

# WELCOME

GAME ON!

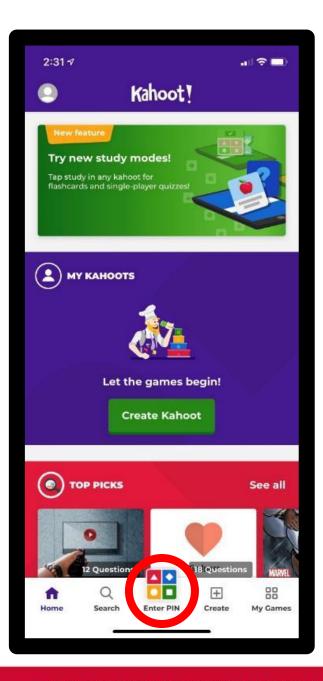
WiFi: *Hilton Honors Meeting* Password: *ICTAR* 

Gary Downey, MS, PE, CPE The Ergonomics Center GLDowney@ncsu.edu For this session you will need to go to *Kahoot.it* 

Kahoot!



- Go to *Kahoot.it*
- Enter the PIN provided (once the game starts)
- Enter your Player Name (keep it respectful)
- LEAVE THE GAME OPEN



### **NC STATE UNIVERSITY**

#### © 2024 The Ergonomics Center

#### KS S&HC | October 2, 2024



**The Ergonomics Center** 



- Not-for-Profit organization founded in 1994
- NCSU Dept. of Industrial & Systems Engineering
- Occupational ergonomics
  - Nationwide
  - Consulting
  - Training
  - Applied research

**NC STATE UNIVERS** 

https://www.ergocenter.ncsu.edu/

KS S&HC | October 2, 2024

### And Now...Death by PowerPoint

- To be, or not to be, that is the question:
- Whether 'tis nobler in the mind to suffer
- The slings and arrows of outrageous fortune,
- Or to take arms against a sea of troubles
- And by opposing end them. To die-to sleep,
- No more; and by a sleep to say we end
- The heart-ache and the thousand natural shocks
- That flesh is heir to: 'tis a consummation
- Devoutly to be wish'd. To die, to sleep;
- To sleep, perchance to dream—ay, there's the rub:
- For in that sleep of death what dreams may come,
- When we have shuffled off this mortal coil,
- Must give us pause—there's the respect
- That makes calamity of so long life.
- For who would bear the whips and scorns of time,
- Th'oppressor's wrong, the proud man's contumely,
- The pangs of dispriz'd love, the law's delay,
- The insolence of office, and the spurns

#### © 2024 The Ergonomics Center

- That patient merit of th'unworthy takes,
- When he himself might his quietus make
- With a bare bodkin? Who would fardels bear,
- To grunt and sweat under a weary life,
- But that the dread of something after death,
- The undiscovere'd country, from whose bourn
- No traveller returns, puzzles the will,
- And makes us rather bear those ills we have
- Than fly to others that we know not of?
- Thus conscience doth make cowards of us all,
- And thus the native hue of resolution
- · Is sicklied o'er with the pale cast of thought,
- And enterprises of great pith and moment
- · With this regard their currents turn awry
- And lose the name of action.

### Alas, poor Yorick!

#### KS S&HC | October 2, 2024

### Gamification

- Applying game mechanics to a non-gaming environment to increase engagement and retention
- Your brain likes it!
  - Dopamine
    - Feel good hormone released when rewarded for actions
    - "Congratulations! You got your steps in!"
  - Serotonin
    - Improves mood levels
    - "You've earned the 6-In-A-Row badge!"
  - Endorphins
    - Thrill inducing chemical
    - "Yay! You earned the highest score in the class!"
- Create Ergo-junkies!





### Why Gamification?

- Makes learning interactive
- Creates learning addiction (see previous slide)
- Competition drives content engagement (for many)
- Creates cooperation when used in groups
- Points mean prizes (or status)
- Offers feedback in real-time
- It's fun!

But who needs fun when you have PowerPoint!



### **NC STATE UNIVERSITY**

#### © 2024 The Ergonomics Center

KS S&HC | October 2, 2024

### Gamification Types

- Structural gamification
  - Existing materials augmented with new dynamic elements
  - Game content presented separately from serious content
  - Examples:
    - Progress bar
    - Mini-games between units
    - Rewards as the user progresses
- Content gamification
  - Transforms existing material to be more engaging
  - Everything becomes part of the game
    - Challenges
    - Storytelling
    - Feedback loops
    - Freedom to fail

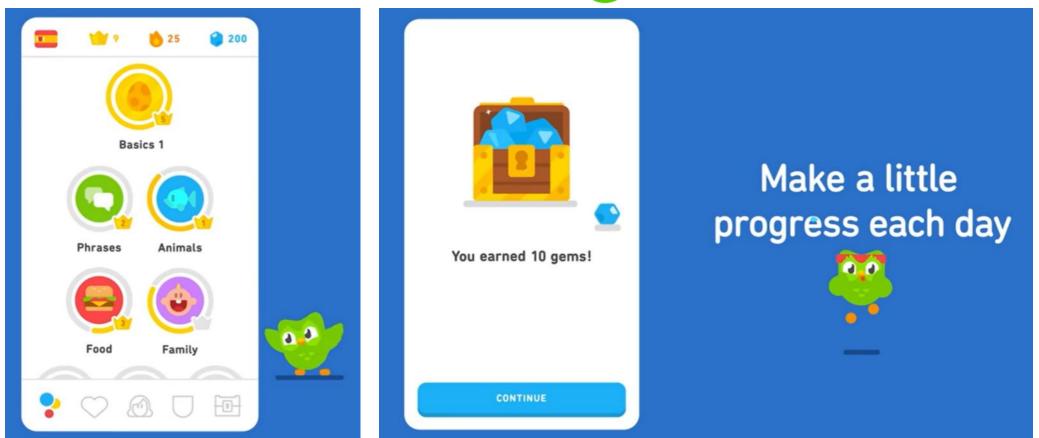
#### KS S&HC | October 2, 2024



© duolingo

NC STATE UNIVER

### Content Gamification duolingo



#### https://youtu.be/LV2R1vWFg3w

#### © 2024 The Ergonomics Center

KS S&HC | October 2, 2024

### Content Gamification duolingo



https://youtu.be/LV2R1vWFg3w

© 2024 The Ergonomics Center

KS S&HC | October 2, 2024

### **3** Popular Gamification Apps



© 2024 The Ergonomics Center

KS S&HC | October 2, 2024

### Comparing the FREE Apps

	Kahoot!	Poll Everywhere	factile
Free version available?	YES	YES	YES
Integrate into PowerPoint (Keynote and/or Google Slides)	NO	YES	NO
Has its own app?	YES	YES	YES (buzzer mode, \$\$\$)
Users can enter their own name	YES	NO	NO
Question timer can be disabled	YES	YES	NO
Built-in music played during game	YES	NO	NO
Multiple choice questions	YES	YES	NO
True False questions	YES	YES	NO
Word Cloud questions	NO	YES	NO
Maximum number of players	10	25	5 (teams)

© 2024 The Ergonomics Center

KS S&HC | October 2, 2024

### **Other Popular Gamification Apps**

- <u>Ouizizz</u> (like Kahoot!)
- **<u>Ouizlet</u>** (group based, teams)
- Gimkit (gameshow, earn money for level ups & prizes)
- <u>Crowdpurr</u> (similar to Kahoot!, more adult looking, survivor trivia mode)
- Pear Deck & Mentimeter (like Poll Everywhere)
- Genially & Breakout EDU (create escape rooms)
- Classcraft Quests (role playing adventure games)

#### © 2024 The Ergonomics Center

KS S&HC | October 2, 2024

### **Additional Resources**

- Gameshow Classroom
- Top 10 Gamification Apps for Education
- <u>Best Gamification Tools for Teachers</u>
- <u>Top 7 Gamification Tools for Teachers to</u> <u>Boost Classroom Engagement Effortlessly</u>
- <u>40+ FREE Digital Escape Rooms (plus a step</u> by step guide for creating your own)

© 2024 The Ergonomics Center

KS S&HC | October 2, 2024

### Key Take Aways

- Gamification of ergonomics education can increase audience engagement and retention
- The brain releases feel good, mood improvement, and thrill inducing chemicals when we are rewarded
- Gamification offers feedback in real time
- Training can be augmented (structural gamification) or it can be completely transformed so everything becomes part of the game (content gamification)
- There are many gamification apps/programs, many of which offer free versions (although the paid versions often offer more features)



#### © 2024 The Ergonomics Center

KS S&HC | October 2, 2024





#### © 2024 The Ergonomics Center

WiFi: Hilton

#### KS S&HC | October 2, 2024





## THANK YOU FOR PLAYING

Gary Downey The Ergonomics Center GLDowney@ncsu.edu



Please share your feedback





### Your feedback is important to me!

NC STATE UNIVERSI

© 2024 The Ergonomics Center