ECGBL

GALA round table proposal:
Topic 1: Organisational issues associated with the implementation of GBL in education and training

Title: GBL in practice: supporting an effective integration of serious games in educational contexts

Game based learning has proved to be an important tool in supporting education in schools and universities as well as vocational training in the industry. Most games used in educational or vocational settings are designed for a very narrow purpose, mostly for mediating a small range of skills to a specific target group. Most games are based on the principle of experiential learning. This means that the students need to be accompanied by the teacher to make a meaningful experience throughout the gameplay. Also, the teacher is responsible for integrating the game experience inside a really effective educational path, thus complementing and enhancing the current didactic practices.

The learning outcome and the effectiveness of using games depend on the teacher’s ability, also considering the possibly various and specific needs of the target player student group. The more heterogeneous the group, the more effort is demanded from the facilitator. This setting leads to specific challenges, especially in Higher education environments. Traditionally, most topics are thought of as lectures that can be delivered to large classes of more than 100 students. By using games, this is mostly not suitable. The students need smaller groups in order to be able to take an active role, and it is also limited how many people one person can facilitate.

In schools, barriers for introducing games are often due to the lack of a proper ICT-infrastructure and of technical know-how by teachers. On the other hand, it is important that teachers are well informed about the opportunities given by performing learning activities with and within games as well as that the games can deliver enough indicators providing formative feedback and supporting student assessment.

In the end it is often a matter of being able to verify that the higher costs connected to the use of games can be accepted due to an overall improvement in effectiveness, so that the ROI can be clearly defined. Even though specific case studies prove high a learning outcome compared with traditional teaching methods in specific settings, the evaluation results, often based on the use of questionnaire and pre and post-test, analysis of videos etc., show large variation in effectiveness if serious games are applied in a dynamic environment. Thus, there are still discussions about if the gaming research can bring evidence showing the effectiveness in general.

Generally speaking, introducing games in higher education does have a large impact on the organization of the academic teaching, under various aspects.

This round table will discuss how different institutions have introduced games into their curriculum, the experiences they have collected so far, as well as how they have overcome the different barriers for game based learning implementation and deployment mentioned above and where and why they have sometimes failed. It will also address the advantages and disadvantages of different student/player assessment methods as well as give concrete examples on how stealth (embedded) assessment techniques and learning analytics can support the evaluation process.

Key words: integration of serious games in formal education settings, Organisational issues, game based learning, GBL, effectiveness, assessment methods, evaluation metrics, learning analytics, performance evaluation