A virtual reality game to educate tomorrow’s ethical managers

BAM

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Dr Suzy Jagger (University of Roehampton)

Dr Diane Sloan (University of Northumbria)

www.virtualvalues.net
“We face a world in which management education is by many assessments in crisis for too narrowly and analytically orienting managers who will need to lead in a complex socially and ecologically fraught world.” Waddock et al (2013:265)
“Embed new content and utilise transformative learning approaches, including experiential learning”

CALL FOR ACTION: Management education, research and engagement for advancing the Sustainable Development Goals
The Challenge for Business Ethics Teaching – developing competencies

• to ensure business students:
  – Leave university with a *deep understanding* of their role and responsibility towards their future employers, community and society;
  – Are equipped with the necessary skills in moral decision making and knowledge of current issues;
  – Are in touch with their own values and conscious of the important part they play in shaping a business world that is seen as contributory and responsible *(Felton & Sims, 2005).*
The Problem

• Course content often dry and unengaging
• Focus on rules-based approaches
• Focus on analysis producing a ‘judgment-action gap in moral functioning’ (Walker 2004)
• Large class sizes
• Challenges: learner engagement, understanding, transferability of knowledge
Virtual Games in Business

- Increase in use of computer games (Klopfer et al 2009)
- Growing research on the use of computer games in education, ‘Serious Games’, use of ‘gamification’ (Afari et al 2013; Annetta et al 2010; Whitton, 2012)
- Powerful effect of interactive games (Kuss et al 2013)
- Provides a ‘valid representation’ of real-world issues
Why Might Games Work?

- Player empowerment (Gee, 2003) free to fail, explore, try out.
- Completion of tasks (scaffolding)
- Active participation/interaction
- Authentic environments (Nyborg et al 2006) found that students struggle applying ethics outside a particular context
- Connection to everyday life experiences (Kebritchi, 2008)
- See from different points of view (Vieira, 2012)
Achieve Outcomes

- Engage and motivate
- Challenge personal values
- Provide skills in recognising ethical issues
- Achieve other learning outcomes in relation to knowledge and skills

The game needs to:

- Motivate players
  - Use Points and Levels
  - Use as part of assessment
- Be easy to learn
  - Attractive and Fun
  - Use standard ‘game’ controls
- Emulate real life
  - Relate to typical business situations
  - Relate to audience
We Built a Game incorporating ‘Gamification’

- Placed player in real life contexts (Ryan et al 2006)
- A ‘safe environment to explore’ (Kapp 2012)
- A storyline to immerse the player in that reality (Schneider, 2004)
- A challenge in ethical decision-making for their character
- An experience based on the consequences of their choices (Gee 2003)
- Points for collecting clues and interaction
- Level progression
- Comic book genre for fantasy/fun
Virtual Values Demo

VIRTUAL VALUES,
A 3D INTERACTIVE GAME OF BUSINESS ETHICS
Level 1 – The Offices of GVE
Level 2 – The Park
Level 3 – The Party
Welcome G4C10,
Congratulations on reaching Level 1 quiz,
your current points are 170,

Before beginning, click here to download the zip file of your collected clues from the GVE’s Office to review before you attempt the quiz.

When you submit your answers, you will receive immediate feedback correct answers will be in green, incorrect answers in red.

Question 1 of 4

What is the most important attitude change for businesses to become more ethical?

- [ ] Build stronger and more positive relationships among staff
- [ ] Focus more on the customer
- [ ] Provide more opportunities for staff to work on community projects
- [ ] Make decisions based on the interests of multiple stakeholders.

20 points

Check
Experiencing Consequences of Ethical Choices

Anna! What’s wrong?! Has something happened? You look terrible! Are you in trouble or something? Is there anything I can do to help?

It’s my fault Matt’s lost his job - this whole thing is my fault.

Tell George  Don't tell
Example of Game Ending (one of six)
### Sample Question

<table>
<thead>
<tr>
<th>Question</th>
<th>Agree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I find the game useful to practice ethical decisions</td>
<td>86% (4.30)</td>
</tr>
<tr>
<td>The game helped me appreciate the skills needed in ethical decision making.</td>
<td>85% (4.24)</td>
</tr>
<tr>
<td>After playing this game, I feel that I have learned new skills which I can apply in different situations</td>
<td>85% (4.25)</td>
</tr>
<tr>
<td>I felt rewarded when I got points</td>
<td>86% (4.34)</td>
</tr>
<tr>
<td>The issues presented in this game helped me to see from others perspectives rather than just my own.</td>
<td>85% (4.28)</td>
</tr>
<tr>
<td>This game has helped me to be more effective making ethical decisions</td>
<td>82% (4.08)</td>
</tr>
</tbody>
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Qualitative Interviews – 13 Students who had played the game and completed the survey

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
<th>Supporting quote</th>
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<tbody>
<tr>
<td>Concrete experience</td>
<td>Doing something in which the individual is assigned a task. Key to learning is active involvement. One cannot learn by reading you need to do it.</td>
<td>… it’s a different learning method. It keeps your concentration going and keep you doing it. … with the game you can sit down, you can concentrate and you can do it by yourself, and you can do it whenever you want to. You don’t have to show up at a specific time and, yeah.</td>
</tr>
<tr>
<td>Reflective observation</td>
<td>Stepping back from the viewing and reviewing what has been done and experienced. Lost of questions are asked.</td>
<td>No, it’s just because it makes you think and it makes you think that maybe the thing that you thought was right maybe isn’t really the best decision, so it’s like, it opens your view to, like, to be more critical with your thinking and it’s, like, it’s almost like a puzzle. You’re collecting pieces. It’s, like, it’s a good way to learn. … that’s how I learn when I relate it to the things that can happen in real life…</td>
</tr>
<tr>
<td>Abstract conceptualisation</td>
<td>Making sense of what has happened, involves interpreting the events and the relationships between them. May draw upon theory from textbooks for framing and explaining events, models they are familiar with and other knowledge.</td>
<td>Why is it an ethical issue?’ then I looked at the er framework and it actually helped me understand why it was an ethical issue. You know the theories, you know the background knowledge, and you remember that when you play the game… and I think that everything just together is a good mix.</td>
</tr>
<tr>
<td>Active experimentation</td>
<td>The learner considers how they are going to put what they have learnt into practice. Translates the knowledge into predictions of what will happen next, what actions will be taken. Must be able to place in a context that is relevant to them.</td>
<td>… with the knowledge that I get from the lectures and with the examples and issues that come up in the game, that together makes me, erm, like, identify issues when I see them in real life now when I go on to work. And actually that, things that I might not consider ethical issues before, I would consider them being ethical issues now because of the game.</td>
</tr>
</tbody>
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Table 2: Kolb’s Stages of Learning with supporting quotes ([Kolb and Kolb, 2005](#))
Focus Group Comments

….makes you aware of yourself and what are you going to do when the situation arises. I know the theory part, the theoretical part of it but not so much the application.

For me it made it more realistic about what ethical issues there could be.

…and you understand the theory and you get rewarded for that and by this you are learning in an interactive way and I think that’s really.. it’s easy to learn this way.

You have to apply your principles – time pressure is there – you have to make a decision right away.
Yeah, well, actually I thought, “Why is it an ethical issue?” Then I looked at the, err, framework [theory] and it actually helped me understand why it was an ethical issue. Because at first I thought it was a matter of point of view. … But actually there is, like, this zone of understanding what everyone agrees, because of the framework, and I think I would not be able to understand that without the game.

… while working now at my workplace I notice a lot of things that’s related to ethical dilemmas whereas before I wouldn’t have noticed.

it did make you think about your own dilemmas and the way you think ethically
Create a commercialised version of game for organisational training:

- broad range of ethical dilemmas
- “industrial” robustness and quality

Expand the academic “community of interest” for curriculum development and deeper research to inform on-going development

Provide services to private and public sector organisations:

- Customisation of games
- Blended training: e.g. games + lectures + debates
- Research – learning needs and impact


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Thank you any questions?

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