



Trends in Gamification

By Karl Kapp

Professor of Instructional Technology

Twitter: @kkapp

Web: www.karlkapp.com



Global game-based learning market
was valued at **\$3.487** billion USD
in **2017**.

It is expected to reach a market size of
\$8.532 billion USD by 2022.

Compound Annual Growth Rate of
19.60%



Brief History of Digital Games

4

3



4

Where is my
opponent
going to go next?

3

How will the ball
bounce off the wall?

In what direction
should I try to move
the ball?

Games 2.0

SCORE 0000

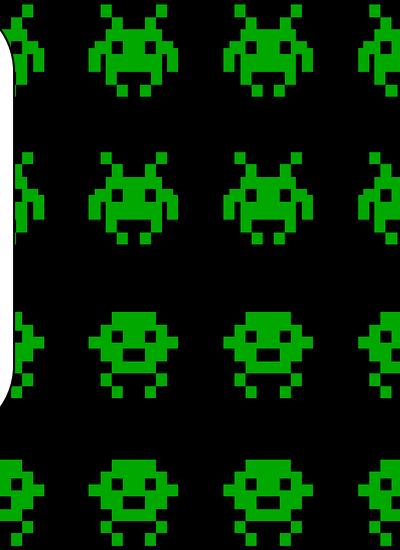
HIGH 0200

2 



Should I shoot the aliens on the end or in the middle or all the bottom aliens first?

What is the pattern these aliens are following?



How long do I have to shoot before an alien shoots at me?



1642

10-10

Interactivity (I) + Immersion (I) = Sustained Engagement (E)
Results in meaningful learning.



ACTIVISION

www.AtariGuide.com

Educational Games

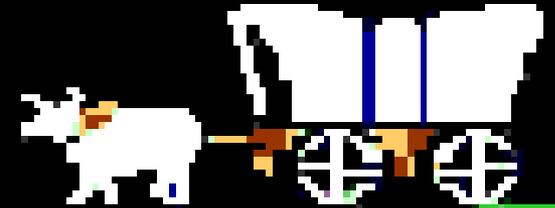


What are the first names of the
four other members in your party?

1. Alan
2. -
3. -
4. -
5. -

(Enter names or press Enter)

What actions should I take based on this information?

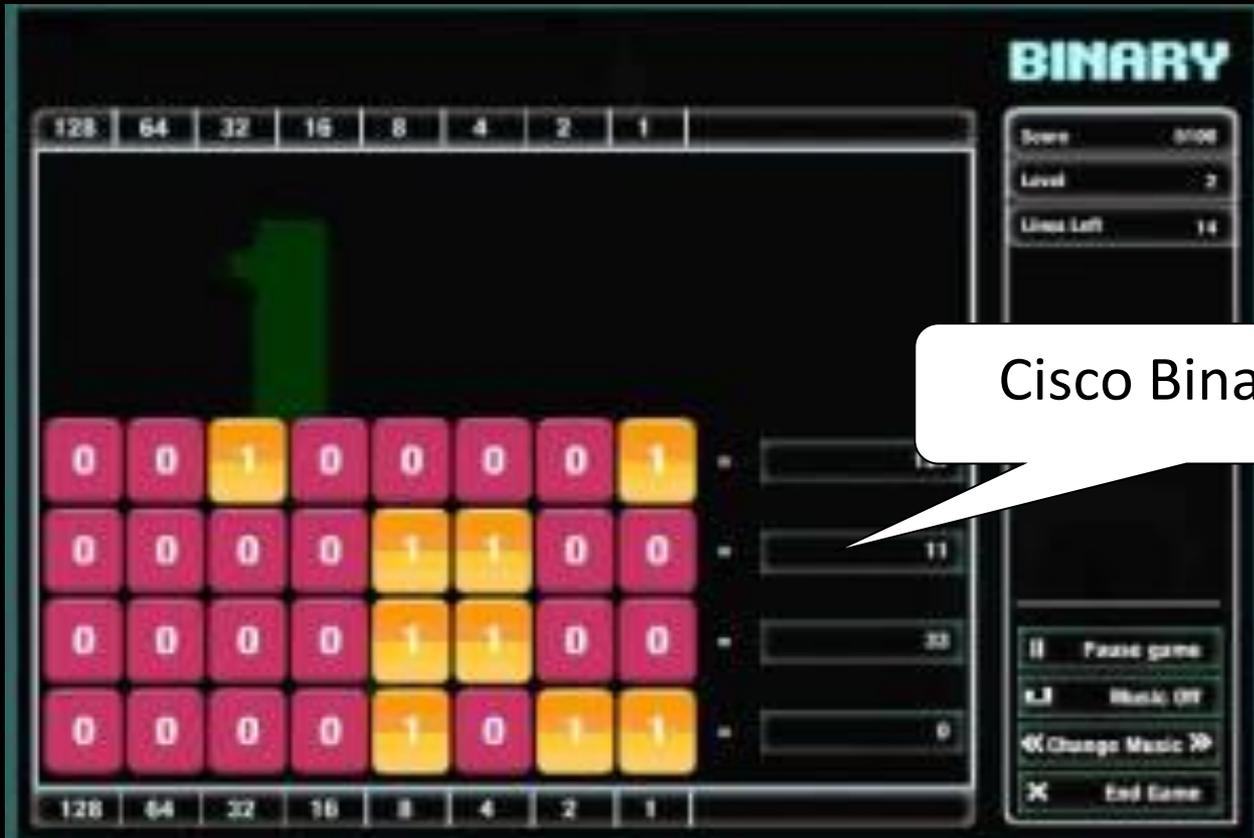


From Independence it is 102 miles to the Kansas River crossing.

What is the story or context of this experience?

Date: April 1, 1848
Weather: cool
Health: good
Food: 800 pounds
Next landmark: 102 miles
Miles traveled: 0 miles

Press SPACE BAR to continue



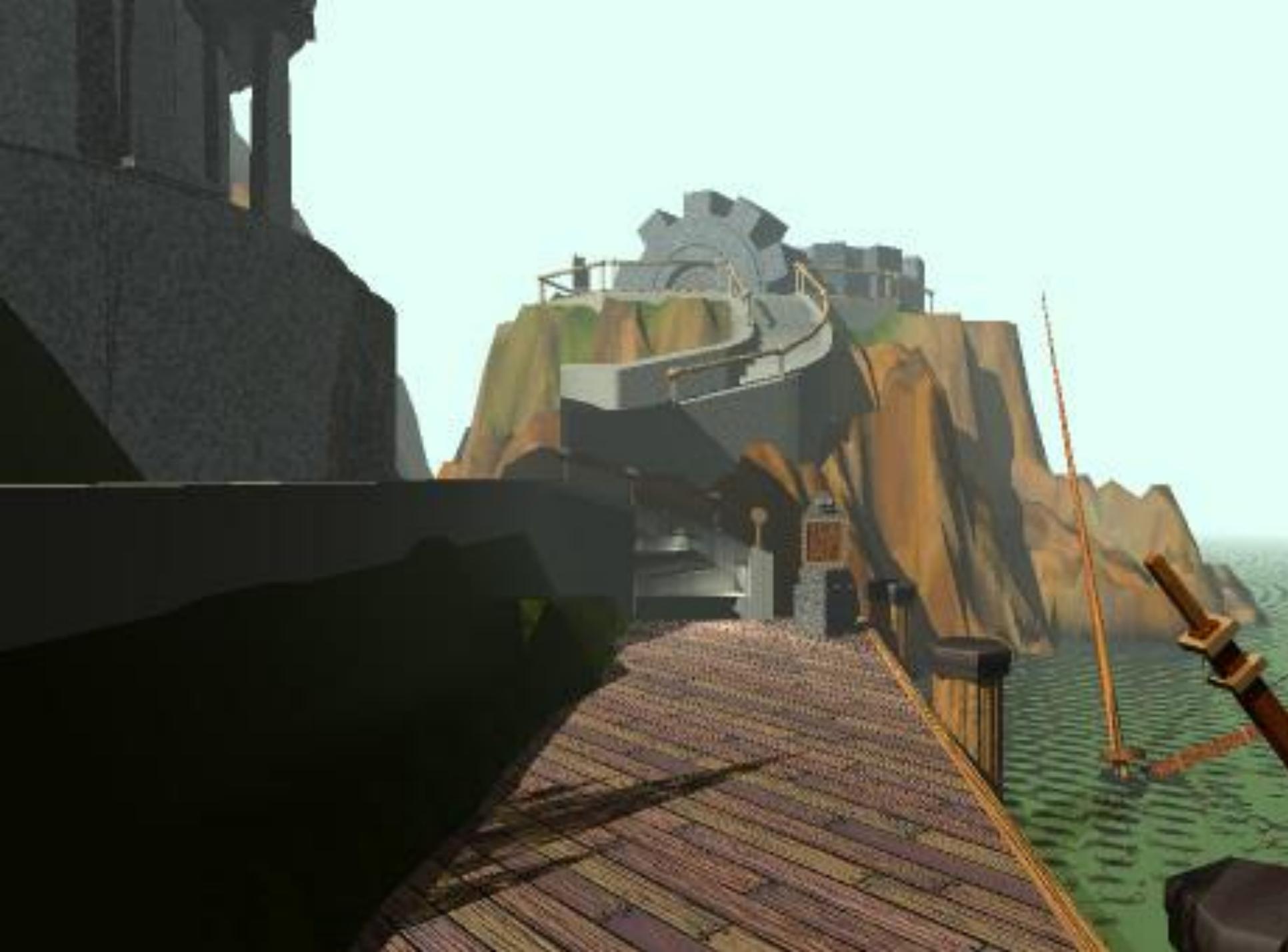
Cisco Binary Game

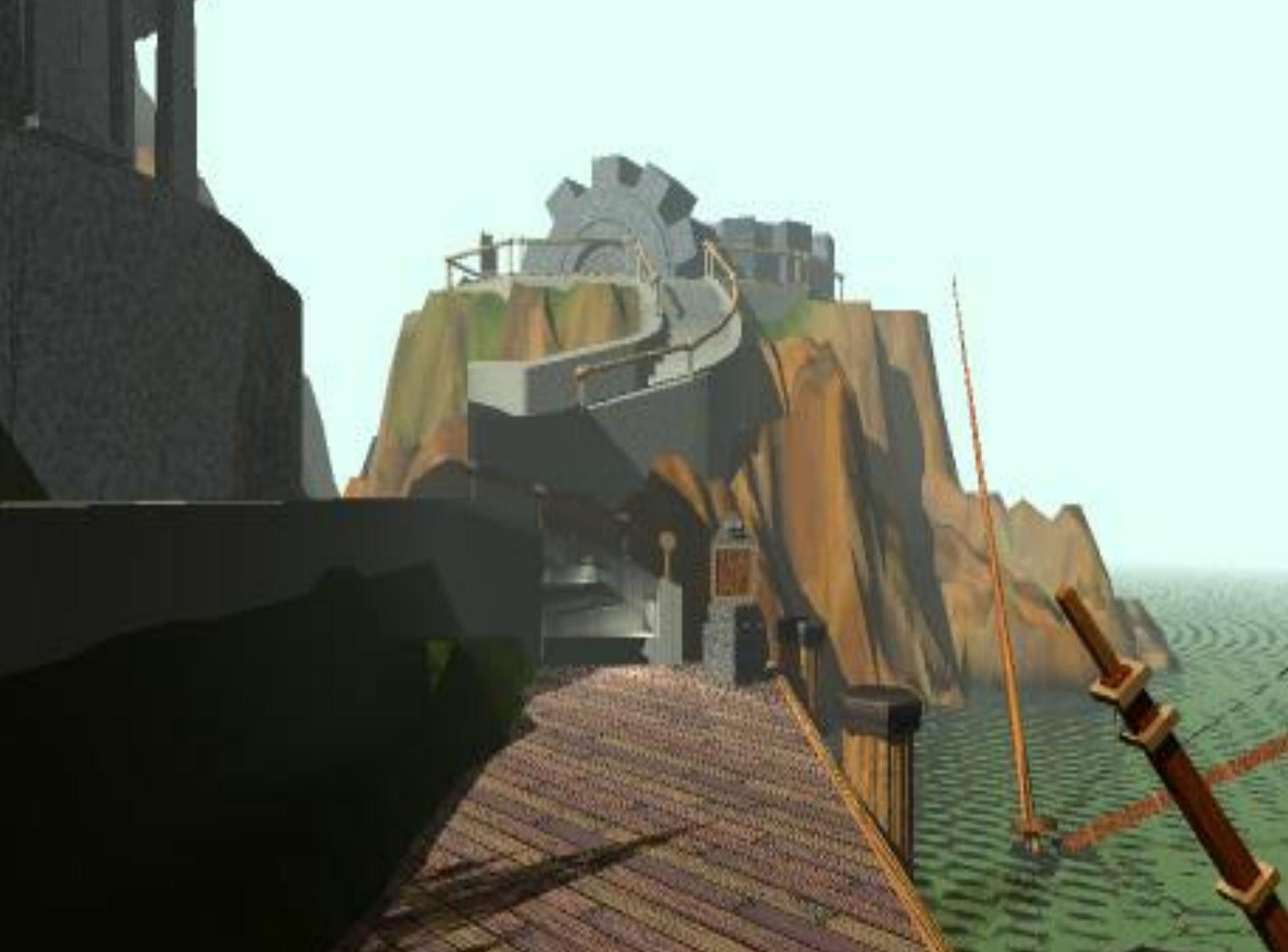


Where in the World is Carmen Sandiego?

©copyright 1992 Electronic Arts
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Broderbund Software, Inc.

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Where do I explore first?

What must I do to achieve my goal?

What activities are of the most value?



What variables do I balance to keep my person happy?
Work Life Harmony

How should I manage my time?



Game interface controls including icons for family, shopping, home, and navigation buttons. A clock shows AM 9:58 and a money counter shows \$28,088.

Character portraits for family members: a woman with glasses, a man with a beard, a man with a mustache, a woman with red hair, a man with a beard, and a woman with red hair.

Game interface elements including a mask icon, a person icon, and a house icon, each with associated progress bars.

Needs and Energy meters:

Needs	Energy
Hunger	Fun
Comfort	Social
Hygiene	Room
Bladder	

Boracadian
Abbott Bundy



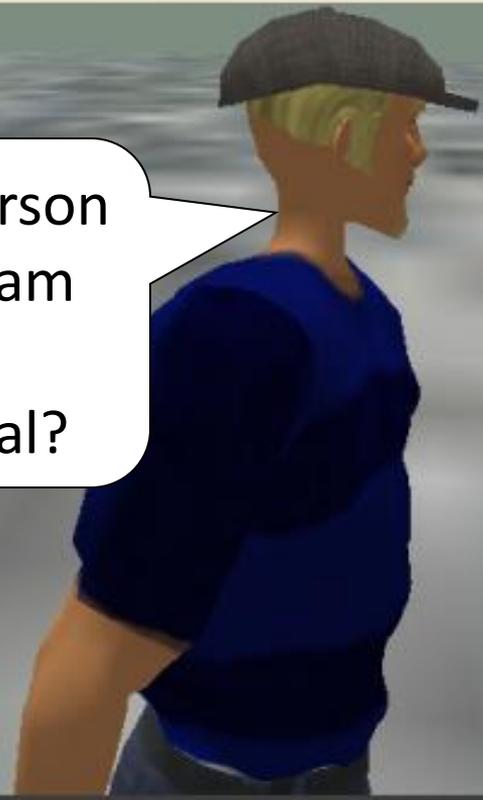
Atticus Ballinger



Boracadian
Abbott Bundy

What activities give me the most return for my efforts?

Can I trust this person who wants to team with me to accomplish a goal?



Focus Move Edit Create Land
Click and drag to change view

- Position Use Grid [Options...](#)
- Rotate (Ltr) Stretch Both Sides
- Stretch (Ctrl Shift) Stretch Textures
- Select Texture
- Edit linked parts

Ruler Mode: World

[+ More](#)

General Object Features Texture Content

Edit object parameters:

Position

X	136.750
Y	85.250
Z	77.803

Scale (meters)

X	1.00
Y	1.00
Z	1.00

Rotation (degrees)

X	0.00
Y	0.00
Z	0.00

Material

What can we create together?





Creating in
MinecraftEDU

The HUD shows a health bar with 10 hearts, a hunger bar with 10 icons, and a hotbar with 9 slots. The selected slot contains a stone block. The hotbar also shows a sword, a pickaxe, a shovel, a hoe, and a torch. The numbers 64 and 9 are visible in the bottom right corner of the hotbar.



Brewnall Village



Raskalor

Keeg Gibn

Dunmore

Fafhrkek

Whiteout

10

Keeg Gibn

Granit

Fafhrkek

Damador
<Night Crew>

Dunmore

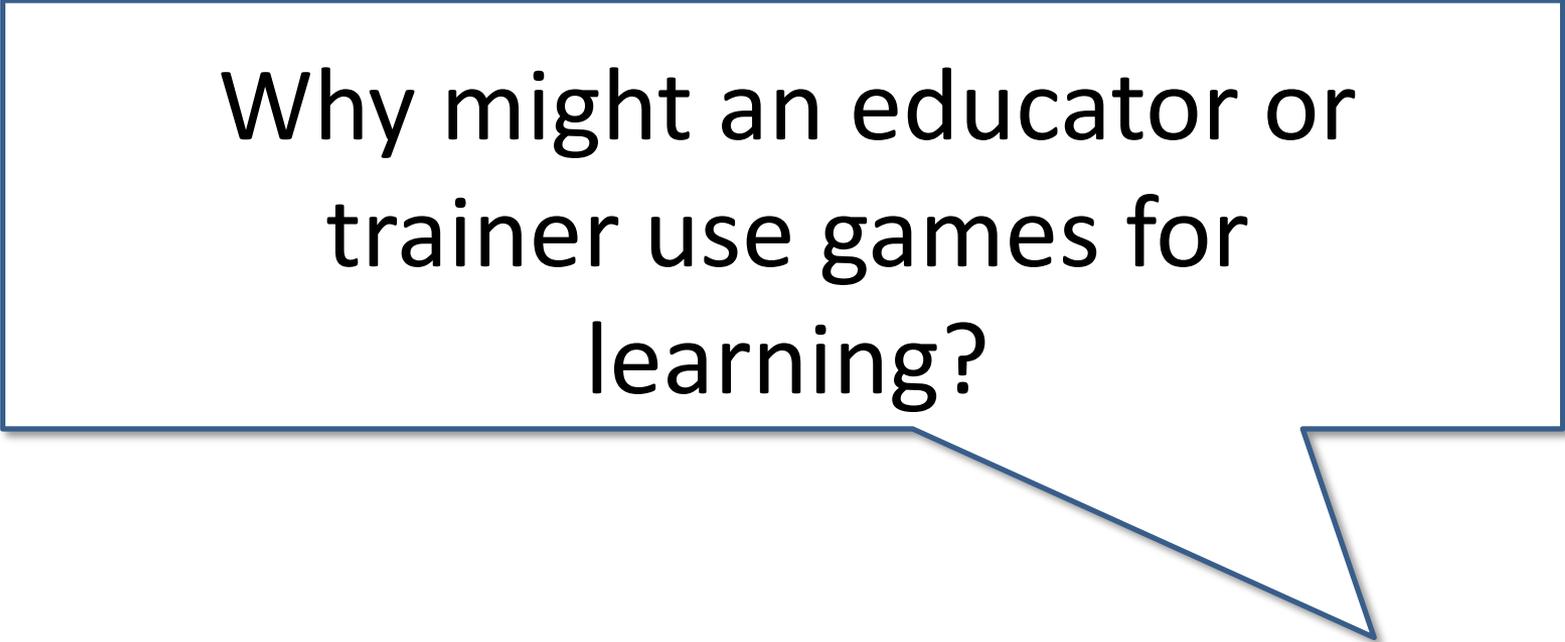
What leadership strategy should I use?

- You dance with Keeg Gibn.
- You dance with Keeg Gibn.
- You dance with Keeg Gibn.
- [1: General] Beryl: get down tonight?
- Dunmore says: join in folks
- [1: General] FourInchTool: Considering we're dwarves, little is right.
- Damador bursts into dance.
- Dunmore bursts into dance.

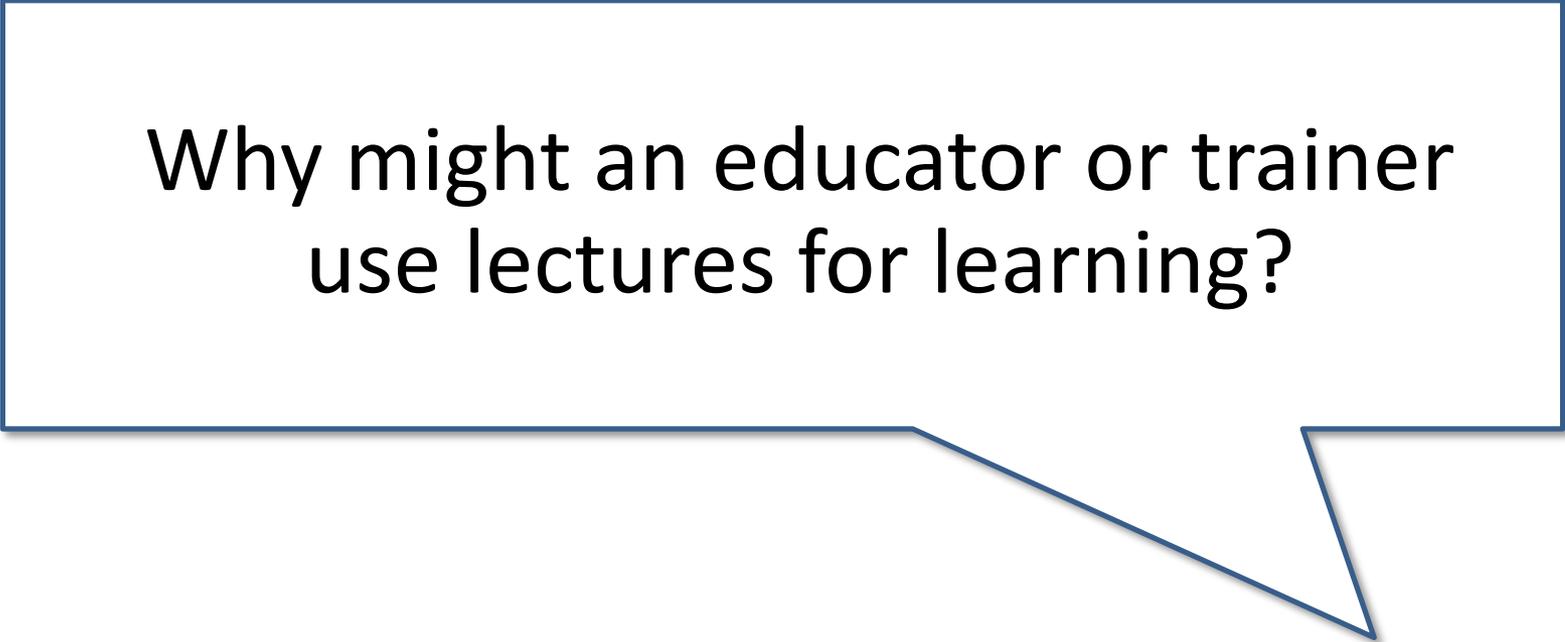
ins-Devotion Aura,
ains-Devotion Aura:
ra fades from: BeoWolven:
Devotion Aura fades from: BaleogFierce.
Devotion Aura fades from: TigerLibra:
Devotion Aura fades from: Erebuni,
Devotion Aura fades from: Brunhilde.
Devotion Aura fades from: BaleogFierce

Damador
Dwarf Paladin
Level 8

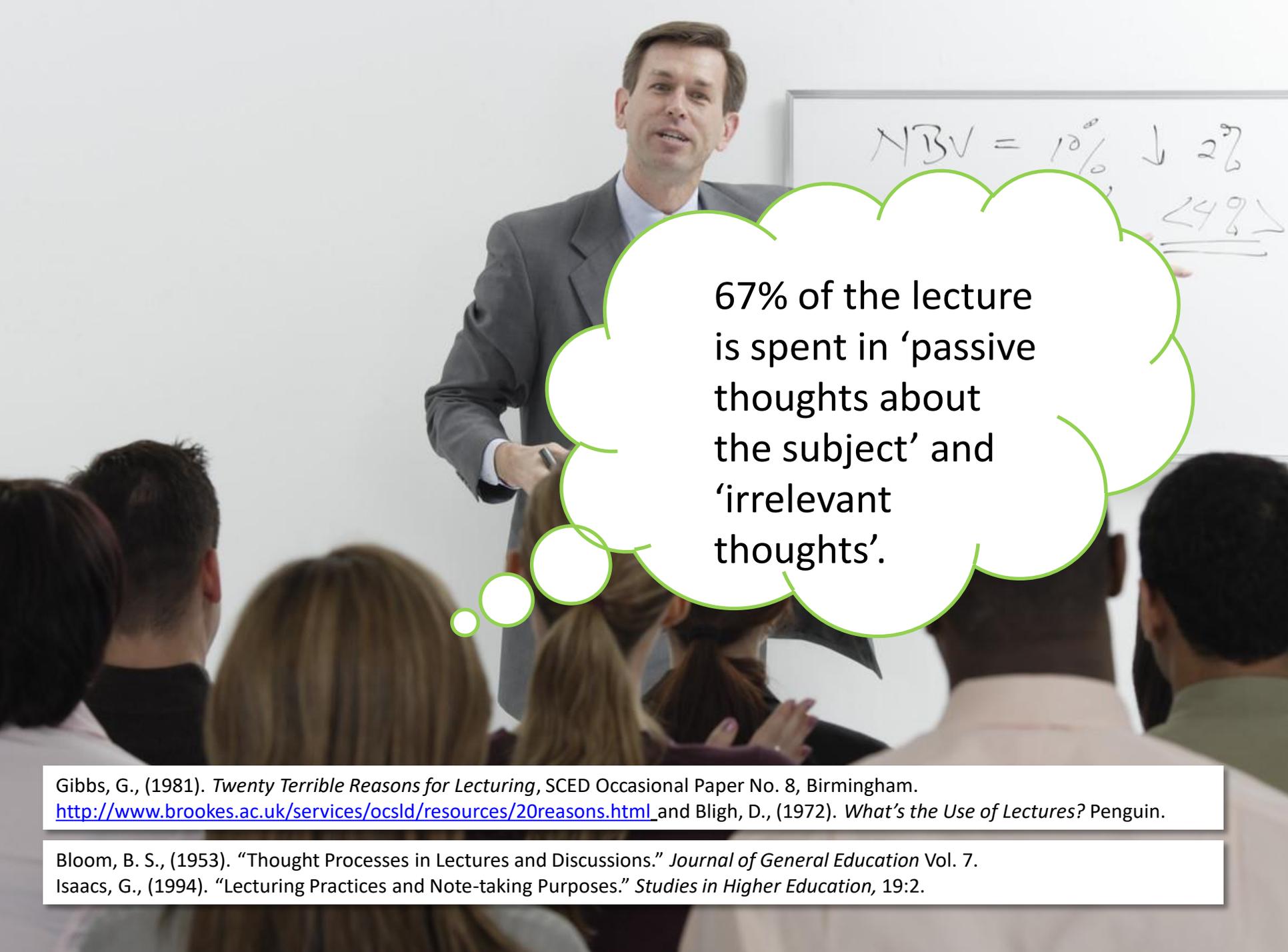




Why might an educator or
trainer use games for
learning?



Why might an educator or trainer
use lectures for learning?

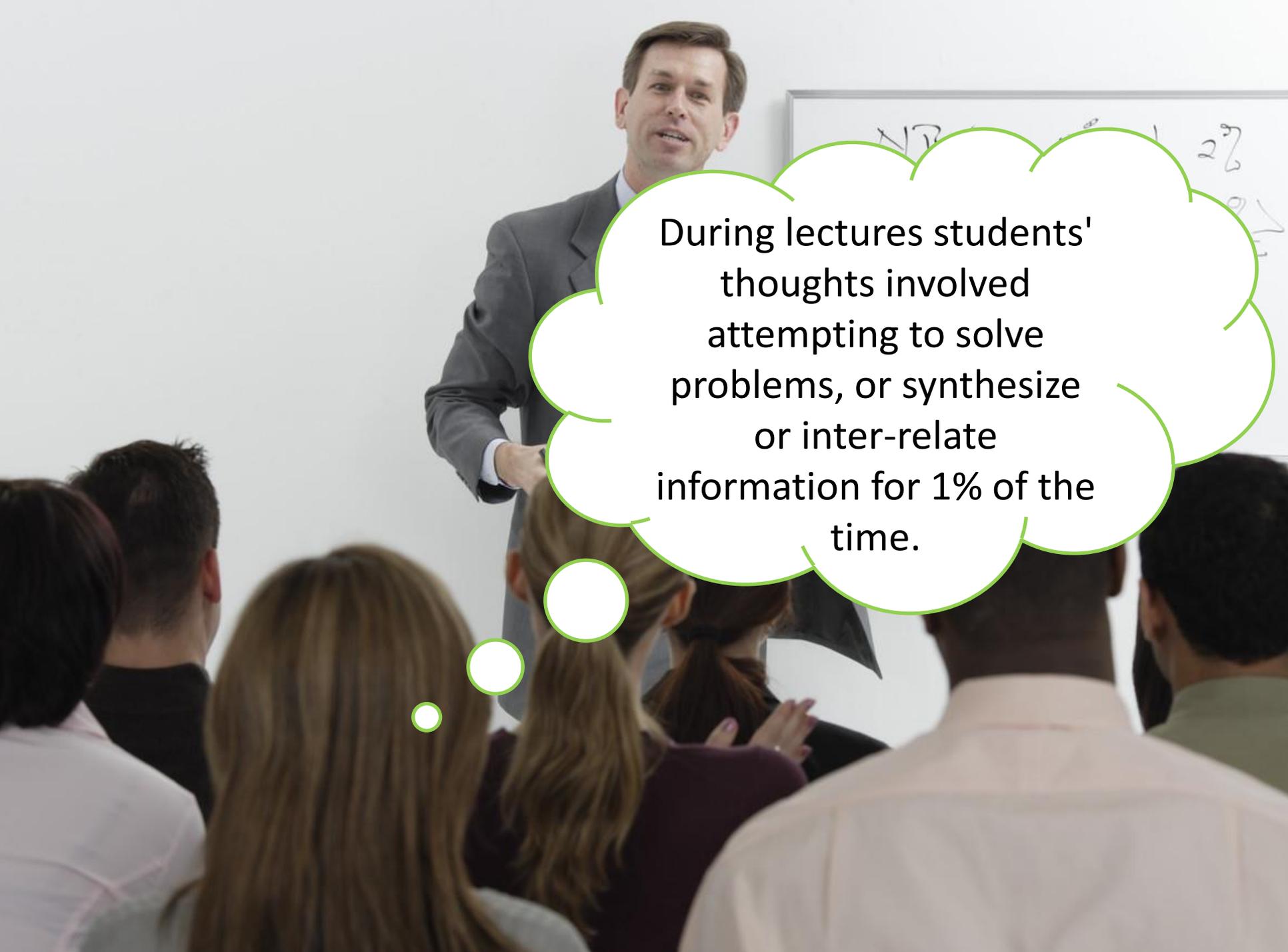


NBV = 10% ↓ 27
2492

67% of the lecture is spent in 'passive thoughts about the subject' and 'irrelevant thoughts'.

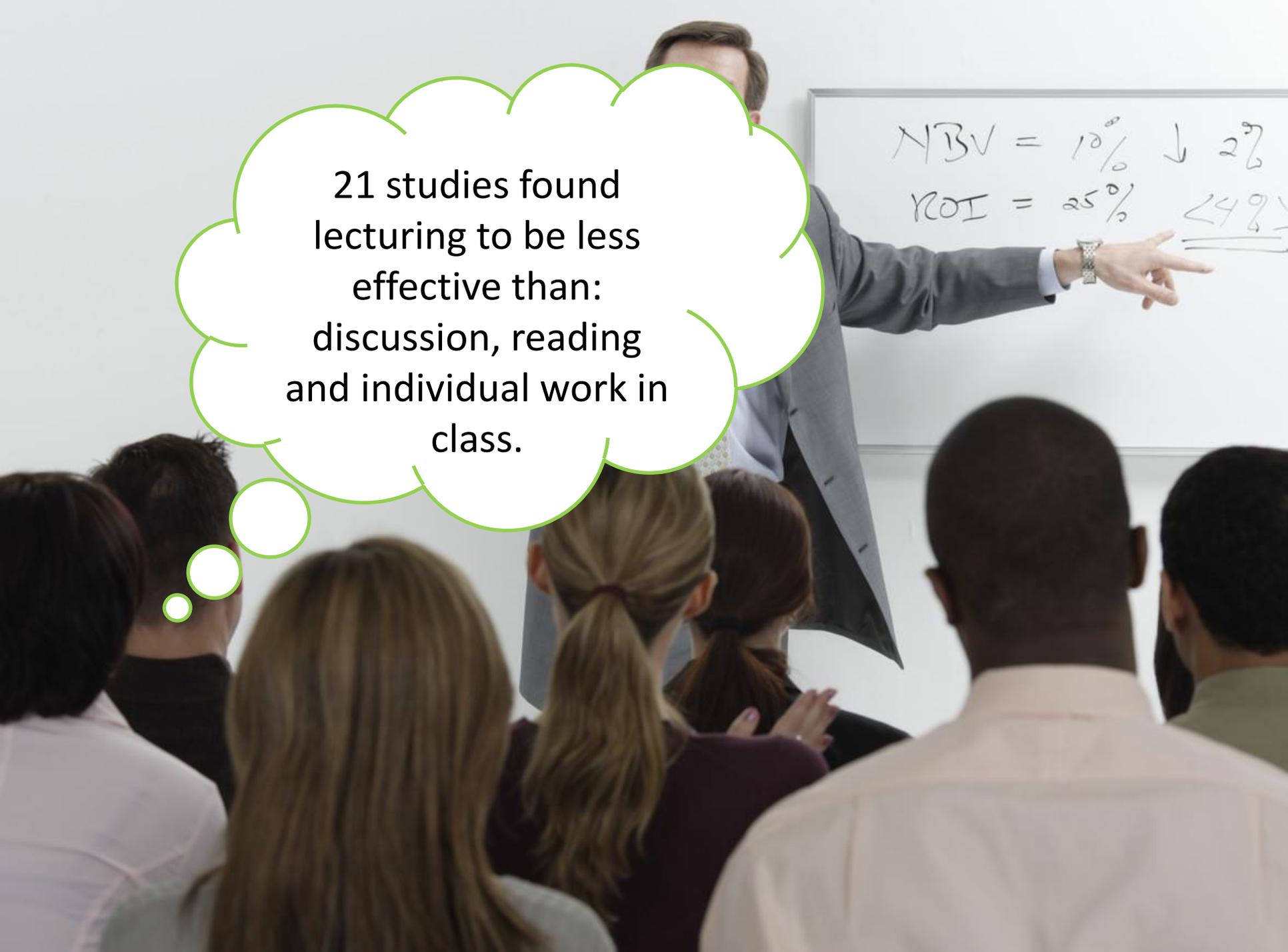
Gibbs, G., (1981). *Twenty Terrible Reasons for Lecturing*, SCED Occasional Paper No. 8, Birmingham.
<http://www.brookes.ac.uk/services/ocsltd/resources/20reasons.html> and Bligh, D., (1972). *What's the Use of Lectures?* Penguin.

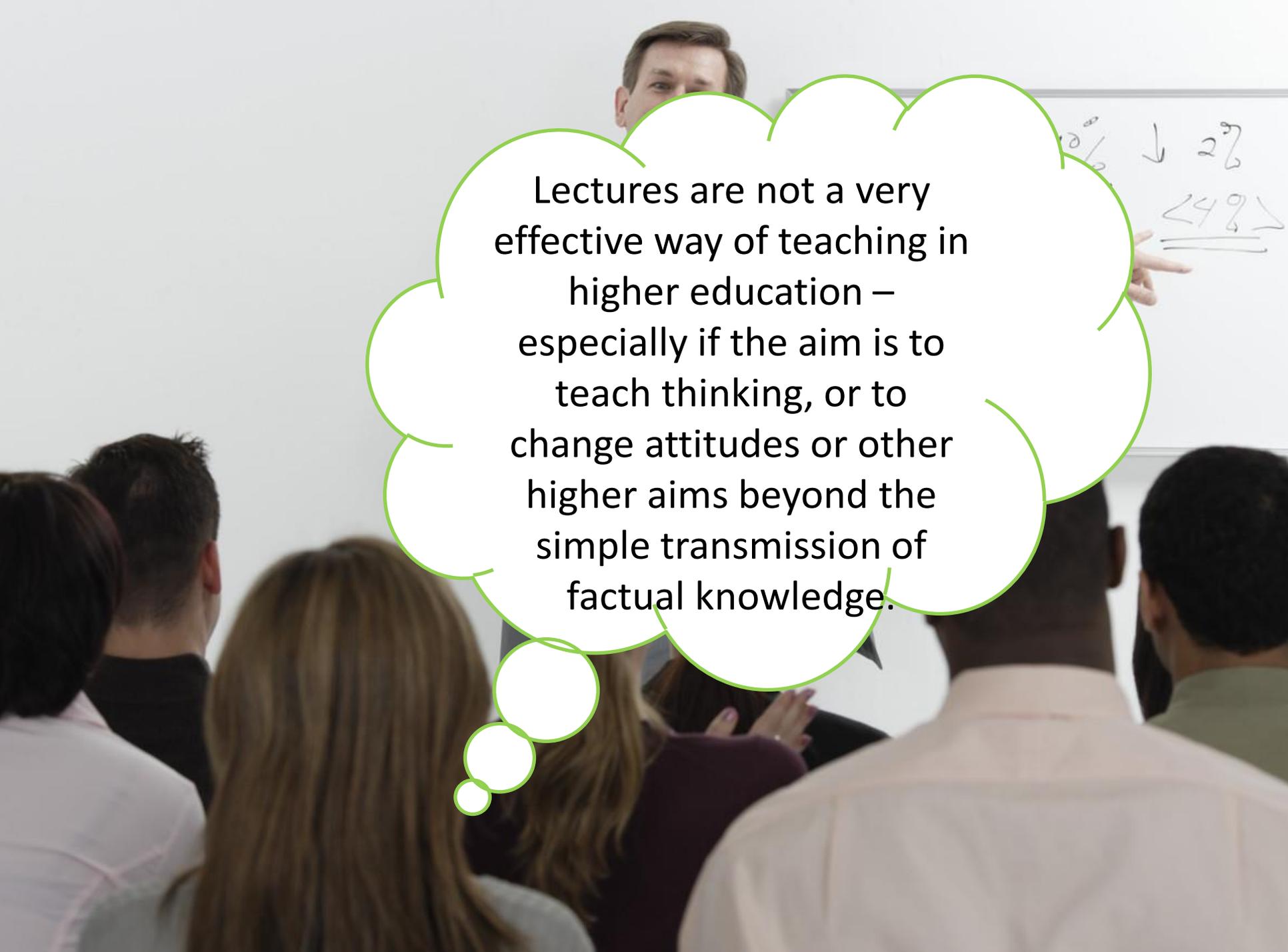
Bloom, B. S., (1953). "Thought Processes in Lectures and Discussions." *Journal of General Education* Vol. 7.
Isaacs, G., (1994). "Lecturing Practices and Note-taking Purposes." *Studies in Higher Education*, 19:2.



During lectures students' thoughts involved attempting to solve problems, or synthesize or inter-relate information for 1% of the time.

21 studies found lecturing to be less effective than: discussion, reading and individual work in class.

A man in a grey suit is standing at the front of a classroom, pointing towards a whiteboard. The whiteboard contains handwritten text. In the foreground, the backs of several students' heads are visible, showing they are facing the whiteboard. A large green thought bubble is overlaid on the left side of the image, containing text.
$$\begin{aligned} \text{NBV} &= 10\% \downarrow 2\% \\ \text{ROI} &= 25\% \quad \underline{\underline{24\%}} \end{aligned}$$



Lectures are not a very effective way of teaching in higher education – especially if the aim is to teach thinking, or to change attitudes or other higher aims beyond the simple transmission of factual knowledge.

What is this “game” stuff?

Gamification is using game-based mechanics, aesthetics and game-thinking to engage people, motivate action, promote learning, and solve problems.

Game-based Learning is the use of a game to teach knowledge, skills and abilities to learners using a self-contained game.

Simulation Learning is a realistic, controlled-risk environment where learners can practice specific behaviors and experience the impacts of their decisions.

Will instruction with
learning games yield higher
gains in learning and
retention than traditional
instruction?

Statistics are from: Sitzmann, T. (2011) **A meta-analytic examination of the instructional effectiveness of computer-based simulation games.** *Personnel Psychology* .Review of 65 studies

Confirmed findings (not statistics): Wouters, P., van Nimwegen, C., van Oostendorp, H., & van der Schoot, E.D. (2013), February 4). **A Meta-Analysis of the Cognitive and Motivational Effects of Serious Games.** *Journal of Educational Psychology*. Advanced online publication. Doi: 10.1037/a0031311 39 Studies. Review of 39 studies 54% conducted in the last year.

Percentages of Impact Over Traditional Training

Type of Knowledge /Retention	% Higher
Declarative	11%
Procedural	14%
Retention	9%



Yes!

Percentages of Impact Over Traditional Training

	% Higher
17% Higher than Lectures	
Declarative	11%
Procedural	5% Higher than Discussion
Retention	

Percentages of Impact Over Traditional Training

It wasn't the game, it was level of activity in the game.

% Higher

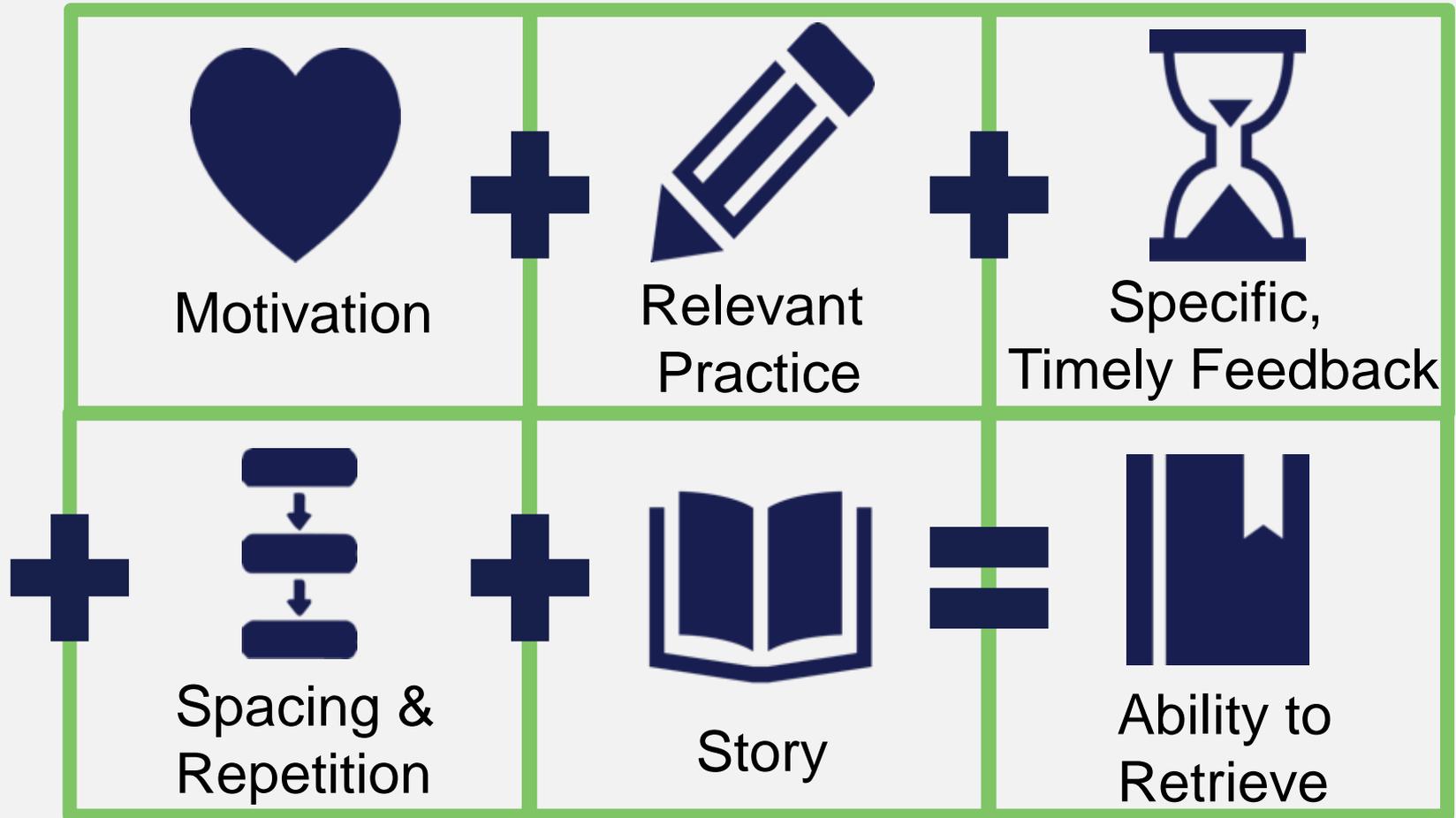
**Knowledge
/Retention**

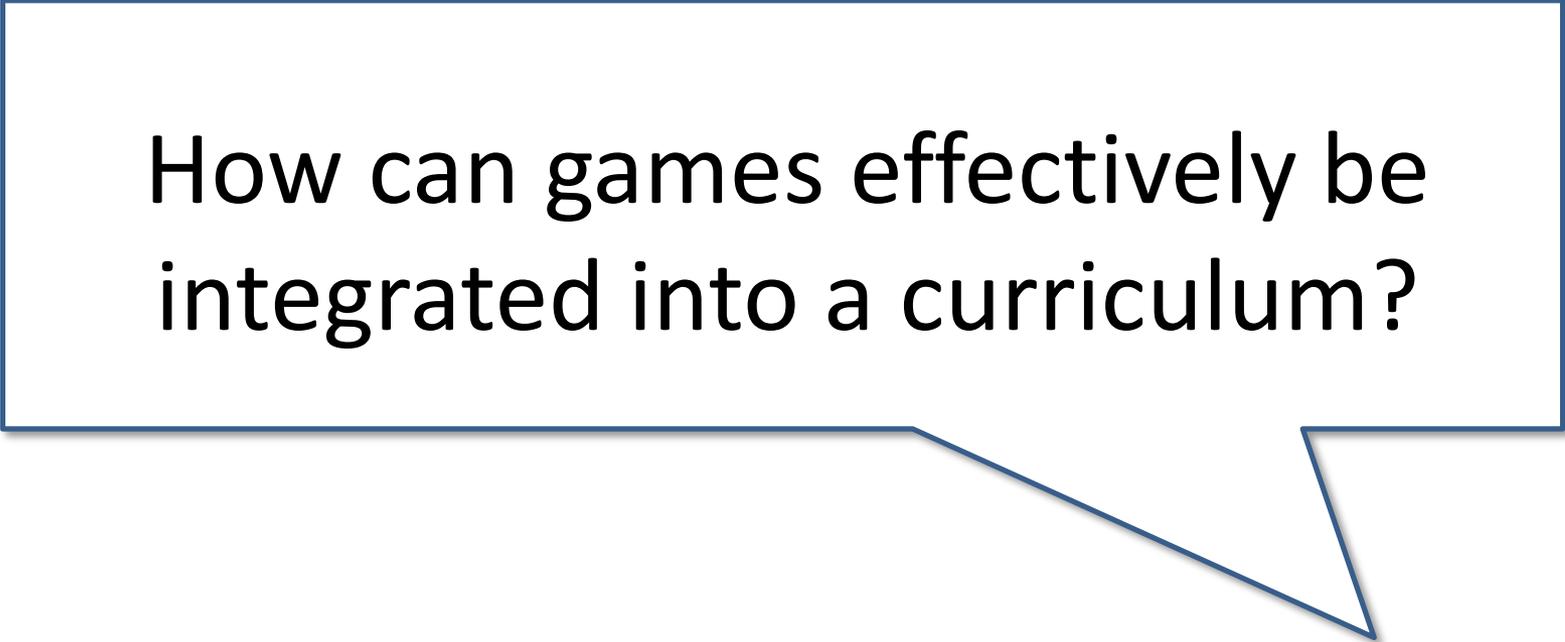
**Declarative
Procedural
Retention**

The engagement of the learner in the game leads to learning.

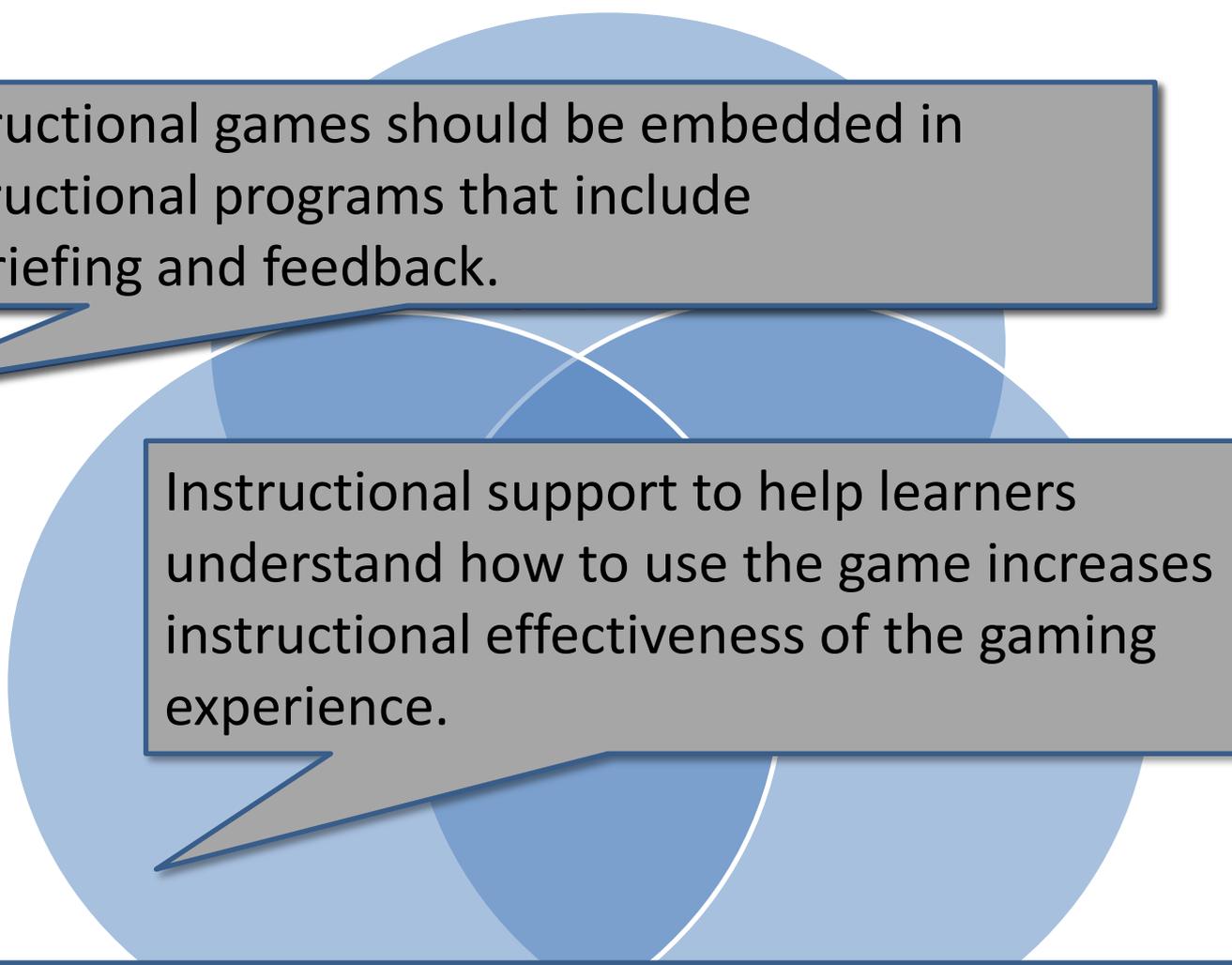
9%

How do people learn & remember?





How can games effectively be integrated into a curriculum?



Instructional games should be embedded in instructional programs that include debriefing and feedback.

Instructional support to help learners understand how to use the game increases instructional effectiveness of the gaming experience.

Hays, R. T. (2005). *The effectiveness of instructional games: A literature review and discussion*. Naval Air Warfare Center Training Systems Division (No 2005-004). Chapter 4 "The Gamification of Learning and Instruction."

Sitzmann, T. (2011) **A meta-analytic examination of the instructional effectiveness of computer-based simulation games.** *Personnel Psychology* .Review of 65 studies

Example

Management Challenge Program

1 Real-world leadership case studies



2 Simulation, scenarios, and role-plays



3 Reflection and application

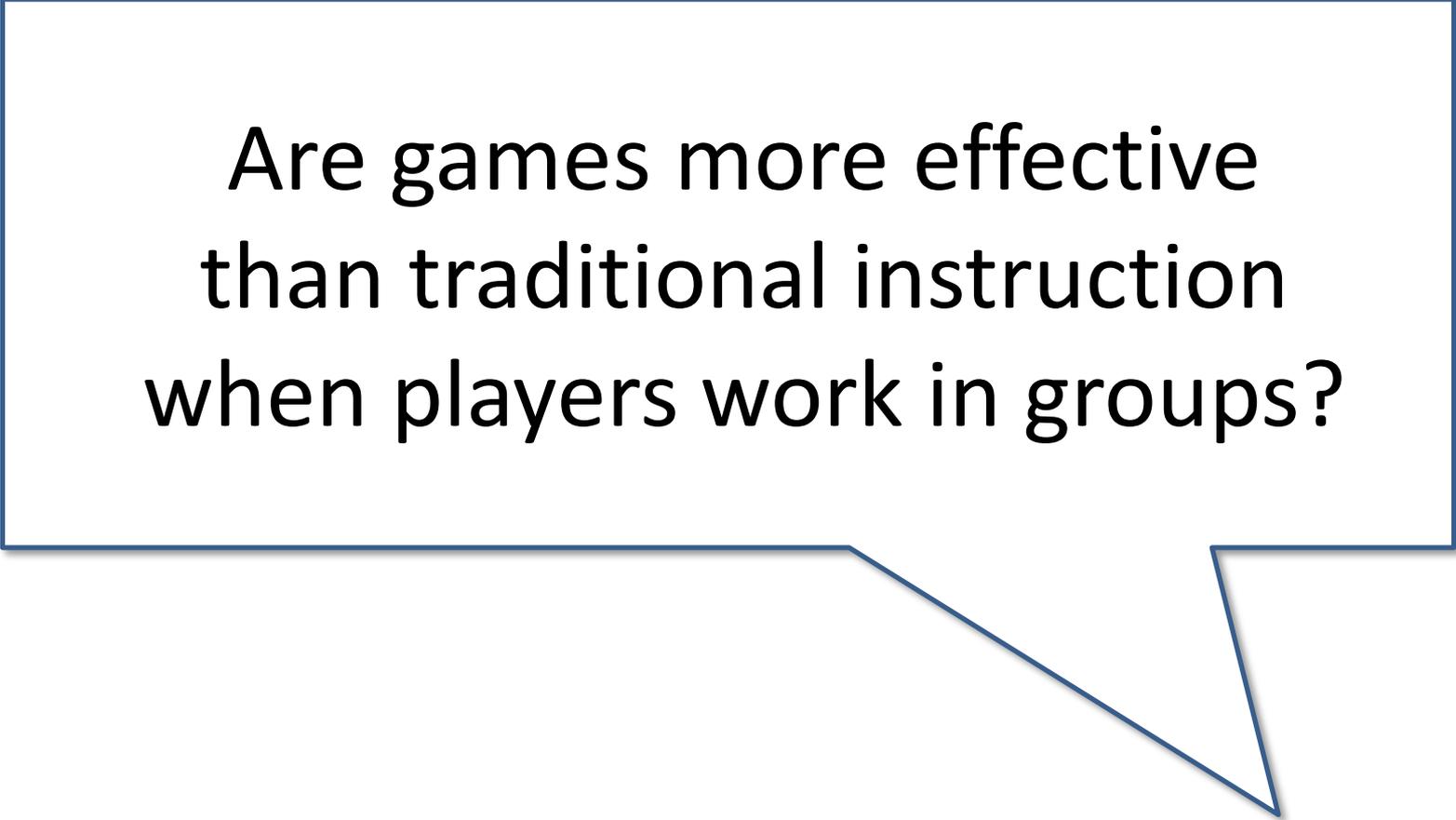


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enspire
learning

Wouters, P., van Nimwegen, C., van Oostendorp, H., & van der Sek E.D. (2013), (February 4). A Meta-Analysis of the Cognitive and Motivational Effects of Serious Games. *Journal of Educational Psychology*. Advanced online publication. Doi: 10.1037/a0031311 39 Studies.

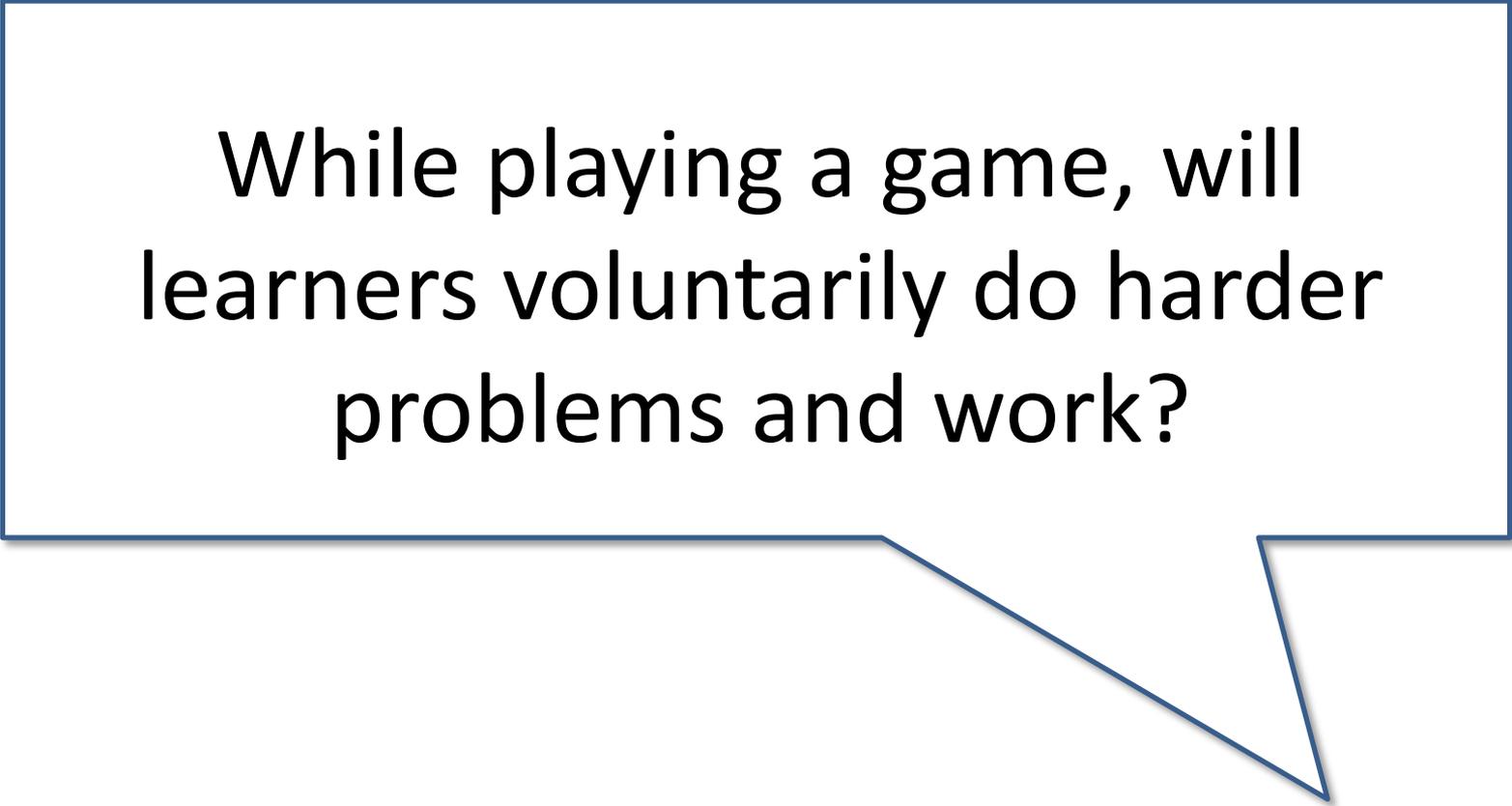


Are games more effective
than traditional instruction
when players work in groups?

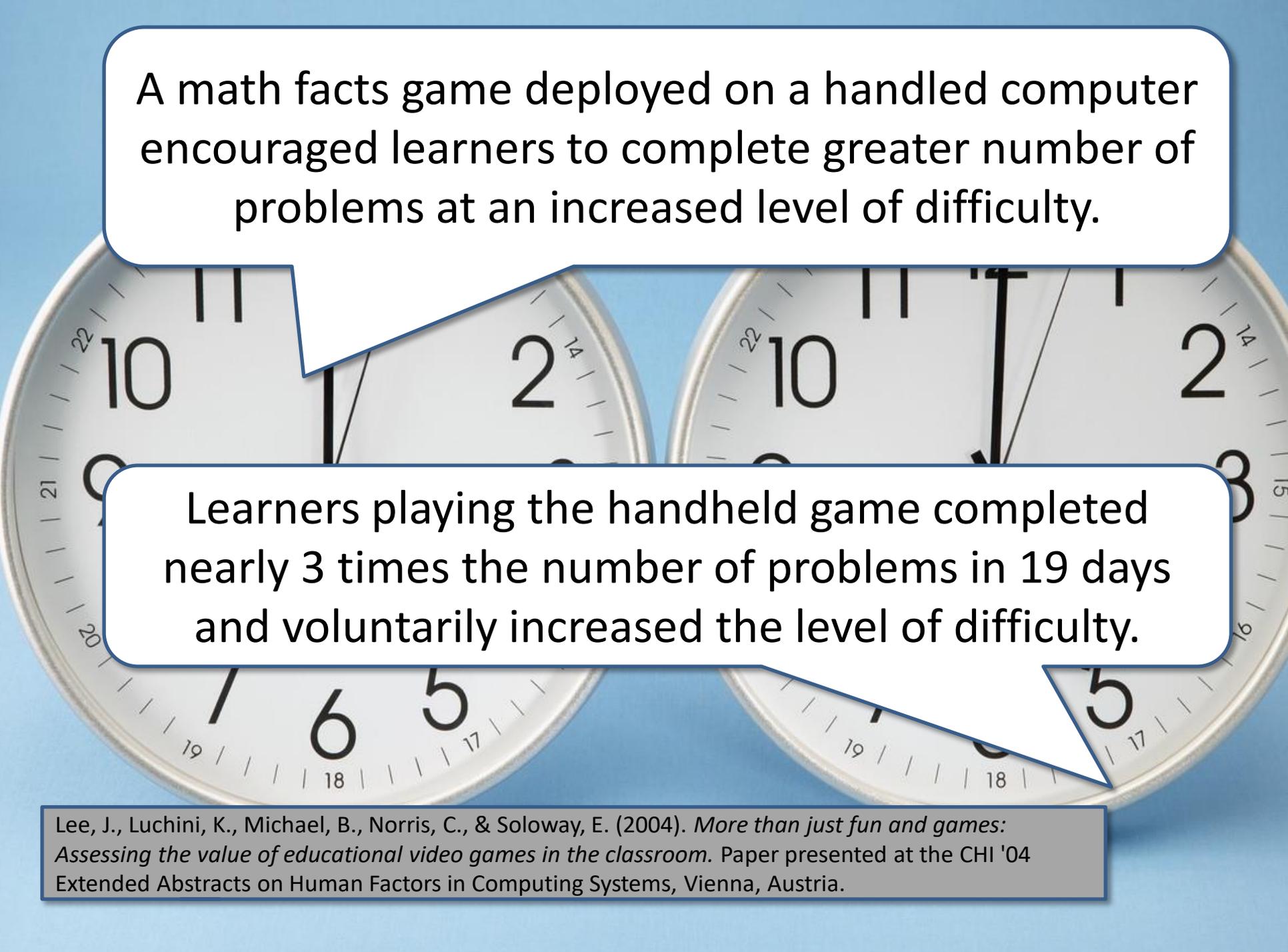
With serious games, both learners playing individually and those playing in a group learn more than the comparison group, but learners who play serious games in a group learn more.



Wouters, P., van Nimwegen, C., van Oostendorp, H., & van der S[el. E.D. (2013), February 4). A Meta-Analysis of the Cognitive and Motivational Effects of Serious Games. *Journal of Educational Psychology*. Advanced online publication. Doi: 10.1037/a0031311 39 Studies.



While playing a game, will learners voluntarily do harder problems and work?



A math facts game deployed on a handheld computer encouraged learners to complete greater number of problems at an increased level of difficulty.

Learners playing the handheld game completed nearly 3 times the number of problems in 19 days and voluntarily increased the level of difficulty.

Lee, J., Luchini, K., Michael, B., Norris, C., & Soloway, E. (2004). *More than just fun and games: Assessing the value of educational video games in the classroom*. Paper presented at the CHI '04 Extended Abstracts on Human Factors in Computing Systems, Vienna, Austria.

BE THE MEDICI

Games used in school.



ARTE
MECENAS





The Ottoman Turks would like to offer you a deal. If you loan them 200 florins now, they will pay you 600 florins after a short time. However, they need this money quickly. Will you loan the Ottoman Turks the money at interest?

-200 f

Accept

Reject

Hold



Ledger

Account Balance 750f

Inventory

Wool 0

Alum 4

Market

A traveling merchant will purchase 6 bales of wool for 300 florins. (Sell 6 for 50f each?)

300 f

Accept

Reject

Hold

Milan offers 585 florins for 13 bales of wool. (Sell 13 for 45f each?)

585 f

Accept

Reject

Hold

For 200 florins, you commission a set of tondi from Donatello to complete the old sacristy of the Basilica of San Lorenzo. Will you choose the image that best represents Donatello's response?

-200 f

Accept

Reject

Hold

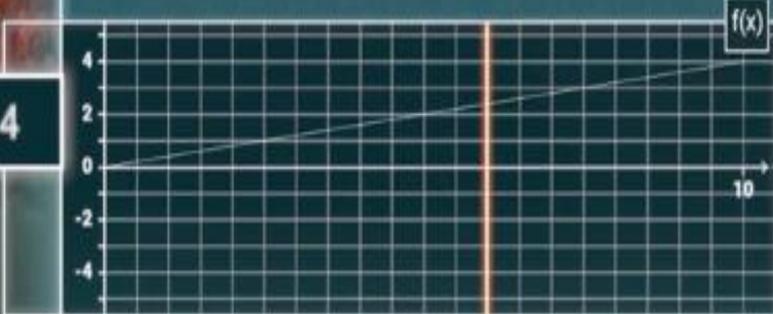
Games used in
school.



VARIANT: LIMITS INSTRUCTOR PORTAL



2.4



f(a)

6.0



If the input of a function is changed, the output may also change. Select an energy input to change the output, moving the boulder from your path. By choosing the correct input, you can overcome many obstacles.



Zombie SalesApocalypse

Games used in corporations.

ABC Corp
sales training game

Enter your username and password

Karl

Select Your Region

- East
- Midwest
- West
- NSO

Login

MAIN MENU

Game Levels

Practice

Leaderboard

Achievements

Analytics

Save Game



GAME LEVELS

Play Practice Again

Play Sales Scenario One

SALES SCENARIO ONE

Activities and Objectives for Problem Identification

Ask probing questions

Activities and Objectives for Personal Knowledge of the Client

Determine the favorite teams and sports of the client.

Activities and Objectives for Persistence

Inquire as to the cost of not taking action.

Activities and Objectives for Product Knowledge

Describe the benefits of our product over a competitor's product.

Activities and Objectives for Professionalism

Ask if the time still works and if client recieved copy of agenda.

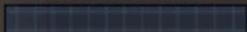
Pick no more than 6

- White Papers
- Wellness Sets Overview
- ABC Leverage Questions
- Total Health Proof Points
- ABC Getting Started Flyer
- ABC Wellness Stories
- Wellness Sets FAQ
- How to find or create a lead
- Dental Refresh- leverage questions
- ABC Value Proposition
- ABC Meeting Plan Guide
- PowerPoint Notes

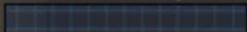
Review Scenario

Submit Strategy

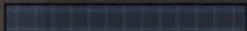
Problem Identification



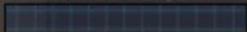
Personal Knowledge of the Client



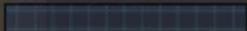
Persistence



Product Knowledge



Professionalism



Score: 0

Boosts: 0

Time: 15

Energy



Receptionist (John)

Hello.

May I help you?

Close

No thanks. I am here to see Doctor Pinelas.
I told her I was coming today so I will just go wait for her in her office.

I'm from ABC Corp. I'd like to speak to Doctor Pinelas about Wellness Solutions.
I have an appointment.

I am from ABC Corp and am responsible for Wellness Solutions.
Doctor Pinelas is expecting me. Is this still a good time for her to speak with me?

Review

Meters

Cams

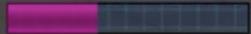
Map

Help

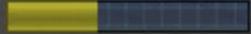
Save

Quit

Problem Identification



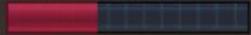
Personal Knowledge of the Client



Persistence



Product Knowledge



Professionalism



Score: 2550

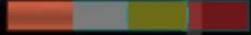
Boosts: 0

Time: 72

Energy



Damage



Review

Meters

Cams

Map

Help

Save

Quit



It seems like an unusual situation in there with many variables to juggle.

In trying to sell them something that they need for their clients when they are under so much stress, what would you say would be one of the most effective ways to really bring home the value of what you have to offer?

- Stressing the importance of the potential ROI of ABC Wellness
- Integration of key questions when opening the sales call
- Effective use of closing questions
- Identification of competitor "hit points"

[Previous Question](#)

[Next Question](#)

Lobby

LEARNER ANALYTICS

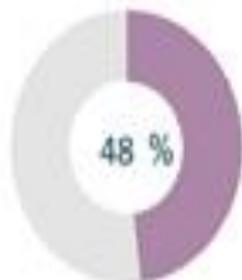
Your Logo Here

Sales

Sales Performance

Session

Strategy



Sales Model Mastery



Prepare



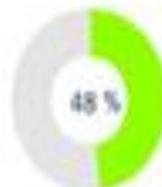
Open the Call



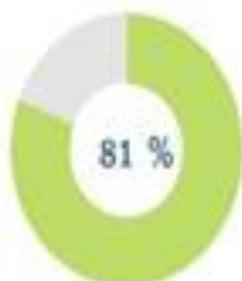
Uncovering Needs



Delivering Insights



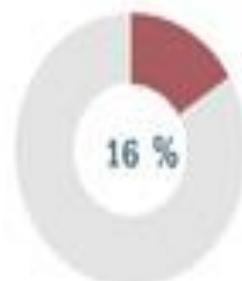
Close the Call



Sales Questions Mastery



Docs Selected



Docs Collected



End game

Pause game

Audio Off

Simulation/games build more confidence for on the job application of learned knowledge than classroom instruction.

20% higher confidence levels.

goal

400

satisfied/disatisfied customers

1/1

wasted ice cream

7.57 (oz)

score

119

level

Sitzmann, T. (2011) A meta-analytic examination of the instructional effectiveness of computer-based simulation games. *Personnel Psychology* .

Day 1, Afternoon

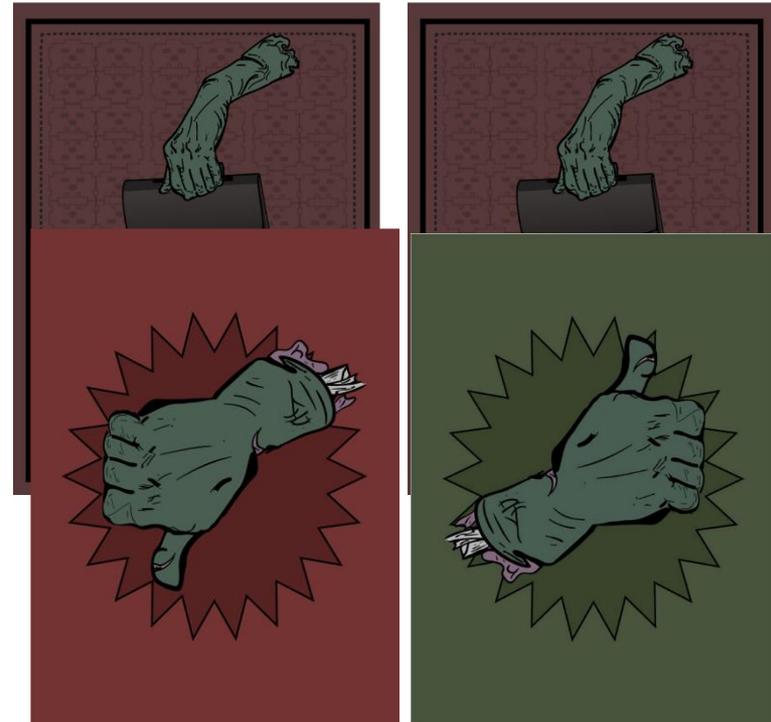
Not All Digital



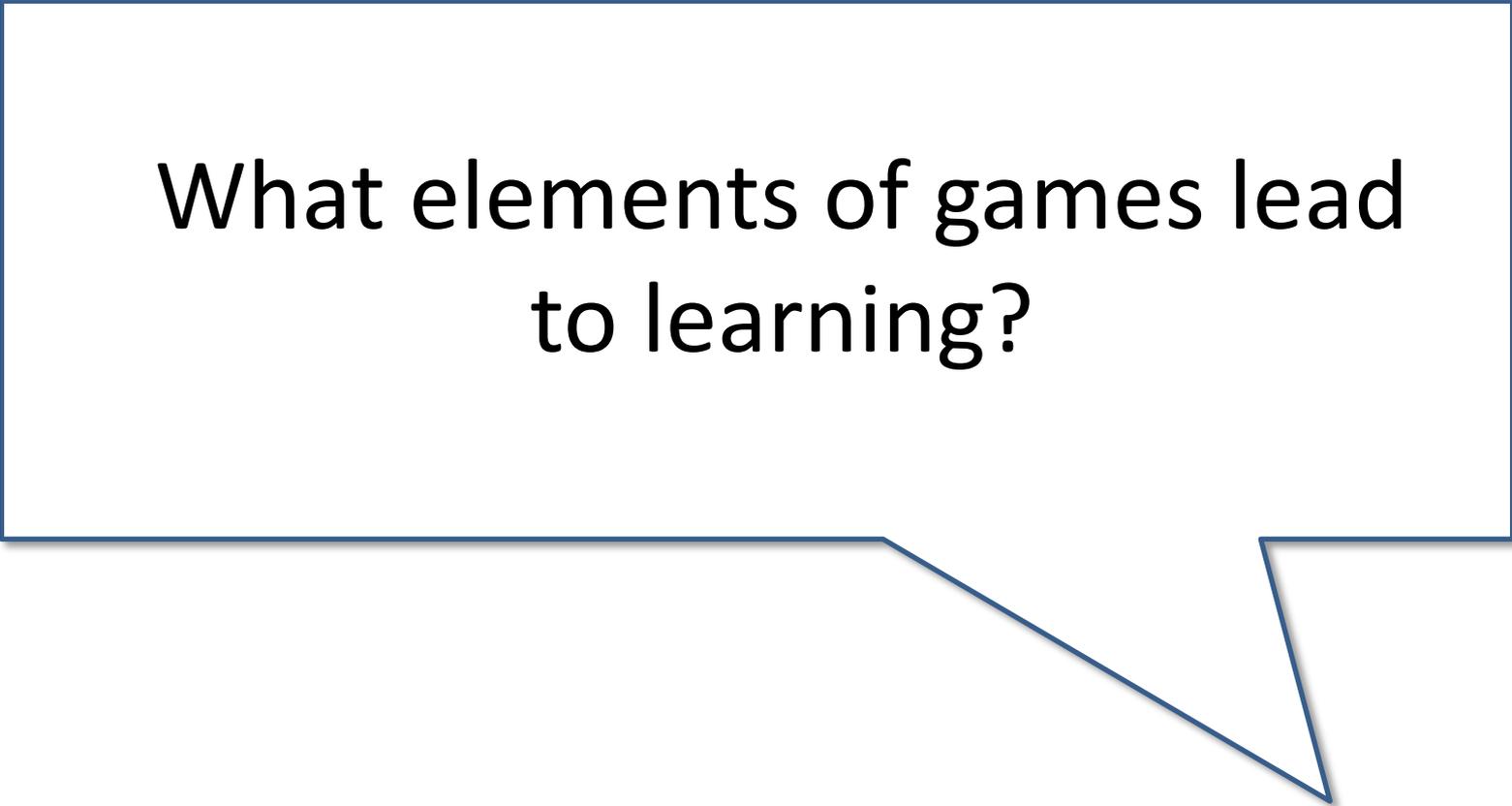
Scenario Cards



Challenge Cards



Voting Cards



What elements of games lead
to learning?

Elements of Games that Aid Learning

1. Avatars
2. Stories & Challenges
3. Levels
4. Feedback
5. Rewards, Incentives and Achievements
6. Freedom to Fail

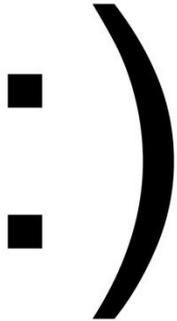
VIDEO GAMES



WHY WASTE GOOD TECHNOLOGY
ON SCIENCE AND MEDICINE?

We've Always Wanted Characters

Avatar



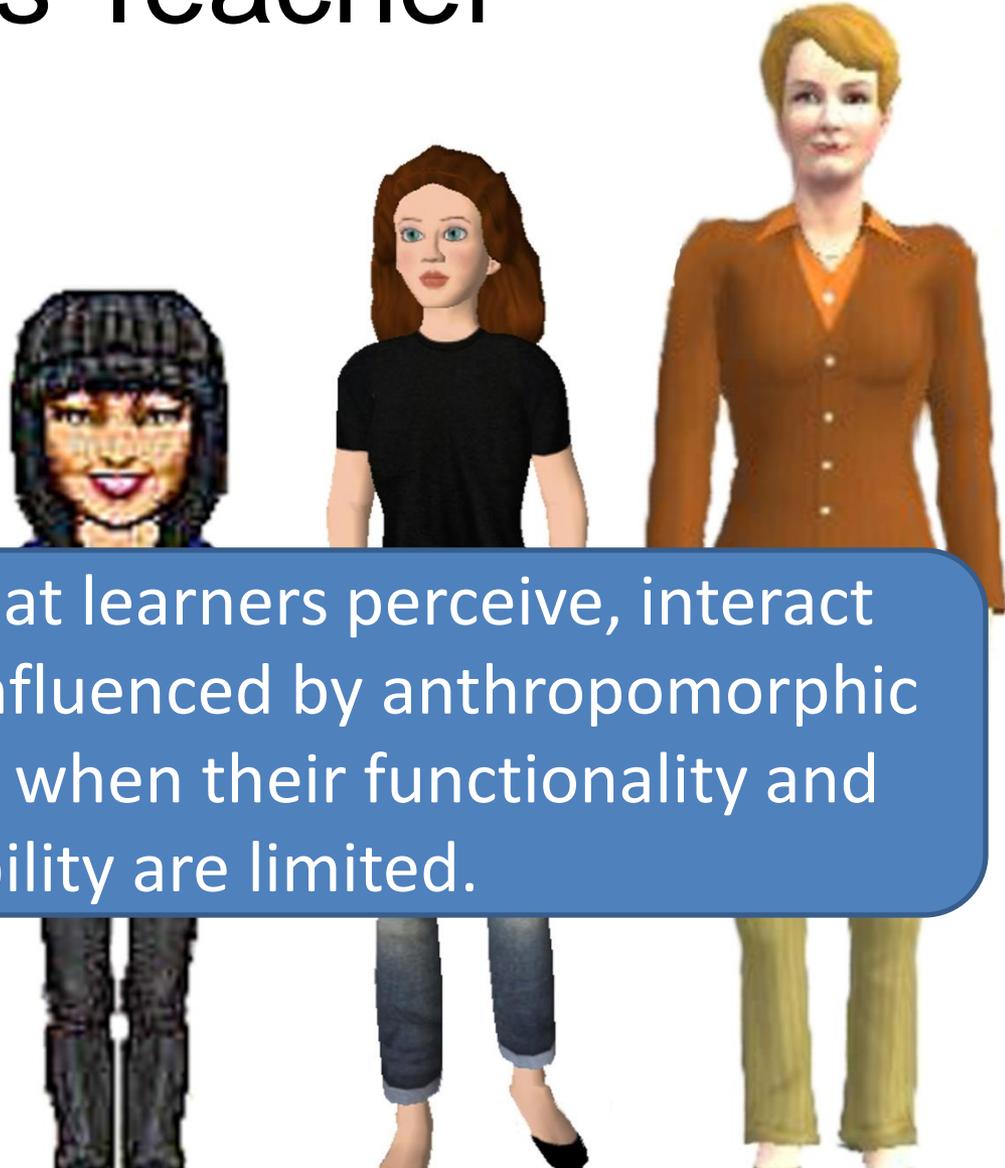
Why be a Character at All?



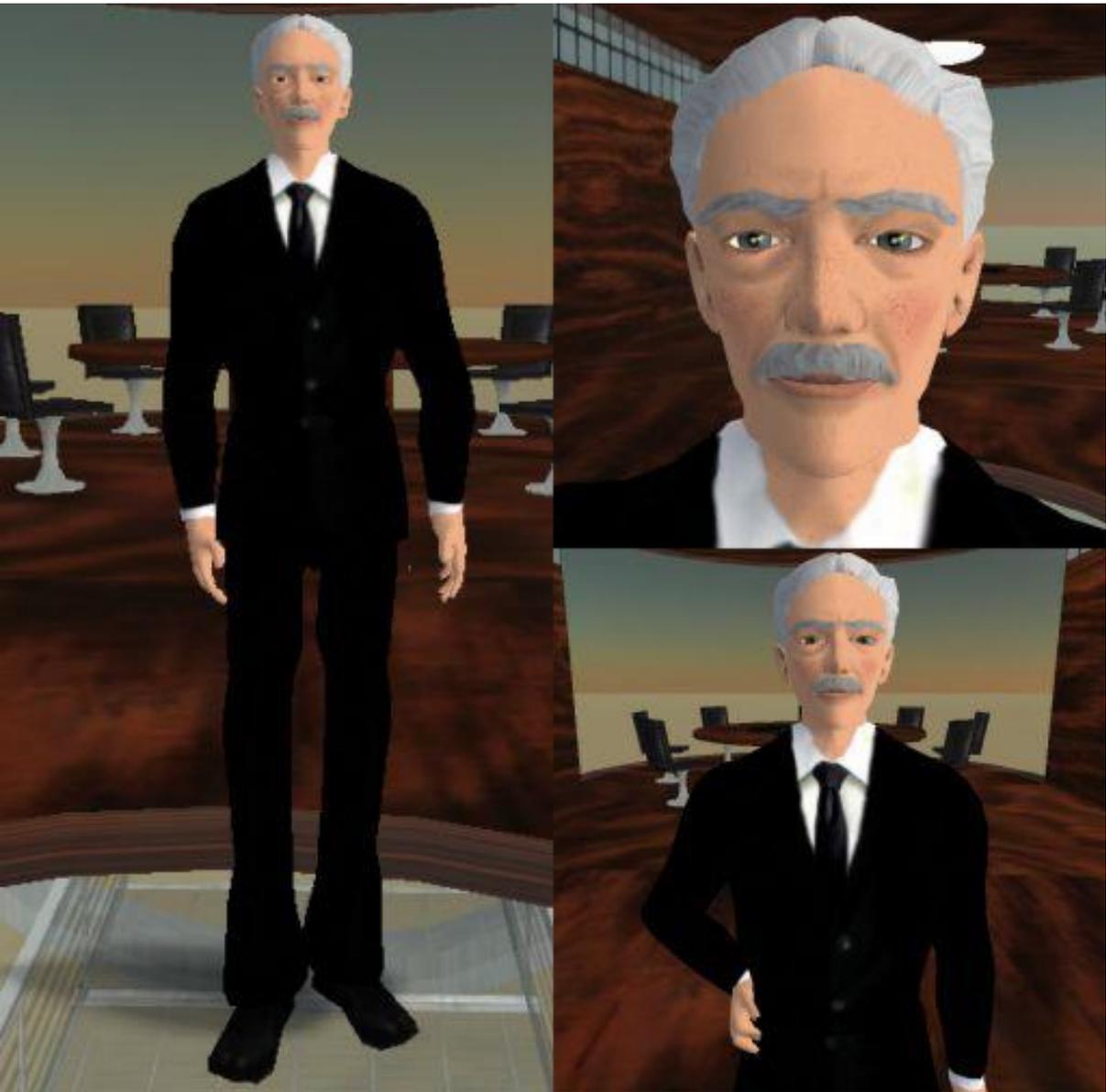
Research indicates that human social models influence behavior, beliefs and attitudes.



Avatar as Teacher

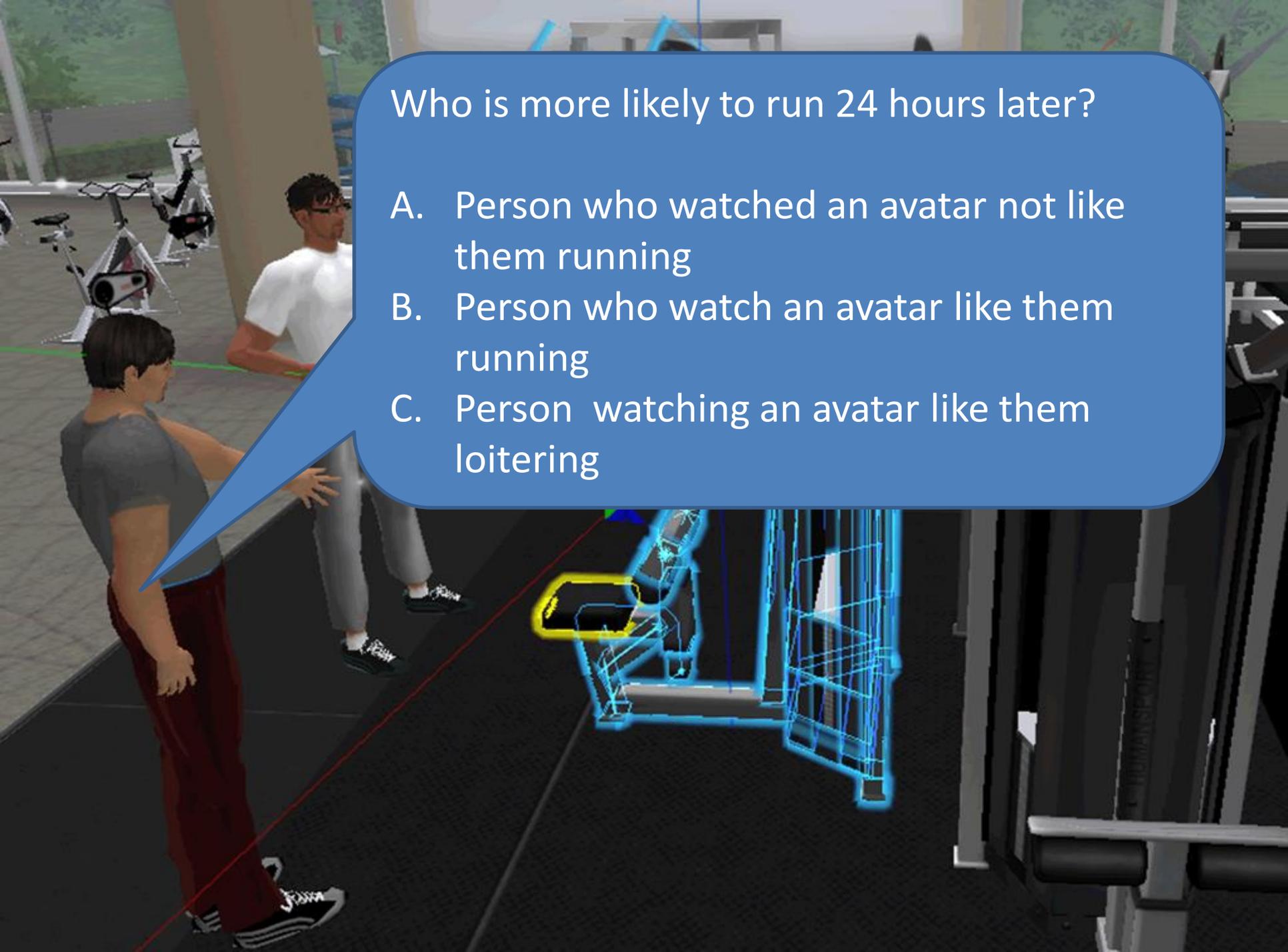


Research indicates that learners perceive, interact socially with and are influenced by anthropomorphic agents (avatars) even when their functionality and adaptability are limited.



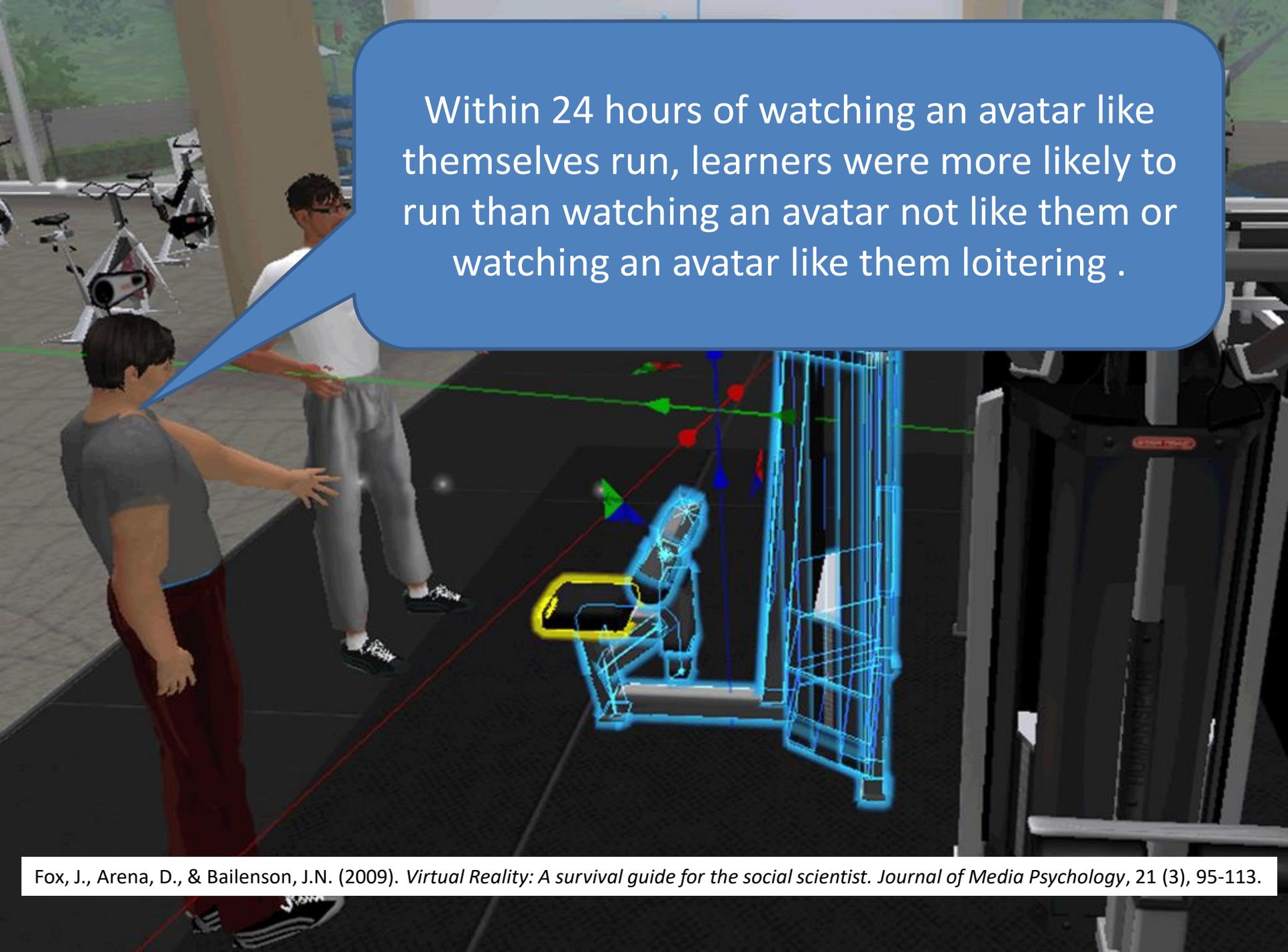
An experience as an avatar can change a person's real life perceptions. In a study conducted by Yee and Bailenson (2006), it was found that negative stereotyping of the elderly was significantly reduced when participants were placed in avatars of old people compared with those participants placed in avatars of young people.

Yee, N. & Bailenson, J.N. (2006). **Walk A Mile in Digital Shoes: The Impact of Embodied Perspective-Taking on The Reduction of Negative Stereotyping in Immersive Virtual Environments..** Proceedings of PRESENCE 2006: The 9th Annual International Workshop on Presence. August 24 – 26, Cleveland, Ohio, USA

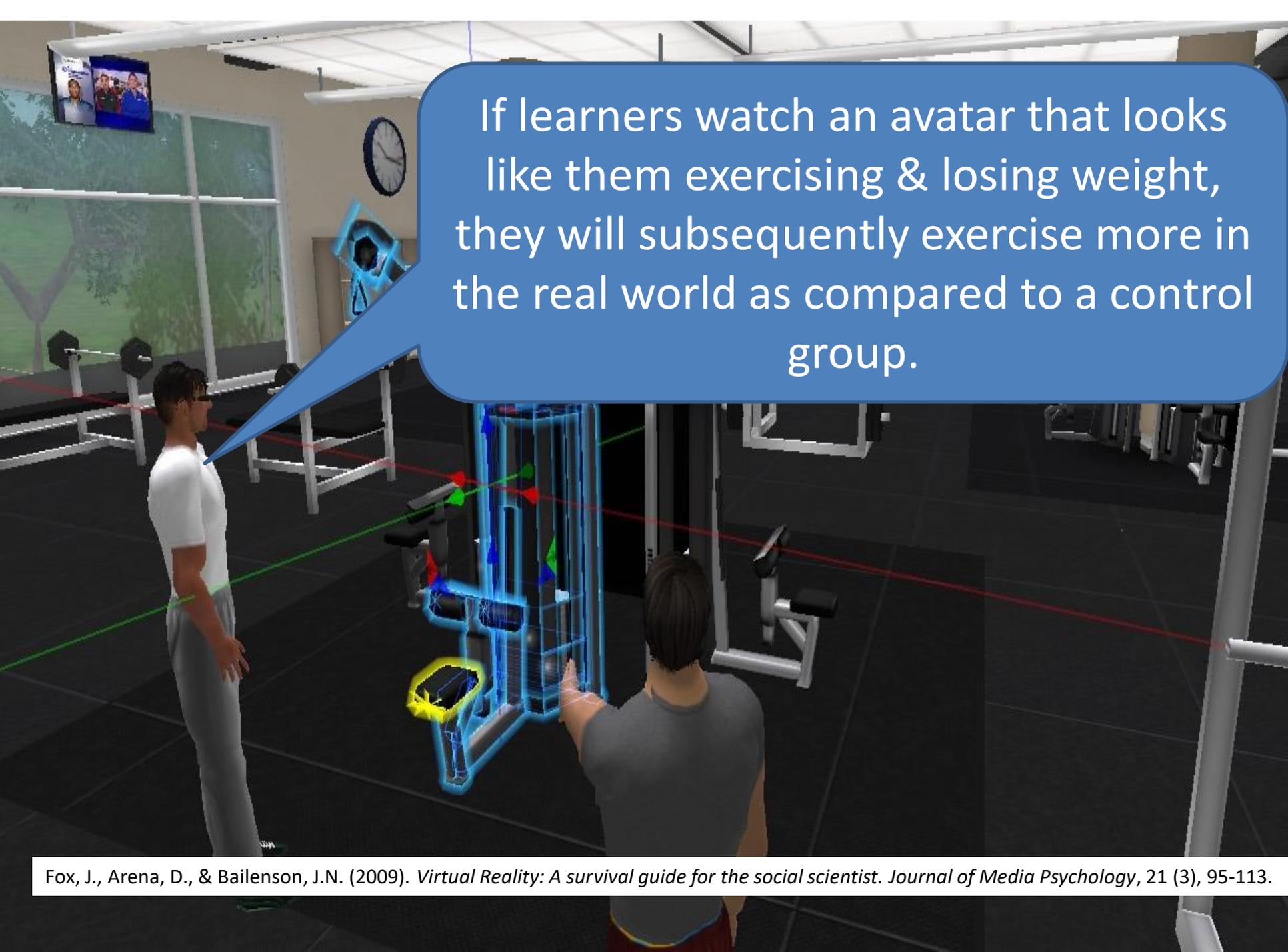
A 3D rendered scene of a gym. In the foreground, a man in a grey t-shirt and maroon pants stands on a black mat. In the background, another man in a white t-shirt and grey pants stands near a treadmill. A wireframe chair is visible in the center, with a yellow highlight on its seat. The scene is overlaid with a blue speech bubble containing text.

Who is more likely to run 24 hours later?

- A. Person who watched an avatar not like them running
- B. Person who watch an avatar like them running
- C. Person watching an avatar like them loitering

A virtual reality simulation of a gym. Two avatars are visible: one in the foreground wearing a grey t-shirt and maroon pants, and another in the background wearing a white t-shirt and grey pants. In the center, there is a wireframe chair with a yellow seat and blue frame. The gym contains various pieces of equipment like treadmills and stationary bikes. A blue speech bubble is overlaid on the scene, containing text. The background shows a window with a view of a building and trees.

Within 24 hours of watching an avatar like themselves run, learners were more likely to run than watching an avatar not like them or watching an avatar like them loitering .



If learners watch an avatar that looks like them exercising & losing weight, they will subsequently exercise more in the real world as compared to a control group.

A photograph of three cowboys at a campfire. One cowboy in a white hat and denim jacket stands in the center, looking down. Two other cowboys are seated on either side, one in a striped shirt and the other in a white hat and fringed blanket. A fire burns in a metal grate in the foreground. In the background, a wooden structure holds a coiled rope, a bag labeled 'TEXAS', and some onions. A white tent is visible on the left.

Stories and Challenges

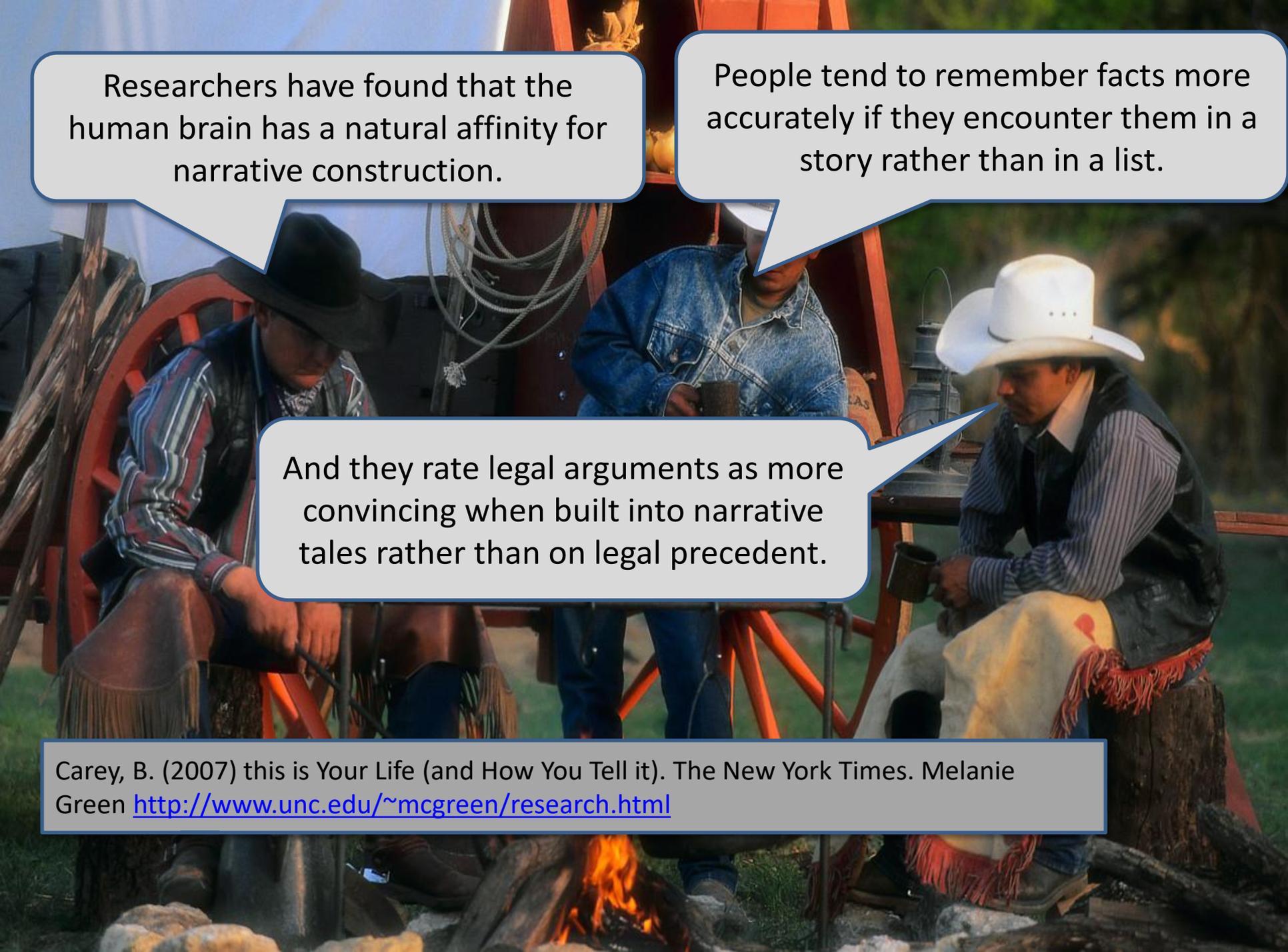


Provide a challenge

Jones, B., Valdez, G., Norakowski, J., & Rasmussen, C. (1994). Designing learning and technology for educational reform. North Central Regional Educational Laboratory. [Online]. Available: <http://www.ncrtec.org/capacity/profile/profwww.htm> and Schlechty, P. C. (1997). Inventing better schools: An action plan for educational reform. San Francisco, CA: Jossey-Bass

A conceptual image featuring a large magnifying glass in the upper left corner. The lens is focused on two tiny figures in business attire shaking hands in the center of the frame. A bright, circular light emanates from the point of focus, creating a spotlight effect on the figures. A white speech bubble with a blue border points from the figures towards the upper right, containing the text "Design the Instruction to Start with a Challenge".

Design the Instruction to Start
with a Challenge

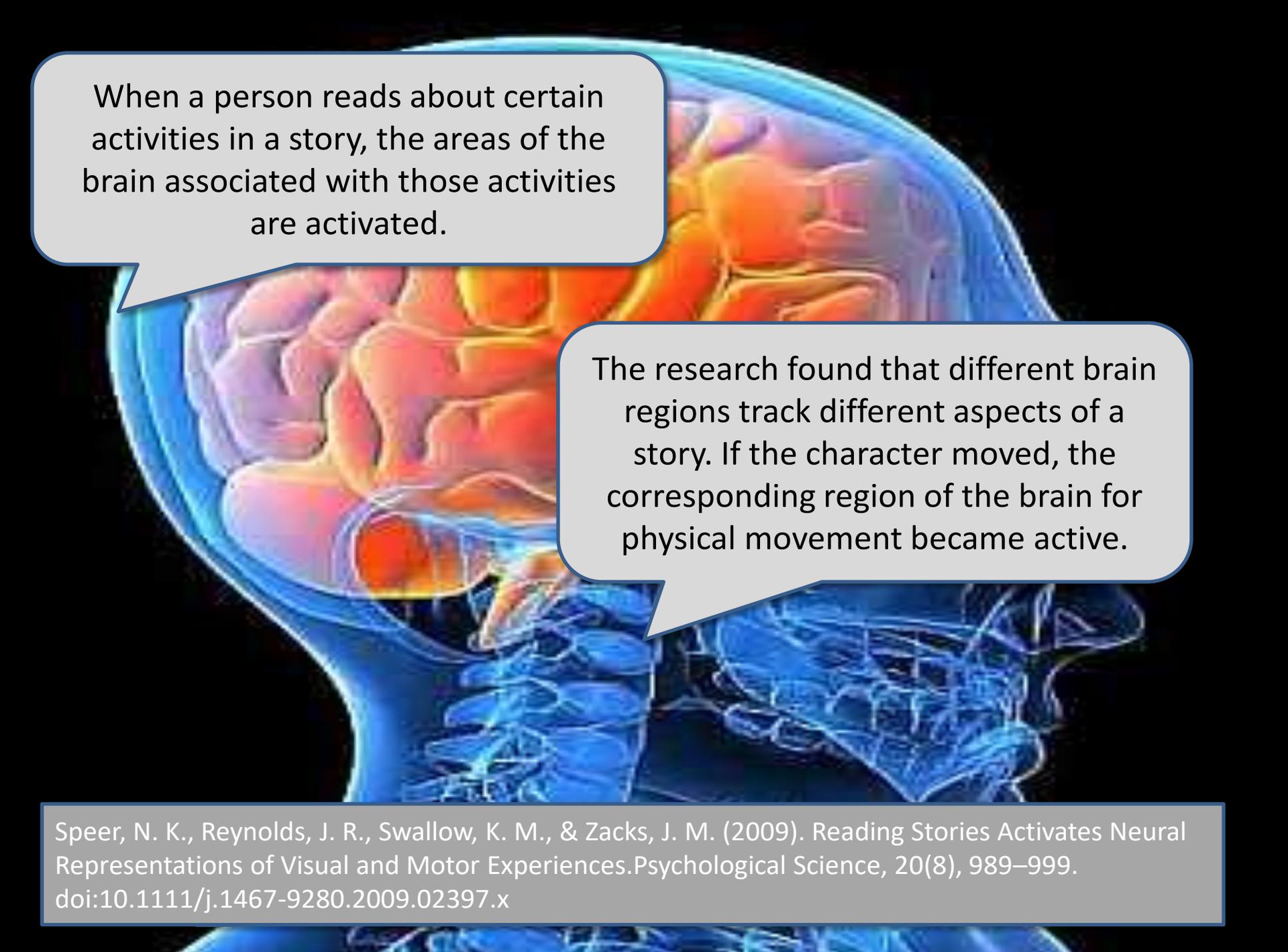
A photograph of three cowboys sitting on a wooden wagon around a campfire. The cowboy on the left is wearing a black hat and a striped shirt. The cowboy in the middle is wearing a blue denim jacket. The cowboy on the right is wearing a white cowboy hat and a striped shirt. They are all holding mugs and appear to be drinking. The background is a blurred outdoor setting with trees and a bright sky.

Researchers have found that the human brain has a natural affinity for narrative construction.

People tend to remember facts more accurately if they encounter them in a story rather than in a list.

And they rate legal arguments as more convincing when built into narrative tales rather than on legal precedent.

Carey, B. (2007) this is Your Life (and How You Tell it). The New York Times. Melanie Green <http://www.unc.edu/~mcgreen/research.html>



When a person reads about certain activities in a story, the areas of the brain associated with those activities are activated.

The research found that different brain regions track different aspects of a story. If the character moved, the corresponding region of the brain for physical movement became active.

Speer, N. K., Reynolds, J. R., Swallow, K. M., & Zacks, J. M. (2009). Reading Stories Activates Neural Representations of Visual and Motor Experiences. *Psychological Science*, 20(8), 989–999. doi:10.1111/j.1467-9280.2009.02397.x

Story Elements

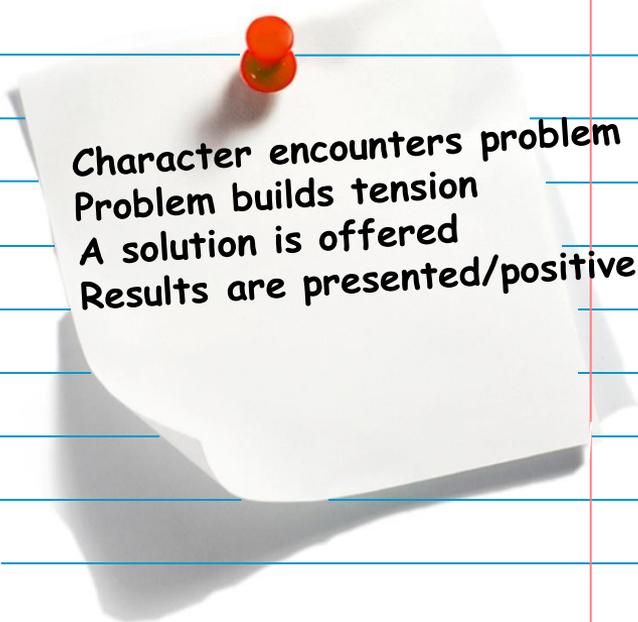
1. Characters

2. Plot (something has to happen).

3. Tension

4. Resolution

5. Conclusion



Character encounters problem
Problem builds tension
A solution is offered
Results are presented/positive

NikePlus Stats for Karl

myLOCKER

ORDER STATUS

CART 0

MY NIKE+ LEVEL: GREEN



TOTAL
276.86 MI

344mi to reach the next level.

What are levels? ▶

sec run at 7:34 AM



HOW WAS YOUR RUN? ▶

FASTER

DISTANCE



03/24

03/25

04/02

04/03

04/06

04/09

◀ 04/16 ▶

SEE ALL RUNS ▶

RUNS



9.56mi last run

GOALS



You did it!

CHALLENGES



Compete With Friends

COACH



Train Like a Pro

MINI



Let's turn it up a Notch!



THE GAME



You tie your shoes, put on your headphones, take your first steps outside. You've barely covered 100 yards when you hear them. They must be close. You can hear every guttural breath, every rattling groan - they're everywhere. Zombies. There's only one thing you can do:

Run!



Automatically collect crucial items for your base as you run, plus artefacts, notes, voice recordings, and more

THE STORY



You're Runner 5. Hundreds of lives are counting on you. You've got to help your base rebuild from the ruins of civilization by collecting critical supplies while avoiding roving zombie hordes. Can you save them and learn the truth about the zombie apocalypse?



Use the items you've collected to develop your base and help your surviving population thrive. With a bigger base comes more missions and some unexpected surprises.

1UP 00000

5

03800

Levels



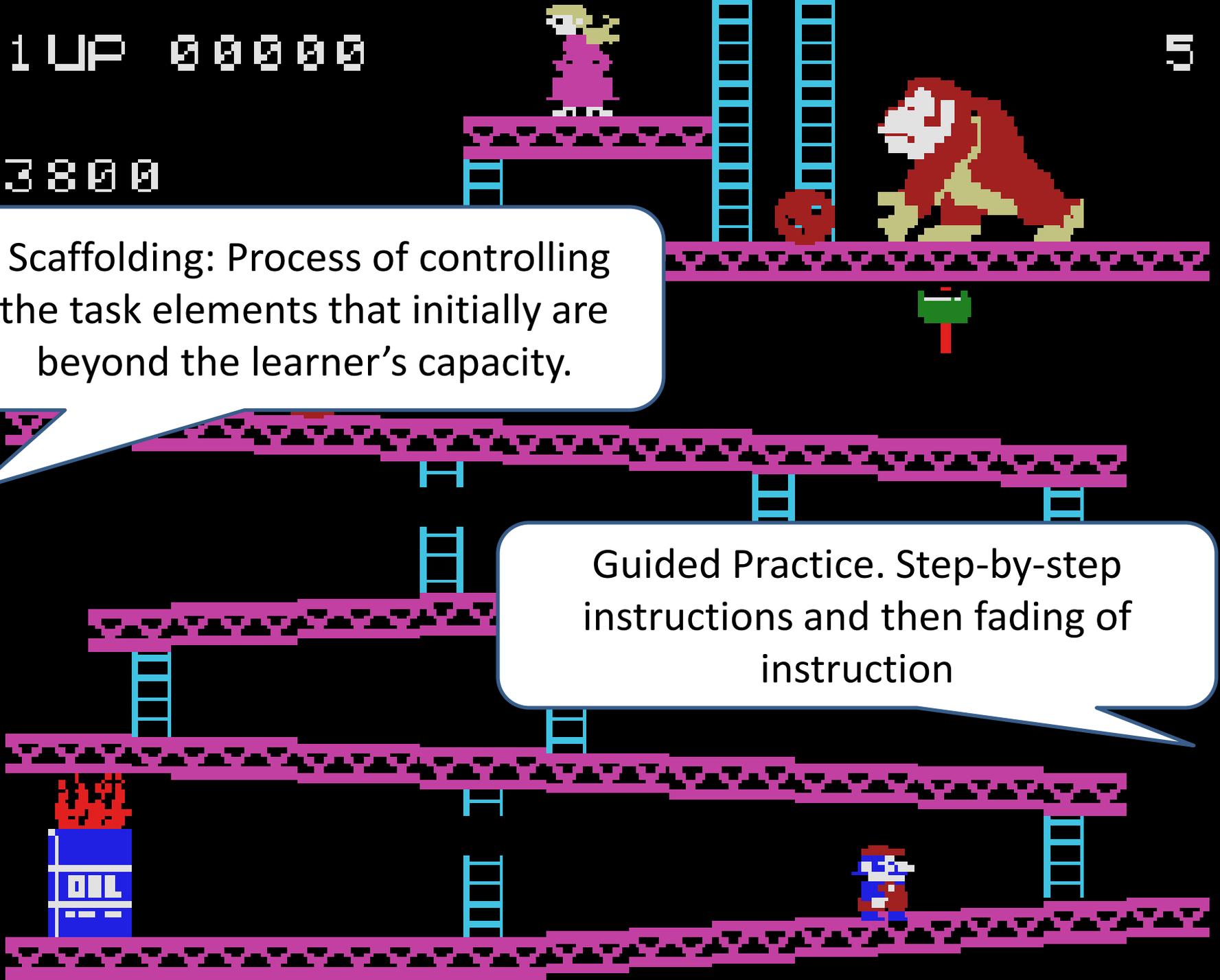
1 UP 00000

5

03800

Scaffolding: Process of controlling the task elements that initially are beyond the learner's capacity.

Guided Practice. Step-by-step instructions and then fading of instruction



MAIN MENU



First Time Users



Demonstration



Practice



Test

3 Levels



CHOOSE DIFFICULTY

WAVE OF MUTATION
THE FOXES

Player 3



EASY
MEDIUM
HARD
EXPERT

Player 2



H

aaaa



Player 4



READY

READY

READY

Back

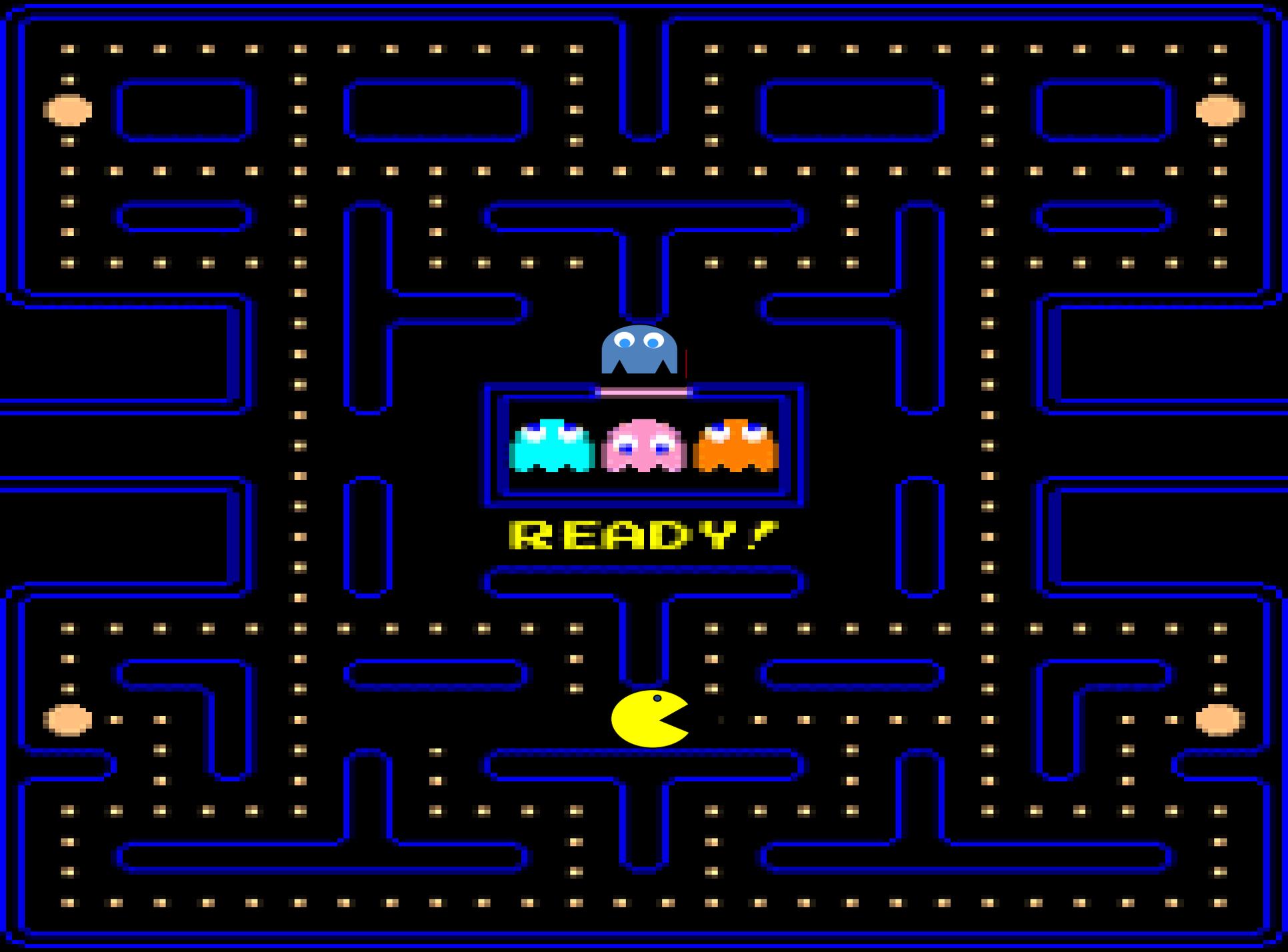
Select

Once that task is accomplished, the learner is then led to accomplish another goal which builds upon the previous.

Feedback

READY?







Create A Sim

Games like The Sims provide feedback on many dimensions which provide opportunities to consider tradeoffs and higher level cognitive thinking.

Simulation Performance Report

Below are the results of your performance during this simulation. Click the "Home" button to return to the beginning and try again.

CREDIBILITY



You scored 94%

MEETING NEEDS



You scored 94%

PRODUCTS SOLD



You scored 94%

DECISION 1: WHAT IS YOUR STRATEGY FOR THIS CALL?

You chose:

Lead with Product A, with plans to then discuss Product B, time permitting. Although you would like to cover your entire portfolio on this call, you know that Dr. Graham will only give you a short amount of time. You don't want to push your luck by trying to cover your entire portfolio in a single call.

Feedback on your decision:

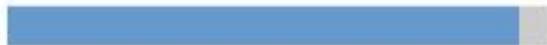
This is not a bad decision. You are planning to lead with your strong product and delve deeper into your portfolio if the doctor gives you the time to do so. While it is true you often only get a short time with a doctor, doctors tend to give you more time if you have something compelling and valuable to say. And remember, there are other people in the office you can speak to about your portfolio besides the doctor. Therefore, it is still a good idea to plan to present your third product.

[Print](#)[View previous feedback](#)[View more feedback](#)

Simulation Performance Report

Below are the results of your performance during this simulation. Click the "Home" button to return to the beginning and try again.

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[Print](#)[View previous feedback](#)[View more feedback](#)

Rewards, Incentives and Achievements



Primarily use expected achievements so players can establish goals for themselves and understand the purpose and progression of interactions.





MARIO 400 -1 WORLD TIME
x2 1-1 274

Use coins or rewards to provide feedback on performance, updates on progress and level of correctness.



Give players an opportunity to go over their earned achievements using some kind of visual stored list.



THUNDER ISLAND

LEADER BOARD

DRIVER	BEST LAP	AIR TIME	BEST HEIGHT	BEST DISTANCE	DATE
INMOTION	1:23.82	014.52	002.93	040.46	12.13.09 18:18
INMOTION				034.64	12.13.09 23:15
INMOTION				040.48	12.13.09 22:54
INMOTION				027.58	12.13.09 18:01
INMOTION				046.03	12.14.09 00:24
INMOTION				042.05	12.13.09 18:03
INMOTION	1:25.26	014.88	002.69	037.49	12.14.09 00:10
INMOTION	1:25.36	015.00	003.31	048.36	12.13.09 22:57
INMOTION	1:25.36	015.62	003.18	049.71	12.13.09 23:05
INMOTION	1:25.44	015.12	003.16	041.38	12.14.09 00:20

Leaderboards provide opportunities for players to receive feedback about their performance as compared to others.

RACE

SETTINGS

QUIT

Freedom to Fail



In games, failing is allowed, it's acceptable, and it's part of the process. Games accommodate failure with multiple lives, second chances and alternative methods of success.



Research indicates that our brains grow when we make a mistake because it is a time of struggle.

Our brains react with greater electrical activity when we make a mistake than when we are correct.

Use the directional arrows to drive the car.

Moser, J. Schroder, H.S., Heeter, C., C., Moran, T.P., & Lee, Y.H. (2011) Mind your errors: Evidence for a neural mechanism linking growth mindset to adaptive post error adjustments. *Psychological Science*, 22, 1284-1489.

Example

Value through Innovation

21 May 2014

- News Centre
- Corporate Profile
- Global Activities
- Corporate Responsi
- Careers
- Research & Develop
- Clinical Trials
- Medical Information
- Products
- Partnering

CARE

The Boehringer Ingelheim group is a large pharmaceutical company.

Boehringer Ingelheim

NewsHome

[New resource for journalists](#)

Oncology Websites

ONCOLOGY WEBSITE FOR PATIENTS LIFEWITHLUNG.CANCER.INFO

Latest Press Releases

- ▶ 21.05.2014 **ATS 2014**
COPD: First Phase III data show lung function benefits of tiotropium + olodaterol fixed-dose combination go beyond tiotropium (Spiriva®) alone
- For media outside UK, U.S. and Canada
- ▶ 19.05.2014 **Additional results from post-hoc analysis underline effectiveness of S...**
- For ex-US and ex-UK Media Use Only
- ▶ 18.05.2014 **IPF Phase III results published in NEJM show nintedanib* slows dise...**
- For non-US health media only
- ▶ 15.05.2014 **As the benefits and safety of Pradaxa® (dabigatran etexilate) are once...**
Boehringer Ingelheim continues to look for new ways for Pradaxa® to patients
- For media outside of the U.S., the UK & Canada only
- ▶ 15.05.2014 **New analysis shows Boehringer Ingelheim's Giotrif® (afatinib) is the first treatment to demonstrate significant overall survival benefit for patients with a specific type of lung cancer**

Connect with us



Competitive-based Gamification
HO-1-13-14

Top Links



Value through Innovation

21 May 2014

- News Centre
- Corporate Profile
- Global Activities
- Corporate Resp
- Careers
- Research & Dev
- Clinical Trials
- Medical Informa
- Products
- Partnering

Field reps are squeezed for time, yet have to understand multiple disease states, product attributes and competitive positioning and complex healthcare system issues of concern to their physicians. They wanted an effective way to pull through the information.

Boehringer Ingelheim

Late

NewsHome

▶ New resource for journalists

Oncology Websites

ONCOLOGY WEBSITE FOR PATIENTS
LIFEWITHLUNG.CANCER.INFO

- 19.05.2014 ATS 2014
COPD: First Phase III data show lung function benefits of tiotropium + olodaterol fixed-dose combination go beyond tiotropium (Spiriva®) alone
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- ▶ 15.05.2014 As the benefits and safety of Pradaxa® (dabigatran etexilate) are once again confirmed, Boehringer Ingelheim continues to look for new ways for Pradaxa® to help more patients
- For media outside of the U.S., the UK & Canada only
- ▶ 15.05.2014 New analysis shows Boehringer Ingelheim's Giotrif® (afatinib) is the first treatment to demonstrate significant overall survival benefit for patients with a specific type of lung cancer

Connect with us



- ▶ Facebook - Company Page
- ▶ Pinterest - Online Pinboard
- ▶ Twitter - Global Channel
- ▶ YouTube - Our Video Channels
- ▶ LinkedIn
- ▶ Mobile Website
- ▶ RSS Feed

Top Links

They rolled out Qstream which consisted of 25 questions, answers and explanations. Reps simply answer two questions from their laptop or mobile device every other day.



It takes to win?

Measure and manage the strengths of your sales team.

Get Industry Report





They are immediately scored, can see how their peers answer the same question, are presented with a concise explanation and on their way in 3 to 5 minutes.



Measure and manage the strengths of your sales team.

Get Industry Report



Reps said:

"I feel this is an awesome way to review and continue to maintain our knowledge. 5 Star rating."

"Great reminders of important points to make for the supplemental calls."

"I enjoy the challenge."

"Love the concept. Keeps me up to date. Thanks!"

"It gives us a chance to really think and confirm what we know, what we really need to know, and where to expand our knowledge."

Example

866.362.4538

PARTNERS

HUBEXCHANGE



REQUEST A DEMO



LOGIN

Products

Services

Clients

Resources

Company

The Future of Marketing is Here

The platform of choice for CMOs

Learn More

salesforce®



ExactTarget®

Discover Your **Digital Marketing Potential**

Make the most of your customer data with marketing automation, email, mobile, social, and personalized web solutions. Our cloud-based marketing software powers relationships between brands and consumers.



ExactTarget is a global marketing organization focused on digital marketing tools - email, mobile, and web and was recently purchased by Salesforce.com. ExactTarget is a leading cloud marketing platform used by more than 6,000 companies including Coca-Cola, Gap and Nike

Discover Your **Digital Marketing Potential**

Make the most of your customer data with marketing automation, email, mobile, social, and personalized web solutions. Our cloud-based marketing software powers relationships between brands and consumers.



Introducing a new product, MobileConnect and wanted to bring the sales force up-to-speed on the features and functionality of the product.

Discover Your **Digital Marketing Potential**

Make the most of your customer data with marketing automation, email, mobile, social, and personalized web solutions. Our cloud-based marketing software powers relationships between brands and consumers.

knowledge
GURU[™]



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VENDOR

<http://www.theknowledgeguru.com/>

Our game creation and editing tool makes
game based learning easy and affordable.

**SIGN UP FOR A
30-DAY FREE TRIAL**

Sign in

Email Address:

sharon@bottomlineperformance.com

Password:

...

Sign In

[Forgot Password?](#)

[Not Registered? Sign Up](#)

Welcome to ExactTarget's MobileConnect Guru Learning Game!

Do you think you're a Knowledge Guru when it comes to MobileConnect? Prove it! Take my challenge and deliver the scrolls of wisdom to me across each category to earn high scores, achievements, and best of all...bragging rights!

Have fun, good luck, and show everyone that you're a MobileConnect Guru!



Click/Touch a page to read more...



Think you're pretty smart? Your presence here means you believe you have what it takes to join my amazingly brilliant self atop my Mountain of Knowledge.

We'll see. Becoming a guru isn't easy.
Not at all.



You must ascend a mountain for each topic you need to master. However, a **single** ascent proves NOTHING. That's too easy. You have to ascend each mountain **three times** - bringing me a scroll of wisdom each time.

 Skip this story next time I sign in

Skip Narrative

Talk Mobile:

To master this topic you must complete each of the paths!

2 of 3 paths completed

Back to Menu



Seeds of Knowledge
19 of 27 earned



Pearls of Wisdom
0 of 1 earned

Delivered

Delivered

Play Path

Score: 0

ExactTarget does not offer FTEU programs.

True

False

Talk Mobile: Question 1 with 8 remaining on this path

Score: 0

You Answered Incorrectly

About your misstep:

In a Free to End User (FTEU) program, subscribers opt in and receive MT (Mobile Terminated) text messages for which they do not incur any premium or standard texting fees from their wireless carrier.

550 points have been deducted from your score.

Continue

Return to Menu

Topic Progress:



Seeds of Knowledge
19 of 27 earned



Pearls of Wisdom
0 of 1 earned

Talk Mobile: 0 correct since your last misstep!

QUESTION OVERVIEW REPORT

QID	QUESTION STEM	OBJECTIVE	CORRECT ANSWERS	WRONG ANSWERS	CORRECT RESPONSE %
1	SMS = short message service. MTA = mail transfer agent. Which one is associated with text messaging?	T1	497	0	100.00
2	You just received a text message from a friend. How was the message transmitted?	T1	433	24	94.75
3	You are a mobile customer who has opted in to receive updates to your local bus route via text. Will these be delivered via SMS or MTA?	T1	436	12	97.32
4	FTEU means free to end user. Customers who opt in to FTEU programs don't incur fees from their wireless carrier when they send or receive messages. Does ExactTarget offer FTEUs?	T1	457	199	69.66
5	You opted into a FTEU program offered by a retailer so you can receive notifications via text free of charge. This program was generated by ExactTarget's MobileConnect application.	T1	413	45	90.17
6	ExactTarget does not offer FTEU programs.	T1	428	22	95.11
7	If you go mobile with your marketing efforts, two kinds of text messages will probably be part of your plans: MOs and MTs. Which statement is correct?	T1	444	219	66.97
8	If you are the marketer, will you send MOs or MTs to your customers?	T1	431	24	94.73
9	You are a local grocer who has a mobile marketing program in place. Your customers are submitting their email addresses to opt in to a newsletter via text messaging. What type of message are your customers sending?	T1	422	57	88.10
10	Short (5 or 6 digits) and long (8- to 10-digits) codes are numbers used to send text messages. Outside of the U.S., which type must be used if the marketer wants to run a global campaign through one code?	T1	432	20	95.58
11	Which set of numbers is an example of a long code, the type of code typically used to run global messaging campaigns?	T1	424	34	92.58
12	Which statement is true?	T1	421	65	86.63

Player Results

"I can't tell you how many people are coming to me wanting another game solution."

"The repetition of the different paths helped me retain the information."

"I'm a pretty competitive person so challenging myself to get one of the top scores added a layer of fun to learning about the MobileConnect product."

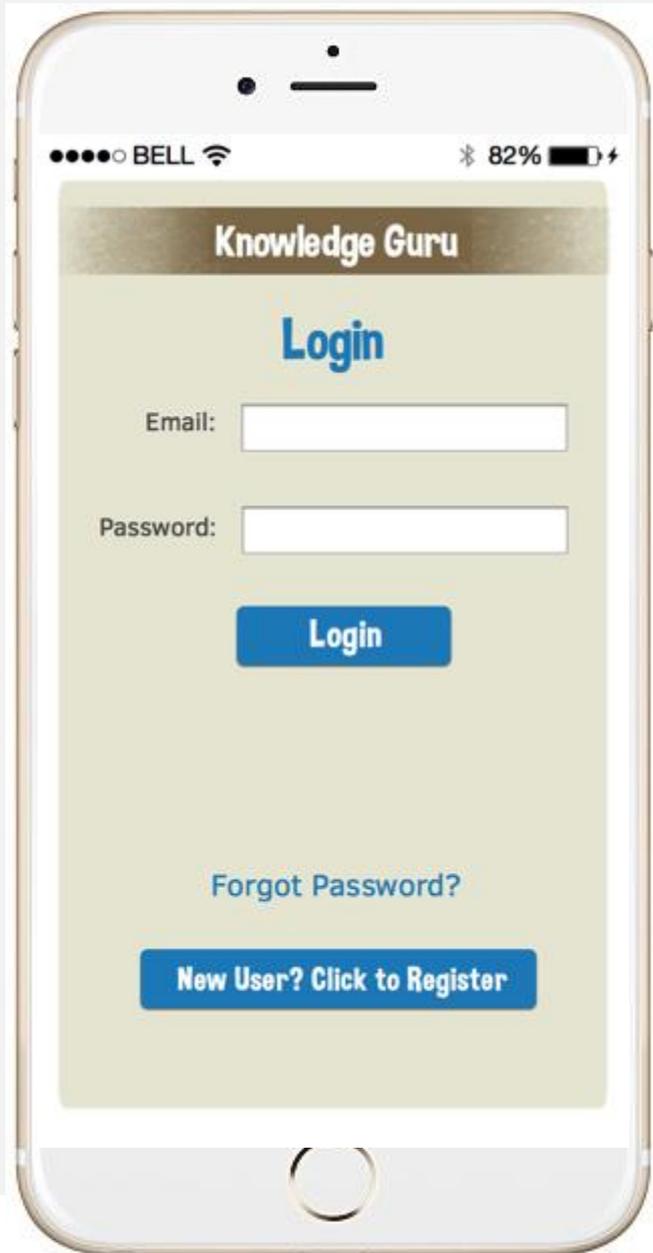
"The game was a fun way to learn about MobileConnect. I enjoyed the scenario-type questions, which put it all into context."

Business Results

Average contract value 2x higher than for previous mobile product.

First call resolution (\$35 a call/average) is up 45%.

Of all the launches done in the previous two years prior to MobileConnect, the sales team built the quickest pipeline for this product.



Points: 0



World A



Question 1 of 3
Points: 0



The first step in ACME's communication process is to obtain information by asking questions and listening. The second step is to verify your understanding of the customer's needs. The final step is to _____ an appropriate sales message.

View Image

Transmit

Send

Deliver

Here's what you need to know, Jackie!

BLP's three step communication process is 1) OBTAIN - Listen and ask questions to learn customer needs; 2) VERIFY - Confirm understanding of needs; 3) TRANSMIT - Based on customer needs, share relevant selling message.

The question you missed was:

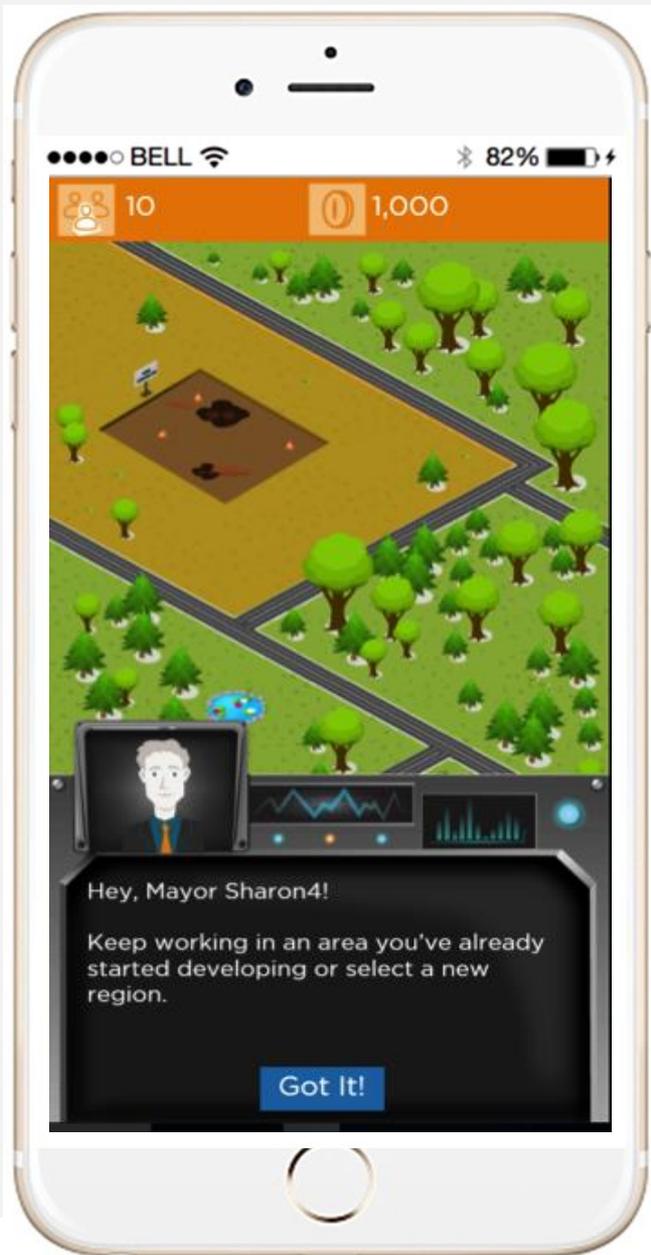
ACME Corporation has a three-step communication process. Review the image and fill in its blanks with the appropriate steps of the process.

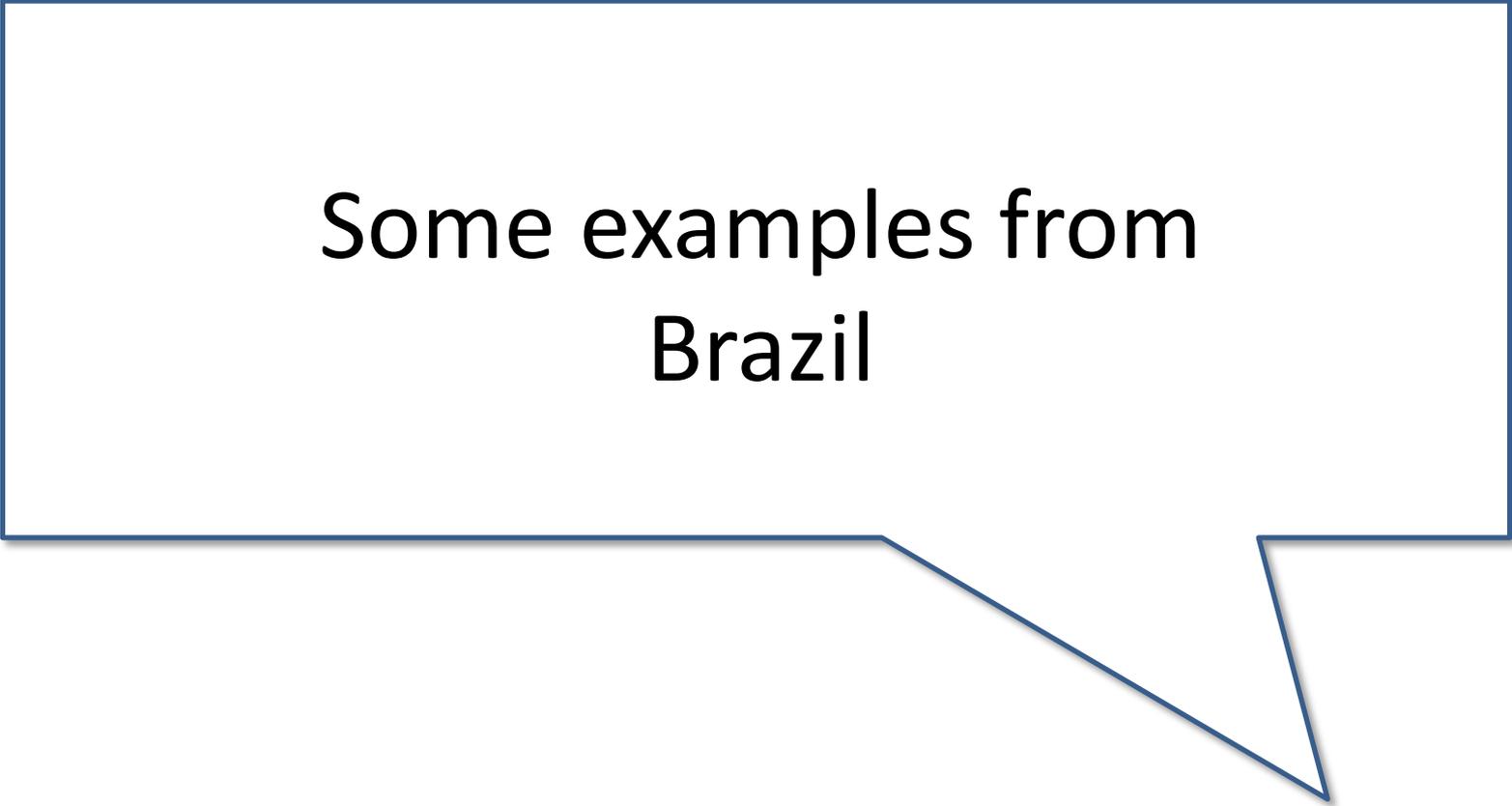


You have lost:
500 points



Try Again





Some examples from
Brazil

Brazil Quest



Launched in 2012 by the Brazilian Tourist Board (EMBRATUR) to promote the 12 host cities of 2014 FIFA World Cup and for motivating the engagement of tourist

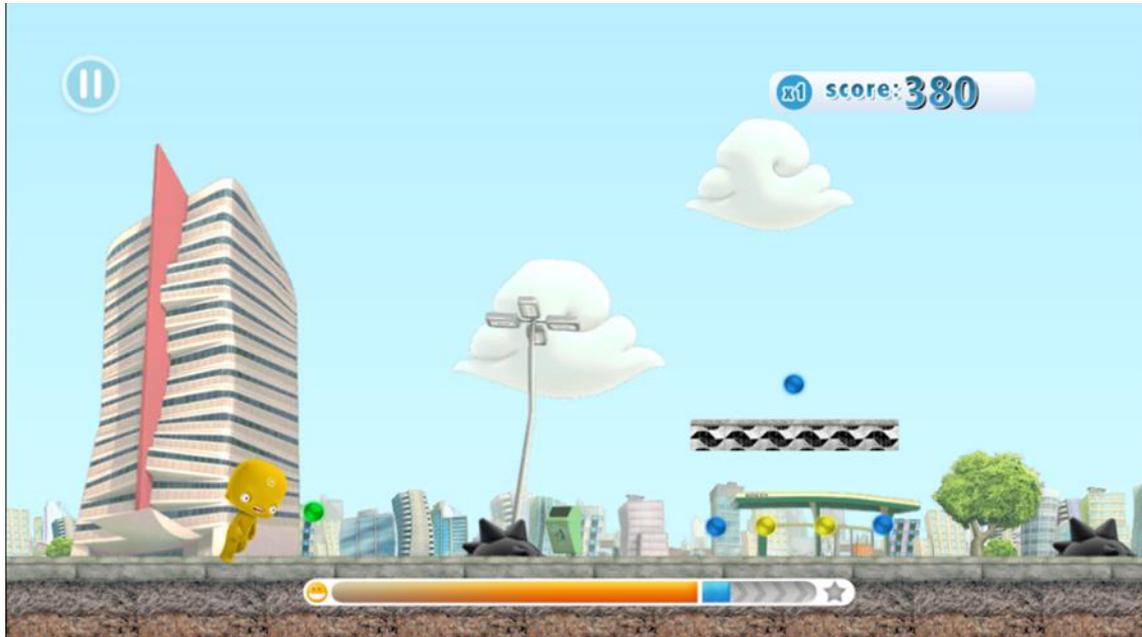
http://ertr.tamu.edu/files/2015/02/SP05_MobileSession_Correa.pdf

Brazil Quest



Link: http://ertr.tamu.edu/files/2015/02/SP05_MobileSession_Correa.pdf

Brazil Quest





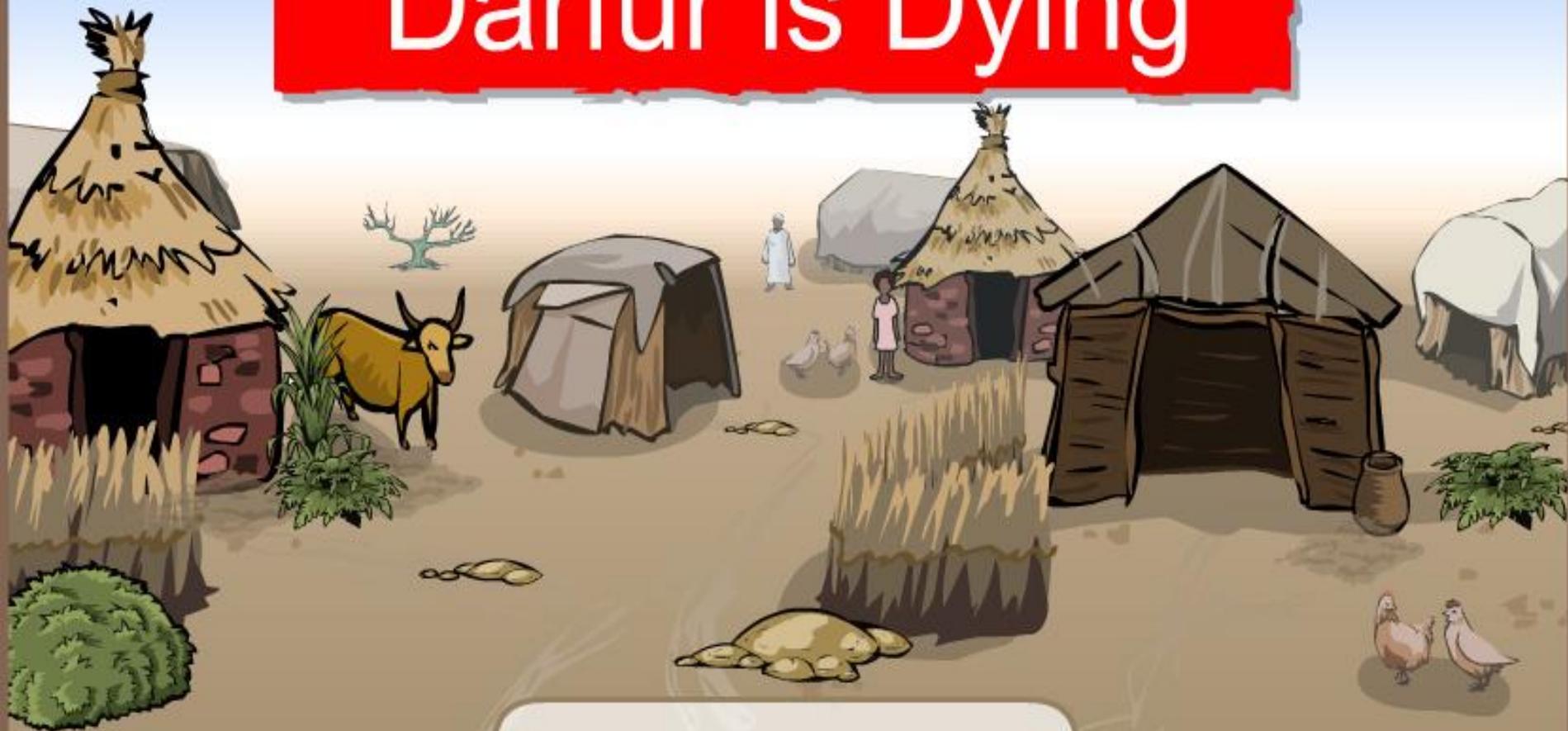


The Future: Games and
Gamification

Can games change or influence a person's behavior?



Darfur is Dying



Help stop the crisis in Darfur

**START YOUR
EXPERIENCE**

Choose a Darfurian to represent your camp



Rahman
Age 30



Sittina
Age 26



Elham
Age 14



Poni
Age 13



Jaja
Age 12



Abok
Age 12



Mahdi
Age 11



Deng
Age 10

FORAGE FOR WATER

First Experiment indicated that playing the game Darfur is Dying resulted in a greater willingness to help the Darfurian people than reading a text conveying same information.



Peng, W., Lee, M., & Heeter. (2010) The effects of a serious game on role taking and willingness to help. Journal of Communications. 60, 723-724. Chapter 5 of "The Gamification of Learning and Instruction.

press 'space' to hide!

You are 4090 meters SouthEast of the well

Second Experiment indicated that playing the game Darfur is Dying resulted in a greater role taking and willingness to help than either game watching or text reading.

Water Pump

Without sufficient clean water, preventable illnesses such as diarrhea are life threatening. Aid organizations work to improve the situation by establishing hand-pumps and latrines.

Peng, W., Lee, M., & Heeter. (2010) The effects of a serious game on role taking and willingness to help. Journal of Communications. 60, 723-724. Chapter 5 of "The Gamification of Learning and Instruction.

SUDAN [TAKE ACTION] GO
HELP STOP THE CRISIS IN DARFUR

? HELP

FORAGE FOR WATER



Jaja
Age 12

Fostering Pro-Social Behavior



Greitemeyer, T. & Osswald, S. (2010) Effective of Prosocial games on prosocial behavior. *Journal of Personality and Social Psychology*. Vol. 98 . No. 2., 211-221.

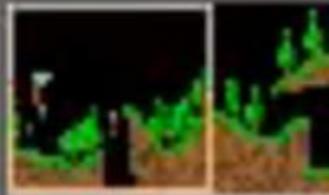
28% helped to pick up pencils.



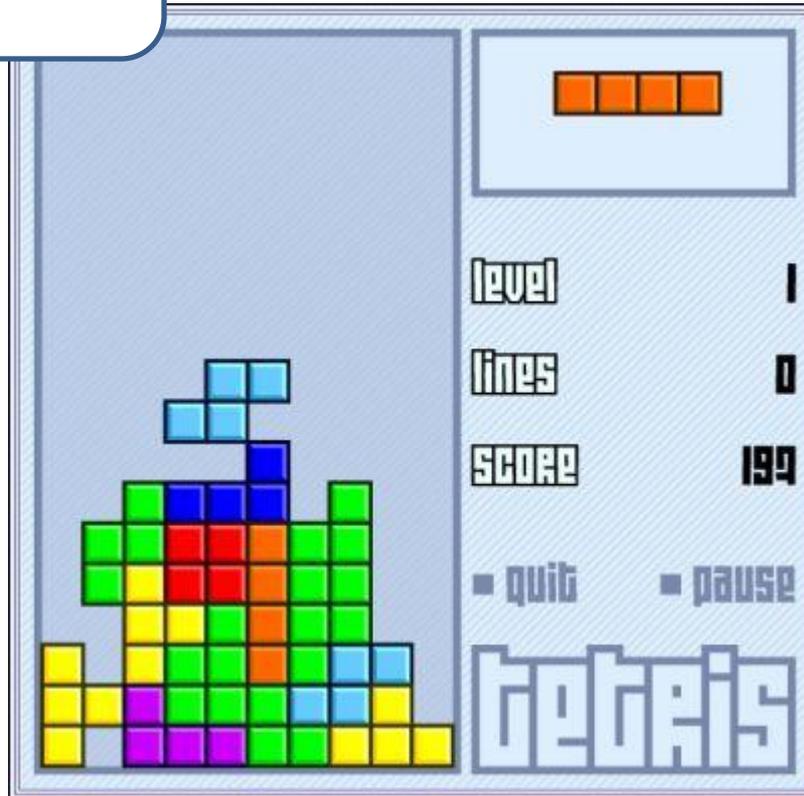
PAUSE

MACHINE GUN : 39

Out :4 In :0



33% helped to
pick up pencils.



67% helped to pick up pencils.



OUT 14 IN 0% TIME 4-44

75	75	10	10	10	10	14	10	10	10		



020,74

-00108 PTS



THE NEXT

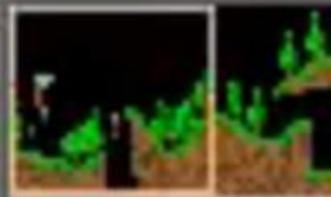
22% intervened.



PAUSE

MACHINE GUN : 39

Out :4 In :0



56% intervened.

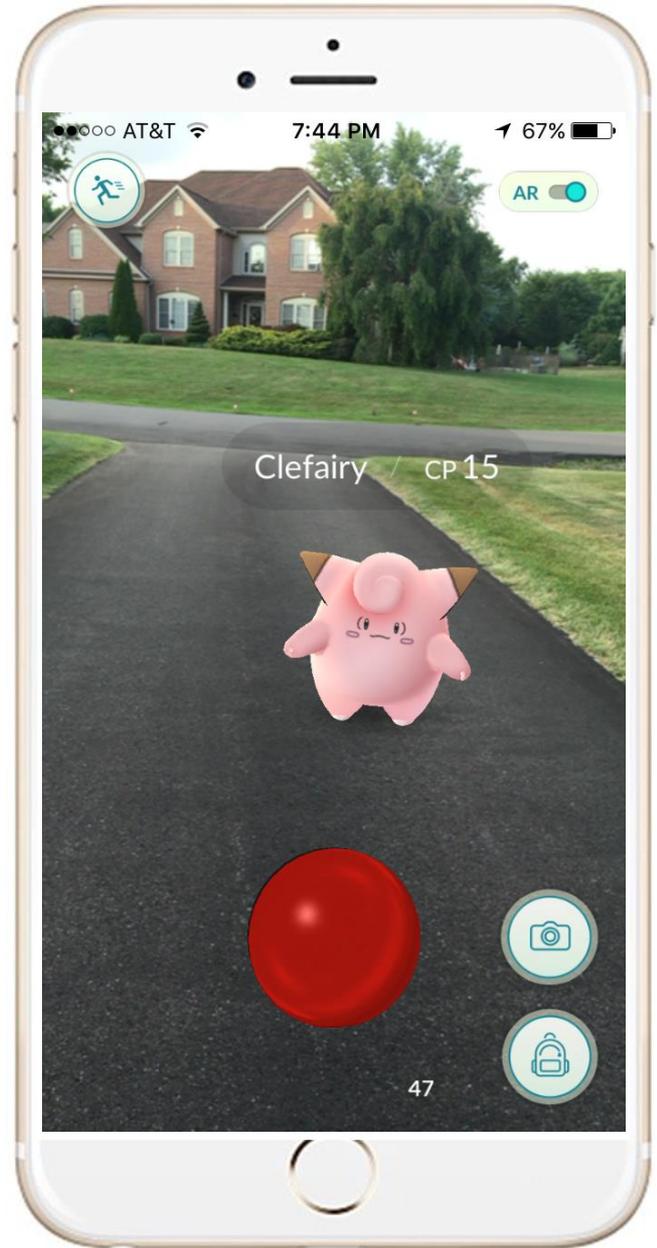


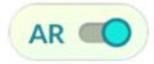






Erythro





Drowzee / CP 44



56

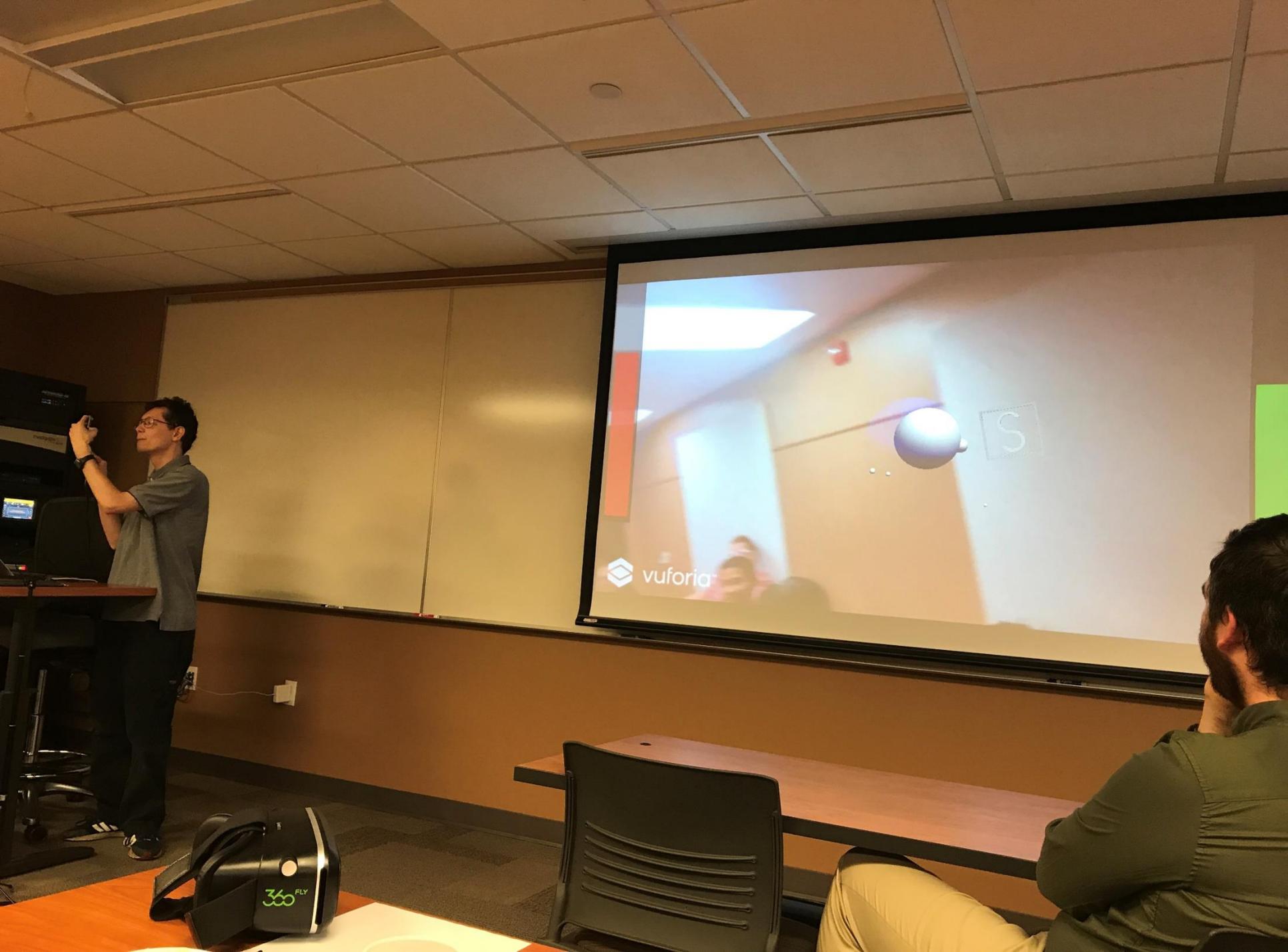




vuforia

S

360 FLY



vuforia

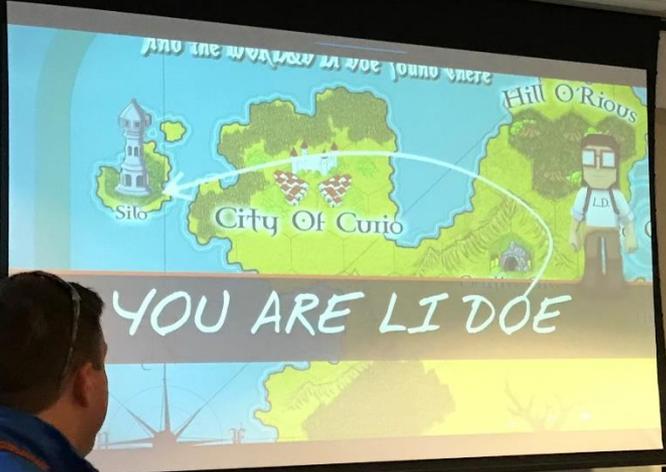
360 FLY



BLOOMS

vuforia

360 PLY



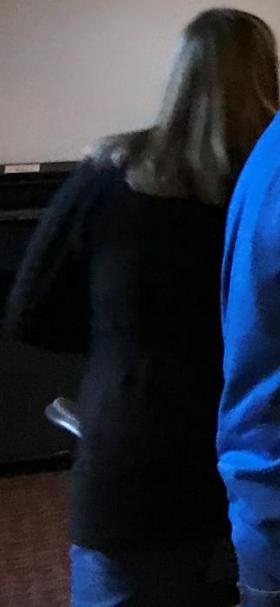
YOU ARE LI DOE

AND THE WEATHER IS NOT FOUND THERE

Hill O'Rious

Silo

City Of Curio



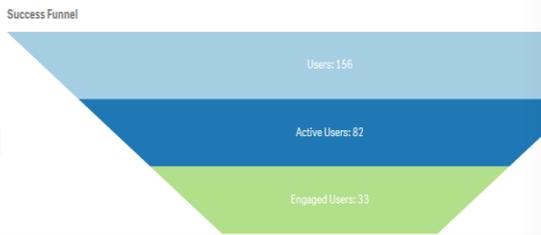
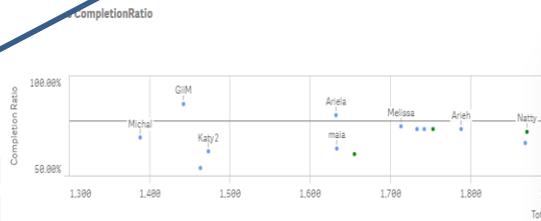




- UserName
- ActivityType
- Quit/Session
- Simulation
- Trainer
- Emma
- Jon
- GameDesc
- Sales Feb-17
- Sales Jan-17
- Service Jan-17
- CampaignDesc
- TimeCompleted
- Org.Unit
- Blue Team
- Red Team
- Yellow Team
- ItemLevel

Analytics

	Success Rate	Completion Rate
17	43.3%	81.8%
38	39.8%	75.0%



MY PERFORMANCE

This Week

- Revenue** 80 \$K / 700 \$K
- Closing Ratio** 60% / 100%
- SQL - New product** 5 SQLs / 800 SQLs
- Lead Response Time** 5 min. / 15 min.

MY MISSIONS

50 Pts

My Race

- LAST PERIOD - 485 PTS
- TEAM AVG - 510 PTS
- MY TARGET - 610 PTS
- MY CAR - 540 PTS

52 3RD PLA

- Linking Key Performance Indicators to Learning.

NEXT BEST ACTION

Social selling
Who said what?

[CLICK](#)

LEADERBOARD

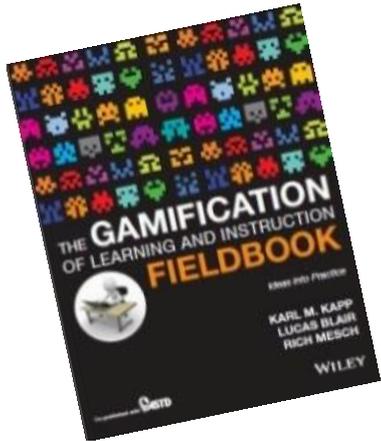
Janardhan Contreras
Classic Cars Race
60 Pts

[VIEW LEADERBOARD](#)

Conclusion

- Gamification is more than points, badges and leaderboards.
- Games and Gamification are growing and show no signs of slowing down.
- The careful and intelligent use of games and gamification make them highly effective for a learning perspective.
- Think like a game-designer. Employee game-thinking to move forward .

Resources and Questions



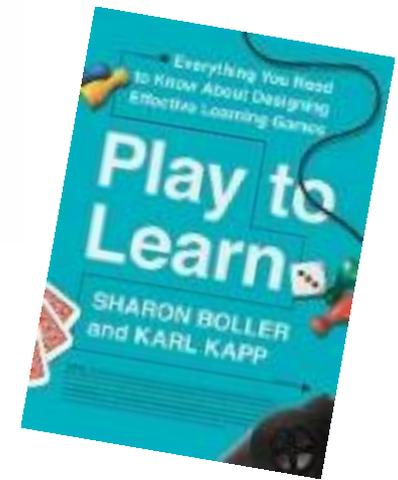
How to...



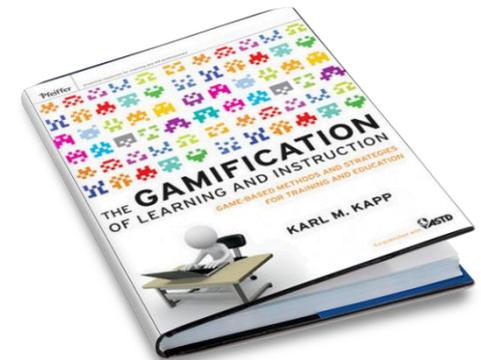
www.karlkapp.com/kapp-notes

Online Courses on Gamification at
Lynda.com

Karl M. Kapp
Twitter: @kkapp
Email: kkapp@bloomu.edu
BLOG: <http://karlkapp.com/kapp-notes/>



Step-by-Step



Research
Underpinnings