Gamification & Game-Based Learning

Gameful thinking in the design of courses to improve student engagement.
**AT-A-GLANCE**

64% of US households own a device that they use to play video games.

The average gamer is **34 years old**.

Gamers age 18 or older represent more than **70 percent** of the video game-playing population.

**60 percent** of Americans play video games daily.

**Adult women** represent a greater portion of the video game-playing population (33%) than boys under 18 (17%).

70% of parents believe video games have a positive influence on their children’s lives.

- Most parents (70 percent) say video games are a positive part of their child’s life. Most parents (67 percent) also play video games with their child at least once weekly and 94 percent say they pay attention to the video games played by their child.

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http://www.theesa.com/about-esa/industry-facts/
Why do we play?
BRIAN SUTTON-SMITH

PLAY for LIFE
PLAY THEORY and
PLAY AS EMOTIONAL SURVIVAL

Foreword by Thomas S. Henricks
Compiled and edited by Charles Lamar Phillips and the Editors of the American Journal of Play

THE OPPOSITE OF PLAY IS NOT WORK. IT'S DEPRESSION.
Gamification Defined

Gamification: “the use of game mechanics and experience design to digitally engage and motivate people to achieve their goals” (Burke, 2014).

Gamification is the use of game design elements in non-game contexts (Deterding, 2011).

At its core, gamification applies game mechanics to non-game activities to prompt specific behaviors. In a business context, gamification is the process of integrating game mechanics and dynamics into a website, business service, online community, content portal, marketing campaign or even internal business processes, in order to drive participation and engagement by target audiences.

The overall goal of gamification is to more deeply engage with consumers, employees, partners and other audiences, and inspire them to participate, collaborate, share and interact in some activity or community. A particularly compelling, dynamic, and sustained gamification experience can be used to accomplish a variety of mission-critical business goals.
Gamification in Blackboard Learn

- **Full, Interactive Games**
  - Live quizlet.com
  - Kahoot.com
  - Bb Quiz Tournaments

- **Timed Quizzes**
  - live.quizlet.com
  - Kahoot.com
  - Bb Quiz Tournaments

- **PBL**
  - Achievements / Badges
  - Partner Integrations: Cengage, Pearson, Duolingo, Kahoot

- **Adaptive Release**
  - Immersive feedback
  - Leveling up

- **Learning paths**
  - Gradecraft.com

- **Storification**
  - Hero’s Journey
1. FULL, INTERACTIVE GAMES.
2. **Timed Quizzes.**

Could you be a super recogniser?

Partly due to the success of a few police super-recognisers at identifying a large number of criminal offenders from CCTV images there has been a widespread interest in individuals possessing these exceptional abilities.

About 3,000,000 people have attempted this test to see if they possess this skill. Do you?

[https://www.elucidat.com/showcase/#!/facial-recognition-quiz](https://www.elucidat.com/showcase/#!/facial-recognition-quiz)
3. **PBL – Points, Badges, Leaderboards**

Progress Bar
Achievements/Badges
Currency – XP
Leaderboard
Partner Integrations: Cengage, Pearson, Duolingo, Kahoot, others

Fundamentals of AI: Example Ultra Course

Szymon Machajewski
Instructor

Chart data. Course progress in points.

<table>
<thead>
<tr>
<th>Names</th>
<th>Gradebook Column: Mid term - Quiz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samantha Pellett</td>
<td>10</td>
</tr>
<tr>
<td>Rosette Cheeseman</td>
<td>9</td>
</tr>
<tr>
<td>Alvin Minglow</td>
<td>8</td>
</tr>
<tr>
<td>Paris Verdi</td>
<td>7</td>
</tr>
<tr>
<td>Shea Thompson</td>
<td>6</td>
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<tr>
<td>Dung Duell</td>
<td>5</td>
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<tr>
<td>Erendea Griffin</td>
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<tr>
<td>Charity Bush</td>
<td>3</td>
</tr>
<tr>
<td>Keturah Raposo</td>
<td>2</td>
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<tr>
<td>Keturah Pollett</td>
<td>1</td>
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<tr>
<td>Jerica Blumenthal</td>
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<tr>
<td>Gilby Kongenci</td>
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<tr>
<td>Kathy Zafar</td>
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<tr>
<td>Adile Caggiano</td>
<td>0</td>
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<tr>
<td>Samantha Cordoba</td>
<td>0</td>
</tr>
<tr>
<td>Taneka Zerba</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: The names of students, other than your own, have been changed.

**Fixed Mindset** *(intelligence is static)*

- leads to a desire to look smart and therefore a tendency to:
  - avoid challenges
  - get defensive or give up easily
  - see effort as fruitless or worse
  - ignore useful negative feedback
  - feel threatened by the success of others.

As a result, they may plateau early and achieve less than their full potential.

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**Growth Mindset** *(intelligence can be developed)*

- leads to a desire to learn and therefore a tendency to:
  - embrace challenges
  - persist in the face of setbacks
  - see effort as the path to mastery
  - learn from criticism
  - find lessons and inspiration in the success of others.

As a result, they reach even higher levels of achievement.

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www.habitsforwellbeing.com
4. **Adaptive Release — Level Up**

**Week 1 Study Guide Questions**

Add two potential questions that could a study guide.

This assignment is worth 30 points. You... [continued]

**Terminology Test**

Enabled: Adaptive Release

**Add Rule**

Instructors can create release criteria for a content item. More Help...

- Indicates a required field.

**RULE NAME**

[Image of adaptive release settings]

**Manage Criteria: Rule 1**

*Adding criteria to this rule will narrow the user's ability to view this content item.*

- Date
- Grade
- Membership

**Early Ocean Explorers Overview**

Visit this site to read about a few of our history adventures. Your objective in this lesson is to simply find... [continued]

**User Progress**

- Early Ocean Explorers Overview
- Adaptive Release
- Adaptive Release: Advanced
- Add Alignments
- Set Review Status (Disabled)
- Metadata
- Statistics Tracking (On/Off)

[Image of user progress]

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Course Agreement

I, Szymon Machajewski, agree to follow the GVSU academic integrity policy and student code of conduct. In order to learn in this course, I will complete the homework and submit only my own work. I have read and understand the consequences of unethical conduct in this or any other GVSU course.

✓ I have agreed to follow the academic integrity code of conduct.

MyLab IT Course Home

Access your MyLab IT course for additional content and assignments.
5. Learning paths.

https://ai.umich.edu/portfolio/gradecraft/
The Points Planner
The Points Planner enables students to set clear goals for themselves and plan their work in your course. They decide which assignments they want to work on, set a goal for how they expect to do, and ensure that they are building toward success in the course as a whole.

Learning Analytics
Data helps you keep track of who is making progress and who may need more support, and helps students stay informed about their own work. By allowing students to see analytics independently, they can then take charge of their own success.

Flexible Rubrics
Rubrics show students concise expectations you have for their work. You can design your rubrics to help deliver clear, consistent feedback to your students. Our rubric feature is flexible: you can enter different amounts of points that can be achieved for each criterion, and more.

Leveling System
Customize the leveling scheme to match your course design—declare what point thresholds equate to earning grade levels, and match the level names to a hierarchy relevant to the coursework itself.

Badges
Badges can be used to recognize student achievement on a specific assignment or their overall excellence more broadly in your course. Badges are flexible: you decide how they’re awarded, and how they relate to student progress.

Leaderboards
Students can choose to participate in anonymous, team-based leaderboards if they enjoy competition, or opt-out if they don’t. As the instructor, you control if leaderboards appear at all.

Unlocks & Getting
Games don’t start with a final boss battle—the same is true for learning: we want learners to acquire foundational knowledge before they move on to more complex work. With unlocks, you can determine what work must be done before students unlock additional opportunities.

Integration with Existing Platforms
We know that integrating with other platforms is key, so we support Learning Tools Interoperability (LTI) 1.1 as both a Tool Provider and Consumer. Your data is your data—and should always be available to you to download and dig into.
6. Storification - Hero's Journey

The Hero's Journey

ACT I
1. Ordinary World
2. Call to Adventure
3. Refusal of the Call
4. Meeting with the Mentor
5. Crossing the Threshold
6. Tests, Allies, Enemies
7. Approach

ACT II
8. Central Ordeal (Midpoint, Death, and Rebirth)
9. Reward
10. The Road Back

ACT III
11. Resurrection (Climax)
12. Return with Elixir (Denouement)

Unknown
Known

Return
Call to Adventure
Supernatural aid
Threshold Guardian(s)
Threshold (beginning of transformation)
Helper
Mentor
Challenges and Temptations

Atonement
Transformation
REVELATION
Abyss (death & rebirth)

#HEBITS
Education is a journey from the Ordinary World to the Special World and back.
Karl Kaap:
Gamification of Learning

Gamification for Interactive Learning

Karin Hutchinson:
Teaching Complex Topics
And those who were seen dancing were thought to be insane by those who could not hear the music.

Friedrich Nietzsche