IS1404 E-READ: Evolution of Reading in the Age of Digitization

Position paper

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WG(s): WG1 Continuing/skilled (PISA-age) reading,
WG2 Developmental aspects of reading

1. **Potential research contribution** in light of, or linked to

A. WG interest and Scientific programme:

I am generally interested in the cognitive foundations of reading and reading disability in order to inform educational science. In particular, I would like to investigate children's reading activities and print exposure in the internet using eye-tracking methods, differences between their reading behavior in digital and printed environments, and the use of online, serious-gaming applications in order to remedy poor reading skills.

B. Action objectives:

Generally, I would like to engage in long-term international and interdisciplinary research between different scientific disciplines investigating reading processes using innovative measures such as online processing, verbal protocols, and linguistic corpus data that complement each other. In the long term, this kind of research will inform educational practitioners and policy makers and provide evidence-based recommendations for reading instruction, optimal text design in educational settings, and the use of digital media in for education and remediation.

2. Interest in

A. organizing and/or participating in a **short-term scientific mission (STSM).**

I would be interested in participating in a short-term scientific mission investigating the following questions:

1. What is the relation between digital vs. non-digital reading in everyday settings? How much do children actually read on paper and on digital devices? This could be investigated by examining children's and adults' reading behavior using mobile eye-tracking glasses.

2. Do texts in digital vs non-digital settings differ in their linguistic properties? This question pertains to structural properties (length, difficulty, coherence) but also to their content (topics, narrativity etc.). This question can be examined, e.g., by comparing texts from popular

websites or text messaging with more traditional forms of written communication (children's books, letters, etc.).

3. Does children's reading behavior and cognitive processing differ between digital and non-digital texts? Are they reading more shallowly? Are they more easily distracted by advertisement etc.? To investigate this, eye-tracking methods (potentially, in combination with other online measures such as heart rate etc.) can be used in order to observe children's moment-to-moment fluctuations during the reading process itself.

I don't know all members of the COST Action yet, but I could imagine cooperating on these questions, among others, with Arthur Jacobs (Free University Berlin), Johanna Kaakinen (University of Turku), Jukka Hyönä (University of Turku) and Sebastian Wallot (University of Copenhagen).

B. organizing and/or participating in a **Training School**:.

I could contribute to a Training School based on my expertise with eye-tracking methods (investigating, specifically, with developmental samples).