

# LEARNING SCENARIOS WITH THE USE OF DIGITAL TECHNOLOGIES: a meta-analysis from the public high schools of the city Recife-Brazil

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## INTRODUCTION

Digital technologies have increasingly become present in the various social segments. School institutions are facing a massive influx of these devices, either through public digital inclusion policies or through student ownership. In the last years, governments and social institutions have invested heavily in the implementation of digital technologies in public schools.

This new demand requires the reorganization of classroom dynamics, aiming at the creation of learning scenarios that guarantee the innovative use of these artifacts. In this way, teachers have made efforts to use technological devices in their practices.

## RESEARCH QUESTIONS

How the use of new technologies in the classroom has become a factor in changing the teaching and learning process?

Is the use of technological devices in the context of education a new form of knowledge production or only the reproduction of traditional patterns?

## THEORETICAL BACKGROUND

- Post-massive technologies work from telematic networks, "freeing" the pole of the issue and allowing everyone to produce information. (Lemos, 2010);
- Students normally produce and share various media materials in their day to day use of their devices. They spend hours searching for activities outside the educational context, while being invited to use the technologies within the school in a different way than they usually do (Buckingham, 2007).
- It isn't the simple use of technologies that promotes or determines the type of interaction, especially the form of pedagogical mediation (Moran, 2013) that the teacher chooses when deciding the use of a certain technology.

## GENERAL GOAL

To know how the learning scenarios have been developed with the use of digital technologies, in the context of state public schools and High School in Recife.

## METHODS OF STUDIES AND ANALYSIS

Mar. –Oct. 2015

Mar. –Oct. 2016

Feb. – Apr. 2017

### METHOD

**Meta-analysis** (RODRIGUES; ZIEGELMANN, 2010) from **two studies** that focused on the use of technologies in learning scenarios.

### PUBLIC AND RESEARCH FIELD

Junior and senior year high school students of three public state schools, in Recife-Brazil.

### 1st STUDY

**15 semi-structured interviews and 243 semi-open questionnaires.**

**GOAL:** the students opinion about how teachers use technological devices in the classroom.

### 2nd STUDY

**Observation of several learning scenarios using digital technologies and systematic records in the field diary about the context and elements present in the observed classes.**

**GOAL:** To know how teachers use different kinds of technology.

### ANALYSIS

A review of the studies included:  
 -Analysis of the goals, theoretical framework and used methods;  
 -Comparison between the research and field participants ;  
 -Construction of a framework to analyze categories.

## RESULTS

<b>Exhibition</b>	Slides exhibition
	Audio-visual reproduction
<b>Socialization</b>	Promotion of debates
	Communication
	Material change
<b>Exploration</b>	Use of social networks
	Materials research
	Reading
<b>Autonomous learning</b>	Web browsing
	Testing application
<b>Authorship</b>	Gaming
	Content creation

Frame 1: Categorization of the common ways of using technologies

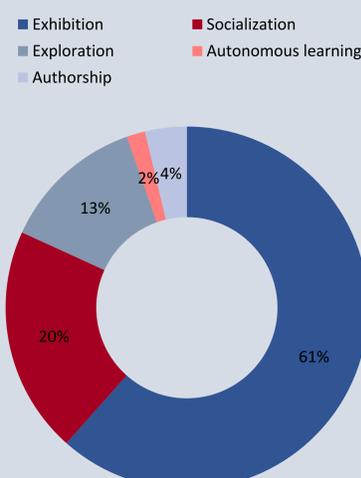


Figure 1: Frequency of use of technologies by categories

## CONSIDERATIONS

The results point out that the use of digital technologies in the classroom is still strongly configured in content playback and exposition practices

They are traditional uses that are based on pedagogical practices and archaic and rooted educational paradigms. However, it is possible to visualize these practices. They share and manage with the activities of co-creation, interaction and mutual learning, capable of producing a non-directive and autonomous knowledge. We believe that teacher training investments are still needed so that can be consolidated the use of digital technologies in innovative practices.

On the other hand, while digital inclusion politics are only the acquisition of machines for the students without an investment in the training teacher, the using of technology will be just reproductive forms of teaching.

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