

# What's Next in Employee Learning: Games!

JULY 6th, 2017

**course**era for Business

# SPEAKERS



**Kevin Werbach**

Associate Professor  
The Wharton School at the  
University of Pennsylvania



**Mark Freeman**

Director of  
Global Customer Success  
Coursera



**Sharon Boller**

President  
Bottom-Line Performance Inc

# What is Coursera?

The global leader in online education  
from the world's top universities.

Yale



Duke  
UNIVERSITY



**20 million** registered  
Coursera learners



**4.2 million**  
course completions



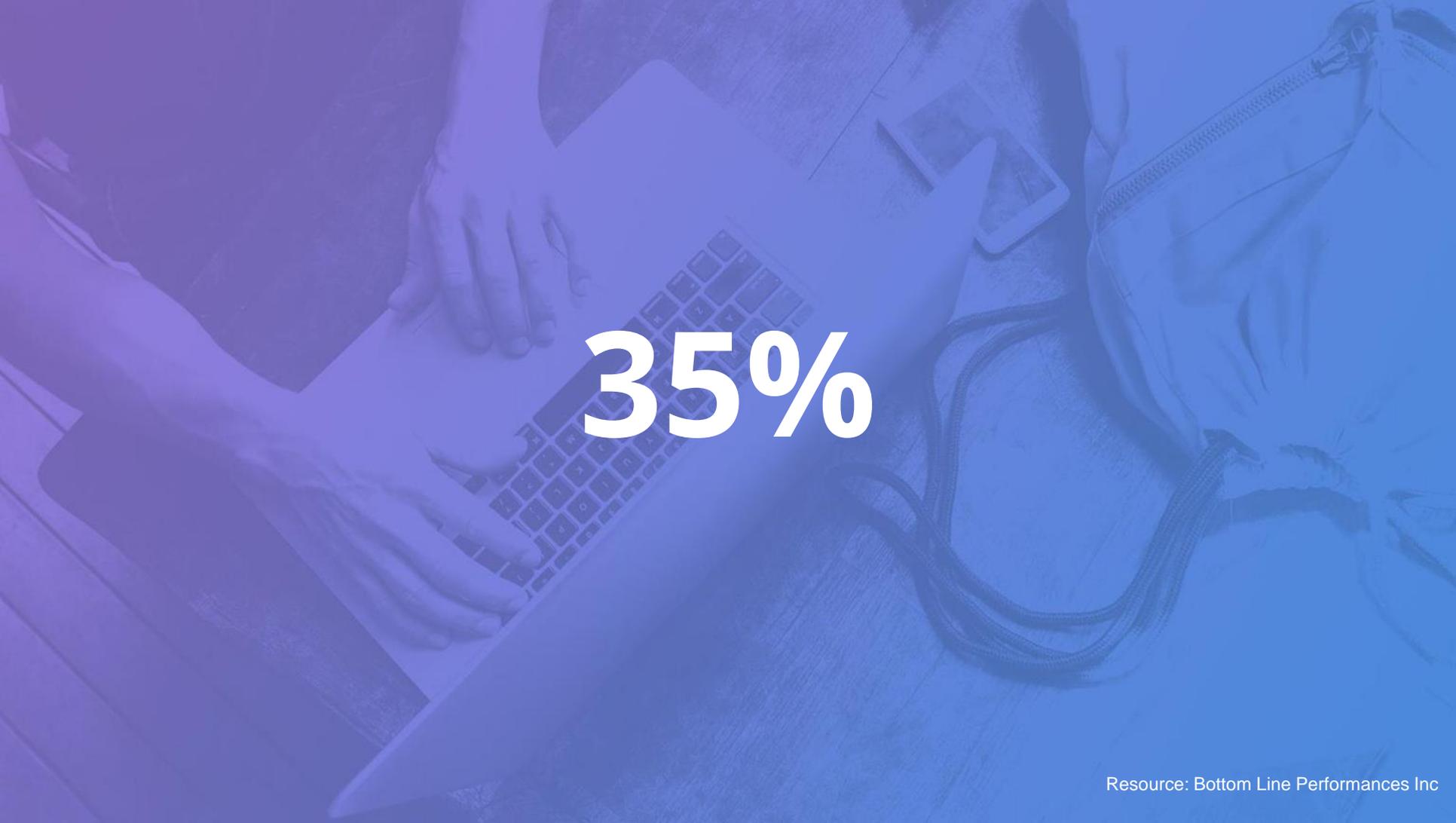
**140** partner institutions



**1,900** courses



**10+** languages



**35%**

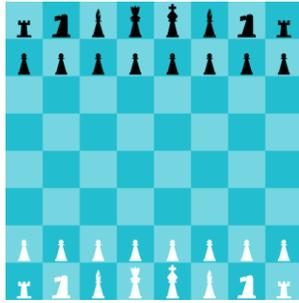
A woman with long blonde hair and a man are smiling and looking at a tablet together in an office setting. The woman is leaning over the desk, and the man is sitting at the desk. There are several pen holders with pens on the desk in the foreground. The background shows a computer monitor and some office equipment. The entire image has a warm, orange-red color overlay.

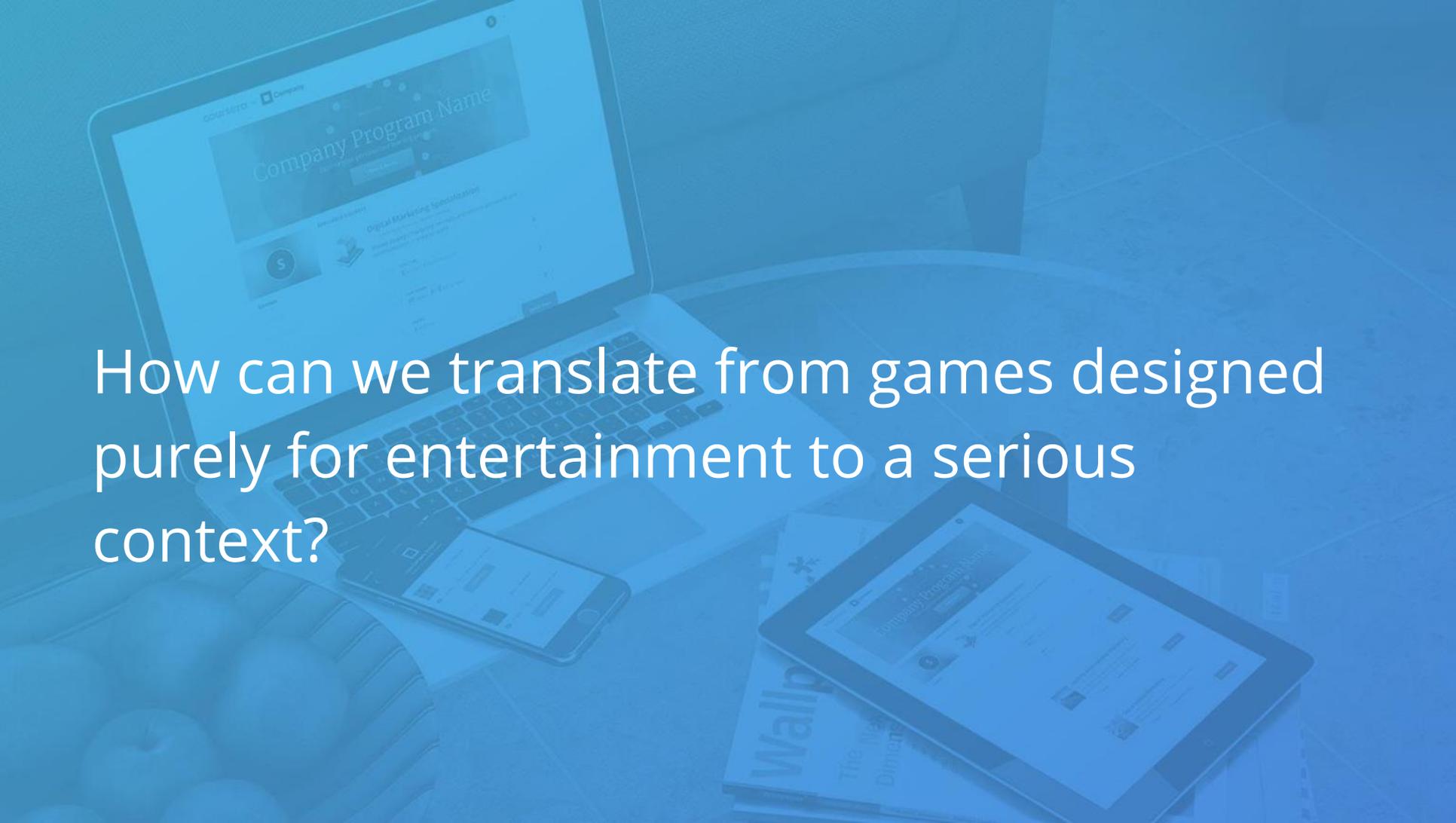
Why games matter?



What is the difference between gamification and games?

# Games vs gamification



The image features a blue-tinted background with a laptop, a smartphone, and a tablet, all displaying a website with the heading 'Company Program Name'. The laptop screen also shows a 'Digital Marketing Specialization' section. In the foreground, there is a stack of books, including one titled 'Wallp' and another 'The New Dinosaur'.

How can we translate from games designed purely for entertainment to a serious context?

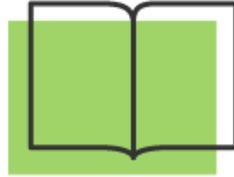
A man with a shaved head, wearing a dark jacket over a light-colored shirt, is sitting at a desk in an office. He is smiling and looking towards the camera. On the desk in front of him is a laptop, a pen holder with several pens, and a cup of coffee. The background shows a window with a grid pattern. The entire image has a purple tint.

What are the key elements of games that sync with a successful learning program?

# Impact of simulations and games in adult learners



**14%** higher in skill-based knowledge assessments



**11%** higher in terms of factual knowledge

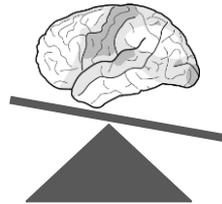


**9%** increase in retention rate

To help someone learn you need to...



Tap motivation



Balance  
cognitive load



Provide relevant  
practice

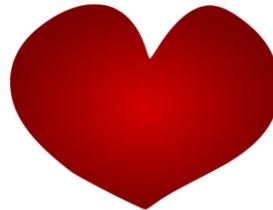


Give specific, timely  
feedback

To help someone remember you need to....



Provide spaced  
repetitions



Generate emotion

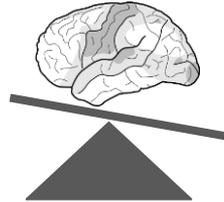


Use stories

# Games tap the same elements we need to learn and remember



LOTS of ways  
games motivate



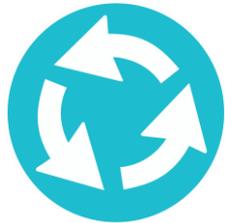
Several load-  
balancing tools



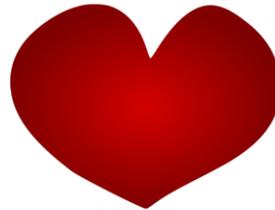
Challenges, rules  
enable relevant  
practice



Feedback in games is  
continuous



Replayability of games  
provides spaced  
repetition



The “fun” in games  
triggers emotions



Themes and stories  
provide hooks



How can employers incorporate these concepts into their learning programs?

Examples of game activities ppl find "fun"	Why it engages us	Implications for work/learning games
<ul style="list-style-type: none"> <li>Achieving a goal.</li> <li>Overcoming a challenge</li> </ul>	<p>Satisfaction of overcoming something hard (but not too hard)</p> <p>Pleasure of achievement</p>	<p>Goals are everywhere in the work world as are challenges (managing limited resources, budgets, etc.)</p>
<ul style="list-style-type: none"> <li>Earning title of "winner"</li> </ul>	<p>Pleasure of recognition</p>	<p>EEs who feel valued also tend to report feeling "engaged" at work</p>
<ul style="list-style-type: none"> <li>Collect, explore, escape</li> </ul>	<p>Mental activity keeps us from feeling bored</p>	<p>Mental involvement essential to learning</p>
<ul style="list-style-type: none"> <li>Collaborating to figure out a challenge</li> </ul>	<p>Fulfills desire to feel valued and part of a group</p>	<p>Learning games lend themselves well to cooperative play; builds collaborative behaviors needed in workplace</p>

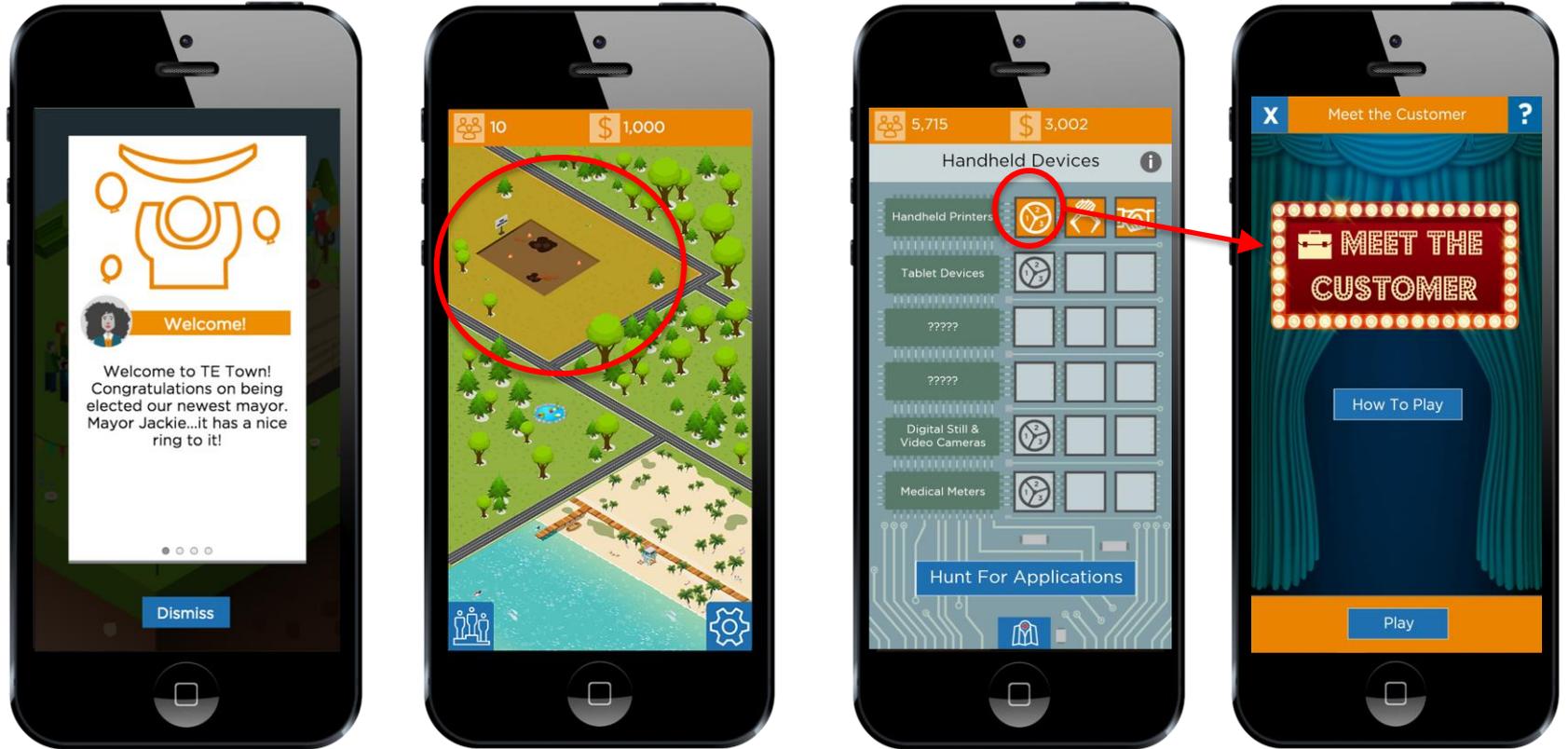
Cognitive Skill	Example Behaviors	Game Types
1 - Knowledge	Recognize, identify	Quiz-style, arcade-style, game-show style games
2 - Comprehension	Explain, describe	Quiz-style, collection, exploration games, storytelling games
3 - Application	Use, choose	Story- or scenario-based quiz games, matching games, role-playing games, decision games involving scenarios, simulations
4 - Analysis	Compare, categorize, classify	Strategy games
5 - Synthesis	Compile, create, estimate	Building games, simulations
6 - Evaluation	Decide, prioritize, justify	Simulations, role-playing games

Modified from *Play to Learn: Everything You Need to Know to Design Effective Learning Games* by Sharon Boller, Karl Kapp (ATD Press, 2017)

A person's hands are shown holding a tablet computer. The image is overlaid with a green and yellow gradient. The text is centered on the image.

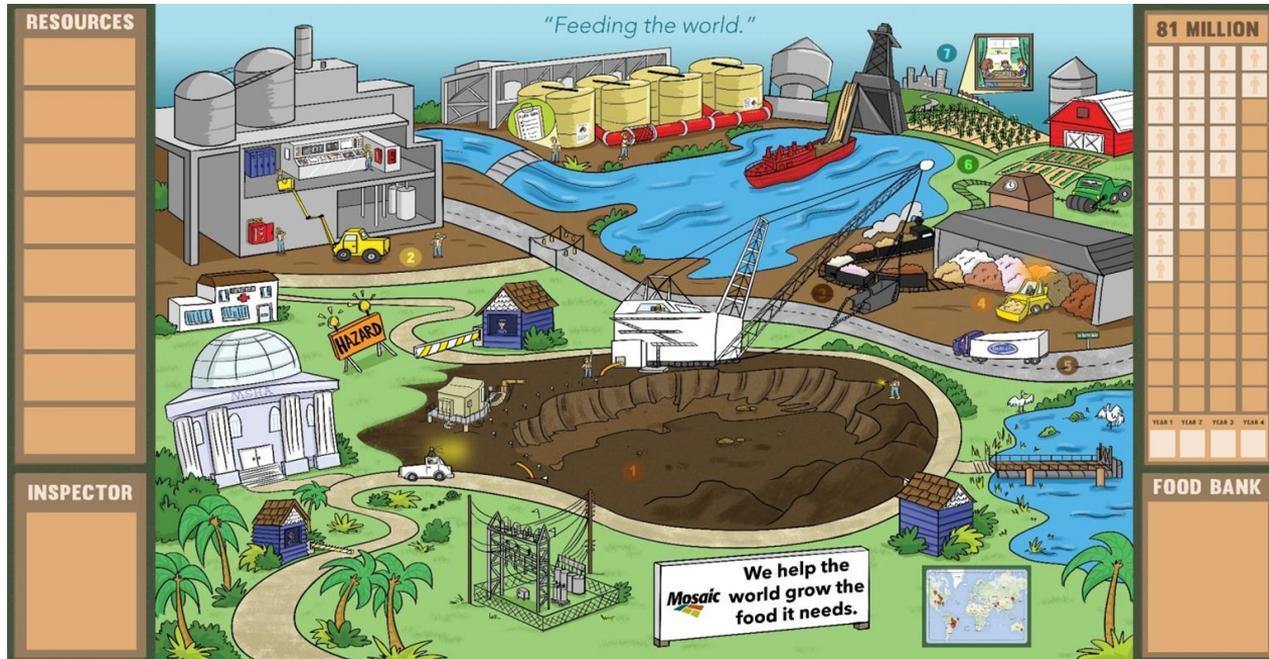
What companies have successfully incorporated games into their learning programs?

## Learning Game Example – Sales Reps: TE Town



## Learning Game Example – All Employees: Feed the World

1. **Game Goal:** Work together to feed an ever-increasing world population, achieving production goals each year.
2. **Learning Goal:** reinforce all the safety steps and environmental protection steps taught during the previous 3.5 days of a NEO workshop.

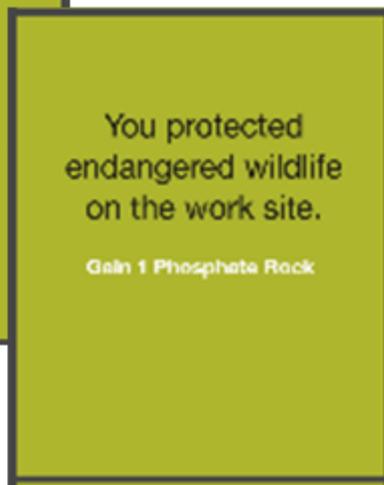
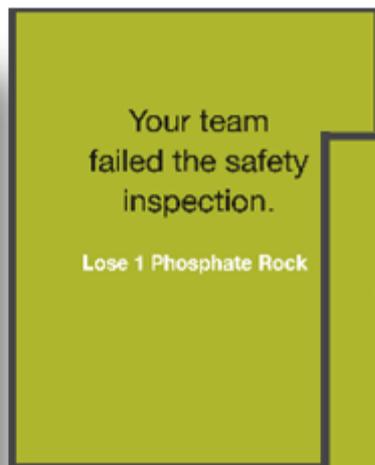




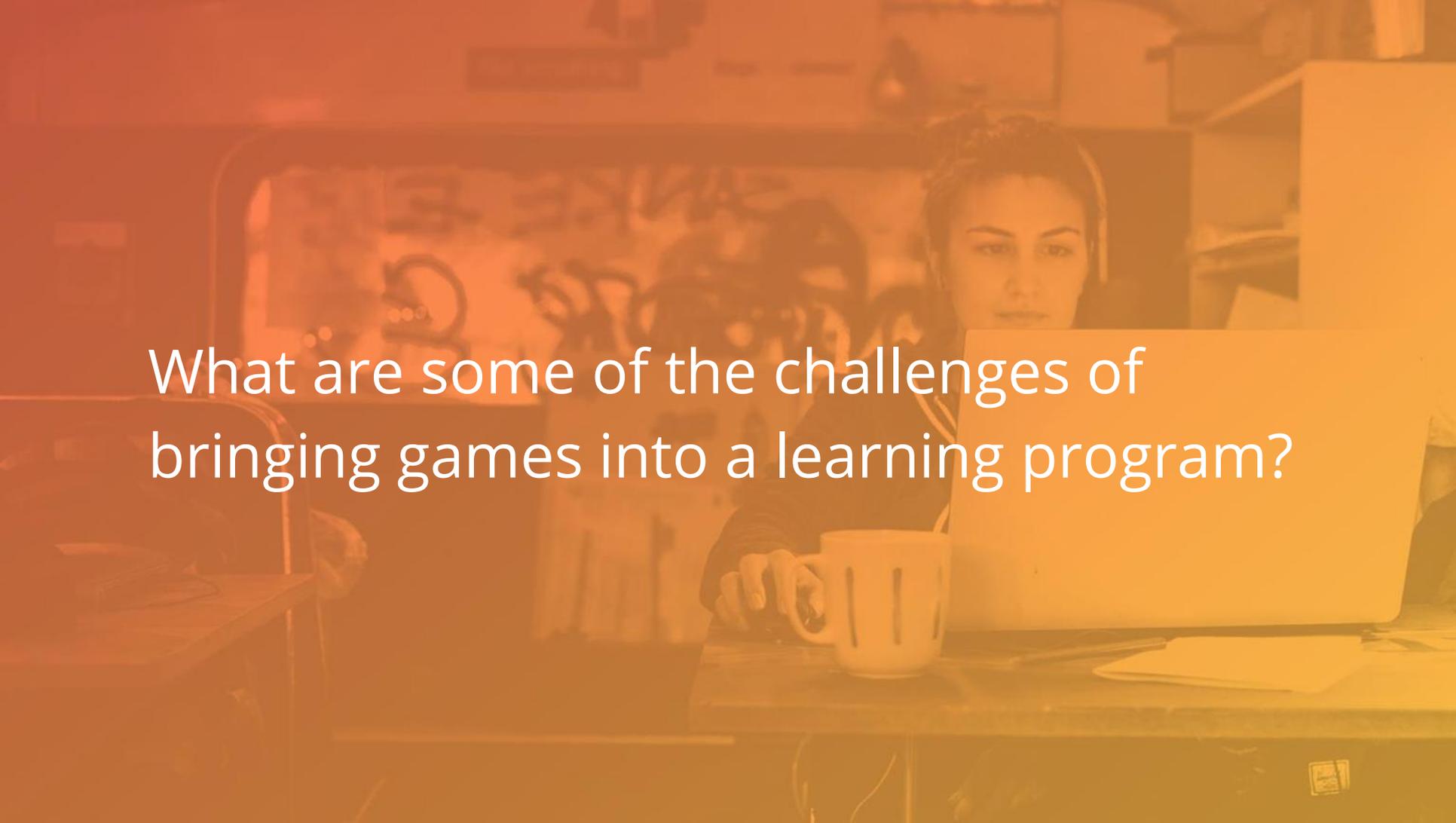
Game play consists of four “rounds” with 7 turns to a round. Each round equates to 1 year of time. # of people to feed each year increases to match real-world increases. The 7 turns mimic the 7 steps of mine to market process. Play complexity increases in final two rounds.



**Resource Cards** – Total of 8 resources you can use on each turn. Most turns require 1-2.



**Inspector Cards**– Reflect “chance” – and can help or hurt your performance. You draw Inspector cards if the Inspector symbol comes up on a die roll.

A woman with a headset is sitting at a desk in a classroom, looking at a laptop. In the background, other students are visible, some also wearing headsets. The scene is dimly lit with a warm, orange glow. A white mug is on the desk in front of her.

What are some of the challenges of bringing games into a learning program?

# Q & A

Read our blog post on Games  
<http://bit.ly/2sveTzG>