Welcome!

- Session is being recorded
- Use of video is encouraged
- Mics muted when not speaking
- Chat is available
- Session will end at :05 after
- Questions? Post to the chat
The Game is Afoot!

Embedded Tutors use Gamification Techniques to Motivate Online Learners
Who originally said, “The game is afoot”?

- A. Arthur Conan Doyle’s Sherlock Holmes
- B. BBC network’s Dr. Who
- C. Shakespeare’s Henry V
Gamification

Defined as it relates to student learning
A standard definition of gamification was proposed by Seaborn and Fels (2015) that “gamification is the intentional use of game elements for a gameful experience of non-game tasks and contexts” (p. 17).

In practice, gamification in education has been used with gamified designs in an instructional system that supports nongame activities to increase student engagement and learning motivation in a fun atmosphere.

The theoretical framework was inspired by literature reviews of gamification studies and self-determination theory (SDT).

Based on the literature, gamification elements:

- feedback
- challenge
- rewards
- objectives

may contribute to improved academic performance.

Deterding, 2011; Dicheva et al., 2015; Hamari et al., 2014; Kim et al., 2017; O’Donnell et al., 2017; Seaborn et al., 2015; Simões, Redondo, & Vilas, 2013; Wilson et al., 2009.
Embedded Tutoring

Defined relative to an online, hybrid learning environment
Embedded tutoring is a form of Supplemental Instruction (SI), based on the model developed at the University of Missouri-Kansas City. In online embedded tutoring, a peer-tutor works in the virtual classroom under the instructor's guidance to help students understand course concepts and enhance student engagement.
Collaborative Learning: Collaborative learning in the Vygotskian tradition aims for social interaction either among students or between students and a teacher, and essentially assists students in advancing through the Zone of Proximal Development (ZPD) (Vygotsky 1978, p. 86).

Active Learning: “[A]ctive learning approaches that rely on group work rest on this sociocultural branch of constructivist learning theory, leveraging peer-to-peer interaction to promote students’ development of higher-order thinking (Bonwell and Eison, 1991).


Fall 2020

What we did and what we learned
In the fall of 2020, tutors were embedded in the online modality (Zoom rooms) of 3 sections of MAT-003 hybrid classrooms. The embedded tutors worked collaboratively with the instructor by joining the students assigned to the online rotation of the classroom, while the instructor worked from the on-ground classroom. To enhance student engagement and increase motivation, particularly in the connected classroom, the embedded tutors used elements of gaming, primarily Kahoot, during a portion of the class time to reinforce collaborative learning and create a sense of community amongst the online and on-ground students.

- We learned that students tend to articulate their struggles with a tutor more openly than an instructor.
- Students tend to feel alienated in an online classroom when they are separated from classmates.
- Students appear to have difficulty with attention while in an online environment.
- Students will participate in group work during class time as they are less likely to seek learning support outside of the class time. The support succeeds when it is intentional.
Data from Midterm and Final Grade Reports

### Supported Classes (3 sections/50 students)

<table>
<thead>
<tr>
<th>FA20 MGRP</th>
<th>FA20 FGRP</th>
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</thead>
<tbody>
<tr>
<td>16-A (32%)</td>
<td>16-A (33%)</td>
</tr>
<tr>
<td>12-B (24%)</td>
<td>12-B (25%)</td>
</tr>
<tr>
<td>3-C (6%)</td>
<td>7-C (14%)</td>
</tr>
<tr>
<td>0-D (0%)</td>
<td>0-D (0%)</td>
</tr>
<tr>
<td>13-F (26%)</td>
<td>8-F (16%)</td>
</tr>
<tr>
<td>6-W (12%)</td>
<td>6-W (12%)</td>
</tr>
</tbody>
</table>

### Unsupported Classes (3 sections/53 students)

<table>
<thead>
<tr>
<th>FA20 MGRP</th>
<th>FA20 FGRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-A (19%)</td>
<td>5-A (9%)</td>
</tr>
<tr>
<td>10-B (19%)</td>
<td>14-B (26%)</td>
</tr>
<tr>
<td>5-C (9%)</td>
<td>13-C (25%)</td>
</tr>
<tr>
<td>0-D (0%)</td>
<td>0-D (0%)</td>
</tr>
<tr>
<td>16-F (30%)</td>
<td>9-F (17%)</td>
</tr>
<tr>
<td>12-W (23%)</td>
<td>12-W (23%)</td>
</tr>
</tbody>
</table>
Phillip

Perceptions of usefulness, learning motivation, and enjoyment from gamified activities by an Embedded Tutor
More Gamification Ideas

Additional gamification opportunities and resources
https://kahoot.com/schools/how-it-works/
https://quizlet.com/teachers
https://www.playfactile.com/
https://quizizz.com/
https://socrative.com/
https://www.gimkit.com/
https://www.bingomaker.com/
https://flippity.net/
https://bubbl.us/
https://crosswordlabs.com/
https://www.mentimeter.com/
https://www.polleverywhere.com/how-it-works
https://www.peardeck.com/
https://info.flipgrid.com/
Answer to preliminary question:

The literal meaning of “the game is afoot” is about hunting. The game means the prey and afoot means running or on the move. In modern usage it means that the action has started.

Poll: Who said, “the game is afoot!”?

a. Sir Arthur Conan Doyle’s Sherlock Holmes
b. BBC network’s Dr. Who
c. Shakespeare’s Henry V

(The phrase comes from Shakespeare's *King Henry IV Part I*, 1597 as spoken by Henry V: "Before the game is afoot, thou still let'st slip." It is also a phrase used by Sherlock Holmes when pursuing a lead in a case.)
Contact us

For information about collaboration, embedded tutoring, Supplemental Instruction, tutoring services, Directed Learning Activities (DLA’s), PAL Coaching, and additional resources to support student success, please email cave@saintleo.edu