Lancaster and Morecambe College: Uses serious computer games as a teaching tool

Summary

John Latham, International Projects Co-ordinator at Lancaster and Morecambe College (LMC), got involved with the project Serious Computer Games as a Teaching Tool (SCOGATT) after using the game EnerCities with his students. The web based platform at http://www.scogatt.eu/ serves as a One Stop Toolkit for vocational teachers and trainers who want to use serious computer games (SCG) in their teaching environments but might need a helping hand. There they will be able to find a compendium of serious games, SCOGATT pilot results, teacher reports and the exemplar games, EnerCities.

About Lancaster and Morecambe College

LMC has close links with hundreds of businesses and organisations throughout the region and provides precisely the kind of courses and experiences students, employers and universities require. The College’s facilities are at the cutting edge of training provision with additional features and improvements being invested in year after year.

The challenge

The SCOGATT project arose from an original project called EnerCities which developed a serious computer game to encourage students and young adults to learn about sustainability, civic responsibility and energy related issues. Co-funded by Intelligent Energy Europe, the EnerCities game won several learning awards across Europe and attracted tens of thousands of players at http://www.enercities.eu as well as on Facebook where it was identified as the first serious game on the ubiquitous social media platform.
LMC didn’t manage the EnerCities project; they just got involved with promoting it within the College getting the students to use it. This is a free resource and is still available. They now have over 100,000 players on Facebook. A University in Holland has proven that after playing this game changes behaviour.

Student playing Enercities
The activity

This game then lead into the SCOGATT project. This is made up of a consortium which combines both geographical and institutional diversity. The exporters include the original co-ordinator and the Dutch partner responsible for research and development of EnerCities ROC Nijmegen College and the main UK pilot organisation, Lancaster and Morecambe College. There are various other partners responsible for other parts of the project.

SCOGATT has a number of objectives:

- to enable partners to utilise the exemplar opportunities for Vocational Education and Training contained in the EnerCities game by translating it into the new partner languages;
- to identify content for, and construct a database of serious computer games available in partner countries which are suitable for use within Vocational Education and Training systems;
- to use the good practice developed during the implementation of the EnerCities project and other relevant experience within the partnership to provide an online tool-kit to support Vocational Education and Training teachers; and
- to ensure dissemination of the outputs of the project in order to have high impact with Vocational Education and Training at all local, national and European levels.

The SCOGATT project revolves around the exemplar game of EnerCities and transfers this to new partner countries (and languages) whilst supporting teachers to take their first steps in game based learning.

One of the interesting findings during the original EnerCities project was the reluctance of teachers to use a serious computer game as a teaching mechanism. These reasons ranged from; lack of confidence using game based learning, shortage of time to prepare and search for SCG, limited IT facilities, managerial resistance to SCG and general lack of knowledge about this growing area of interest.

LMC then used that experience of getting EnerCities rolled out to help with the SCOGATT project. They translated the game into other languages, and included it in a web based toolkit to help teachers to use computer games in the classroom. It puts all the games into one place so they are easily accessible and can be refined by subject. It is still being developed and will grow and grow.

LMC then piloted workshops about using computer games in the classroom and found different things. In Turkey you can't just use a game in the classroom, it has to be approved by the ministry whereas Sweden had autonomy in the classroom and the equipment to run these kinds of games. EnerCities was designed to run on the lowest power of computers. A partner in Greece who had very old computers still managed to run it.

John explains: "There are 100 games so far but it will grow. It is a compendium of games where we hold the links, not the games themselves. One of the problems teachers find if they want to use this sort of game in their teaching is finding them so
it is really useful to have the links to them all in one place."

There is a ‘submit your own game’ button. Game developers can upload their own games themselves to get people using them; this will help the whole project grow. This project is a place where a vocational teacher can go and find a resource that they can use in their class.

LMC are ahead of the game as there hasn’t been that much research into computer games and the average vocational teacher has a certain perspective about computer games. They are trying to say, this is useful; they can really help you think about your teaching.

**The outcomes**

LMC now need to promote the SCOGATT project to staff and users so they know there is a place they can visit for help with computer games. While they are there, there is a free computer game they can use which is perfectly embeddable for most classes and will be there for at least the next five years. It is a free computer game and a good resource.

The traffic to the site will be measured and analysed to see how successful it has been. Knowing where traffic is coming from will also help increase the visits to the website, for example tracking the likes on Facebook and Followers on Twitter. Promotion is a very important part of this project.

These computer games are extension exercises for the classrooms. They could be used in flipped learning. One teacher asked his class to go away and play the games and then when they returned to the classroom analysed what had happened with them.

In a classroom of students with learning and behavioural difficulties, some students didn’t like the game as it didn’t fit with the way they were used to being taught. One student said: “I don’t care about the environment” and the teacher responded that was fine but he had to play the game anyway. Afterwards they got a debate going about what is the safest form of energy: nuclear, water or coal? In the game you run out of oil and everything you do has a consequence, cause and effect. At the end they talked about how they had found the experience and what they had learned about energy. This particular student acted like he didn’t care, but then as he left the classroom turned around to switch his monitor off before leaving. He may not admit to caring but it changed his behaviour.

At the point in the game when oil runs out students always ask how they get more and that triggers really interesting debates. The teacher can then pause the game and use it as a really good teaching resource.

John explains: "The games won’t teach a class for you but if you know when to step in, they can help turn your students into independent decision makers who can think for themselves. It has very interesting results."

One student from the EnerCities project quoted: "Games don’t always give us the
answers and solutions, but they help raise questions and encourage us to get involved in world issues”.

The impact

Co-funded by Intelligent Energy Europe, the EnerCities game won several learning awards across Europe and attracted tens of thousands of players at http://www.enercities.eu as well as on Facebook where it was identified as the first serious game on the ubiquitous social media platform.

EnerCities was awarded the title of “Best Learning Game 2010” by the European platform “ENGAGE Quality Awards”. In addition, the Dutch game industry awarded EnerCities with the title “Best Online Game 2010”. The Enercities Project also won the Sustainable Energy Europe Award for Learning on 19 June 2012 at an Award Ceremony in Brussels hosted by EU Commissioner for Energy, http://managenergy.net/news/articles/154.

The short term impact will be the implementation of serious gaming tools in countries across Europe. However, these tools will remain after the project has ended, and along with the EnerCities game, serve as an introduction to the arena of game based learning for current teachers and a legacy for future ones. Interest in serious gaming is on the ascendency across the globe, as well as in the partner countries, the consortium expects that the longer term impact of SCOGATT deliverables will be substantial and act as a platform for future research as well as reference resource that will grow and evolve as new resources and games are added.

The lessons learned

John explains: “The main thing to remember with a project like this is that promotion is so important. People now need to know there is a place they can visit for help with computer games and that these games can bring a new dimension to teaching in the classroom.”

Useful links

Jisc RSC Northwest
Lancaster and Morecambe College
Enercities
SCOGATT

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