Mobile Learning in scenarios of Flipped Learning and Gamification: a training teachers experience

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colored pencils
paint markers
green and red pen
Smartphone
Context

Students regularly use mobile devices to communicate (read and write) anywhere and anytime out of school (Wexler, 2008)
Context

Pedagogy and the learning context of literacy and numeracy do not reflect sociocultural and technological changes: remain the traditional pedagogies and 'classical'
Problem

The reading skills of primary education students remain a critical area (DGE-IAVE, 2016).
Research Question

How to transform reading pedagogy in primary education through the use of mobile devices?

General Objective
Specific Objectives

a) To promote the construction of professional knowledge on the pedagogical use of mobile devices

b) To promote the construction of professional knowledge about the pedagogy of reading supported by mobile devices

c) To promote the design and implementation of pedagogical practices of reading teaching supported by the use of mobile devices

d) To evaluate the pedagogical practices of the teaching of the reading supported by the use of mobile devices
Research Project Design

How can teachers’ learn?
Research Project Design

2 Teacher Training Modules:

- Module I (Learning with mobile devices - mobile learning in scenarios of flipped learning and gamification) - 50h

- Module II (For the transformation of the pedagogy of reading through mobile learning and gamification) - 50h

- Participatory intervention and monitoring of the pedagogical practices of two 3rd grade teachers
Training Programme Objectives (i)

• (Re) thinking the learning space
• (Re) define rules of physical and pedagogical use
• Develop pedagogical projects
• Implement active methodologies
• Design activities and learning scenarios
• Implement new pedagogical strategies of learning
• Monitoring the implementation of pedagogical strategies
• Track project development
• Use tablets / mobile devices in educational context
• Design learning resources
Training Programe

450 teachers involved in the 1st training programe on pedagogical innovation scenarios

Until July 2017

Each of the 450 teachers worked with one class (about 10 000 students)

1 class of 3rd grade of Primary School (School A)
1 class of 3rd grade of Primary School (School B)
Data Analysis

- Initial survey - on the previous experience of teachers with mobile devices

- Mid-term evaluation survey - Opinion about the training program

- Final survey - to gather the opinions / perceptions of the teachers about the training program

- Focus Group - To gather the opinions of the participants on the training process carried out on the transformation of the pedagogy through mobile devices

- Weekly Teachers reflections and research diary
Data Analysis

(in teacher’s perspectives)

Which factors condition teachers’ engagement in professional learning about new pedagogical approaches in the era of mobile learning?

The analysis of data suggest four major critical factors in teachers' learning as seen by themselves:
Construction of pedagogy

"No student is left out because everyone is doing different activities" (P8)
"With evaluation tests to do, it is not easy to change my practice" (P12)

Curricular flexibility

"I can not always be there for the students to play and play games" (P13)
"Flexibilization of the curricular matrix through the application of small class projects" (P18)

Learning Space

"Mobility and portability of equipment is not in line with the physical spaces existing in schools" (P3)
"We can do activities anywhere, inside the room, in the corridors, in the playground, go to the city" (P9)

Assessment

instead of evaluating I realized that it is more important to gauge learning and these models make it easier (P7)
Technical scaffolding availability

"If the training did not have this accompaniment, I would not be able to do it alone" (P16)

Collegiality

"I've tried to do some of the resources with colleagues and it's been easier" (P8)

Technical aspects

"Without internet I can not apply to my class" (P7)

Experience of gamification

"The gamification is very interesting and it takes us to be very committed in the activities, so easy and never knew of this" (P9)

Practicability of learning

"Being in the student role in training and then performing in the class has been an interesting model" (P12)
Institutional commitment

"The headmaster must know these matters" (P18)
"The internal regulation needs to be changed because I do not think it allows the use of these equipment" (P13)
"The headmaster enrolled me in this training, and still good" (P7)

Parents’ support

"Most parents have sent tablets to school, it has been a good support" (P18)
"Parents can be a problem when they start working like this" (P6)
Teacher Attitudes

Teacher Resistant Profile

Contents

Process

Context of professional learning

Teacher Transformer Profile

Contents

Process

Context of professional learning
 Especially concerning flipped learning and gamification, as can be inferred from what they say about how it helped they newly envisage pedagogical time, space and assessment.
Especially concerning collegiality, technical scaffolding and availability, experience of gamification in learning and practicability of learning tasks in their own classrooms.
Especially concerning the institutional commitment as well as parents’ support regarding the intended pedagogical transformation
Conclusions

If these 4 factors (plus 11 dimensions) are met, then teachers can learn / professional development

Based on this scheme we designed the second training program about the reading pedagogy
Conclusions

1.º National Meeting about Pedagogical Innovation SUPERTABi

700 teachers
Conclusions

2017

2.º National Meeting about Pedagogical Innovation SUPERTABi

700 teachers