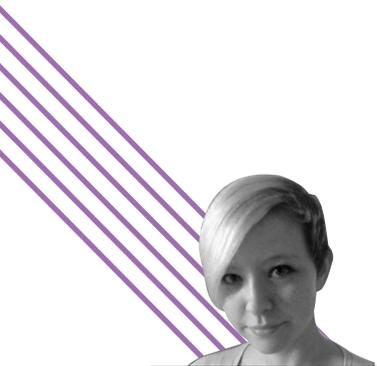


THE SCHOOL OF GAMES



Cassi Camilleri

In *The Histories*, Herodotus tells the story of King Atys of Lydia in Asia Minor, whose realm was ravaged by a devastating drought 3000 years ago; one which left his people suffering under a great famine. The Lydians blindly accepted the situation and ploughed on, hoping that the terrible drought would pass but it did not. Desperate for a solution to remedy their misfortune, the Lydians came up with an unconventional plan — to engage in games. For one whole day, the people of Lydia devoted themselves wholeheartedly to games, so they forgot about being hungry. The next day they ate, and on the following, they returned to their games. In this way 18 years of famine passed and in the meantime, the people of Lydia invented dice, ball, and many other popular games.

While the truth behind this story is questionable, at its core is an essential truth about games. Games provide an escape from reality, but that escape is a purposeful one. The Lydians used games to escape the famine that gripped their land. In that same way, people now use games to achieve the engagement they long for; an engagement which the world, for whatever reason, fails to provide. As Jane McGonigal says in her book *Reality is Broken*, ‘we are starving and our games are feeding us’.

Just a few years ago, the phrase ‘to know something’ often referred to retaining and reciting information. Knowledge was synonymous with recollection of content, be it history, science, literature, or any other subject. Today, that meaning has changed dras-

In ancient times games played an integral role in society. Whilst in today's hyperlinked world, games have evolved into complex, sophisticated mechanisms that enthrall millions. Now, however, games are dismissed as trivial, and of no real value. But is this really the case? **CASSI CAMILLERI** meets the research team *gamED* from the University of Malta to find out

tically to problem solving: the ability to locate information, analyse it, and apply it successfully to find solutions.

This shift has brought with it obvious changes to society, especially when it comes to training and education. The focus in any course should now lie with teaching higher order skills such as critical thinking, problem solving, and innovation. According to the research group *gamED* — games naturally support this kind of learning.

Made up of Prof. Matthew Montebello, Prof. Alexiei Dingli, and Prof. Liberato Camilleri, together with Vanessa Camilleri and Leonard Busuttil, *gamED* is a group from the Faculties of Education and ICT at the University of Malta who came together back in 2007 thanks to a mutual passion for video games. This shared fascination with the

medium and its capabilities inspired them to look into its vast potential. Together they now share a vision that sees games being used for much more than just entertainment. They also educate and empower people in Maltese society.

Their main goal is to harness the positive aspects of games, to direct the attention games enjoy from users towards a more productive outcome. By using games in education and training, learning can be greatly facilitated and enhanced. Games can help students achieve much more than the traditional pen and paper educational system could ever provide.

One of their most recent studies, due to be published in the coming months, is the first report on video game usage in Malta. Funded by the Malta Communications Authority, it investigates

the trends and patterns in digital game play on the island through a representative population sample. This report has strengthened the team's resolve with its promising results that indicate that their ultimate goal is not pie in the sky.

According to the study, 74% of Maltese people aged between 3 and 55 play digital or video games. Of these 53% play every single day and 20% will play for more than an hour. There is no doubt about it — the consumption of video games in Malta is widespread. This statement also extends to children, whose engagement with games is almost across the board with 98% of the country's parents saying that they allow their children to play games.

The conclusion easily drawn from these findings is that Malta holds the perfect conditions to effectively »

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implement games as part of its training and educational systems. Serious games are the answer. Serious games are designed to teach a particular skill or behaviour, or to raise awareness about a subject, motivating users by providing challenge, curiosity, control, and fantasy.

Their inherently scaffolded structure — a trait present in all games — delivers learning/teaching at the time it is needed as well as continuous feedback during play, allowing users to develop ‘mastery’ of a skill. These games create a compelling need to know, ask, examine, assimilate and master certain skills and content areas. Some experts argue that games are, first and foremost, learning systems and that this accounts for the sense of engagement and entertainment players experience. In his book *Fun Inc.* Chatfield agrees, stating that games without learning or skill acquisition fail as the ‘result will soon be boredom’.

As Vanessa Camilleri explains, the effectiveness of serious games has already been proven. She points to the medical field as a major success story where serious games have been developed to impart specific competencies to future doctors. But these games have also been used by the UN World Food Programme to educate people about the causes, effects, and solutions to famine in developing nations. Even Renault has used them to raise awareness on eco-driving. The application of this technology is endless.

Sadly, the journey towards meaningful engaged learning in Malta has not been straightforward. The challenges will be a steep mountain to climb in the years ahead.

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gamED have run various experiments, attempting to implement games within training and educational structures. The results, for the most part were considerable, but one thing became clear — it will take time for people to subscribe to this concept.

Although not under *gamED* umbrella, the first attempt saw Camilleri working with 100 pre-service teachers as part of her doctorate on virtual worlds and serious games. The practical application of the study involved the use of serious games in an immersive virtual world to teach about educational technologies. The students’ course took place exclusively online. Presentations were made in the virtual world, papers were submitted through the portal, meetings also took place there and, as time wore on, the world became populated by the students’ own work.

Camilleri reports that there was an initial resistance to the idea. The universi-

ty students felt uncomfortable with this new method of working. They found it shocking and confusing since they had no previous experience of learning inside a virtual world. However, despite the hurdles, the study went on and at the end gave an amazing response. Participants were interacting and producing vast amount of work at a fast pace, engaging with the virtual world and the content within. But as the experiment progressed the interaction started to taper and perceptions began to change. The moment students started seeing the tasks as fun, they also stopped seeing them as equal parts of the learning process. ‘They were no longer deemed serious enough to constitute real learning’, Camilleri said. Looking back on this experience, Prof. Montebello points out that the lack of ‘chalk and talk’ made the students nervous. Being online and in the virtual world meant that ‘it was not real’.

This happened again on another occasion when *gamED* introduced a game called *Quest Atlantis* from the University of Indiana at a private, independent school to children between 9 and 15. Used worldwide to teach concepts as diverse as physics, biology, and creative writing, this was a prime example of what serious games should be. Provided with their own accounts children were asked to play. Once again, the response was overwhelmingly positive with the children completing their tasks successfully and diligently. However, during the subsequent interviews, the idea of replacing books with the game was not well received. Students plainly told the »



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An immersive virtual world was used to teach 100 pre-service teachers about educational technologies



group the move would not be possible. ‘This is fun but we do this at home — this is not learning.’

This experience confirmed the very perception gamED keeps trying to alter — ‘for some, a game is a game. The older generation grew up with the idea that video games were solely for leisure and that has now been taken on by the younger generation,’ said Prof. Dingli. Vanessa Camilleri confirms that in Malta, our perception of learning is very linear requiring lessons, books, homework, and eventually an exam. But this could be argued to be ‘a very superficial way of looking at things’ and also highlights something of a paradox very common in Maltese society. People call for change but when concrete steps are taken to that effect there is an immediate push-back from all sides. Camilleri agrees, ‘Maltese society is not yet ready for such a massive change.’

For most educators, implementing serious games is a daunting task. Change tends to put many out of their comfort zone. *GamED* has observed that in many institutions, the set curriculum is followed literally to the letter rather than interpreted and expanded to make it more engaging and flexible.

But the situation is far from hopeless. *GamED*’s latest attempt to bring serious games to the public has gone a step further than previous efforts. Part of the ICT students’ coursework has been to devise serious games to raise awareness on the importance of blood donation. Working with the Mater Dei Hospital’s blood transfusion unit, *gamED* will provide the best games produced for the unit as part of a national campaign.

Clearly, as the impact of games continues to be studied and analysed, change will inevitably follow.

Camilleri sees a bright future ahead for serious games, ‘In future, I see more efforts being made. I also see parents changing their perceptions, becoming more open to the idea of games used as a tool to educate. This happens especially as the gamers of today grow up and become parents themselves.’

Prof. Dingli points to the budding games industry in Malta and the government’s plans to launch a gaming incubator. He hopes it will attract to the industry young minds who could bring new ideas on the effective application of games in society.

Prof. Montebello urges government entities such as Malta’s Employment and Training Centre (ETC) to get on board. By pushing serious games as part of employability training, they will more likely be accepted by the public as part of the educational system.

To drive the movement ahead, *gamED* is now preparing for the conference VS-Games 2014. To kick off in September, the conference targets

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cross-disciplinary communities with emphasis on virtual worlds and games for serious applications. Getting the relevant players together to discuss the way forward at this stage is crucial.

Raising awareness of the untapped potential the medium holds should bring in some much needed investment. Finance is needed for serious games (a price tag that is presently out of reach for Malta) and to build the right courses. Professionals need to learn to use them effectively in various fields.

Camilleri states that ‘for serious games to become part of Maltese education and training, an all-round effort is needed. This is not about a group of game fans trying to convince a country that their views are correct. This is about creating a brighter, more engaging future for future generations. A cultural shift is in order — a global one. Industry, political policy, education, and the members of society must rally and work together to make it happen. History has proven time and time again that such a task will not be easy. But it has also proven that it can be done.’ ●

FURTHER READING

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