

Exploring students' reading comprehension in a digital environment

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INTRODUCTION

Coiro & Dobler (2007) report on reading comprehension in the digital environment that

- traditional cognitive strategies can be applied,
- in the context of new literacy and cognitive flexibility, upgraded skills and strategies are required.

Nikolakopoulos & Paraskeva (2014) are based on research on the type of reading behaviour in the digital environment.

- Liu makes conclusions about the time, actions and quality of reading online (2005, cited in Nikolakopoulos & Paraskeva, 2014).
- Leu et al. (cited in Nikolakopoulos & Paraskeva, 2014) report that students did not locate information online and did not make use of it, points on which Coiro & Dobler's research with adolescents (2007) differs.
- Afflerbach & Cho's talk about unique strategies in the new environment (2009, cited in Nicolakopoulos & Paraskeva, 2014).

RESEARCH QUESTIONS

The foreign research examines the characteristics of adolescents' online reading and asks two questions:

- what characterizes the process of searching and locating information?
- what informs their choices when reading information?

Greek research focuses on reading strategies on an electronic device and asks the questions :

- which cognitive and metacognitive strategies are recruited in electronic text?
- which ones are used in the book and which ones are discarded in the digital environment?
- which new ones are developed in the new environment?

METHODOLOGY

In Coiro's & Dobler's survey:

Participants: 11 6th grade students, proficient readers. Tools: Oral protocols, interviews, field observations.

Procedure: assignment of 2 tasks, reading on multilevel websites or using a search engine, use of "thinking aloud" protocols, interview with questions after each task.

In Nikolakopoulos & Paraskeva survey:

Participants: 15 upper secondary school students, 15-17 years old. Tools: closed interviews, focus groups, questionnaires, researcher's observations.

Procedure: presentation of e-Reader device & familiarization of students, reading text in groups of 5 from the book and from the electronic device, conducting the interviews and group sessions.

RESULT

The comprehension strategies that appear in both contexts and in both articles are :

- cognitive : prior knowledge, inference and metacognitive : observation, self-regulation.

In addition, the foreign language article analyses the complexities of these strategies.

The Greek article also mentions the strategies

- of contextual speculation, the search for a central idea, self-questioning. On the whole, their usage rates are higher in the book.

Those that are rejected in the digital environment are :

- the use of notes and dictionary, underlining, summarizing, repetition.

The new strategies are reading aloud, font customization, keyword search.

EDUCATIONAL IMPLICATIONS

The use of e-Readers is suggested:

- from the learner to the development of skills and strategies
- by the teacher as a teaching tool (Nikolakopoulos & Paraskeva, 2014)

Coiro & Dobler (2007) consider that student success is linked to the use of the digital environment.

BIBLIOGRAPHY

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CONCLUSIONS

The two articles conclude the following:

- Use of traditional reading comprehension strategies in the two contexts,
- developing new ones by having students exploit the potential of the new environment.

Also, the foreign-language article discusses the complexities of the strategies when reading in the digital environment:

- of prior knowledge,
- inferential reasoning,
- self-regulation.