

LET THE GAMES BEGIN: An Evaluation of Gamification for Health Informatics Students

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MSTC Technical Communication 2020

BS HIM Health Information Mgr 2018

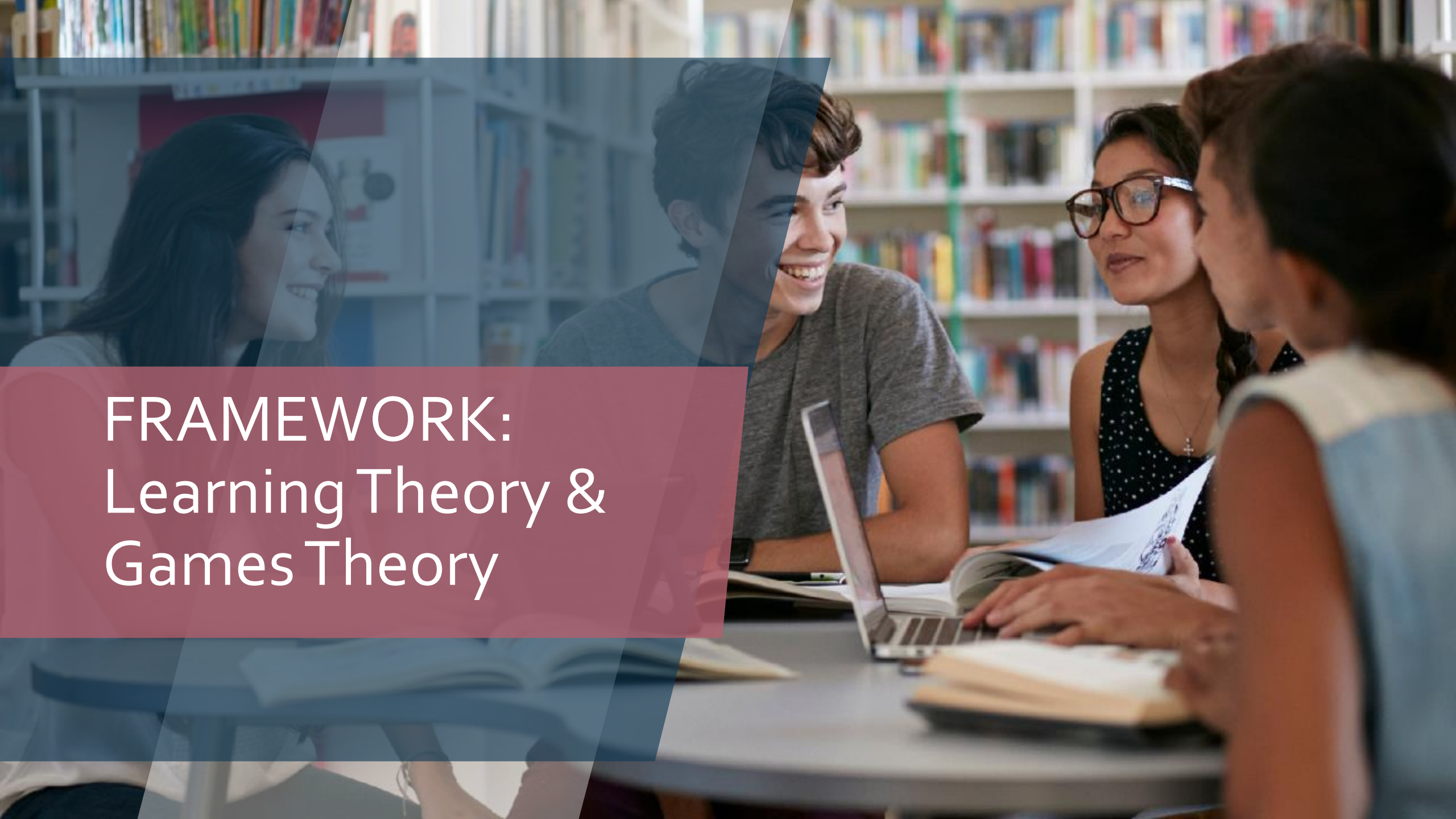
TC-S Surgical Technology 2009

Annotated Bibliography



Gamifying Education

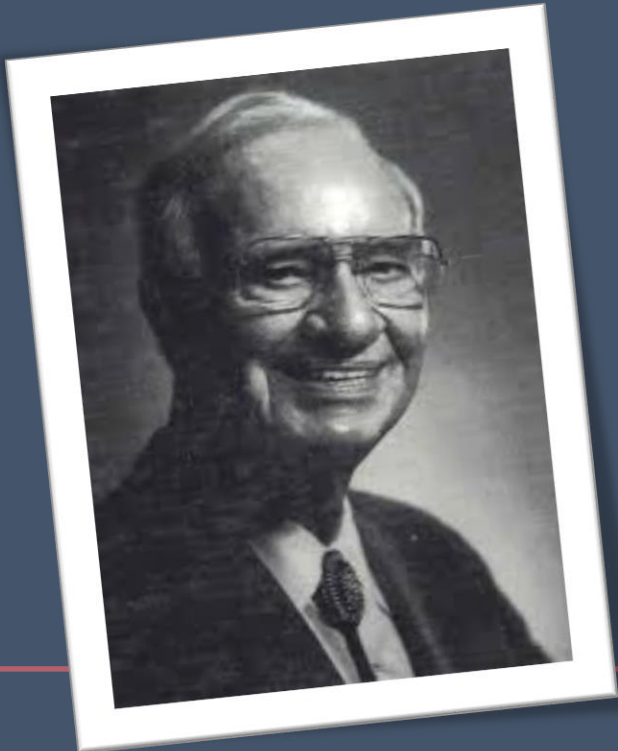
This 21st century trend plays a significant role in transforming online educational programs

A photograph of four students in a library setting. A young man in a grey t-shirt is smiling and looking towards a young woman with glasses who is looking at a laptop. Another young woman is in the foreground, and a young man is partially visible on the right. They are all gathered around a table with books and a laptop. The background is filled with bookshelves. A semi-transparent red banner is overlaid on the left side of the image, containing the text.

FRAMEWORK: Learning Theory & Games Theory

Knowles' Andragogy

Theory of the Adult Learner.



Ready to Learn



Problem- Centeredness



Need to Know



Adult Learning
Experience



Self-Learning



Motivation



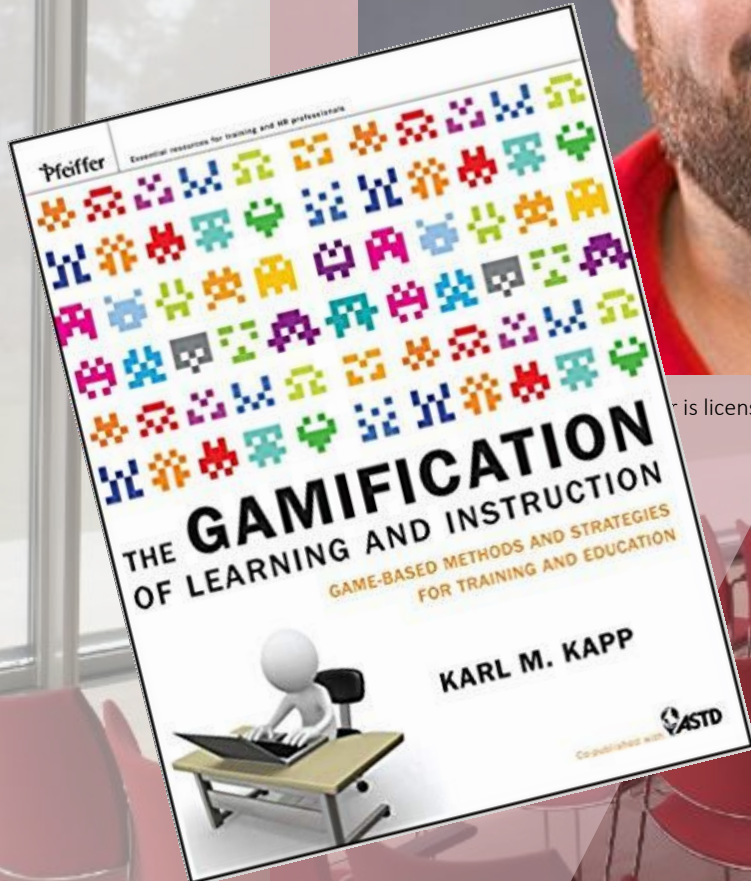
The learner should be actively
involved in the learning process.

Malcolm Knowles

knowledge orientation
 application orientation
 human
 Adult
 problem
 result
 perspective
 moves
 concept
 postponed
 changes
 shifts
 social
 tasks
 roles
 self
 immediacy
 motivation
 time
 internal
 subject
 person
 becomes
 one
 learn
 his
 her
 learning
 Learn
 matures
 Learning

"Gamification is the process of using
Game Thinking and **Game Dynamics** to
Engage Audiences and Solve Problems"

- Gabe Zichermann



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Game Theory



"Games engage players to
overcome self-imposed challenges
by means of intrinsic motivations."

Motivation: “A key concept of game play is motivation” (Kapp, 2012).

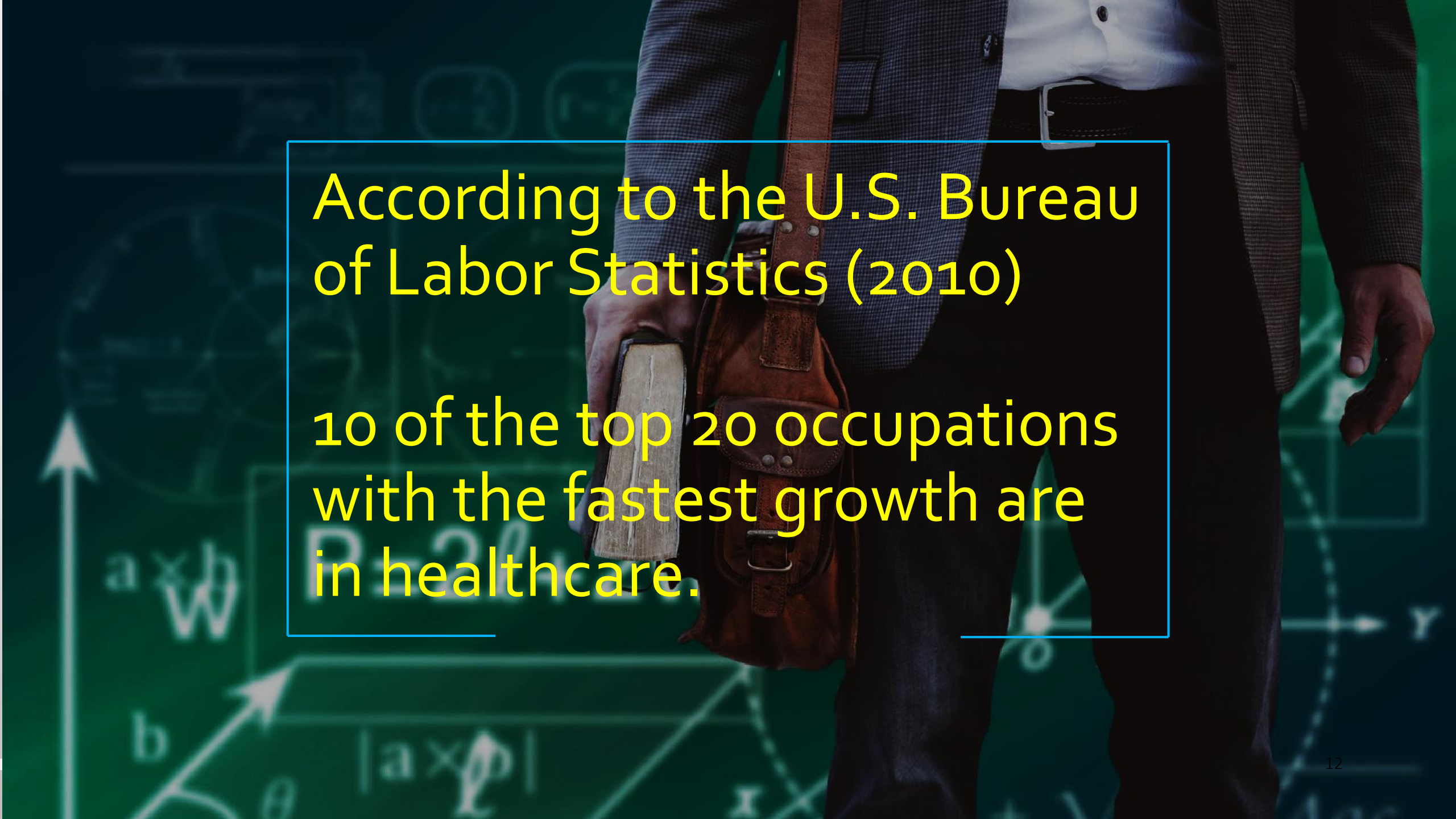
- Anticipated reward:
Employment
- Intrinsic: Self fulfillment
- Increased Engagement: Fun

Welcome to Health Informatics

101

CLASS Procedures

World's Best Teacher

A person in a grey suit and white shirt is shown from the waist down, holding a brown leather bag and a book. The background is a dark green surface with various mathematical formulas and diagrams, including $a \times b$, w , b , $|a \times b|$, θ , r , and ϕ .

According to the U.S. Bureau
of Labor Statistics (2010)

10 of the top 20 occupations
with the fastest growth are
in healthcare.

The background of the slide features a person in a grey suit and white shirt, holding a brown leather satchel and a thick book. The background is a dark green gradient with various mathematical formulas and diagrams, including $P=2l+2w$, $a \times b$, $|a \times b|$, and θ .

Health Informatics **Consultant.**

Health Informatics **Director.**

Nursing Informatics **Specialist.**

Chief Medical Information Officer.

Electronic Medical Record Keeper.

Results



Online Adult Education



Health Informatics Education



Novel Curriculum



Technical Communication

A background image showing a group of students in a classroom setting. In the foreground, a student's hands are visible, holding a pen and writing in a notebook. Other students are blurred in the background, some looking towards the camera and others looking away. The image is overlaid with a semi-transparent white diagonal shape on the right side, which contains the text.

Online Adult Education

This requires a fundamental change for educators, from didactic teacher to learning facilitator.



Healthcare education needs to move toward an emphasis of “competent performance through active learning” (IOM, 2010).



Novel Curriculum

Blended Learning combines face-to-face instruction with gamification





Technical Communication

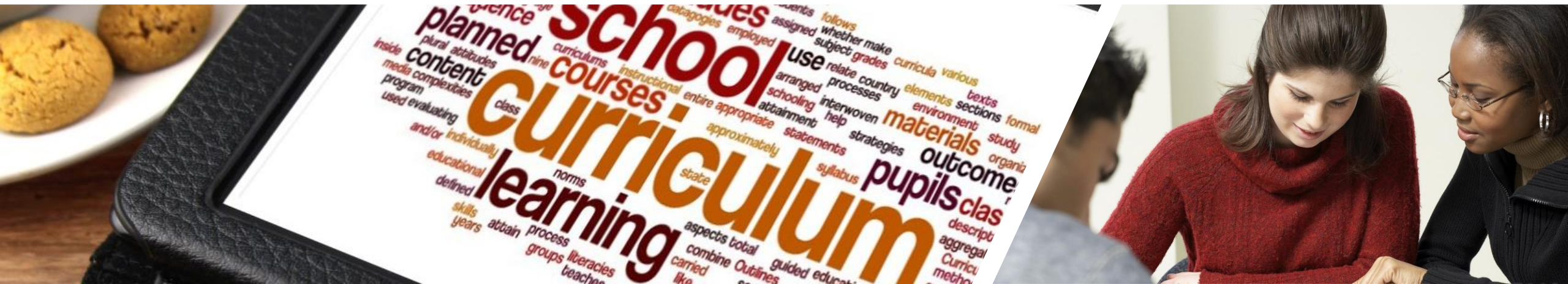
Translators of game development
communication to the world



Discussion

Global healthcare gamification reaches \$4.2 billion by 2022

Estimated global healthcare gamification could reach \$13.5 billion by 2025.



Implications



Limitations



UTILITY CO. ENERGY REDUCTION GAME: RANKINGS

2011

17 Rank
Ricky

2012 kWh: 1879
2011 kWh: 6479
You're on track to save about \$432 compared to 2011 energy expenses

YOUR NETWORK

Rank 100 Sarah	Rank 100 Bart	Rank 100 Fernando
Rank 100 Molly	Rank 100 Yoko	Rank 100 Ricky
Rank 100 Michael	Rank 100 David	Rank 100 Abdul

Company Cycle Challenge

Current Level: Elite

Total Weight Loss: **16 lbs**

Progress Path

- 1.5 Amateur Night Ride
- 1.5 Hollywood Hills Descent
- 1.5 Malibu-to-Redondo Intermediate Ride

RIDE POINTS TO GO TO REACH ELITE LEVEL: **2.5**

Upcoming Progress Rides

- 1.5 4th of July Elysian Park Ride & BBQ
- 2.5 PCH Elite Challenge
- 1.5 Amateur Night Ride
- 3.0 MT Baldy Apex Climb

Your Rider Network

Road Rash: 100 / 100 / 201 CENTURES

SPEEDTRACKER

	Unread	Read	Deleted
Email	32	9,452	5,025
Upcoming			
Completed	12	74	5
Tasks	112		
POINTS EARNED: 413	LEVEL: 3		

Side Chat: Olivia M.

Ricky A: Hey, I think I'm ready for the Mt. Baldy ride. R.U. doing it?

Olivia M: Hi, Yes! When I finish I'll be at Super-Ellie's and have a chance at that new James Kennedy Corp Carbon drawing...

Ricky A: I'm gonna catch you! Bring it!

Olivia M:

Current Missions	Incentives & Rewards	Team & Network
<ul style="list-style-type: none"> Client Proposal: 94 Blog for John: 87 Save Cat: 42 Company Health: 50 Talker: 67 	<ul style="list-style-type: none"> Call reduction time: 100 Sales: 200 Posts: 15 Weight Loss: 65 Speedtracker: 100 	<ul style="list-style-type: none"> Challenges: 100 Applause awards: 500 Friends: 25 Referrals: 1,000 Alliances: 52

Profile: Ricky Anderson

Posts: 391
Reactions: 1,625
Likes: 874

Comments: 6,589
Responses: 569
Likes: 1,143

Edits: 232
Re-edits: 42

VIRTUAL CURRENCY

\$1,298
Points: 112,987

Social Network

How's the ride today?

Can you help me out with this project?

Underboard list:

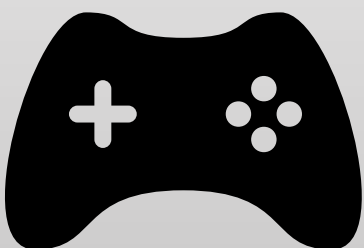
- David
- Terry
- Ricky A.
- John W.
- Arnie

Challenge: Mission: Moving the banner at 3:15p

What's up? Lead?

Who has the direct deck at the moment?

Badges Earned



Conclusion



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



Gamification can be applied to industries such as retail to computer services to education (Zichermann, 2018).



Educators, are responsible to take a leadership position in the gamification of learning and instruction (Kapp, 2012).



Technical communicators are needed to add a layer of mediation to prevent ineffective written communication (Selwyn, 2005).



THANKYOU

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