MEKIDS – media education with kids through interactive digital storytelling

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Objectives

MEKIDS aims to:

- Promote media education and new literacies with younger learners (8-11 years)
- Expand the available repertoire of teachers to design learning arrangements
- Design of a media education tool that combines literary engagement with creativity and play

Challenges in Media and Literacy Education for younger learners (8-11)

- Age of first smartphone ownership, changing media environments (Medienpädagogigscher Forschungsverbund Südwest [mpfs], 2021)
- Passage from "learning to read" to "reading to learn"
- From different forms of meaning making towards digital participation

The Potential of interactive digital storytelling

- Stories are interactive: choices determine the outcome, usable for various learning objectives
- The procedural nature of IDS combines a narrative mode of thought with computational thinking
- Digital stories enable the use of different modes (audio, visual, text..) and formats

Whereas forms digital storytelling have already entered classrooms, narrative technology has the potential to foster creative collaboration and reflection (Hall, 2012). In specific, research on *interactive digital narratives* (Koenitz, 2015) explores media formats where user interaction affords active participation, such as hypertext novels or text-based games.

Methods

- Educational Design Research (McKenney & Reeves, 2012)
- RQ: What are the characteristics of an interactive digital narrative learning arrangement (IDNLA) for the purpose of promoting critical reflection about media among primary school children in playful and creative ways?
- partner school: Montessori school in the province of Bolzano (Italy), groups of mixed age and language, age 6-14
- exploration phase: until summer 2021, development of design principles

Design object

Whereas an interactive digital narrative is defined as "an expressive narrative form in digital media [...] containing potential narratives and experienced through a participatory process that results in products representing instantiated narratives" (Koenitz, 2015, p. 98), an *interactive digital narrative learning arrangement* (IDNLA) integrates that participatory process in an education setting to promote informal and formal learning outcomes

Design and construction, evaluation

Spring 2021-2022, workshop cycles over the course of 5 weeks, data collection of audio and video recordings, observatory notes, qualitative content analysis of workshop interactions and the creative works of children

Figure 1: Children working collaboratively on the Fantanomio

Design principles

A creative tool for picture-elicited storytelling

- offering of story choices from predefined categories
- multiple choice selection of next story element
- story elements customizable by teacher, via a spreadsheet to be imported
- reduce cognitive load: UDL and visual support, dyslexia font
- literary interactivity (Bus et al., 2019), textual tinkerability (Chang et al., 2012)
- non-prescriptive story facilitation through questions and listening, aspects of storycrafting (Karlsson, 2013)

The Fantanomio

Figure 2: In the Fantanomio, children expand a story sequence with story ideas selected from dynamicaly generated story elements

Figure 3: New ideas in children's narrations have been used to expand the pool of available story elements to choose from

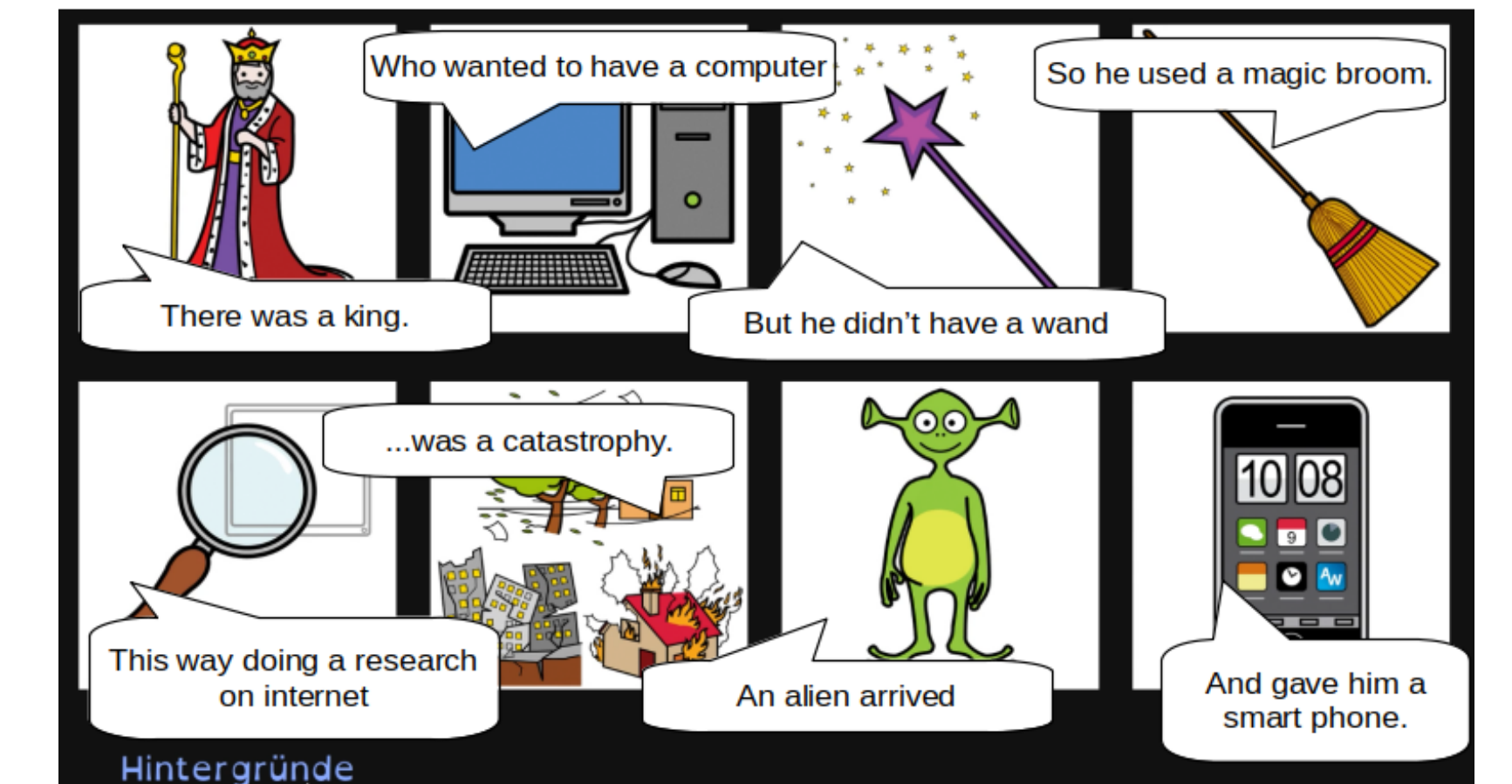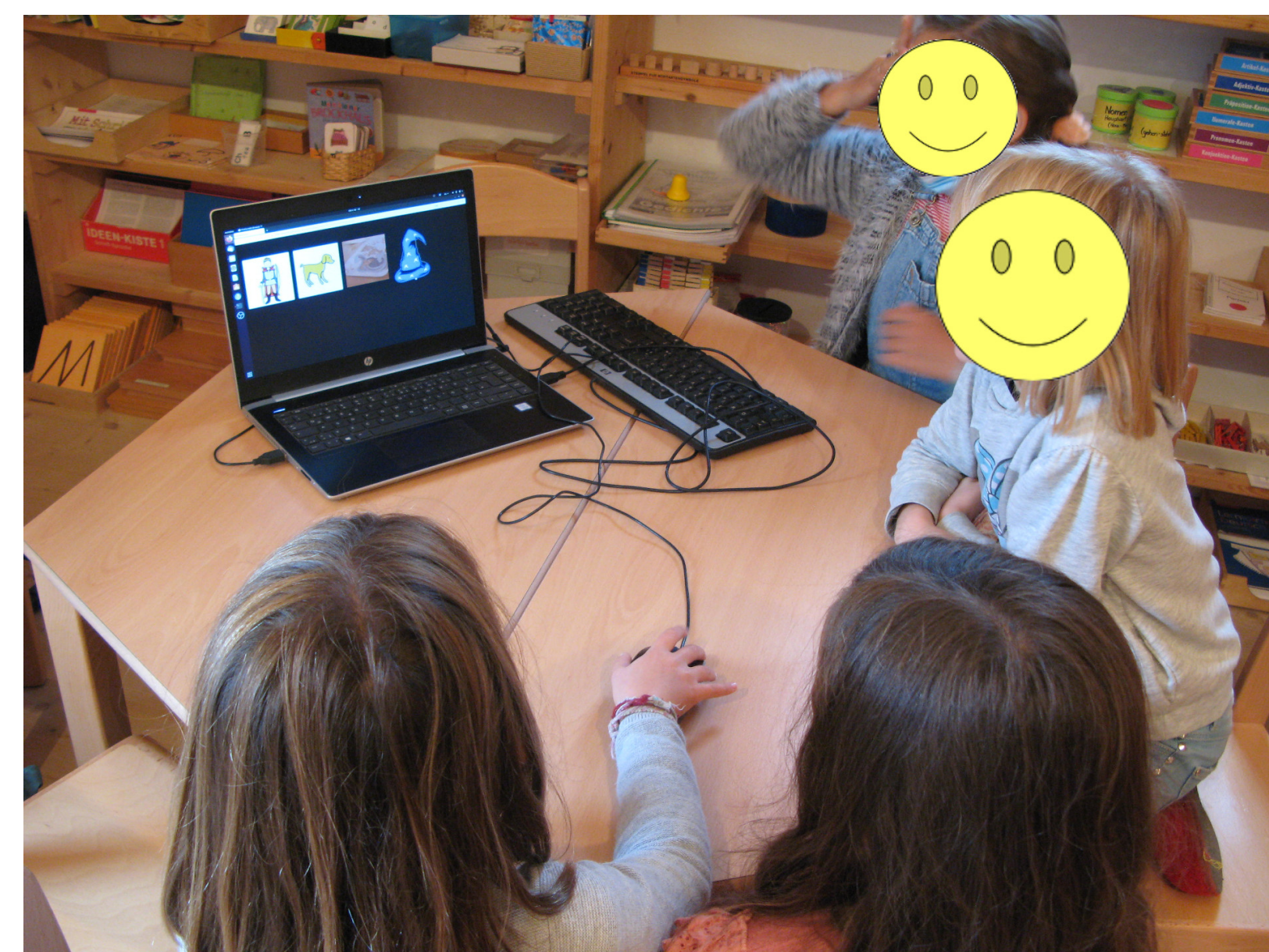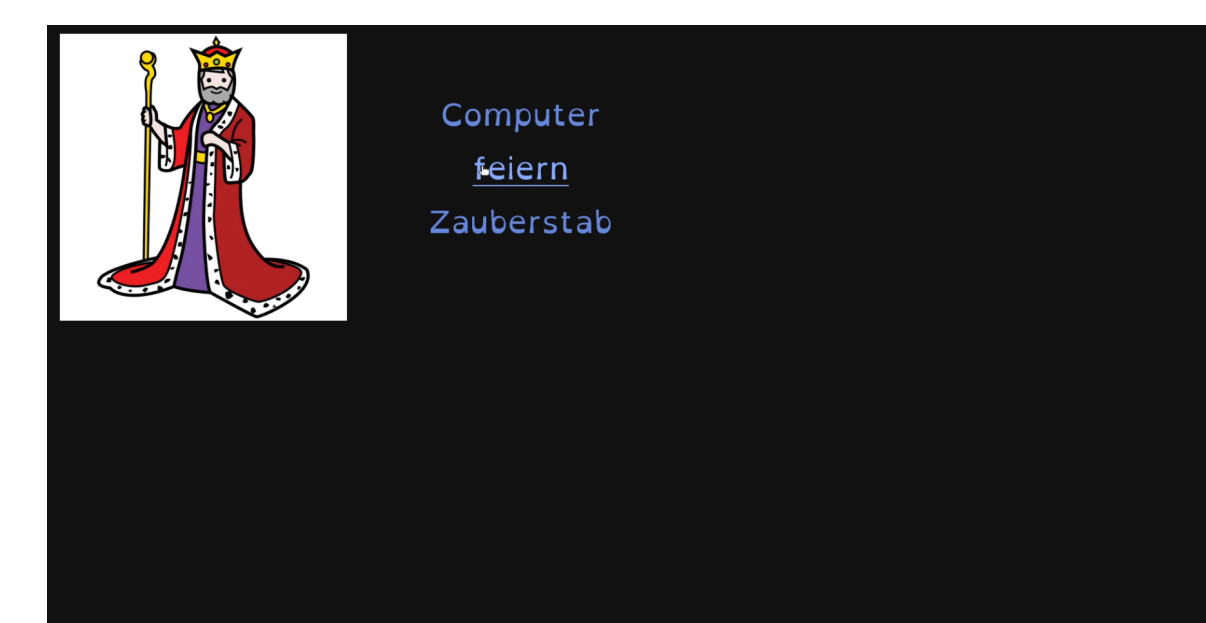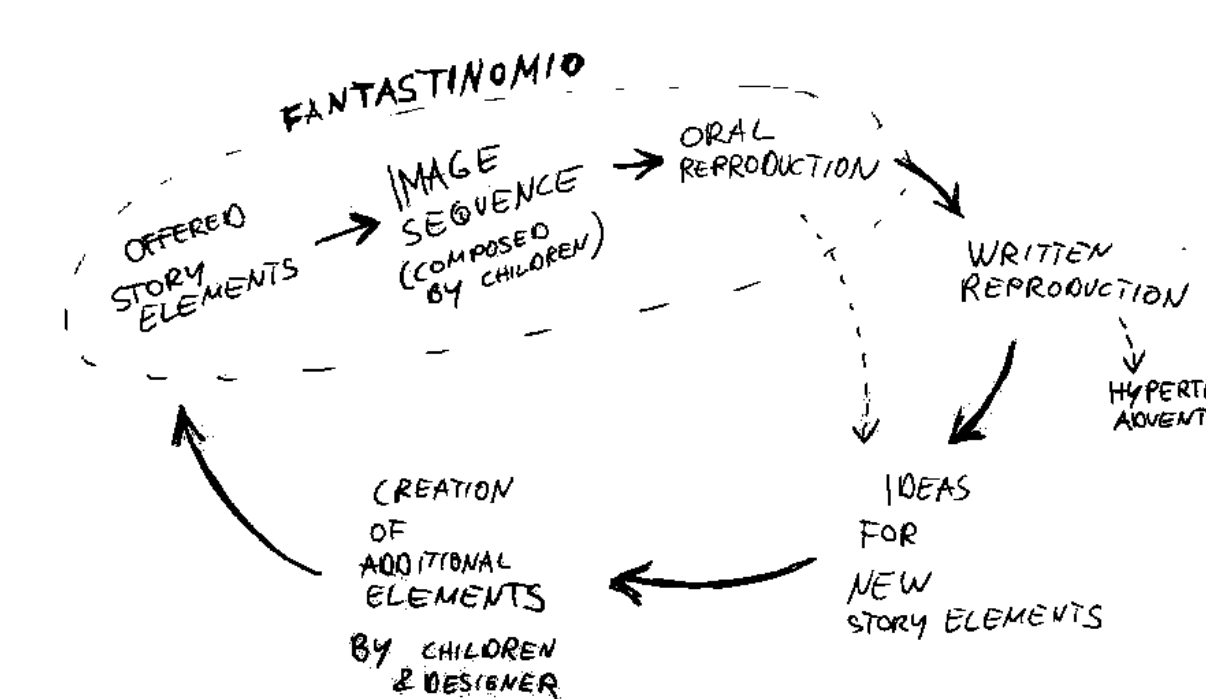## Insights into th process of mediated creative narration

Figure 4: The process of creative construction, adding details

The Fantanomio mediates a process where children switch between different representational modes (for example: text -> image -> oral reproduction -> written form). By doing so, children create their own additions and interpretations, enriching a narrative, while relating to predefined elements.

Additional Information

- coding platform used: Twine twinery.org

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