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## Reflective Information Literacy Education with Search Story Plots

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### **Explain how your proposal relates to the teaching or learning of information literacy.**

*This proposal illustrates an innovative approach to IL and online search education and is a follow-up to our presentation at GACOIL 2022. Last year we illustrated the data collection and analysis of the LOIS project, in which we developed techniques to visualize search stories (i.e., time-coded URLs of task-based online searches). In this presentation we will show how visual search stories have been used in secondary education classes to promote reflective IL education to enhance metacognition and self-regulation.*

### **Abstract**

Searching for information in today's everyday life mostly happens online and serious IL education cannot underestimate the understanding of online search practices. One challenge of IL education is that, while the products of an online search are visible (e.g., a report, a presentation), the search process remains often confined to individual screens and it is often invisible to the eyes of the teacher. This prevents teachers to capture "teachable moments", and also makes learning from peers difficult, as search behaviors cannot be directly compared. In some cases, the development of self-awareness and self-regulations are hindered.

In a research project investigating online search behaviors, we developed techniques to capture and analyze "search stories", i.e., the navigation actions of a user solving an online search task. In order to allow the human inspection of search stories, we also developed scripts to generate both graphic and interactive visual plots.

In this contribution we illustrate how these techniques can be applied to online search education, so that the visual plots search stories can be used in class to promote online search and IL education activities, and in particular to help students develop awareness and self-regulation skills.

The presentation will first illustrate how search stories are visualized, and then describe some short learning units in which secondary school students (age 12-18) read, compare, analyze and reflect on their own visualized search stories. The evaluation data collected from over 500 students in over 25 sessions will be presented and discussed.

### **Presentation description (for the program)**

While the products of an online search are visible, the search process is often invisible to the teacher and cannot be share with peers. In a research project we developed techniques for capturing and visualizing "search stories", and we then used them to enhance online search education, promoting metacognition and self-regulatory search skills. Experiences and data from secondary education classes (age 12-18) will be reported.

### **Keywords**

Visual, self-regulation, online search, secondary education