

# Space design and language teaching in formal learning environments

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# Outline

- Presentation of the project « new learning space »
- Research question
- Developing formal learning environments – a step back?
- space desing as secondary innovation
- Institutional framework
  - The design process in university management /policy
- Language learning issues

## Some observations:

“A large issue pertaining specifically to SLA is the significant change in the environments in which language is learned today” (Heift, T. & Chapelle, C.A. (2012:565).



the physical environment, classroom layout, furniture and technology (video projector) > teacher centred, transmissive pedagogy

Teacher training in France - primary and secondary school teachers - master level in one of biggest teacher training centres in France:

See photo next page

Negative influence of the environment on new teachers future teaching practices



In order to generalize new teaching practices in primary and secondary schools

> future teachers need new learning experience

**Techopedagogical  
support**

**Educational  
ESCAPE GAME**

**Educational  
serious games**

# CoCooN SPACE

**DESIGN AND COOPERATION  
USING DIGITAL TECHNOLOGIES**  
(CONCEPTION ET COOPÉRATION AUTOUR DU NUMÉRIQUE)

## EXAN AMI 2016

**eXperimental Learning Space  
and Innovative Practices**

**DGESIP - A MiPNES**



- Design - user-friendly, modular, reconfigurable space (Refurbishing / new furniture / white-board walls / colours, etc.)
- Educational experiments and creation of resources > emergence of a wide variety of educational approaches > Website
- **Research:** exploratory phase
- **Networks :** Learning labs

## **RESEACH PROGRAMMES**

**AAP ESPE 2017  
AAP ESPE 2018  
FEDER 2**

## **LEARNING LAB FEDER 1**



- **Technological equipment**
- - Giant touch screen
- - Smartboards
- - Interactive video projector
- - Multi-user table
- - Educational robots
- - 3D scanner printer
- - Computer

# New learning space: Objectives

a happy, connected, friendly social learning environment, rich in resources that stimulates creativity, a space for experimentation and production to rethink pedagogical, social and cultural aspects and transform current practices.

Teachers and students will develop new interdisciplinary, collaborative and creative practices

In addition to the design of the space, the project aims at the production of digital AND tangible resources.

It also targets the production of teaching materials and transferable models. CoCooN is a place of co-construction and co-production of resources, skills and knowledge based on the interaction between the pedagogical and technical expertise of the actors in cooperation with researchers in the educational field.

Desired outcomes: the development of creativity, critical thinking, aptitude for collaboration



Link to youtube CoCooN: <https://goo.gl/n1nsvC>

Link to youtube: Spanish – Digital culture: <https://goo.gl/7eKyE2>

CoCooN is a NLS NOT dedicated to language learning, it is used by all disciplines > interdisciplinary projects are encouraged

Is is not an open space > formal teaching – lessons last 2, 3 or 4 hours









# Characteristics of CoCooN

The NLS is a space that can be easily transformed, modulated and reconfigured according to educational needs and objectives:

- problem solving
- project construction
- case study
- Telecollaboration, etc.

Well-being of the users, it was necessary to make the place convivial and aesthetic.

Choices have been made regarding:

- Furniture,
- colours
- painting
- Equipment, boards etc.

In such a space, the teachers can test various modes of functioning and organize the work according to the needs of the students:

- in groups, in pairs, alone
- Place for movement: interaction between groups : new group dynamics
- videoconferencing and/or teleworking with external partners

# Research question:

Is there a correlation between the implementation of new learning spaces and the transformation of language teaching practices? What is the role of space in the dynamics of creating new teaching/learning habits in an institutional framework?

Learning space : not only physical settings where standardised activities take place, but an environment for people who desire to learn: human factor is essential to learning space design.

# Methodology:

Critical ethnography (Vaughan, 2011): study and systematic recording of teaching learning cultures + Linking subject's meaning to general structural elements

Present research (exploratory stage) is part of a longitudinal study aiming to analyse the sustainability of the innovation implemented at ESPE

## Techniques

interviews, **Observations**, Questionnaire

## **Classes observed: master 1st year, primary school teachers**

English class: gamification: picture dictation

Spanish class: writing a story

Spanish class: peer teaching of dancing the flamenco

Opening Day in June 2018, effective use to NLS: from the end of February 2018 till beginning of April





## Picture dictation

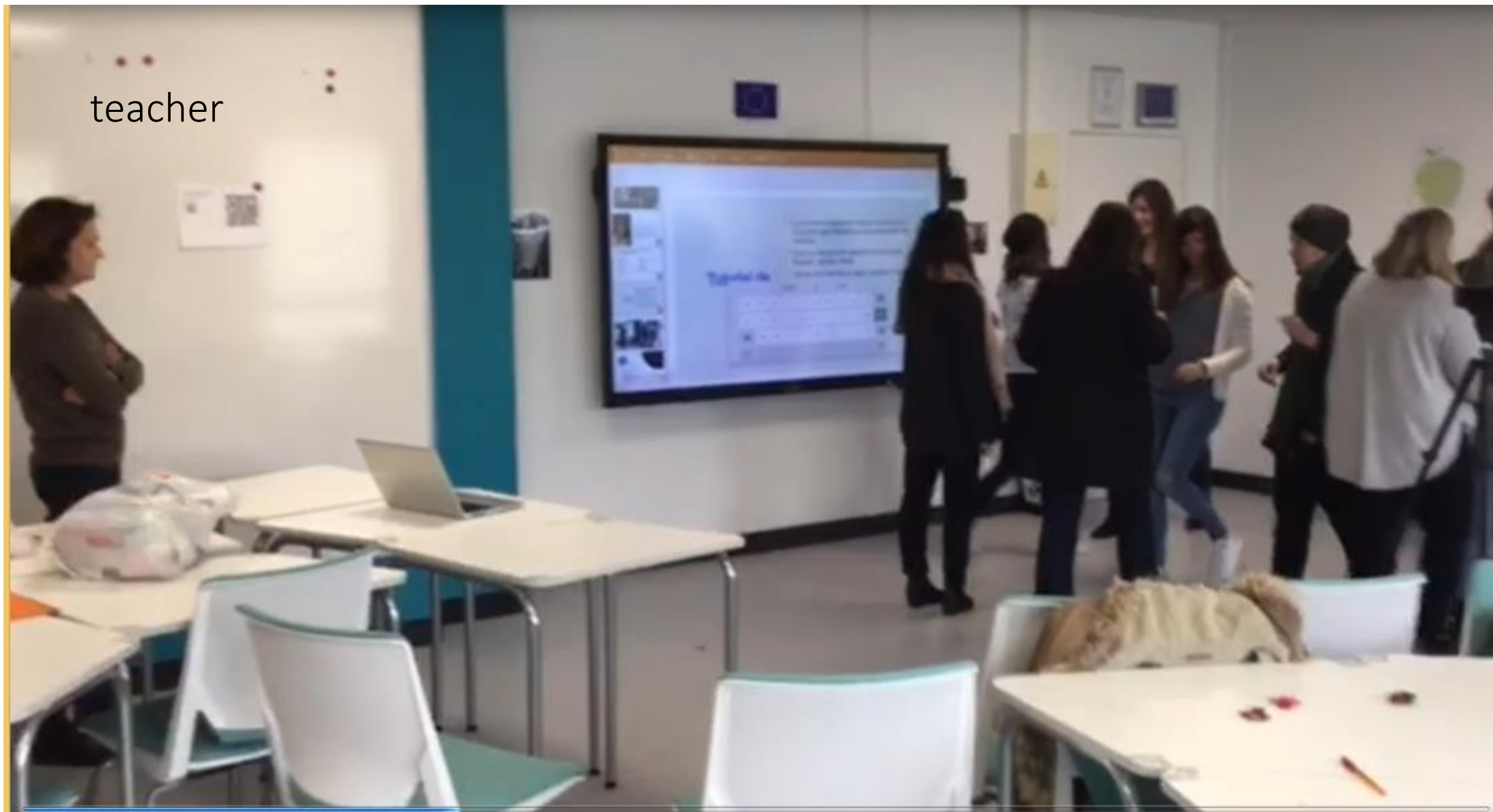




Writing a fairy  
tale



teacher



Flamenco  
Peer  
teaching

## Learning principals

based on constructivist paradigm :

- Active learning
- Social interaction
- Social engagement
- Creativity

## Digital technologies

move from access to information and digital ressources (90s) to digital transformation of education: pervasive DT is integrated into the teaching / learning process

# Back to formal learning? swimming against the tide?

Current trends :

Today's main concern in educational field:

Fusion of formal and Informal Learning Environments, blending student formal and informal learning > need to rethink learning spaces in the digital area

Aim to personalize the learning process throughout a wide range of contexts, environments, spaces > fusion of educational spaces

Socio-critical approaches (Collin, 2017) emphasise the importance of studying digital educational practices in school and out-of-school settings in relation to students' non-educational practices

## Answers:

### 1. Contextually grounded approach (Carless, 2011)

« approach grounded and derived from the interplay between existing indigenized practices and those found in [...] literature

- Basis in existing believes of teachers and learners grounded in particular sociocultural settings
- The staring point is the existing teaching and learning practices
- Realistic and pragmatic view

### 2. Top 6 Digital Transformation Trends In Education

<https://www.forbes.com/sites/danielnewman/2017/07/18/top-6-digital-transformation-trends-in-education/#6600154d2a9a>



moving away from BYOD> several grants and donations have outfitted classrooms all over the country with iPads and laptops for each student

21<sup>st</sup> century classrooms are SMARTboards instead of chalkboards and pods of SMARTdesks instead of individual seating. Students are going on virtual field trips instead of merely reading from a text; they are creating media instead of just looking at it. The redesigned learning space is laden with integrated technology,

# Innovation

Transforming learning environments > bringing about educational improvement > i.e. innovation in language education

CARLESS (2013) distinguishes

- Primary innovations: new pedagogic approaches [TBT], alternative assessment methods [portfolio] etc.
- Secondary innovations: organizational changes which provide enabling support for the primary innovation

*“One of the reasons for lack of success in implementing change is failure to promote secondary innovations.”*

## Carless (2013): facilitating factors for the succes of educational innovation

- The innovation is not overly ambitious and has support from sufficient relevant secondary innovations.
- It has appropriate time frames and seeks to facilitate early, small-scale success which generates momentum and positive sentiments.
- Teachers are brought on board at an early stage, and feel belonging and ownership that is of more than a token nature. These teachers may act as brokers, “champions,” or opinion leaders.
- Effective institutional-based professional development and support are built into the project.
- The innovation is contextually and culturally appropriate, and does not promote values which are incongruent with those of implementers.
- Problem-solving strategies are built into the project and there are change-management strategies to tackle challenges arising.



## Institutional framework

According to Temple (2007)

**school:** design of new learning spaces continuing preoccupation (Montessori)



**higher education management:** doesn't think about space design to meet teaching and learning needs but in terms of "place making" and rational "technologically pure architecture",

Temple (2007,7)

"No rigorous evaluations have been found of the improved learning said to result from facilities of these types".

The design process should be considered as part of the institution's overall management of teaching and learning not a separate technical matter

Design considerations Temple (2007)

group size – variably-sized spaces for individual and group work

- structural aspects – flexibility of layout; durability of surfaces; access to services
- functional spaces – special requirements of classrooms, laboratories, studios, project spaces
- adjacencies – connections to other people and spaces, internally and externally; access to storage
- psychological and physiological aspects – spaces providing a sense of belonging; private spaces; natural light, heating and cooling
- furnishings – versatile furnishings; variable lighting; display areas.

As one part of this improved understanding, campus and university building design needs to give more consideration to the social underpinnings of learning.

## Inequality

According to Collin (2017) young people's relationship to the digital world is not only heterogeneous but unequal. An important way to fight against inequality is to train teachers specifically dedicated to digital learning. He thinks leaving digital integration to the discretion of subject teachers is hazardous.



NLS equipped with digital tools where teachers of all disciplines are trained to use them is a better alternative as subjects teachers' understanding of pedagogical aims is paramount

## Institutional level

the evolution of NLC represents, even modestly, a change in the relationship between institutions and educational technologies and managerial logic gives place to pedagogical considerations.

institutional recognition of the value of new cross-cutting approaches to literacies induced by digital literacy

## Conclusion

Space is design is a sign of important institutional changes

Space design influences teaching practices significantly

- Language teaching /learning is changing as a result of pervasive use of technology > new teaching competences required for our teachers and for future teachers (trainee teachers)
- NLS promotes the development of digital competences of teachers as an integral part of the learning process
- NSL promotes interdisciplinary teaching / learning
- Increases considerably student engagement

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