GAME - BASED LEARNING IN EDUCATION

Michaela Logofatu, Anisoara Dumitrache, Mihaela Gheorghe
PROACTIVE PROJECT

• PROACTIVE:
  – FOSTERING TEACHERS' CREATIVITY THROUGH GAME-BASED LEARNING

• Started in January 2010

• The project’s length - 36 months
PROJECT CONSORTIUM

• University of Barcelona – Spain
• Sapienza Università di Roma – Italy
• Università di Napoli Federico II – Italy
• Universidad Complutense de Madrid – Spain
• University of Bucharest - Romania
• Centre for Advanced Software Technology Limited – SME
PROACTIVE OBJECTIVES

• To stimulate the creativity of trainers working in LLP
• To introduce innovative ICT-based experiences in teaching and training practice
• To implement co-design creativity sessions and pilot sites for addressing school, university and vocational education scenarios
• To validate the proposed approach as a means of learning
GBL in education

- Is expected to boost the learners’ performance and educational outcomes.
- Potential for boosting teachers' creativity with the help of innovative ICT technologies
- Learning scenarios will be developed
- Five metaphors of learning: Imitation, Participation, Acquisition, Exercising, and Discovery
- Focus - groups
FOCUS GROUP

The aim of focus groups:

• Explore participants’ interest/employment of ICT tools in their teaching approach

• Explore participants’ knowledge about user-centered design

• Explore participants’ point of view in relation to learning metaphors and their adaptation to their teaching approach

• Explore participants’ interest in the editors’ employment in their teaching approach
LEARNING METAPHORS

• Most of the participants recognized the five metaphors in their current teaching/learning process
• The acquisition metaphor it is used very often in university lecture
• Learning through discovery is applicable especially in sciences and with visible results in other fields such as: math, history, literature, business.
• Learning through imitation is applicable only in a very short area because students already created their own learning type.
ICT IN LEARNING

• Participants from the focus groups have an experience in using computers; some of them, depending on the subject are introducing computers in lessons.

• “Virtual classrooms” is already a very well known concept, already applicable for students and teachers.

• PROACTIVE stimulates teachers' creativity by facilitating them to design new learning scenarios and digital games to innovate their pedagogical practices.
SWOT ANALYSIS ON GBL - STRENGTHS

• Professor’s perspective:
  – Creativity development
  – Knowledge construction
  – Being proactive
  – Immediate application of theory

• Student’s perspective
  – Students become focused on the subject
  – Attractiveness, involvement, efficiency
  – Active participation of the student
  – Student has an active role
SWOT ANALYSIS ON GBL – WEAKNESSES

• Professor’s perspective:
  – Insufficient time for teaching
  – Inadequate curricula
  – Lack of technical support
  – Rigidity of educational system
  – Not finding the adequate software

• Student’s perspective
  – Games became a source of fun instead of learning (students are not able to differentiate game as exercise from game as entertainment)
  – Students do not see the benefits of the game
  – Changing the learning style (resistance to new teaching approach)
SWOT ANALYSIS ON GBL – OPPORTUNITIES

• Professor’s perspective:
  – Software development
  – Reducing the cost of didactical materials (in case of simulation programs)
  – Engaging pedagogical approach

• Student’s perspective
  – Incompatibility between software and hardware
  – Continuous update of the software version
  – Divagation from the subject
  – Risk of not accomplishing the lesson’s objectives
SWOT ANALYSIS ON GBL – THREATS

• **Professor’s perspective:**
  – Continuous update of the software version
  – Divagation from the subject
  – Risk of not accomplishing the lesson’s objectives

• **Student’s perspective**
  – Losing interest
  – Need for adaptation to new learning tool
  – Students are more concerned about the graphics of the game than the educational purpose
CREATIVITY

• Introduce games in lessons and the purpose of game in educational scenario.
• The role of the teacher is to design the learning scenario.
• The teacher must identify the suitable game in order to obtain interest, curiosity in finding results, involvement from the student side.
• Computer can help the student to individualize its learning process, promoting and helping self studying.
FOCUS GROUP
CONCLUSIONS

• This focus groups allowed us to explore more deeply a subject that it is new (as concept) in universities
• There is a strong relation between learning tradition, participant’s age, field of study and their openness to new
• People that use GBL in their current practices are very enthusiastic in sharing their experience and use their creativity for new scenarios
• Work in teams and not individual and specific trainings are needed, in order to be creative through different game scenarios
Thank you!