



You are kindly invited to the public defense to obtain the degree of

**DOCTOR OF EDUCATIONAL SCIENCES**  
of drs. Mary-Ann Elizabeth Isaacs Bornand

Which will take place on  
**February 18, 2026 at 2 PM CET**  
Promotiezaal – D.2.01 ([building D](#)) – [VUB Main Campus Brussels](#)  
Pleinlaan 2 – 1050 Brussel  
Or if you wish to attend online, a link will be added later.

**DIGITAL STORYTELLING AS A STRATEGY TO PREPARE  
STUDENTS FOR 21ST CENTURY LEARNING**

**JURY**

**INTERNAL:**

**Prof. Dr. Ingeborg Placklé**  
Vrije Universiteit Brussel

**Prof. Dr. Geert Vandermeersche**  
Vrije Universiteit Brussel

**EXTERNAL:**

**Prof. Dr. Natalie Pareja**  
Universiteit Van Amsterdam

**Prof. Dr. Fredrik Mørk Røkenes**  
University of Oslo

**PROMOTOR**

**Prof. Dr. Jo Tondeur**  
Vrije Universiteit Brussel

**CHAIR**

**Prof. Dr. Gustaaf Cornelis**  
Vrije Universiteit Brussel

Coming by car? Please [register your licence plate in advance](#) to have access to the campus.

You are also invited to the reception afterwards.

Please confirm your attendance before 11/02/2026 by filling out [this form](#).

## SUMMARY

Title: *Digital Storytelling as a Strategy to Prepare Students for 21st Century Learning.*

Although there is a global consensus on the importance of 21st-century skills, a persistent gap remains between educational policy and classroom practice, leaving educators without clear strategies to develop skills such as critical thinking, communication, and collaboration. This dissertation addresses this challenge by investigating digital storytelling as a promising pedagogical strategy to bridge this gap, examining the relationship between the actions in producing digital stories and the development of essential skills. The dissertation is structured across three studies. First, a systematic meta-aggregative review (Study 1) established a robust connection between digital storytelling and skills development, with critical thinking, creativity, and collaboration as the most consistently reported outcomes. Building on this, a qualitative study with pre-service teachers (Study 2) revealed how the creative process, specifically planning, problem-solving, and constructing arguments, activates different types of critical thinking skills. A broader subsequent qualitative study (Study 3) expanded this analysis to a wider range of 21st-century skills, identifying 13 distinct creative actions that directly promote these competencies.

The primary contribution of this dissertation is the Digital Storytelling Skills Ecosystem model (DiSE), an outcome of Study 3 that synthesises the research from all three studies. The DiSE Model provides educators with a practical, evidence-based framework for integrating digital storytelling into their pedagogy to intentionally and effectively foster the skills required for today's 21st-century learners, offering a tangible solution to a critical educational challenge.

References: [references\\_Isaacs\\_2025.docx](#)

## CURRICULUM VITAE

### Selected Publications

Isaacs, M. A., Tondeur, J., & Vaesen, J. (2024). Digital storytelling in teacher education: Developing pre-service teachers' critical thinking. *Australasian Journal of Educational Technology*, 40(3), 92-109.  
<https://doi.org/10.14742/ajet.9258>

Isaacs, M. A., Tondeur, J., Howard, S., Claro, M., & van Braak, J. (2024). Digital storytelling as a strategy for developing 21st-century skills: a systematic review of qualitative evidence. *Technology, Pedagogy and Education*, 33(5), 573-593.  
<https://doi.org/10.1080/1475939X.2024.2343929>

Isaacs, M. A., & Tondeur, J. (2020, Mar 02-04). Digital storytelling as a strategy to prepare students for 21st century learning: a systematic review of qualitative evidence. *INTED Proceedings 14th International Technology, Education and Development Conference*, Valencia, Spain.  
<https://doi.org/10.21125/inted.2020.1340>

For full CV, go to the link: <https://acrobat.adobe.com/id/urn:aaid:sc:EU:997dc8a2-0fa1-4fcf-8802-2e93079e1878>

### Educational Background

**2018**  
**Diploma in Curriculum Design**  
**2011-2013**  
Master in Psychology, Universidad de La Frontera, Chile.

**2008-2012**  
Psychologist, Universidad de La Frontera

### Work Experience

**10/2013 – 08/2019**  
Teachers Digital Competence Coordinator, Pontificia Universidad Católica de Chile.  
**03/2013 – 10/2013**  
Educational Projects Coordinator  
**04/2011 – 04/2013**  
Research assistant in TechEd projects