# **Gaming and Liberal Education**



https://www.flickr.com/photos/polarisxv/51096562601/

# Why are we talking about education and gaming in 2021?

# The plan

- 1. Gaming now
- 2. The potential of gaming in higher education
- 3. What went wrong?
- 4. The liberal arts angle
- 5. Looking ahead

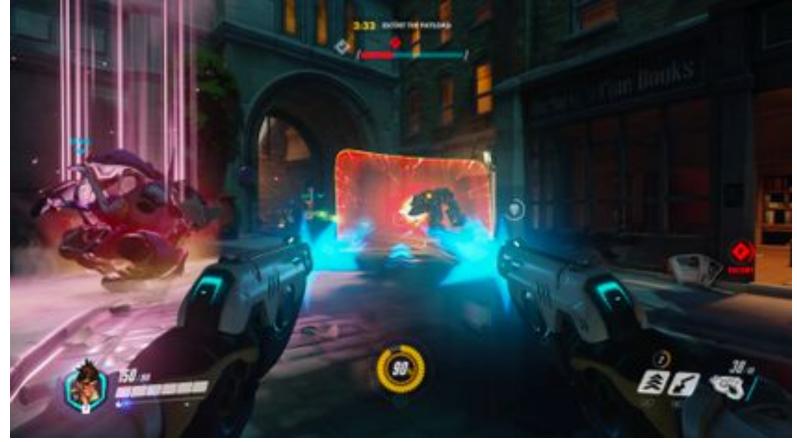


# How big is the gaming world?

- >3 billion players worldwide (DFCI)
- Nearly \$200 billion industry (Variety)
- "More than 214 million people in the United States today play video games one hour or more per week" (ESA)

# • 244 million (NPD)

https://www.dfcint.com/product/video-game-consumer-segmentation-2/ https://variety.com/vip-special-reports/the-state-of-the-video-game-industry-in-2021-1234980415/ https://www.theesa.com/resource/2020-essential-facts/ https://www.npd.com/wps/portal/npd/us/news/press-releases/2020/more-people-are-gaming-in-the-us/



# Overwatch: <> 25 million players

https://www.polygon.com/2017/1/27/14417214/how-many-people-play-overwatch-25-million

# Some received game genres

- Real-time strategy game (RTS)
- Open-world or sandbox
  - Variant: crafting (Minecraft)
- First/third-person shooter
- Role-playing game (RPG)

- Massively multiplayer online game (MMORPG/MMO)
- Interactive fiction (IF)
- Sports games
- Puzzles











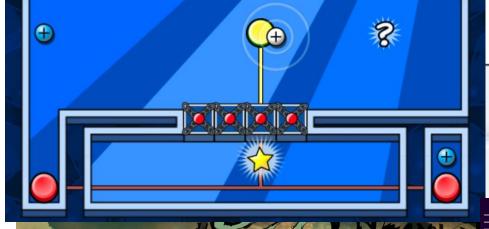
# Analogies

# Movies + television

# Music

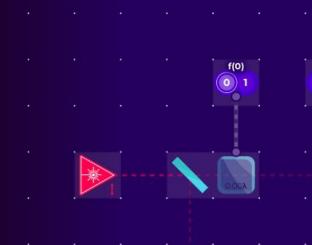
# Five established uses of gaming in higher ed

- 1. Learning content
- 2. Student-produced games
- 3. Gamification
- 4. Game studies as scholarly enterprise
- 5. Student life





### 💷 Deutsch-Jozsa algorithm 🖉



There are few places left where it is safe to hunt without being tracked by Indian Agents, but you come across a hunting party who are resisting assimilation. One of the hunters greets you. Hunter: "Boozhoo, gibakade ina?" ("Greetings, are you hungry?")

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# https://ops.muzzylane.com/demo/web/OpsM1



### **Breathless in the Midwest**



### Clue #1

MENU

The first reported case is a 37-year-old musician from Chicago named Zeke. You start by talking to Zeke to find out what he was doing before he got sick.

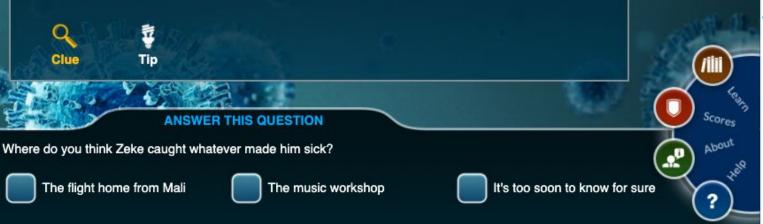
CLUE 1 OF 5

Zeke said that he started coughing and feeling very tired shortly after he led a music workshop for 50 students at a Chicago concert hall. He thought he might have picked something up from one of the students in the class, or perhaps he caught it 2 days ago on a flight home from vacation in Africa.



Inside the concert hall where the music workshop was held.

https://www.cdc.gov /mobile/applications/ sto/



# Next THE FUTURES OF HIGHER EDUCATION

Bryan Alexander

Objects in Mirror May Be Closer Than They Appear

For example, imagine a future academy after a major pandemic has struck the world, perhaps along the lines of the early twentieth century's Great Influenza. To envision the institution under such pressure, we would have to think through multiple disciplines and domains. We would have to consider, first, how such a thing would occur. This could involve delving into the history of disease, a look into graph theory for models of contagion, and a reflection on contemporary public health. We would then apply that learning to colleges and universities, a process that can ramify extensively depending on our awareness of the sector. Would distance learning grow rapidly as people fear face-to-face learning because of perceived contagion risk? Similarly, how would we take conferences and other forms of professional development online? Depending on the disease's death toll, should we plan on depressed demographics within a generation, or would the birth rate bounce back? Would athletes refrain from practice and play from fear of contagion, or would both institutions and the general public demand more college sports as an inspirational sign of bodily vigor in the context of sickness and death? Which academic disciplines would be most likely to grow in the disease's wake? And so on. This mental exercise dives into disciplines and then crosses between them in an example of inquiry-based learning.<sup>15</sup>

As is often the case with pedagogical materials, creating scenarios can be at least as powerful as consuming them. Creators must consider



Depression Quest

(non)fiction about living with depression

by zoe quinn patrick lindsey isaac schankler

restart the game

94

As you walk home, the streets hiss from the recent rainfall. You know that your significant other will be in classes until late, another couple hours at least. You briefly consider using this serendipitous solitude to catch up on that **project** that you've been working on haphazardly for the past few months.

As soon as you think about the work that awaits you at home you can feel the panic creeping in from the back of your brain, unbidden. All you can think about is how incredibly far behind you are, and the amount of work seems nothing less than insurmountable.

By the time you arrive home and change out of your uncomfortable work clothes the stress is weighing down on you like a heavy, wet wool blanket. Your computer seems to be staring you down from your desk. You want to sit down and work but the mere thought of trying to work sends your stress levels flying; more than anything you feel suddenly and absolutely *exhausted*, and feel a strong desire to simply hide in bed.

Do you...

- 1. Order some food, grab a drink, and hunker down for a night of work.
- 2. Reluctantly sit down at your desk and try and make yourself do something
- 3: Turn on the TV, telling yourself you just need a quick half hour to unwind from work
- 4: Crawl into bed. You're so stressed and overwhelmed you couldn't possibly accomplish anything anyways.

You are depressed. Interaction is exhausting, and you are becoming more and more withdrawn.

You are not currently seeing a therapist.

You are not currently taking medication for depression.

# Pedagogical principles

- From digital media:
- Replayability
- Media generation
- Remix/modification

# Pedagogical principles

- Many games teach
- Regime of competence
- Probing/exploration/discovery
- Projective identity
- Psychosocial moratorium
- Rapid assessment and feedback

# -James Paul Gee

# Production



# "Mineclass"

### Threshold

Welcome to the Isle of Man! You have just traveled back in time to the year 889 and have walk towards a plush green hill you see in the distance. Before you are able to go any furth necessary to have a guided map of the island, or else you would never be able to proceed Fortunately, he speaks English and you hope that maybe everyone will speak some English lot. It is on paper that was most likely once white, but now has a brownish tint. It has man touch it because it is so frail and fragile looking. You unfold the map to the hill.

Balladoole Interactive Fiction Project

An Interactive Fiction by Lauren Young Release 1 / Serial number 071205 / Inform 7 build 4W37 (I6/v6.31

### Hill

It is a low elongated hill that rises above the southeastern lowland device obtainance occurs. On the hill, you see people in the distance. As you walk closer you are amazed to see man ritual, which you are unable to distinguish. The map tells you to go further so you decide y room, to see what is going on.

## See also https://youtu.be/O4qXjjakyGA



#### Summer2020

#### Home

#### Announcements

Assignments

Discussions

Grades

People

Pages

Files

Syllabus

Collaborations

Chat

Zoom Conferencing

**GU** Library

Health Resources

**University Policies** 

Accessibility Resources

### Gaming, Design, and Education.Summer2020

Welcome to our seminar on gaming, design, and education!

This is our Canvas space, where we hold some discussions, issue announcements, post work, seek feedback, and share resources.

You can find links to key parts of this space:

- Syllabus
- <u>Readings</u>
- Discussion threads
- Assignments: mid-term pitch, final project
- Class policies and stuff
- <u>Technologies</u>
- Games

#### TOP LEVEL INTRO TO THIS SEMINAR

This class explores the intersection of gaming, education, design, and technology. We will explore both digital and tabletop games as students play, study, and build them, combining scholarship, creativity, and reflective analysis. This approach lets us explore a series of major themes, including: the nature of games; storytelling; access and accessibility; interactive design; how we learn through games. The class structure combines hands-on work (and play), discussion, computer-mediated conversation, and presentations.



### Good day, Secretary Friend of LACOL!

Congress has allotted a budget of 100 million pesos to the department. You are now tasked to create a budget for the year. Your goal is to accomplish as many projects as possible. Here are some basic facts about the state of science in the country to help you with your decision:

1. PHIVOLCS needs 23 new earthquake monitoring stations, each equipped with a seismometer, GPS instrument, and a data logger. (Cost: 35 million pesos in total)

2. PAGASA needs 3 new Doppler Weather radars to improve its typhoon monitoring capabilities (Cost: 76 million pesos)

3. There is also need to introduce ways to help reduce the effects of climate change and other natural disasters (Cost: 55 million pesos)

Where would you like to allocate the budget first?

PHIVOLCS

PAGASA

Climate Change and disaster risk reduction

Magandang araw, Sekretary kaibigan LACOL!

Binigyan ng kongreso ang departmento ng 100 milyong pesos. Kailangan mong gumawa ng budyet. Narito ang data tungkol sa agham sa bansa para matulungan ka sa iyong desisyon:

1. Kailangan ng PHIVOLCS ng 23 bagong earthquake monitoring stations. Ang mga stations ay may seismometer, GPS instrument, at data logger. (Presyo: 34.5 million pesos)

2. Kailangan ng PAGASA ng 3 bagong Doppler Weather radars para maging mas maayos nilang masundan ang isang bagyo. (Presyo: 76.2 milyon pesos)

3. Importante din na masimulan ang mga proyekto na makakabawas ng epekto ng climate change at ibang disaster. (Presyo: 55 milyon pesos)

Ano ang uunahin mo?

http://blog.annedumanat.georgetown.domains /technology/gamification/

PHIVOLCS

http://PAGASA

Climate Change at disaster risk reduction

### COLLEGE





### They don't let just anybody in. This university's powerhouse athletics

program and strong academic record make it a VERY well-respected and competitive school. This school offers a great education all for low, in-state tuition.

### **YOU COULD EARN**

🗆 Genius Material

Academics at Level 4.

□ Renaissance Scholar 3 Stats at Level 4.

🗆 Brilliant Thesis Essays at Level 5.

YOU NEED

0/4

SERVICE

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ACADEMICS

 $\times$ X

LETTERS 0/3

ESSAY

0/3

ENERGY

10





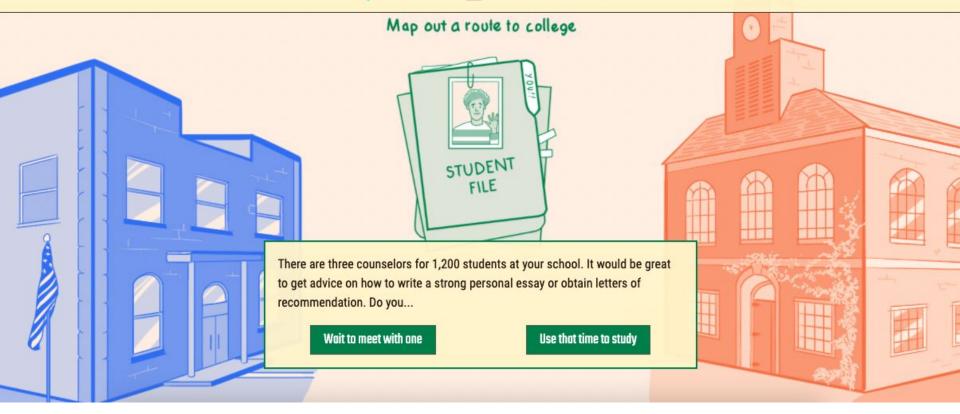








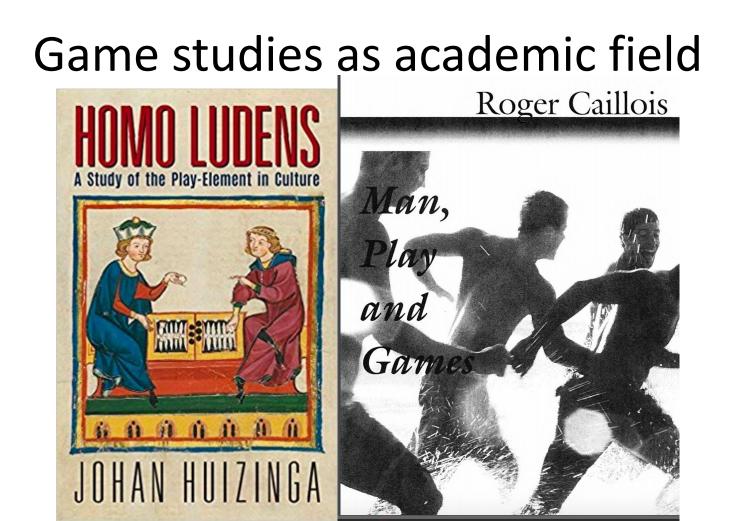
CAL MATTERS



## https://tuitiontracker.org/temp/game-of-college/

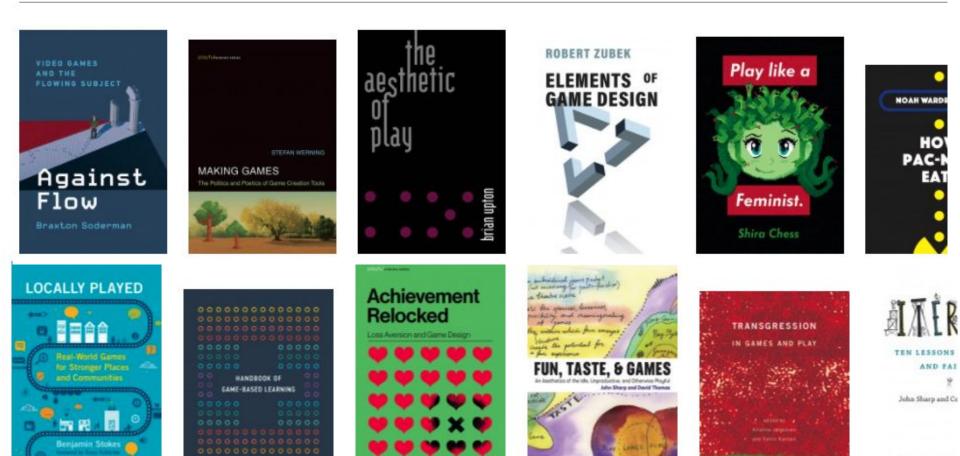
### Gamification

- Levels, points, roles, badges
- Collaborative mystery or quest
- Multilinear paths through class
- Game-based exercises, such as Kahoot quizzes



# Game studies as academic field

**Featured Titles** 



# Game studies as academic field

#### The International Journal of Computer Game Research

#### Our Mission - To

explore the rich cultural genre of games; to give scholars a peerreviewed forum for their ideas and theories; to provide an academic channel for the ongoing discussions on games and gaming.

Game Studies is a nonprofit, open-access, crossdisciplinary journal dedicated to games research, web-published several times a year at www.gamestudies.org.

Our primary focus is aesthetic, cultural and communicative aspects of computer games, but any previously unpublished article focused on games and gaming is welcome. Proposed articles should be jargon-free, and should attempt to shed new light on games, rather than simply use games as metaphor or illustration of some other theory or phenomenon.

Game Studies is

### Two Decades of Game Studies

by Espen Aarseth

This issue of Game Studies marks the 20th anniversary of the journal.

[more]

#### Animal Mayhem Games and Nonhuman-Oriented Thinking

by Marco Caracciolo

This article discusses a recent strand of videogames that foreground disruptive animal characters in an urban environment. I link this "animal mayhem" to recent debates on the nonhuman, showing that videogames like Goat Simulator and Untitled Goose Game (my case studies) evoke the inherent strangeness of humannonhuman connectedness.

### [more]

The Child in Games: Representations of Children in Video Games (2009 -2019)

by Emma Reay

This paper examines representations of children in contemporary video games through content analysis. Using a

#### Beyond the French Touch: The Contestataire Moment ir French Adventure Digital Games (1984-1990)

by Filip Jankowski

This article attempts to suggest revision of the historical aesthetic category frequently called the "French Touch." The article focuses on games that matched the contestataire moment in the history of France from three development circles (Froggy Software, Cobra Soft and François Coulon), arguing that they escape this traditional categorization.

[more]

#### "Twere Well It Were Done Quickly": What Belongs in a Glitchless Speedrun?

by Martin Ricksand

This article analyzes speedruns, the practice of beating a game i fast as possible. The article applies theories from the philosophy of sport as well as th

### EAI Endorsed Transactions on Serious Games

EAI Endorsed Transactions on Serious Games is an open access, peerreviewed scholarly journal focused on serious games applications, serious games technology, serious games analytics, user experience design and more

### Elsevier Entertainment Computing

Entertainment Computing publishes original, peer-reviewed research articles on topics including computer...

### Eludamos

Eludamos is an international, multi-disciplined, biannual e-journal that publishe peer-reviewed...

### Entertainment Computing

Entertainment Computing publishes original, peer-reviewed research articles i all aspects of digital entertainment, new media, entertainment computing, gaming, robotics, toys and applications among researchers, engineers, social scientists, artists and practitioners.

### European Conference on Games Based Learning

Reports from the annual ECGBL conference. Papers cover various issues and aspects of game-based learning in education and training.

### Games and Culture

Games and Culture: A Journal of Interactive Media is a quarterly international journal that publishes...

### **Game Studies**

Game Studies is a crossdisciplinary journal dedicated to games research, web published several times a year...



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dy Research and Scholarship

Collections About Us

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Home > Locations and Hours > Computer and Video Game Archive

# Computer and Video Game Archive

The Computer and Video Game Archive (CVGA) acquires, maintains, and makes available an extensive collection of video games, consoles, board games, and more, from the 1970s to today.



Ask a Librarian 🔺

Visit Use the Archive Class Visits and Events Research Support Offsite Game Lab

### https://www.lib.umich.edu/locations-and-hours/computer-and-video-game-archive

### esports





https://youtu.be/BRIAFfVqOkU

# Non-pedagogical reasons

- Technical skills
- Game production careers
  Soft skills

# So why hasn't gaming taken over academia?

2003 - What Video Games Have to Teach Us About Learning and Literacy

2008 - Arden: The World of Shakespeare

2008 - Nudge: Improving Decisions about Health, Wealth, and Happiness

- 2008 financial crash
- 2011 Ian Bogost: gamification is bullshit, exploitationware
- 2014 Gamergate

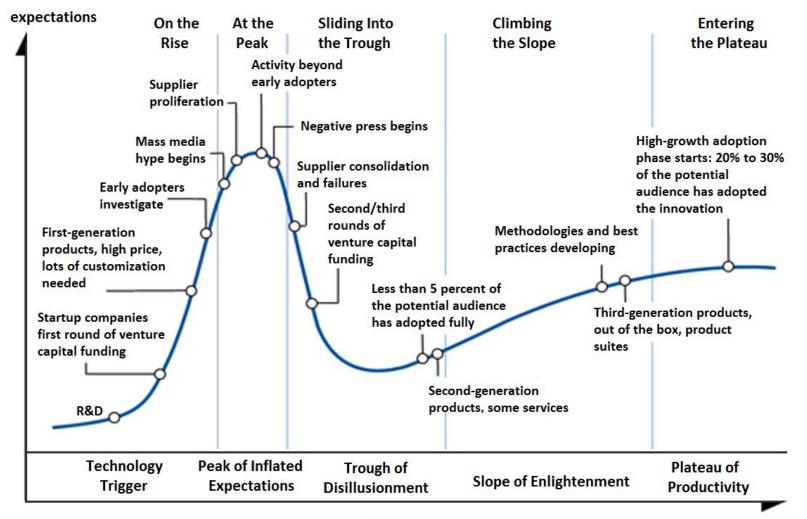
2015 - Horizon Report drops mentions of gaming

Why hasn't gaming taken over academia?

- Perceived development costs
- Not enough appropriate content for curriculum

Why hasn't gaming taken over academia?

- Gamings' bad reputation in academia
  - perceptions of gender bias and limitations
  - persistent concerns about violence
  - sense that games are inappropriate (childish, tawdry, anti-intellectual)



Now, steady growth and development

- Continuous R+D
- Nudge theory in policy
- Increasing attention to students and their experience
- New technologies
- Continued research



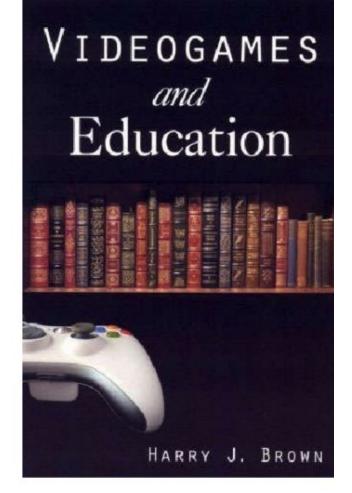
# So why bring gaming into liberal education?

# All of the preceding reasons, plus:

- Creativity
- Undergraduate research
- Interdisciplinary approaches
- Student-centered learning

Harry Brown, Depauw University (M.E. Sharpe, 2008)

- Part I: Poetics
  - Chapter 1: Videogames and Storytelling
  - Chapter 2: Videogame Aesthetics
  - Chapter 3: Videogames and Film
- Part II: Rhetoric
  - Chapter 4: Politics, Persuasion, and Propaganda in Videogames
  - Chapter 5: The Ethics of Videogames
  - Chapter 6: Religion and Myth in Videogames
- Part III: Pedagogy
  - Chapter 7: Videogames, History, and Education
  - Chapter 8: Identity and Community in Virtual Worlds
  - Chapter 9: Modding, Education, and Art



### Threshold

Welcome to the Isle of Man! You have just traveled back in time to the year 889 and have walk towards a plush green hill you see in the distance. Before you are able to go any furth necessary to have a guided map of the island, or else you would never be able to proceed Fortunately, he speaks English and you hope that maybe everyone will speak some English lot. It is on paper that was most likely once white, but now has a brownish tint. It has man touch it because it is so frail and fragile looking. You unfold the map

tells you to walk up to the hill.

### Balladoole Interactive Fiction Project

An Interactive Fiction by Lauren Young Release 1 / Serial number 071205 / Inform 7 build 4W37 (I6/v6.31)

### Hill

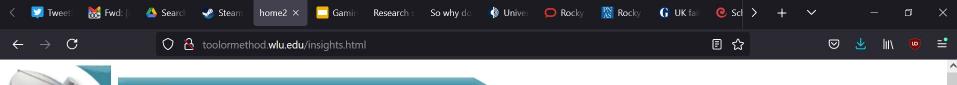
It is a low elongated hill that rises above the southeastern lowland **createred and the cons** On the hill, you see people in the distance. As you walk closer you are amazed to see man ritual, which you are unable to distinguish. The map tells you to go further so you decide y room, to see what is going on.



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# Technology: Tool or Method?

### Broadcast Forum Insights Experiences Strategies

### Insights

**O**n a quarterly basis, a member of the Baker's Dozen Discussion Group or another expert in the field of teaching with technology will have an article featured under **Insights**. This quarter's article is from Dr. Bryan Alexander, Associate Director of the Center for Educational Technology at Middlebury College, USA. His article, "The American Experience in Vietnam: Notes on the Design and Teaching of a Multi-campus, Interdisciplinary, Computer-mediated Course," is an in-depth look at multimedia technology used in preparing a course on literature, controversy, and culture.

#### **Insights Feature Article**

Dr. Bryan Alexander, Center for Educational Technology (CET), Middlebury College

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Gallery

### Thanks

### The American Experience in Vietnam: Notes on the Design and Teaching of a Multi-campus, Interdisciplinary, Computer-mediated Course

During the fall of 1999, two colleagues and I taught an unusual class, "The American Experience in Vietnam." Neither the subject nor the approach of teamteaching were new; instead what we developed was a pedagogy using a variety of information technologies to organize one class simultaneously across three campuses and disciplines. This hybrid class, a mix of distance learning and the traditional classroom, brought out strengths from both modes to create a powerful learning environment. This article will sketch out the design and progress of the course and then suggest some conclusions.

The 1999 Vietnam class was supported by a grant written by three Centenary College professors (Steve Shelburne, George Newtown, Jeff Hendricks) for the Associated Colleges of the South (ACS), a liberal-arts consortium of fifteen campuses. The ACS had obtained funds from a generous Mellon grant in order to spark and help organize cross-campus, technologically-empowered curricular development. Another such project would occur as the Medium and Message class, taught in the spring of 2000 between two Centenary and one Millsaps professors.

The grant brought interested faculty together, in person, on Centenary's campus during the summer of 1998. During a week of intense work, a group of three professors (four initially, until John Copper (Rhodes) received a sabbatical for the target term) grew to know one another, sharing their interests in the topic of the Vietnam War. At that time, and at a subsequent face-to-face meeting in the summer of 1999, Ernie Bolt (history), Tom Lairson (political science), and myself

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6/20/2021

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#### REACTING TO THE PAST



### **DEFINING a NATION**

INDIA ON THE EVE OF INDEPENDENCE, 1945

AINSLIE T. EMBREE MARK C. CARNES

### **Defining a Nation**

India on the Eve of Independence, 1945

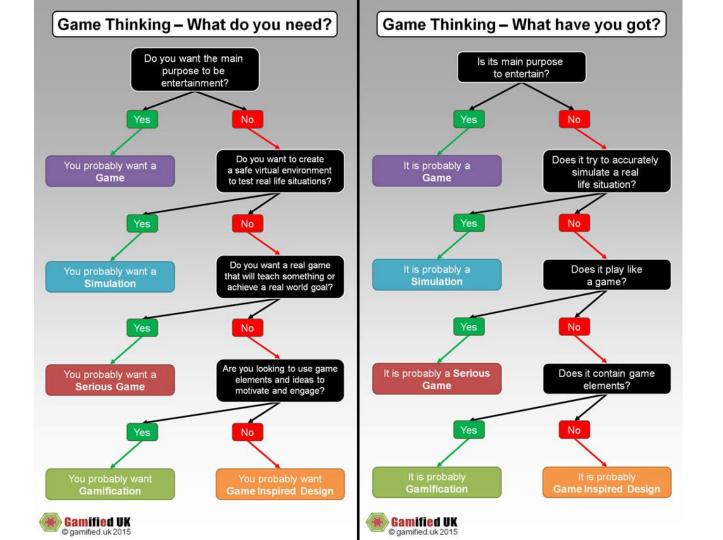
by Ainslie T Embree (Author, Columbia University), Mark C Carnes (Author, Barnard College)

Part of the *Reacting to the Past* series, *Defining a Nation* plunges students into India's struggle for sovereignty and identity.

*Defining a Nation* is set at Simla, in the foothills of the Himalayas, where the British viceroy has invited leaders of various religious and political constituencies to work out the future of Britain's

# https://reacting.barnard.edu/games

# What's next with games in education?



http://lti.lse.ac.uk/ games-in-he/

- Continued interest, incremental growth
- New projects
- New hardware: VR, XR
- New and improved software
  - Twine, Storyboard
  - Game Maker
  - Unity (Ben Salzman)
  - o <u>https://itch.io/</u>

MIND, CULTURE, AND ACTIVITY 2017, VOL. 24, NO. 3, 232–246 http://dx.doi.org/10.1080/10749039.2017.1293691



# Continued critical, social justice research and production

### Privilege, Power, and Dungeons & Dragons: How Systems Shape Racial and Gender Identities in Tabletop Role-Playing Games

Antero Garcia

Stanford University

#### ABSTRACT

This article takes a cultural-historical approach to analyzing how systems shape the assumptions, identities, and experiences of their users. Focusing on how the tabletop role-playing game Dungeons & Dragons is built on a system of play that has grown and shifted over the course of 40 years, this study emphasizes the central role that systems play in mediating the experiences of participants. By focusing on depictions of gender, race, and power in Dungeons & Dragons—as a singular cultural practice—this study highlights how researchers must attend to cultural production both *around* and *within* systems.

Once upon a time, long, long ago, in a realm called the midwestern United States—specifically the states of Minnesota and Wisconsin—a group of friends gathered together to forever alter the history of gaming. — Preface, Dungeons & Dragons Player's Handbook Fifth Edition (Wizards of the Coast, 2014a, p. 4)

Forty years since the official release of the world's first role-playing game (RPG), Dungeons & Dragons (D&D; Arneson & Gygax, 1974), the preface to the fifth edition of the game invokes a self-

BALANCE



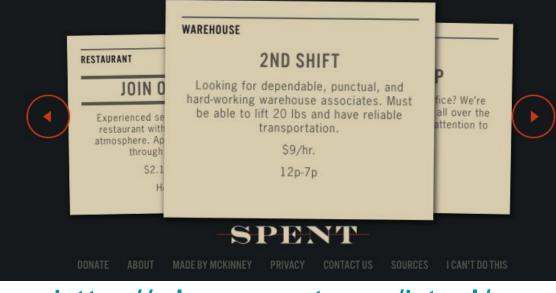
JOB

NEED CASH?

### YOU'RE RUNNING OUT OF MONEY FAST

DAY

It's time to get a job – any job Here's what's available Choose one:



http://playspent.org/html/

# September 7th, 2020

You raise your hand. Your professor motions that it will be a few minutes. She's trying to answer other questions, but each question takes longer than usual due to masks and social distancing.

While you're waiting, you look around. You see that a neighboring student is not wearing a mask.

Do you motion for the student to put their mask on or pull your own mask tighter?

Just one day.

Created by Cait S. Kirby

Website

Twitter

Cait S. Kirby

© 2020

Saves

https://caitkirby.com/downloads/Fall%202020.html

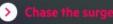
Connections to information, digital literacy



As you drop off a passenger in the Financial District in the northeast of San Francisco, you notice there's surge pricing in the Sunset District.

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The 3x fare is attractive, but Sunset is 30 minutes away.



Don't chase the surge

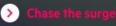
# https://ig.ft.com/uber-game/

Connections to information, digital literacy



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> Don't chase the surge

# NEWSGAMES

Journalism at Play

IAN BOGOST Simon Ferrari Bobby Schweizer

# https://ig.ft.com/uber-game/

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Improving Decisions about Health, Wealth, and Happiness Richard H. Thaler and Cass R. Sunstein ...with a new afterword

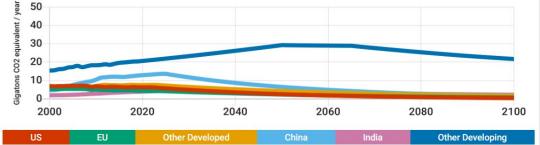
"One of the few looks I've read recently that fundamentally changes the way Ethink about the world." - Steven Levitt, countloor of Feathenemist



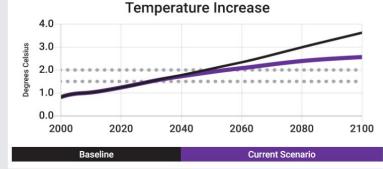
# Analogies:

- Movies
- Music

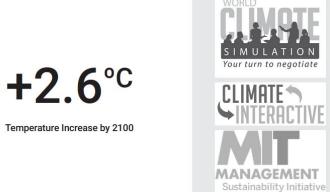








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# http://futureofeducation.us/

# http://twitter.com/bryanalexander

