Integrating innovative pedagogy principles in hands-on learning activities on the Internet

http://tecfa.unige.ch/proj/cvs

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InteRSTICES

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PLAN

- Context
- IntersTICES mandate and strategy
- Where is e-Learning added value ?
- A framework of 7 factors / indicators
- Examples in VITELS

IntersTICES' mandate

1. To provide pedagogical support to the projects;
2. To identify the projects' pedagogical practices and factors affecting the exploitation of the innovative potential of ICT;
3. To set the bases of an evaluation framework assessing the innovative nature of eLearning pedagogy, in collaboration with the national and international community.

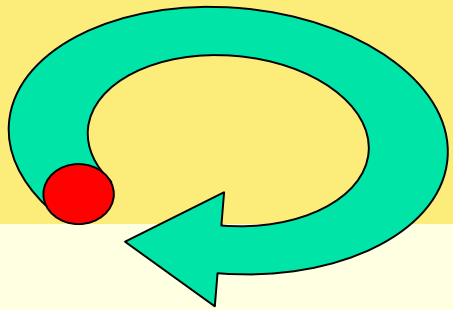
Action-Instruction-Research

Our strategy ?

Explicitation
Elaboration

- Targeted competences
- Context resources & contraints
- Pedagogical stance (actors'role)
- Scenario
  - Content, activities, resources
  - Articulation presence/distance

Needs analysis and formative
Evaluation of the dispositive



Co-managed workshops

Discussion, sharing in a
Community of practice

Theoretical & practical references
or tools for the developement
of a blended learning dispositive

Where is eLearning added value ?

Require to make things explicit

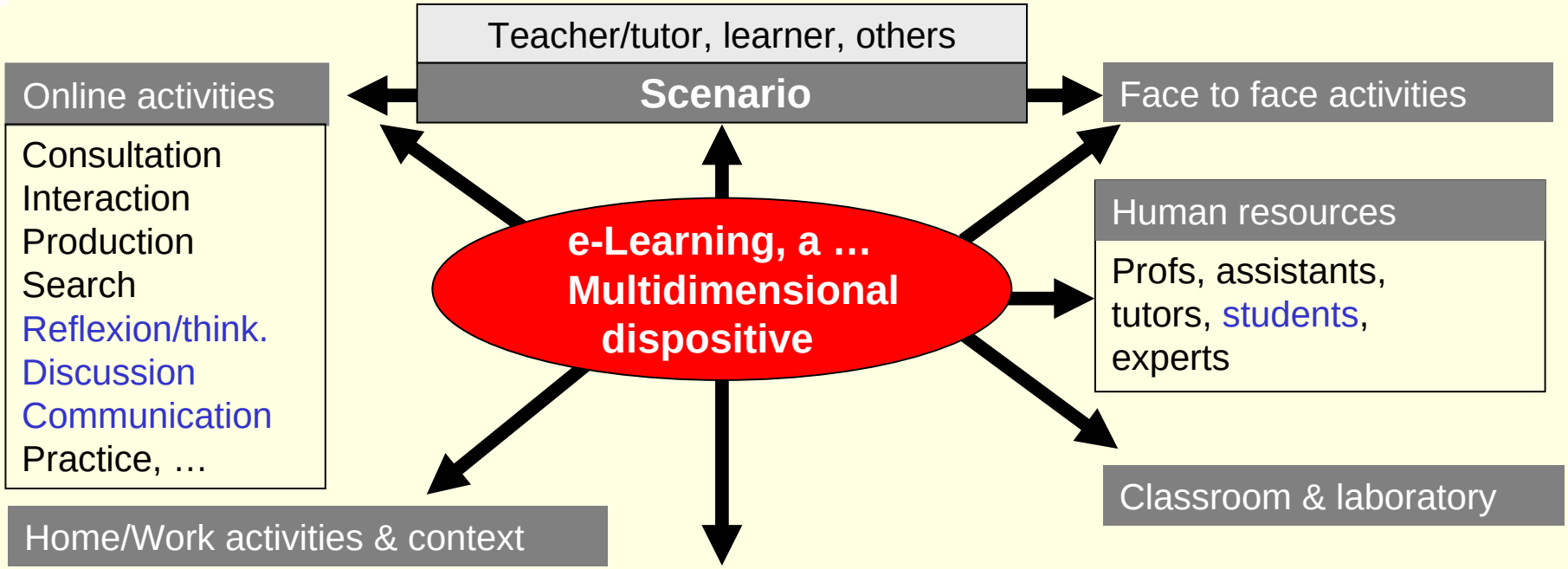
Basic pedagogy principle = **Congruence**

Objectives + **objects** (contents)

Activities, specific **support & tools**

Products (evaluated, applied)

What is eLearning ?



Teaching/learning platform

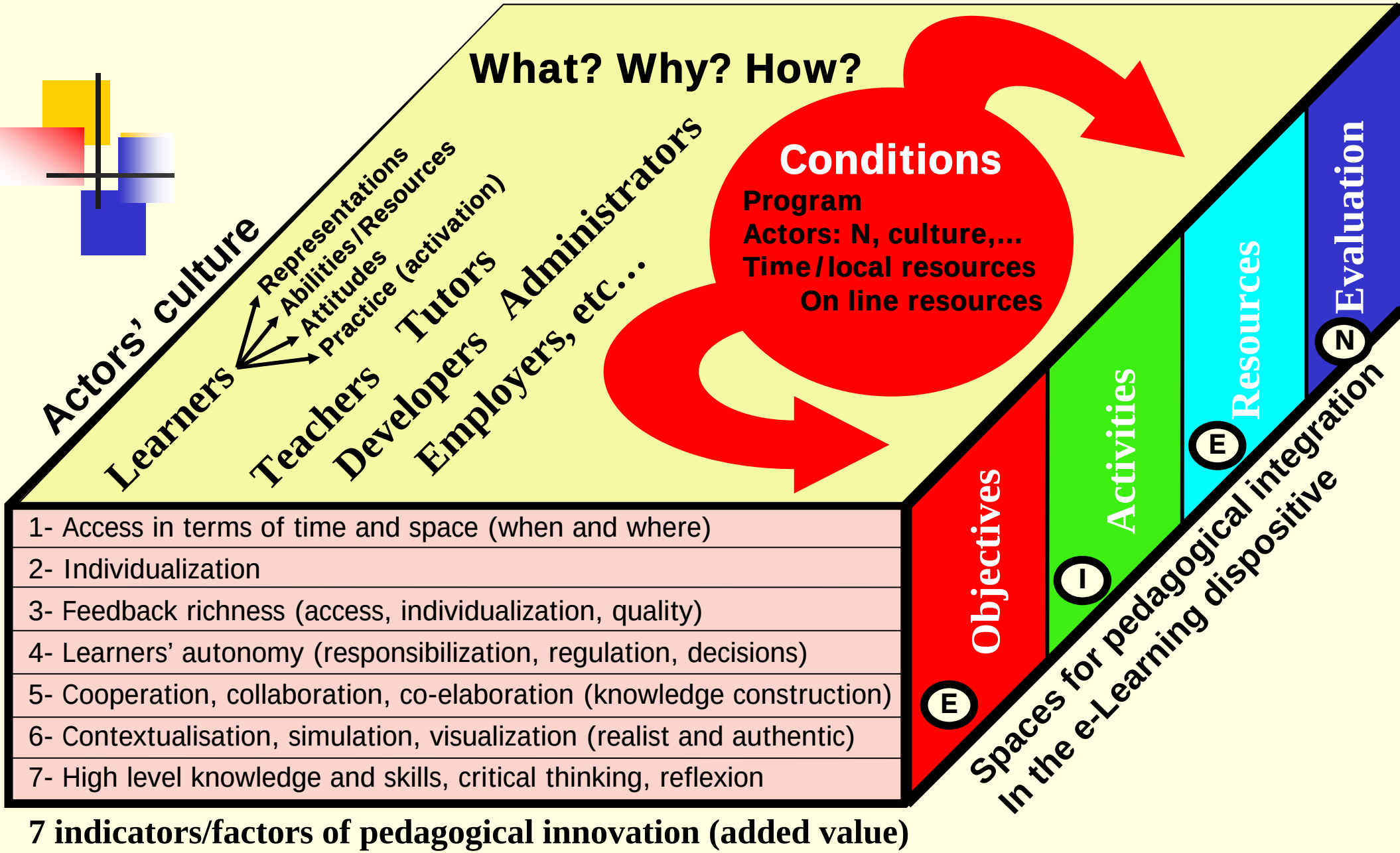
Documents, lessons, web site …

Maintenance & updating

Internet acces, identification/registration
personal database, tools, etc…

Where is eLearning added value ?

1. access in space and time
2. individualization
3. feedback-communication
4. autonomy
5. collaboration
6. contextualization / simulation
7. verbalize and reflect (trace)



7 indicators/factors of pedagogical innovation (added value)

VITELS PEDAGOGICAL STRUCTURE

1. Introduction

- prior knowledge, sense making (what, why, how)

2. Basic knowledge acquisition

- theory, readings, personal synthesis, self-test, quiz

3. Knowledge applic/exploration

- laboratory on-line, traces, team work (solve-discuss)

4. Evaluation knowledge/skills

- personal synthesis, final quiz

1- Access in terms of time and space (when and where)

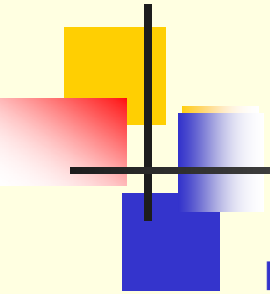
- The essence of VITELS
  - On line labs accessed from home or anywhere
  - Printable documents (readings, ...)

2- Individualization

- Students can choose how much time is invested in each part of the module
  - Still need to pass the quiz but ...
- Choose the level of depth in readings
- Verbalize personal objectives and goals

3- Feedback richness (access, individualization, quality)

- Enriched and dynamic FAQ
- Self tests provide links to further information and/or learning activities for failed items
- Quiz graded by a tutor
- Possibility to provide feedback on the basis on what is written in the :
  - Log book
  - My goals
  - Personal syntheses



4- Learners' autonomy (responsibilization, regulation, decisions)

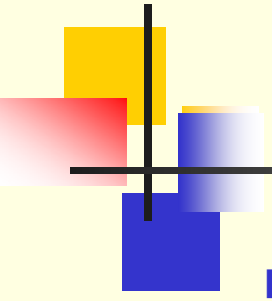
- Stimulate motivation and involvement
- Make the goals, expectations and strategies explicit, ex. progressive source of help
- Provide tools and resources
  - Log book and other personal docs
  - FAQ
  - Self tests
  - Quiz
  - Laboratories with online reservation

5- Cooperation, collaboration, co-elaboration (knowledge construction)

- Suggest to work collaboratively during the « knowledge application/exploration phasis »
- FAQ helps to build on other experiences, problems and solutions

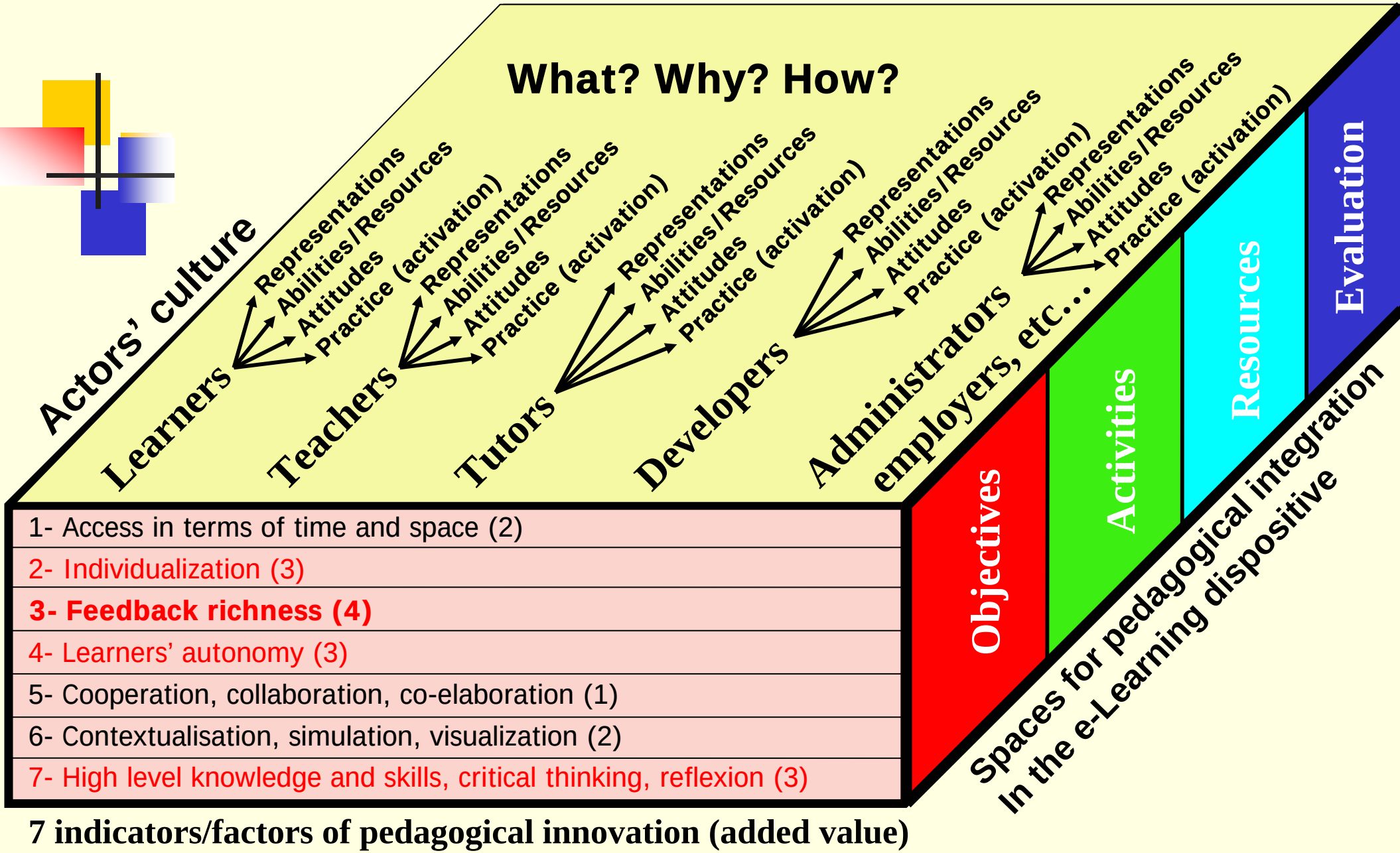
6- Contextualisation, simulation, visualization (realist and authentic)

- The essence of VITELS, to experiment online with a real machine to be configured at distance (realism, authentic task)
- Provide visualization of internal functions of computers and related processes



7- High level knowledge and skills, critical thinking, reflexion

- Provide clear statements of the goals
- Provide specific reflexive activities and tools (log book, my goals, personal syntheses, mind maps)
- Provide different levels of readings



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