

This interview was made by email with Kevin Corti, the founder and the managing director of PIXELearning Limited. PIXELearning is a games-based learning company in the UK that specialises in Business education and business and management skills development. The interview was made in April 2006.

1. What is your name and title?

Kevin Corti,
Managing Director,
PIXELearning Limited

2. What kind of educational and training games do you design?

Mainly business simulations for business education and management skills development, but these are not in the form of the traditional 'spreadsheet simulations' that many of us grew up with. Our games look like a PS2 game in terms of the use of graphics and are not restricted to merely crunching numbers in a turn-based approach.

3. What is the target group of the games?

Schools, colleges, universities, start-up support agencies, training organisations, small and large companies and educational publishers.

4. What kind of educational elements do the games have?

Our games range from giving learners exposure to concepts that they have no prior experience with (e.g. kids can run a simple business to gain an introductory level of awareness of business terminology and concepts) through to the incorporation of extremely detailed business and economic models that are suited to MBA courses and experienced managers. Typically the learner is given a background brief, they assesses the starting scenario, they prepare a business plan and/or strategy and then attempt to achieve (or beat) the goals that were defined.

5. What is your approach to designing a game for educational purposes?

First task is to understand whether the game needs to be aligned to a particular curriculum (e.g. the UK Schools National Curriculum), whether it is being commissioned in response to a specifically identified training need or whether it is being used, perhaps, as a motivational tool alongside a wider blended learning programme.

Secondly we need to know what the assessment criteria will be. What does the teacher/trainer need to be able to measure? Is it a fairly simple 'end results' report that they can review or do they want a detailed log, for example, of numerous in-game variables over time plus qualitative user reasoning/justifications etc?

Thirdly we need to know everything that we can about the audience, the organisation and the mode of access e.g. will it be web-deliverable, CD-based, linked to an LMS and used by employees from home?

6. What kind of pedagogical theory are your products based on?

Our games are very task, action and goal-based, which implies a Constructivist approach. We also pay reference to the concept of 'authentic learning', where the experience is particularly relevant to the learner, relates to the real-world (not just theory), allows them to think in the mode of the discipline (e.g. as business managers) and where the assessment is in a form that is relevant to the discipline (e.g. you are assessed on your ability to deliver bottom line financial performance not a simple multiple-choice test or drag and drop fact recollection quiz).

7. What kind of reception have your games got?

Generally very good. People like the fact that the games include humour, drama, storylines and characters. They also like the fact that they incorporate real world chaos and ambiguity rather than being solidly theoretical. The challenge/reward factor also plays a part.

If a game is not well-received then it probably wasn't either designed for the right audience and learning need or was used by someone out of context.

8. What is your solution to the dilemma that the different type of learners and persons of different genders tend to like different kind of games?

Given that we specialise in business simulations that also have a role play mechanic, because we are seeking to fulfil a specific need (business education/management skills development) and because we feel that these genres do this best, we don't tend to experience this dilemma at all. The fact that we do incorporate characters and story narratives does, I believe, make it an experience that spans the gender gap. I also believe that the creative element (you can choose your company name, logo, the products it sells and hire your staff for example) makes it appealing to woman as it allows them

to emotionally invest something of themselves into the experience.

9. According to some, players have a tendency to cheat or take the easiest/shortest path possible in the games. How should an educational game be designed to make it sure that the player doesn't skip important educational parts of the game?

Firstly I think that we shouldn't always view such activity overly negatively. The ability to search for and exploit a weaknesses implies initiative and problem-solving. That said it hardly fits into a formal curriculum particularly one that requires a level (assessment) playing field.

We want to reward the learners that find the 'correct' path quickly by not inhibiting their learning experience but equally we want to help those that are not finding it easy going by automatically detecting these two states and adjusting the game automatically.

The use of levels as a tool within GBL allows us to restrict information flow to the learner, tasks that that are required to fulfil, objectives they need to attain and the flow of the game (boredom vs frustration) depending on which level the learner is currently engaged in.

10. What is your opinion on educational and training games in general? What kind of visions do you have on this?

We believe that Serious Games, Games-based learning (call it what you will) is the missing link between great classroom/f2f environments and the current state of eLearning. It allows you to take the theory and to put it onto practice in an authentic, simulated but totally safe environment.

Games allow us to use learning technologies which, for pretty much the first time, foster higher-order thinking skills such as critical analysis, problem solving, negotiation etc. E-learning has not proved to be the tool for doing this and the time, geographic and cost pressures upon organisations in the 21st Century severely restrict what we can do with traditional face to face modes of learning.

Games engage. Not just because they are 'fun' at the simplistic level. Rather they are engaging because they are complex problem spaces in which we, the learner, derive immense satisfaction by solving these problems and by the intrinsic recognition that the nature of the problem was highly relevant to our educational or vocational goals.

11. Have you been designing commercial entertainment games? If you have, how does designing an educational or training game differ from that?

Several of PIXELearning's development team have commercial entertainment games experience. The differences are plentiful. The most obvious is timescales and budgets. GBL solutions are designed to solve a (most commonly) current training problem. Commercial games can take 2 to 3 years to build. If a client has a problem now they need a solution now hence the time pressures are immense. Likewise the numbers of clients who have six figure let alone seven figure budgets is so small as to me insignificant. Therefore most GBL solutions fall into the €10,000 to €150,000 range.

Other differences are that GBL solutions need far more user tracking mechanisms (for assessment) and far less technical finesse.

12. Have you used any open source software in designing and developing educational games?

We have chosen to go down the Microsoft and Macromedia path although we have, on a few occasions, dabbled with some of the lower-cost 3D game engines. Other GBL companies may have used open source tools but for what we set out to do and with our market place in mind these were deemed inappropriate.