FROM DIGITAL STORYTELLING TO AI-SUPPORTED VIRTUAL MUSEUMS

Enhancing Scientific Thinking and Digital Skills in Secondary Science Education

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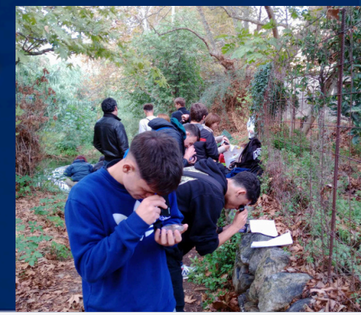

ORIGINAL MODEL

Experiment

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Digital Storytelling

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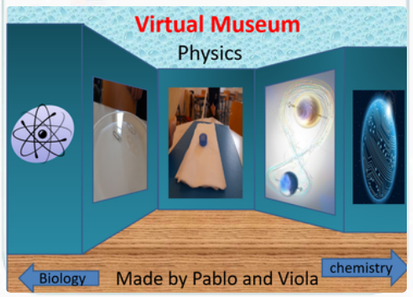
Virtual Museum



DIGITAL STORYTELLING

BACKGROUND	PROJECT DESIGN	RESULTS
Digital storytelling combines scientific inquiry, communication and digital creativity.	Phase 1 Experiments in laboratory and field	70 students
Virtual museums allow students to present scientific investigations through interactive digital environments.	Phase 2 Digital Storytelling Students create: scripts, storyboards, multimedia narratives	4 countries
Erasmus KA2+ "Connected by Knowledge"	Phase 3 Virtual Museum Digital exhibition of experiments and scientific explanations	

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Proposed AI-Enhanced Model

Experiment

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Digital Storytelling

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AI Storytelling Assistant

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AI Museum Curator

↓

AI Narrator

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Virtual Museum

CONCLUSIONS

Digital storytelling and virtual museums:

- increase student engagement,
- support deeper understanding of scientific concepts,
- promote 21st-century skills.

Artificial Intelligence can further enhance these learning environments as a cognitive and creative support tool rather than a replacement for scientific inquiry.

EXPLORE THE ERASMUS PROJECT

CONNECTED BY KNOWLEDGE

Scan the QR code to visit our project and the virtual museums!

STUDENT FEEDBACK

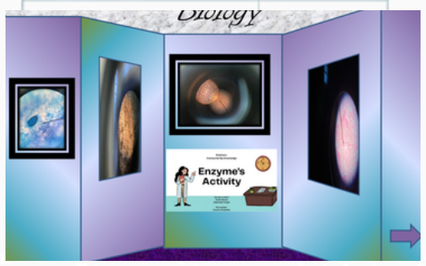
96% Improved Understanding

62.2% Highly Interesting Activity

17% Reported Difficulties

RESULTS

Indicator	Value
Students	70
Countries	4



HOW AI CAN SUPPORT LEARNING

AI Storytelling Assistant
Supports script writing and narrative structure.

AI Museum Curator
Creates exhibit descriptions adapted to students' age.

AI Narrator
Produces multilingual voice-over and accessibility options.

AI Visual Designer
Supports scientific illustrations and visual communication.

KEY MESSAGE

Artificial Intelligence can enrich:

- Scientific communication
- Creativity
- Accessibility
- Digital storytelling

while maintaining:

- ✓ scientific rigor
- ✓ evidence-based learning
- ✓ student ownership of knowledge

REFERENCES

- Korakaki et al. (2023)
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70 STUDENTS | 4 COUNTRIES | DIGITAL STORYTELLING | VIRTUAL MUSEUMS | AI-ENHANCED LEARNING