"IT'S-A ME, MARIO!"

What playing videogames taught me about effective online course design

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About James Moore
Super Mario and The Legend of Zelda are two of Nintendo’s most valuable video game franchises, spawning a slew of highly regarded (and high-selling) series of games on multiple consoles. I cheerfully admit to spending a considerable amount of time playing these games over the years, but playing these games has also taught me much about effective and fun design of online and hybrid courses. There are ten lessons learned from these two video game series that can be applied to course design – structuring a course that promotes student learning, reduces confusion, and that could even be fun.

1: System Requirements

The person purchasing a videogame is not necessary the person who will be playing the video game. System requirements (prominently printed on the box) help a spouse, parent or grandparent purchase a game that will work on the intended device. With an online course, system requirements will help prospective students understand whether their technology at home will support the technical needs of your course. For example, you may have developed hours of Flash video that will play on modern desktop and laptop computers (with the right plug-in) but definitely will not play on an Apple iPad. By providing your system requirements in advance, you can help students make an informed decision about whether they can actively participate in your course.

2: Genre

It has been said that there are only seven basic plots in stories and literature. A larger list of genres exists for videogames (Wolf has 41 in his paper), and knowledge of which genre a particular game falls under (Platformer vs Action Adventure) helps videogamers decide which games to purchase and play. With online courses you can think of at least two

*genres* that classify your course - synchronous or asynchronous. Students pre-disposed to asynchronous courses

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(whether through preference or need for flexibility) are not going to be happy to discover that the course they have just enrolled in is synchronous. Again, let them make an informed decision by providing this information before a student registers for your course. One way of accomplishing this may be through a publicly available syllabus.

### 3: Instruction Booklet

The dedicated gamer is probably going to initially ignore the instruction booklet that comes with their game. They are probably just going to jump into playing the game, and only look at the booklet when they get stuck and do not know how to progress through the game. Here, I speak from experience. Videogame manuals typically contain some dry material (system requirements, legal disclaimers, etc.) laid out in an unexciting fashion, but the Nintendo instruction booklets provide information on the actual game mechanics and objectives in an entertaining fashion. White space and appropriate illustrations are used to guide the reader through the information that they need to know: Information on a helpline is provided, the text is easy to read - in both use of type, and language. Consider using these examples as you craft your syllabus and your course. Ideally, your course should be designed in such a way that a student knows intuitively where to go and what to do, but that does not excuse you from taking the time to write a student-focused syllabus that is easy and pleasurable to read. Your students will be consulting the syllabus when they are stuck, and if they can find the answer here this will reduce both confusion and the resulting email questions that they will otherwise have to send to you. Here are some simple suggestions that go beyond the regular syllabus requirements:

- Use simple active language
- Use bulleted lists and tables to structure content (particularly deliverables, grading structure and requirements)
- If you require or recommend a book, provide an image of the front cover
- Avoid long paragraphs and dense type
- Add a photo to go with your contact information
- Provide information on technical help
4: The Call To Action

Both the Mario and Zelda games begin with a dramatic call to action - the Big Baddie intrudes upon the idyllic utopia and does something bad, leaving the hero protagonist with a just cause to follow and a problem to solve. In your online courses, this can be mirrored by outlining a Big Project at the beginning of the quarter - the final task that they must achieve at the end of the course, so as to demonstrate proficiency and learning. Lead with the requirements for the project, and then let the rest of the course flow from this. Everything in the way of content and smaller exercises that your students then encounter is viewed through the context of how this will help them successfully complete the project.

5: A Quiet Place to Explore

Whilst the Mario and Zelda games begin with the heart-pounding introduction of the villain, they then segue way into a quiet period of exploration where the hero has the chance to explore how the game works. Contextual advice and tips are provided on game mechanics. This is the virtual equivalent of a sandbox where mistakes can be made without penalty, which induces the player to experiment and explore without fear of failure. An easy way to accomplish this in an online course is to let your students into your course early. Consider providing Week 0, in which students have access to your course and introductory material, and get to experiment with the tools that they will later use to submit graded assignments. For example, you may create self-paced exercises in which the students post an introductory message on the discussion board, post test messages to the course dropbox, and watch sample videos.
6: Constraints

Players of the Mario and Zelda games are first presented with a subset of the entire game world in which to play and explore. For example, in the Zelda games, players are initially constrained by blocked pathways and locked gates to a smaller gameworld. The players can see that there is more to explore beyond these barriers, but they cannot get there yet. This prevents the gamer from rushing off to parts of the world that they are unprepared for. In your online courses you can provide a similar structure through staged or conditional release. In my online courses, students in Week 1 cannot access the materials for Week 2 until the next week (and in some cases not until they have completed their assignments).

7: Mini-Bosses and End-Of-Level Bosses

Players in the Nintendo games encounter Mini-Bosses partway through a level. These are enemies to defeat through the application of a recently discovered and honed skill, such as jumping, defending with a shield or a sweeping slices with a sword. The Mini-Bosses act as checkpoints in the game. Without the right skill the player cannot progress. The End-Of-Level Bosses can only be defeated through the application of combined skills, such as a sweeping slice with the sword whilst jumping, the back flipping with the shield held defensively. You can apply these types of checkpoints in your online course quite easily. One way I do this is through the buildup to a project. One of the projects I assign is for a group of students to film, edit and upload a seven-minute video presentation that answers a particular question. Rather than just awarding points for the project itself, I award points for sub-tasks in the weeks leading up to the project deadline – the students get individual points for assigning teams, then crafting a script, then creating a test video, then uploading that test video to the dropbox. Each sub-task is akin to the Mini-Boss, and the project is akin to the End-Of-Level Boss.
8: Coins

In the Zelda games players accumulate Rupees, while in the Mario games players accumulate golden coins. The currency is both a record of achievement and an inducement to attempt difficult or dangerous tasks. For example, a player might have to execute a series of complex and well-timed jumps and maneuvers to obtain precariously placed golden coins that allow them to complete the level with a perfect score. In your online courses consider awarding points for a plethora of tasks, such as creating an online profile, posting a student introduction, regular discussion posts, attempting a quiz, etc. The points will help induce your students to stay actively involved in the course and to utilize all aspects of the Learning Management System.

9: Game Over

Game over is not the end of the game in Mario or Zelda. A player may lose their life, but they can play the game from where they died again and again. I would recommend following the same philosophy in your online courses. The course does not have to be a high wire act for your students in which failure is not an option, but instead an environment in which they can creatively fail, experiment and practice until they perfect skills and achieve complete understanding and mastery. One suggestion for your online courses is to let students retake quizzes until they achieve a score they are happy with. This practice may also reduce the pressure to cheat.

10: Narrative Structure

A well-designed game has a narrative structure, and your online courses should exhibit this aspect too. Stories are ways in which we make sense of life and remember facts. As I have suggested earlier, your course should culminate in a project that allows your students to demonstrate proficiency and learning. Upon completion of the project, your students should be able to look back at their progress through the course and see that there was narrative structure, not a series of disjointed and random events.
In my courses, I use an anonymous weekly survey to ensure that the course is working for my students. The questions I ask are:

**Question 1**
What was the most useful thing that you learnt this week?

**Question 2**
What was the least useful thing that you learnt this week?

**Question 3**
Is there anything that you did not understand?

**Question 4**
Did you experience any technical difficulties?

**Question 5**
How useful to you were the lecture videos?
- N/A - I will not watch the videos.
- I have not watched yet - but may do so in the future.
- Not useful.
- Somewhat useful.
- Very useful.

**Question 6**
What is your preferred format for the lecture videos?
- Downloadable.
- Streaming.
- Both.
- No preference.

**Question 7**
Is there anything you want to tell me?

These questions allow me to make changes as I teach the course, and to make refinements for the next time the course is offered.
About James Moore

James Moore is the Director of Online Learning for DePaul University’s Driehaus College of Business. He teaches Internet Marketing classes in fully online, blended and face-to-face formats. He attempts to balance his love of technology and gadgets with the knowledge that quick and simple solutions are best. Unfortunately, creating quick and simple solutions often involves a long and complex process.

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Here are a few of the courses and seminars I teach:

**Practical Internet Marketing Certificate Program: Hands-On Techniques for Small Businesses and Nonprofits**
http://cpe.depaul.edu/opim (online)
http://cpe.depaul.edu/pim (face-to-face)

A six-week certificate program that covers (almost) everything you need to know about marketing on the Internet.

Taught online and face-to-face in Chicago.

**MKT 595: Internet & Interactive Marketing**
http://condor.depaul.edu/jmoore/mkt595/
An eleven-week DePaul University MBA course that covers (almost) everything you need to know about marketing on the Internet.

Taught online.