Yarner: Study of Technologies Inside Classrooms Focusing on Literacy with the Development of a Digital Web and Mobile Application

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Technologies have been transforming society in many areas. However, in most Brazilian schools, there is a limited utilization of these technologies inside classrooms. Also most children, in Brazil, are not interested in reading. This research consists in a study to understand the use of digital tools inside classrooms, focusing on literacy practices and initial readers' formation. Five main agents were investigated, internal and external to school (parents, teachers, technological education companies, school administration and students – from 7 to 11 years), in order to understand the difficulties to create an efficient digital pedagogical tool and to develop it. The students were followed in their school activities with and without electronic devices and interviews were conducted with the mentioned agents. Based on the collected data, to study how the technologies can impact students reading and writing habits and the teaching process, a learning object for active learning and interdisciplinary purpose named Yarner was developed. The application consists in a web and mobile application (based on HTML5 Canvas), that allows writing, reading and sharing interactive e-books. Children evidenced great interest for the tool, that has showed its efficiency for assisting literacy practices and digital inclusion (89.4% approval with the students). The approval of the schools, parents and teachers was also high. Students´ perception of reading and writing changed, as they saw how fun these activities could be. There are many barriers to use technologies in schools: the creation of a pedagogically viable product, lack of infrastructure in schools, high bureaucracy in the education system as a whole and the need to change the approaches of teachers when using digital practices.

Awards Won:

Fourth Award of $500

Oracle Academy: Award of $5,000 for outstanding project in the systems software category.