking**: Involves the right hemisphere, especially areas associated with imagination and creativity.

- **Attention and Memory**: Activates the prefrontal cortex and hippocampus, reinforcing neural pathways related to maintaining interest and recalling information.

This approach promotes cognitive flexibility and maintains students' interest by encouraging them to make connections between different parts of the narrative.

Step 3: Performing

Performing the story involves retelling it in the student's own words, using voice, intonation, gestures, and personal expressions. This step demonstrates a deep understanding and emotional connection to the content.

Cognitive Functions and Brain Areas Engaged:

- **Language Production**: Activates Broca's area in the frontal lobe, crucial for speech production and articulation.

- **Motor Skills**: Involves the motor cortex and cerebellum, which coordinate movement and fine motor skills.

- **Expressive Communication**: Engages the mirror neuron system, which helps in understanding and mimicking others' actions and emotions.

- **Emotional Expression**: Involves the amygdala and prefrontal cortex, which regulate emotional responses and social interactions.

By reinterpreting the narrative, students show real learning, which requires complete understanding, critical reflection, and personal interpretation, integrating the concepts learned in a meaningful and holistic way. Performing reinforces neural pathways and facilitates long-term retention.

The Complementary Nature of the Three Steps

The interplay between listening, interweaving, and performing is what makes sstorality effective. These processes are cognitively complementary, each enhancing the other.

- **Listening** provides the foundational knowledge and understanding, engaging auditory processing, comprehension, memory formation, and emotional

engagement.

- **Interweaving** deepens this understanding through critical reflection and analysis, engaging holistic cognition, analytical thinking, and cognitive flexibility.

- **Performing** solidifies it through expressive and interactive engagement, activating language production, motor skills, and emotional expression.

This natural and iterative cycle engages various cognitive functions and brain areas, ensuring that students continuously deepen their understanding and solidify their knowledge, leading to meaningful and long-lasting learning outcomes.

Connecting Story and Learning Concepts

During the interweaving process, the teacher uses the story as a guiding thread to integrate and connect the concepts that need to be learned, aligning them with the course's expected competencies. The goal is to make explicit the concepts implicit in the narrative, facilitating students' understanding and practical application. This method involves several specific actions:

1. **Discussion of Concepts**:

   - The teacher identifies and highlights important concepts present in the story.

   - Discusses these concepts in detail, explaining how they manifest in the narrative and how they relate to the theory and practice of the course.

2. **Presentation of Charts and Diagrams**:

   - Uses charts, diagrams, and other visual resources to illustrate the discussed concepts.

   - Shows how these visual elements connect with the story, helping students visualize and better understand abstract concepts.

3. **Incorporation of Other Examples**:

   - Introduces additional examples, both from the story and other sources, to reinforce and clarify the concepts.

- Compares and contrasts these examples with the main narrative to deepen understanding.

4. **Suggestion of Supplementary Readings**:

   - Recommends additional readings that expand on the themes and concepts covered in the story.

   - Encourages students to explore these readings for a broader and more detailed perspective on the studied topics.

5. **Practical Activities**:

   - Proposes activities and exercises that allow students to apply the learned concepts in practical contexts.

   - Allows students to teach the class using various resources, connecting the concepts with the story's content.

Conclusion

The method of storality, with its listening, interweaving, and performing techniques, offers an educational approach that goes beyond memorizing facts. It promotes deep and experiential understanding of the content. By connecting narratives to learning concepts, storality engages students holistically. This approach facilitates the retention of information and the practical application of acquired knowledge. The various activities and approaches proposed ensure significant and integrative learning. This prepares students for a broad and contextualized understanding of the world around them.

In the era of universal access to artificial intelligence and the re-oralization of the West, driven by the rise of generations of digital natives, storality presents itself as an alternative to contemporary educational challenges. This pedagogical method revitalizes the practice of storytelling. It establishes a connection between traditional and inherent forms of human learning and the current demands of society. Through the internalization and performance of narratives, storality provides a learning environment that reflects how we understand the world in our daily lives.

Additionally, storality is a democratizing practice. It levels the playing field for students from different backgrounds and can be effective in both primary oral

societies and highly digitally literate societies. By not relying on written assessments, but rather on real-time integration and participation in the classroom, storality offers an alternative to the risk of misuse of artificial intelligence by students. It promotes authentic learning, where students not only absorb information but also experience and apply it practically and meaningfully.

One of the challenges in implementing storality is the need for teachers to find or create stories that are simultaneously interesting, well-structured, and comprehensive regarding the content related to the desired competencies. For storality to be effective, narratives must engage students. They must spark their interest and curiosity, while integrally covering the concepts and principles that need to be learned. This requires significant effort from educators in terms of planning and creativity to ensure that the chosen or created stories meet these criteria and contribute to effective learning.

Storality's steps—listening, interweaving, and performing—are cognitively complementary. Listening engages auditory processing and memory formation. Interweaving enhances critical reflection and analytical thinking. Performing solidifies learning through expressive engagement. Together, these processes activate different brain areas. They ensure deep, integrative learning by engaging various cognitive functions and promoting neural synapses.

By internalizing a story, it becomes a part of the person; the narrative is appropriated. The brain processes and remembers an experienced story as if the person were actually living through the events themselves. This deep cognitive process engages multiple brain areas responsible for memory, emotion, and sensory experiences. As a result, the story becomes integrated into the student's worldview.

This process transcends the mere acquisition of facts. It transforms the individual by embedding the story into their personal and cultural framework. They do not just recall information; they embody and experience it, making the story their own. The story becomes a living part of their knowledge and identity.

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