Games

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Games We Played

Source: google images
Games We Now Play

Source: google images
Game Industry Revenues

How about Serious Games?

- “Games that are designed to entertain players as they educate, train, or change behavior”- Stokes, 2005

**ElderQuest**

https://youtu.be/YertjfCoWhg

- Experience, exploration, reflection and playful gaming
- Authentic tasks to be carried out in inspiring learning environments
- Collaboration and communication through role play
- Immersion
- Active and interactive participation
- Personalization and adaptation
- Self directed learning
- User identity
Learning Benefits Expected from Serious Games

Drummond, Hadchouel, & Tsniere-2017
Pillars of Learning

Drummond, Hadchouel, & Tsniere-2017
<table>
<thead>
<tr>
<th>Pillars of learning</th>
<th>Objective</th>
<th>Practical implications for serious games development</th>
<th>Practical implications for serious game implementation</th>
<th>Future directions of research</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attention</strong></td>
<td>Reaching medium level of arousal</td>
<td>None</td>
<td>None</td>
<td>Links between serious game design, level of arousal, learning effectiveness</td>
</tr>
<tr>
<td>- Alerting network</td>
<td>Selecting relevant information</td>
<td>Promote strategies that help to select relevant information (modelling/examples, modality/use of the audio channel for verbal explanations to guide visual search, feedback, integration of relevant information in virtual tools)</td>
<td>Educators should discuss with learners at the end of the serious gaming session in order to ensure that they identified the relevant information</td>
<td>New strategies integrated in games for guiding the player towards relevant information</td>
</tr>
<tr>
<td>- Orienting network</td>
<td>Staying focused on the serious game</td>
<td>None</td>
<td>Because learners are not always immersed in the game although they do learn, the environment shall stay clear of distractions during the serious gaming session</td>
<td>Differences between immersion, engagement, and repercussions on learning effectiveness</td>
</tr>
<tr>
<td><strong>Active learning</strong></td>
<td>Being engaged during learning</td>
<td>Promote interactivity rather than convey the learning content via text or audio explanation</td>
<td>None</td>
<td>Description of game features that enhance interactivity</td>
</tr>
<tr>
<td><strong>Feedback</strong></td>
<td>Evaluating the gap between the objective and the actual performance</td>
<td>Promote the use of feedback which deals with the task completed, not with the self-esteem</td>
<td>Educators can debrief the performance of players at the end of the serious gaming session</td>
<td>Exploration of forms of feedback which are the most effective in serious gaming</td>
</tr>
<tr>
<td><strong>Consolidation</strong></td>
<td>Achieving long-term memory</td>
<td>Promote the repetition of interactions with important learning content inside the game</td>
<td>Promote spaced-education with multiple training sessions and various educational methods</td>
<td>Description of forgetting curves after different types of serious gaming and determination on how often refreshers should be proposed</td>
</tr>
</tbody>
</table>

Drummond, Hadchouel, & Tsniere-2017
Healthcare Serious Games

http://www.ardeaarts.org/birthBeta/
Commercial Products and Home Grown

https://youtu.be/l0q7nweJ8i8
Exercise
LEADERSHIP AND TEAM SIMULATION: EVEREST

Prepare
- Introduction  - How to Play  - Your Profile

YOUR PROFILE
You are Italy’s most accomplished mountaineer, who began your career at a teenager scaling mountains in the Alps. Your hero growing up was Reinhold Messner, a climber from South Tyrol in Italy who many view as the greatest high altitude mountaineer in history.

You are here to clean up the mountain. You are tired of hearing about people who leave tons of junk on the mountain, including old tents, gear, and oxygen canisters. You are going to work on cleaning up the various camps. You have been to the summit twice before in your career. Your hope is to spend an extra day at Camp 4 during your ascent, so that you can assemble all the garbage at camp and then enlist the help of your team to carry the tanks back to Base Camp on their way down the mountain.

If you accomplish an effective clean-up, you are going to receive a major grant from a large European corporation whose CEO is dedicated to promoting environmental protection. You plan to use the grant to fund your efforts to complete the clean up of a polluted river in Italy - (this is your pet project, which you have been working on for 10 years).

In a surprising development, you experienced Acute Mountain Sickness (AMS) on your last expedition in the Himalayas. However, you know that everyone is counting on you to help many of the other climbers given your experience on Everest and other high altitude climbs. You do not want to disclose your concerns about your health, because you are afraid you may be asked to leave the team and because you had not had these kinds of problems earlier in your esteemed career. A part of you, though, thinks that this may be your last shot at Everest, if these health issues get worse.

HOW YOUR SCORE WILL BE CALCULATED

<table>
<thead>
<tr>
<th>Goal</th>
<th>Potential Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid rescue</td>
<td>3</td>
</tr>
<tr>
<td>Spend extra day at Camp 4 during ascent</td>
<td>1</td>
</tr>
<tr>
<td>Bonus points (revealed during simulation)</td>
<td>3</td>
</tr>
<tr>
<td>Your Total Possible Points</td>
<td>7</td>
</tr>
</tbody>
</table>
Marshmallow Challenge

https://www.tomwujec.com/design-projects/marshmallow-challenge/
Moon landing - a team building game

Team building activities can be simple games, creative problem-solving tasks, or ‘pen and paper’ group survival situations. ‘Moon Landing’ falls into the third category. Apart from the ‘fun’ challenge of trying to stay alive, it can help encourage communication, cooperation and decision making skills among your young people.

You are a member of a space crew scheduled to rendezvous with a mother ship on the lighted surface of the moon. However, due to mechanical difficulties, your own ship was forced to land at a spot 200 miles from the rendezvous point.
Lost at Sea

Lost at sea - a team building game

Another ‘pen and paper’ group survival game and a team building activity to encourage interaction and teamwork among your young people. The chances of ‘survival’ depend on their ability to rank the salvaged items in relative order of importance.

You have chartered a yacht with three friends, for the holiday trip of a lifetime across the Atlantic Ocean. Because none of you have any previous sailing experience, you have hired an experienced skipper and two-person crew.

Unfortunately in mid Atlantic a fierce fire breaks out in the ships galley and the skipper and crew have been lost whilst trying to fight the blaze. Much of the yacht is destroyed and is slowly sinking.
Telestrations
Perfection-
Jigsaw Puzzle
Pillars of Learning

Drummond, Hadchouel, & Tsniere-2017
Leading Change: Go Beyond Gamification with Gameful Learning

Learn the tools to support gameful learning environments that foster personalized, engaged learning in schools.
Gameful Learning

http://gamefulpedagogy.com/what-is-gameful/
Assessment
What ideas do you have?

“A journey of a thousand miles begins with a single step”
— Confucius
Thank you

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References

