



# GAMiLearning Project

## Games for Media and Information Literacy Learning Objectives, Research Design and recent Outcomes

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### Introduction

#### Gamilearning Goals

- To explore the value and effectiveness of game-based learning activities in educational contexts;
- To identify key aspects for engagement and successful learning in game-based activities;
- To examine the relationship between gaming activities in educational settings and interdisciplinary learning;
- To understand the power of game-based activities to promote learning, knowledge and information literacy skills among children;
- To evaluate students' learning progression and educators' attitudes about the gamification of the learning environment;
- To promote Media and Information Literacy (MIL) through student critical analysis and creative production of games;
- To analyze variables in the learning environment that support best practices and challenges for the use of online gaming activities;
- To identify variables that explore the relationship between MIL learning and gaming using mixed methods approaches that contribute to the research base of the integration of gaming in learning environments.

#### Research questions

- Can we promote and develop MIL skills, such as critical understanding, awareness, creativity, participative actions, interactive practices and empowerment, by facilitating the use of game-based activities in educational contexts?
- What is the relationship between effective learning, motivation, engagement and game based activities for educational purposes?

Our central premise is that children should not only be involved in game play for learning, but that they should also be the designers and creators of games.

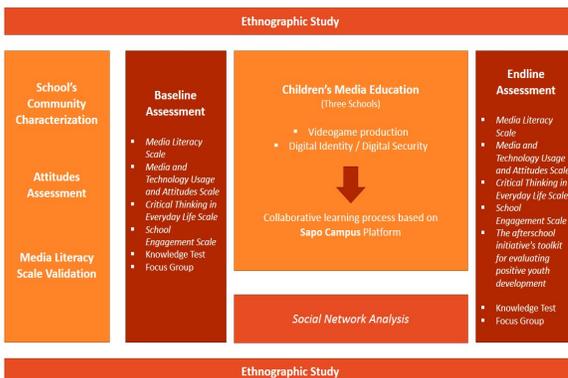
They will **create, produce, share, critique,** and **play** games for learning as they **reflect** upon the game design process.

#### Media literacy

In a digitally mediated society, media literacy is a bundle of sociocultural competencies (Livingstone et al., 2013) that include:

- operational skills (such as encryption and computing);
  - editorial skills (including reading, writing and production of multimedia);
  - organizational skills (navigating, sorting, filtering and evaluation).
- (Frau-Meigs, 2014)

### Research Design



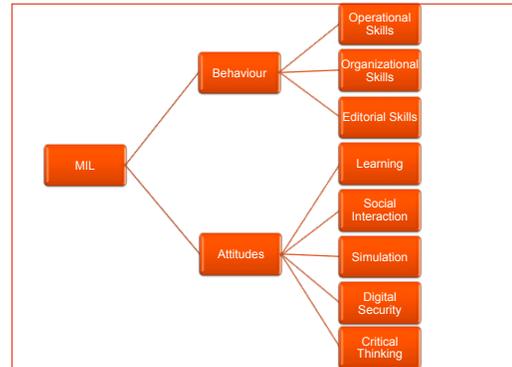
### Outcomes

#### 1. MIL SCALE

Research has denoted a **lack of tools/measures dedicated to children in this field**, especially for the study of new literacies media (NLM). Media literacy, in different contexts, can only be understood by combining imminently comprehensive qualitative methodologies, with quantitative methodologies, properly validated and verified (Líerat, 2014).

Need to create and validate a **scale for measuring media literacy**, based on the multidimensional conceptual model explained above.

The scale will be validated for the **students of the second and third cycles** of the Portuguese basic education (5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> grades).



#### 2. PLAYING DIGITAL SECURITY



In the context of a playful activity, the Caesar's Cipher, a well-known and simple encryption algorithm, is used to introduce children to concepts of privacy in a digital world. Using a handmade artifact known as the *Cipher Wheel*, children work in groups to exchange encrypted messages based on a previously shared secret, playing the role of both senders and receivers. In this encryption game, their messages are forwarded through a third group, the intruders, who try to sneak into the conversation using their own Cipher Wheels and other strategies to decode and corrupt the various possible secrets. An android app for supporting this activity has also been developed and **can be downloaded from:** <http://netlab.ulusofona.pt/im/praticas/Alphabet.apk>

#### Future Steps

- Preparation of field work and research activities for schools in Portugal and Austin
- Field work
- Results
- Dissemination activities

#### References

Frau-Meigs, D., Velez I., Flores, J. & F. Tort 2014, Media and Information Literacy Policies in Europe. Available from: <http://openjournals.cochin.it/doku.php> [10 September 2015].  
Livingstone, S., Wijnen, W. G., Papaioannou, T., Costa, C., & Grandio, M. d. (2013). Situating media literacy in the changing media ecology: critical insights from European research on audiences (pp. 210-227). In N. Carpenter, K. Schroeder & H. Hallett, *Audience Transformations: Shifting Audience Positions in Late Modernity*. Routledge.  
Líerat, I. (2014). Measuring New Media Literacies: Towards the Development of a Comprehensive Assessment Tool. *Journal Of Media Literacy Education*, 6(1), 15-27.