

# An innovative training scenario bringing together professional writing and online tutoring

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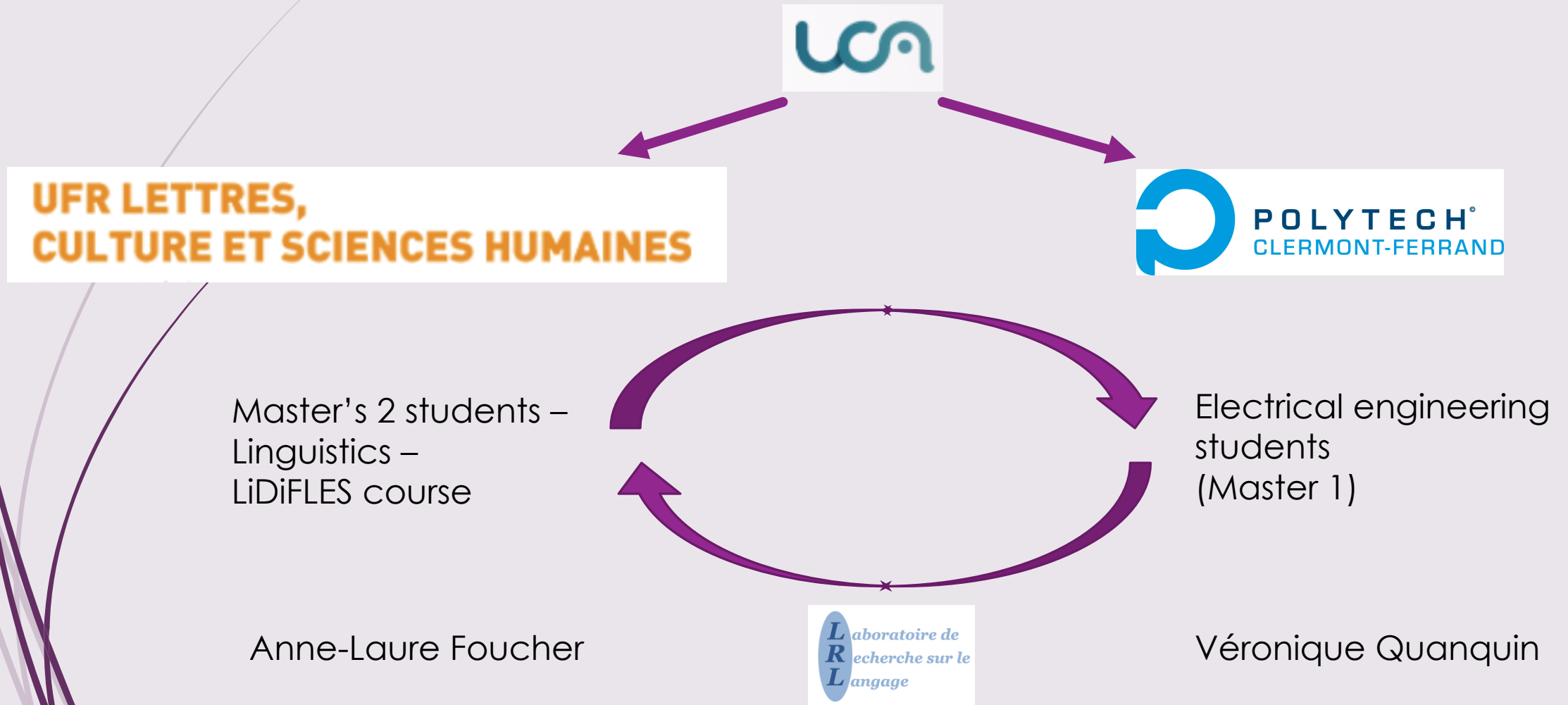


Round table : Collaborative writing and commentary in digital environments : an e-learning perspective

7/12/2017

Universität Duisburg – Essen (D)

# Context



# Summary

**1 – Pedagogical system**

**2 – Action-research : theoretical references and hypothesis**

**3 – Data, results and prospects**

# Learners and purposes

Master's 2  
students

Digital teaching  
Writing didactics  
Reflective attitude

Online tutoring to  
review the articles

Electrical  
engineering  
students (Master's 1)

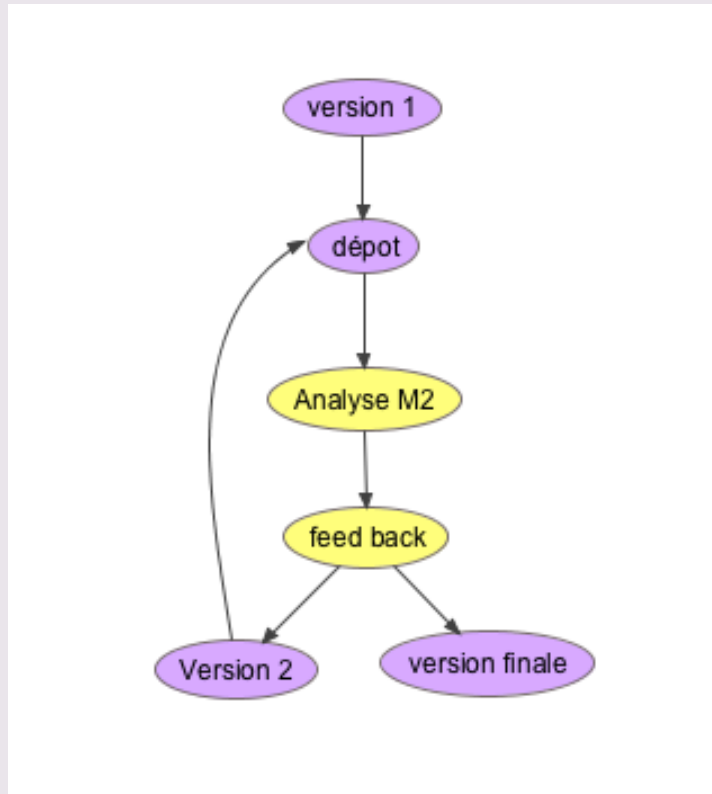
Improve writing skills  
Be aware of writing process

Write a popularizing science  
article

# General characteristics

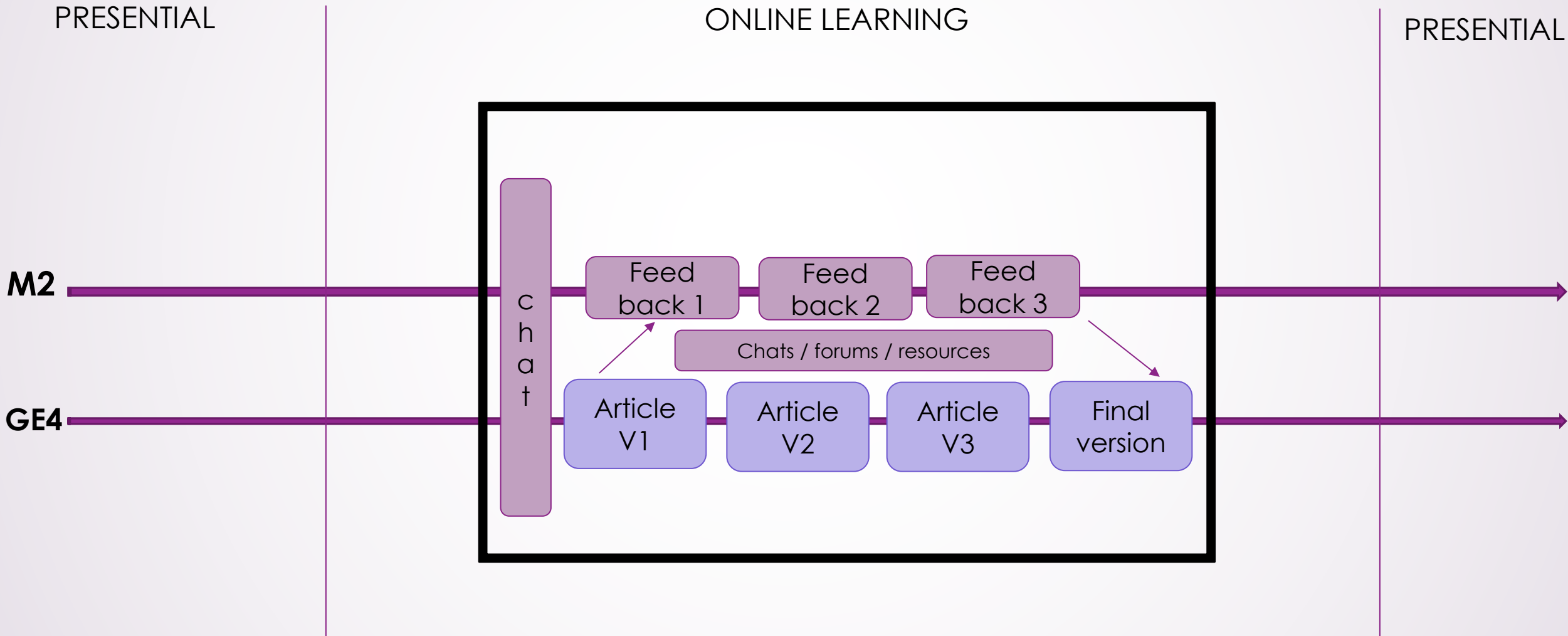
- ▶ Calendar :
  - ▶ Begin : 2013-2014
  - ▶ 2017-2018 : 5<sup>th</sup> release
- ▶ Duration :
  - ▶ Tutoring : about 2 months
  - ▶ Master's 2 students : from september to january
  - ▶ Electrical engineering students : 2 months
- ▶ Number of students (in 2017-2018) :
  - ▶ 14 Master's 2 students
    - ▶ Including 5 « French as a Foreign Language »
  - ▶ 32 electrical engineering students
    - ▶ Including 10 « French as a Foreign Language » or « French as a Second language »
- ▶ Platform Moodle

# Pedagogical scenario expected



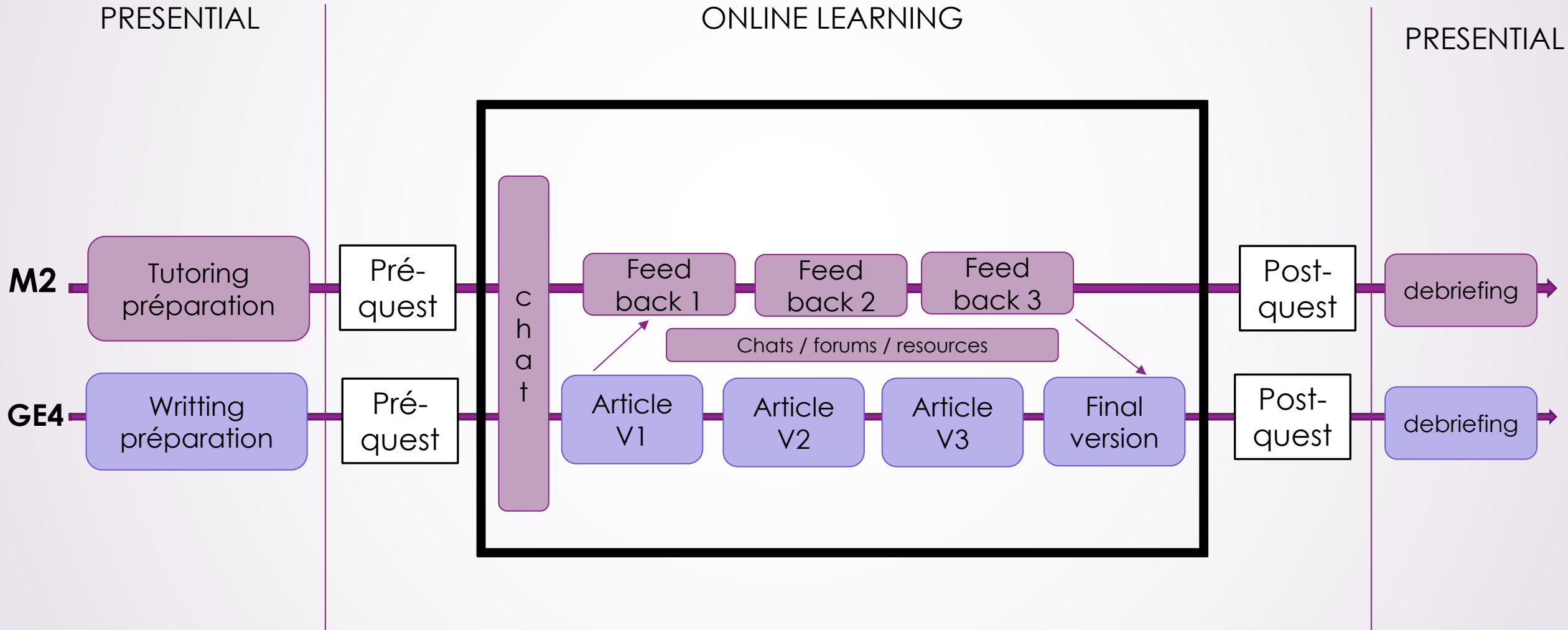
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# Distance learning system : timeline



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# Blended learning system : timeline





# Theoretical references and principles

1. Situated learning => active learners
2. Métacognition => reflective attitude
3. Research / training interaction

# Theoretical references and principles :

## **Situated learning => active learners**

- ▶ Social constructivism :
    - ▶ Meaningfull learning situation for all of the learners
    - ▶ Whithin a time frame
    - ▶ Joined to an organized reflective process
  - ▶ Allows the accountability of the learners :
    - ▶ In situ experiment
    - ▶ Decision making
- (Vygotsky, 1962 ; Giordan, 1998 ; Gaonac'h & Golder, 1995)
- ▶ Necessary in situ learning of knowledge and competences (Tardif, 2003)
  - ▶ Real life learning situation = authentic context
    - ▶ Real issues (i.e : the learners grade are part of the global evaluation)
    - ▶ Complex pedagogical problems to be solved

# Theoretical references and principles

## Metacognition => reflective attitude

- ▶ Learning transfers :
  - ▶ Contextualisation, decontextualisation, recontextualisation (Presseau, 2000)
- ▶ **Master's 2 students**
  - ▶ Reflective process set up
    - ▶ At the start of the conception phase of the online system
    - ▶ During the tutoring
    - ▶ And when the tutoring is finished
  - ▶ Alone or in a class-group (Donnay et Charlier 2006)
  - ▶ Topics : online tutoring, pedagogical actions, feelings experienced...
- ▶ **Electrical engineering students**
  - ▶ Complex writing process (Hayes & Fower, 1980 ; Piolat, 2004)
  - ▶ Importance of métacognition and auto-regulation to improve the writing process (Escorcia, 2007)
  - ▶ Text reviewing task : writing sub-process, important cognitive cost (Heurley, 2006)
  - ▶ Reflective process set up

# Theoretical references and principles

## Research / training interaction

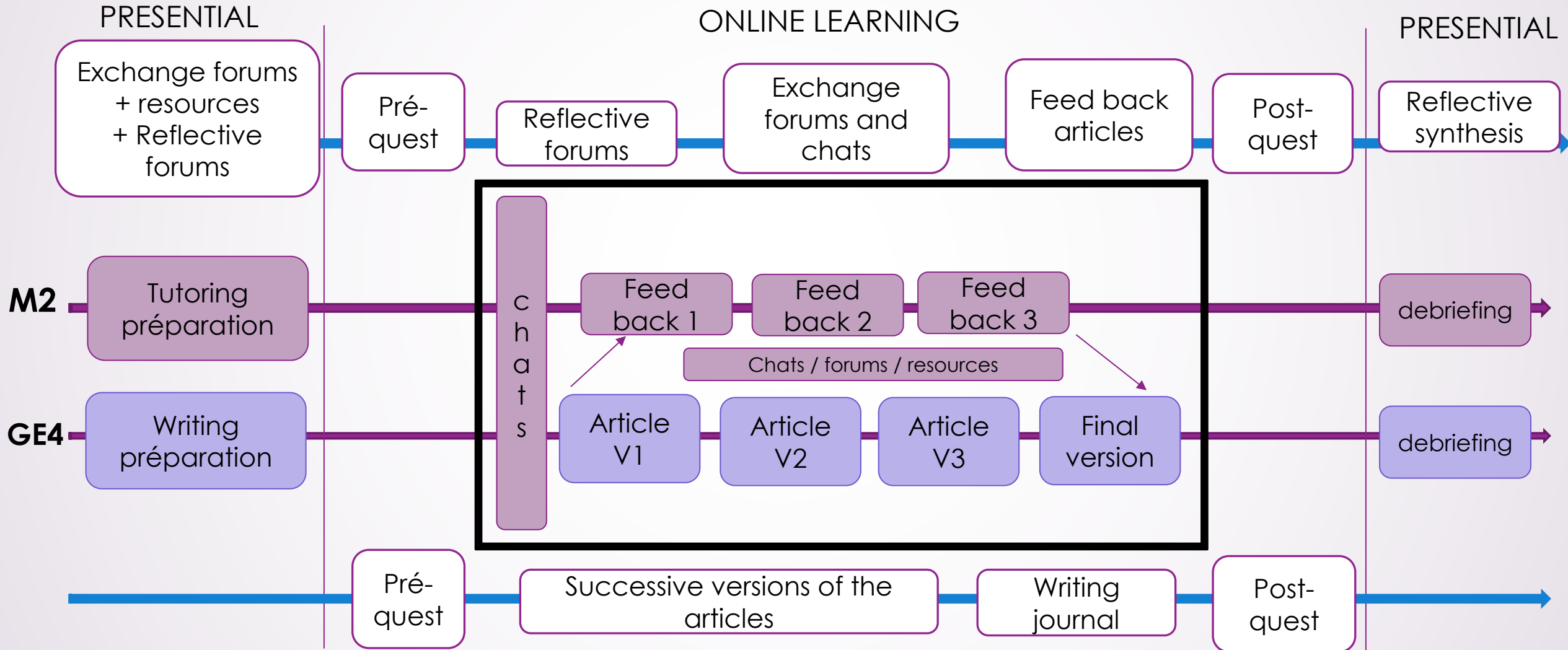
- ▶ Action-research
- ▶ « La recherche-action est une recherche en interaction sociale, dans la vie réelle, et non en laboratoire, où il convient d'allier innovation, créativité, scientificité et donc distanciation » (Narcy-Combes, 2001)
- ▶ Field based
- ▶ Collecting data; building up a learning corpus
- ▶ Conducting studies on linguistic, didactic and digital issues
- ▶ Improving the system
- ▶ New experiments

# Research protocol and collected data

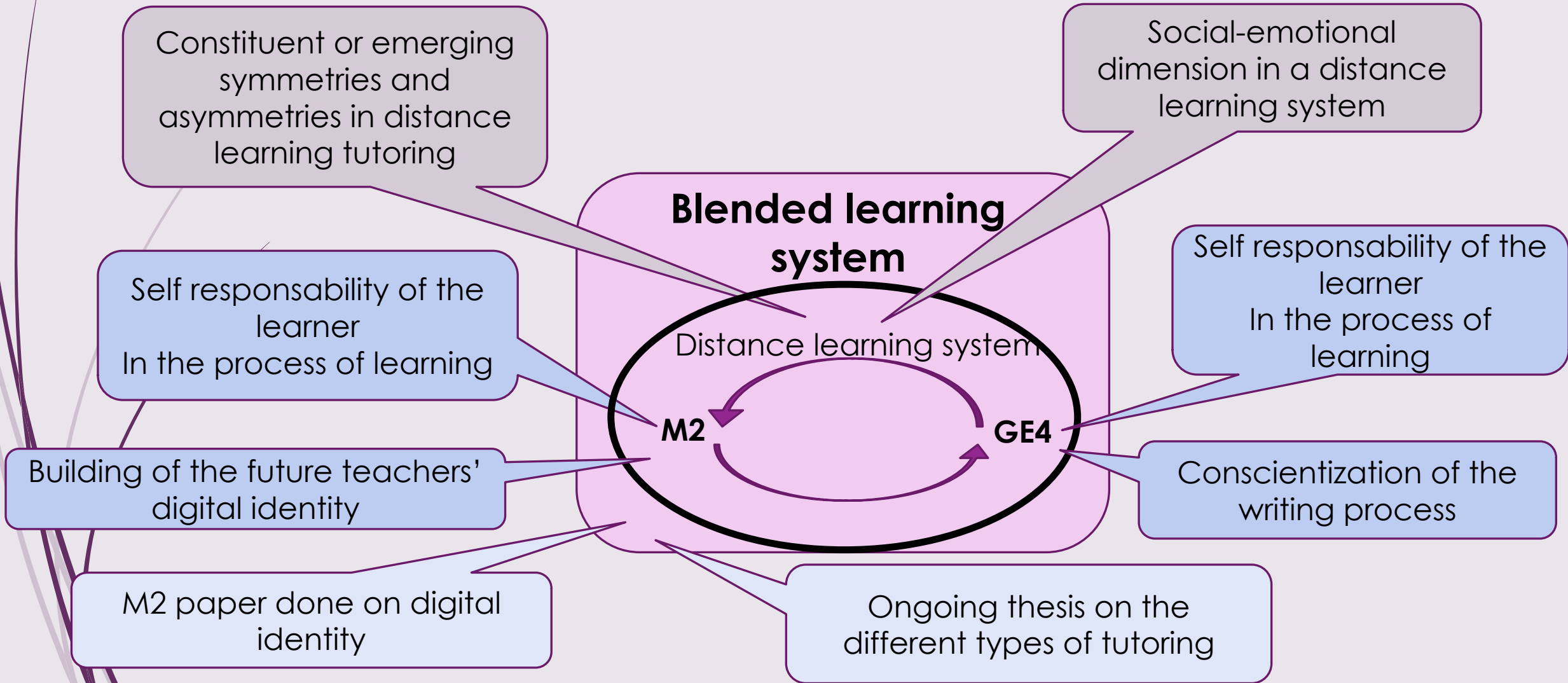
- Research protocol :
  - Signature of a free and informed consent form
  - Collecting language data :
    - Online interactions-(for example : messages on forums, chats, etc)
    - Writing productions (for example : resources, versions of articles, etc)
  - Collecting technical data (for example : number of connections, of downloading, Moodle field organization)
  - Collecting research data (for example : pre- and post-task questionnaires)
  
- Ecological data and research data (Van der Maren, 1995)
  
- Exploration manuelle des données vers formalisation en TEI (Text Encoding Initiative)

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# Language data collected



# Action-research : first studies



# Pedagogical changes following the first results (1/2)

1. Building of the digital identity of the future teachers (M2)
  - Transfers of the digital competences from the private sphere to the professional sphere
  - Assessment : emerging of this digital identity
  - But necessity of some assistance to reinforce the reflective process
  - => **implementation of thematic reflective forums for the M2**
2. Conscientization of the writing and revision process (GE4)
  - Postulate : conscientizing to progress, and verbalizing to conscientize
  - Social-affective, cognitive et métacognitive feed backs of the tutors
  - Positive inputs of the feed backs
  - => **Explicitation of the writing process (Hayes et Flower, 1980 ; Lumbroso, 2010)**
  - => **Reinforcement of the writing journal place for the GE4**



# Pedagogical changes following the first results (2/2)

## 3. Symmetries and asymmetries in distance learning tutoring

- ▶ Constituent or emerging
- ▶ Strategical, behavioral and structural symmetries and asymmetries
- ▶ Necessity to train the future teachers to perceive and integrate them into their tutoring
- ▶ => **implementation of a common chat phase for all the learners for a better work synchronisation**
- ▶ => **impact to be assessed**

# Research prospects

1. Dealing with the data and building up some learning corpus
  - ▶ TEI
  - ▶ Sharing with the scientific community
2. Building training objects and assessing their relevance
  - ▶ Mini-corpus
3. Exploring new research issues
4. Conducting longitudinal research



2016	2017
Book (9)	Spelling (6)
Spelling (8)	Story (5)
Reading (lecture) (6)	Book (5)
Reading (lire) (6)	Pen (5)
Story (5)	Reading (lire) (5)
Novel (5)	Imagination (4)
Pen (5)	Inspiration (4)
Vocabulary(4)	Letter (4)
Expression (4)	Vocabulary (3)
Letter (4)	Expression (3)

- 8 words out of 10 are the same
- “Spelling” and “book” come first
- “spelling” at first and “vocabulary, expression” at the end
- Nothing about planification, coherence etc

# Innovation and originality

1. Interaction between different learners with different goals
  - Different courses followed at the same time
  - Different benefits expected by the participants
2. Complete autonomy of the learners
  - In the writing process (GE4)
  - In the tutoring (M2)
3. Training system AND university research
  - Didactic research backed up by the experiment in the training courses
  - Action-research : continuous improvement of the blended learning system
  - Theoretical and applied research

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