

Simulation and Gaming in the Social Science Classroom



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- 1. Why?**
- 2. How?**
- 3. Best practices**
- 4. Additional sources**

Serious games and learning

- research on educational games suggests:
 - **moderately positive** effect on learning (compared to conventional methods), but considerable variability
- much depends on simulation design and implementation
 - a **poor simulation implemented well** may have superior learning outcomes over a **good simulation implemented poorly**
 - simulations do not teach themselves
 - importance of debriefs

Serious games and learning

- *simulations can:*
 - **act as intellectual cross-training**
 - **promote team-building and networking**
 - **motivate and engage**
 - **offer insight into issues of process, coordination, interaction that lectures convey poorly**
 - **offer insight and empathy into the perspectives and behaviour of others**
 - Kesten Green, "Forecasting in conflict situations" (2002)

*depending on design and implementation



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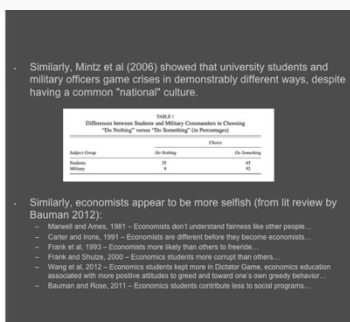
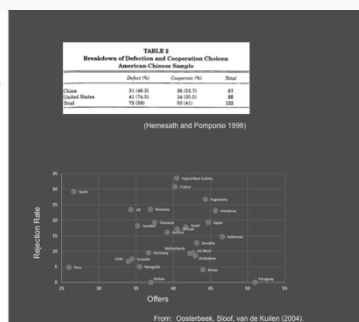
Quick and simple games

- 1 minute negotiation (ultimatum game)
- 2 minute negotiation



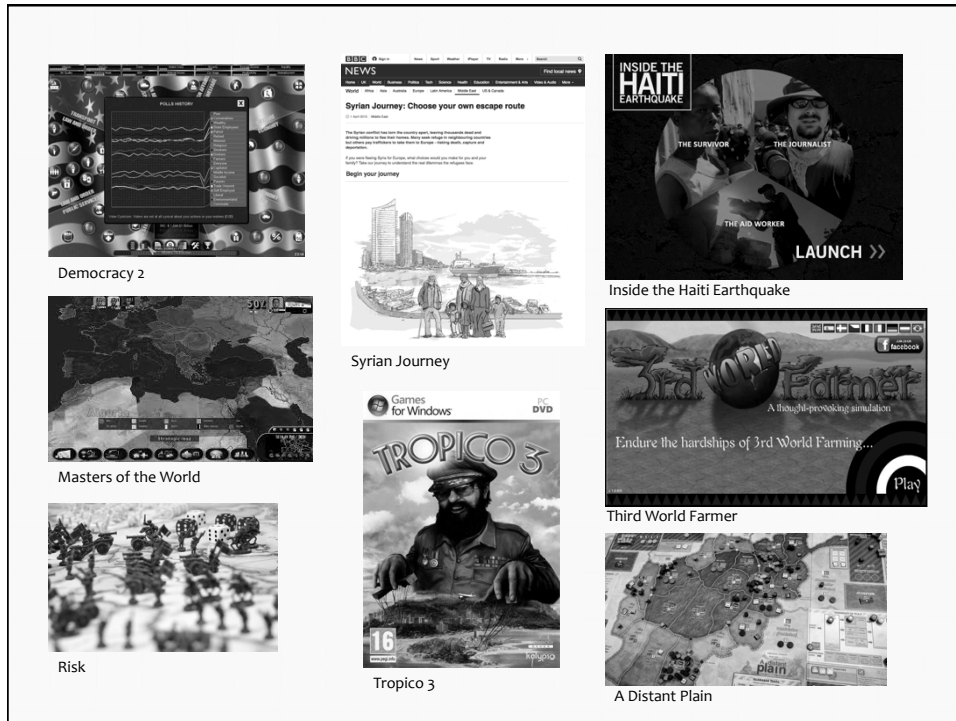
Quick and simple games

- take up little class time, yet can be linked to considerable experimental research



Commercial games as reading/review assignments

- only limited instructor preparation or support required
- encourages students to adopt a critical perspective
- simulation need not be "high fidelity" (or even accurate)



Roleplay and negotiations

- variable length and degree of background preparation
- in-person and/or digital interaction
- some premade simulations available



The THRESHOLD of DEMOCRACY
Athens in 403 B. C.
Third Edition
Mark C. Carnes • Josiah Ober
"Reacting to the Past" Series

Rousseau, Burke, and Revolution in France, 1791
Mark C. Carnes and Gary Kates
"Reacting to the Past" Series

Defining a Nation
India on the Eve of Independence, 1945
Anshu T. Embree and Mark C. Carnes
"Reacting to the Past" Series

Reacting to the Past series
<https://reacting.barnard.edu/>

A "game show"

● In larger classes, games can be played before an audience.

The Impact of Colonial Incorporation into the Global Capitalist System on Pre-Colonial Subsistence Agriculture!

year one

- one land produces three grain
- one artisan produces six pots
- a family consumes five grain

year three

- the Portuguese trader introduces cotton!
- seed costs \$1 per land (half price this year)
- sells for \$4 per unit (more than grain)

year four

- colonial rule I
- missionaries provide medical care (\$2) and education (\$2)
- irrigation/mechanization (\$15, increases yield to 4/land)
- appointment of local magistrate
- registration of land
- taxation (\$3 per year)

year five

- prices down!
- due to a slump in world cotton prices, cotton earns only \$2/unit this year

year six

- prices up!
- due to a rise in world cotton prices, cotton earns \$6/unit this year

Matrix games

- highly adaptable, free-play narrative games based on actions/arguments/consequences
- extremely easy to set up and run
- can simulate almost any multi-actor situation
- usually played with 4-7 actors/teams, but could be adapted to larger groups

Matrix games

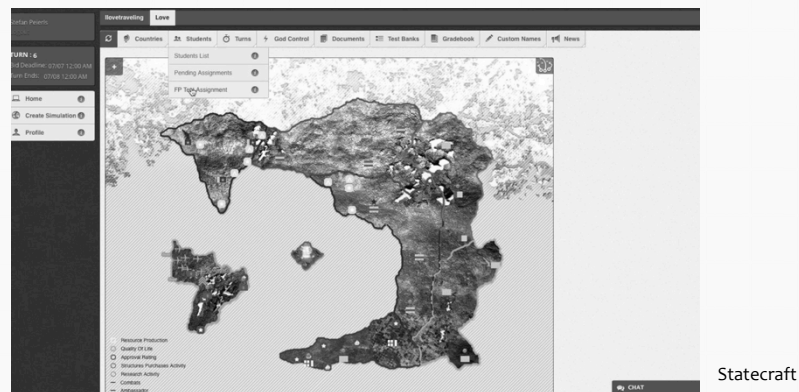


ISIS Crisis matrix game



Online digital games

- subscription based, roleplaying + embedded game mechanics



Custom-designed boardgames

- time-consuming and challenging to develop, but can be designed-to-purpose
 - variants and modifications can also be designed of existing games, with MUCH less work
- limited number of players?



Iraq RISK

Afghan Provincial Reconstruction

DISTRICT 1
Administrative and Commercial

- Emergency Relief
- Rescue
- Infrastructure
- Security
- Assessment

CLUSTER COORDINATION

- Health & Medical
- WASH
- Food & Nutrition
- Shelter
- Logistics
- Media Outreach

AFTER SHOCK STUCK
A Humanitarian Crisis Game

Health Cluster Coordination
The current player draws the Coordination card for each district in which they have at least one asset, and then selects one of these cards to play.

Teamwork
When a player has a card in a district, they can play it to help another player's card in that district.

Local Self-Help
Each player starts with one 'Local Self-Help' card. This card can be used to help another player's card in a district.

Celebrity Visitors
Each player starts with one 'Celebrity Visitor' card. This card can be used to help another player's card in a district.

3272 Persons at Risk
2 Medical
2 WASH
2 Food
1 Shelter
1 Rescue

632 Persons at Risk
1 Medical
1 WASH
1 Food
1 Shelter

Squatters
If a SHELTER is in the district, and no SOCIAL UPRIGHT card, the player may conduct a media outreach.

Needs Assessment
Players may conduct a media outreach in the district.



Student-authored games

- research suggests students learn even more when asked to design their own game/simulation
- Druckman and Ebner, "Enhancing Concept Learning: The Simulation Design Experience," (2010).

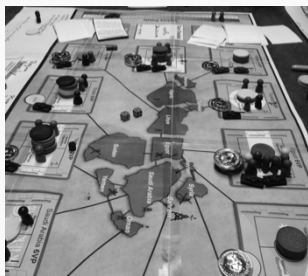


Student-authored games

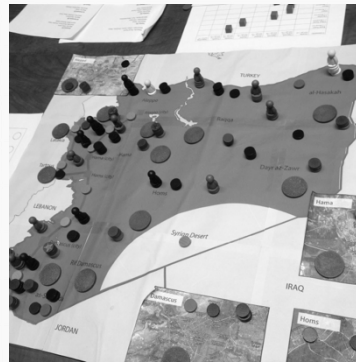
Aleppo: The Mother of All Battles
by Tracy, Alexander, Thibault, Louise
ALEPPO
Syrian Family 1: Abu Omar
Syrian Family 2: Haddad Family



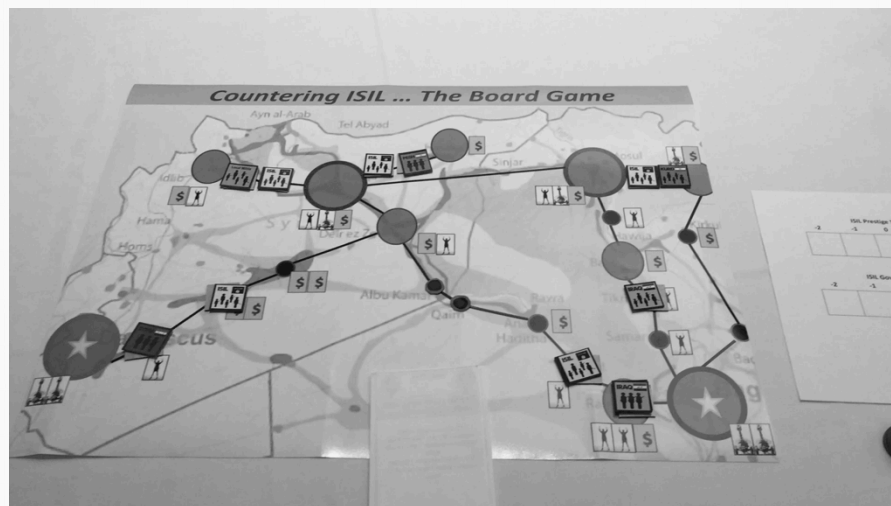
Inklewriter



Arab Spring

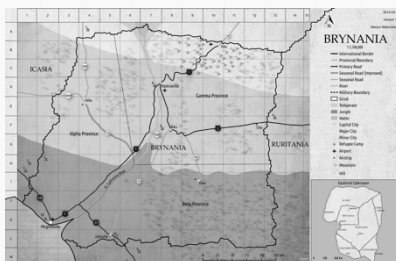


Road to Damascus

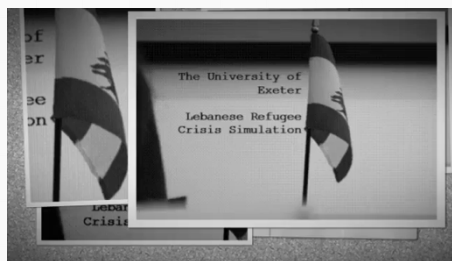


Complex and hybrid games

- Role playing games combined with other game mechanics
- Can be very large indeed (“MegaGames”)



Brynania



Syrian Refugees in Lebanon

Games as extra-curricular activities

- students with high degree of interest
- bonus grades?
- conflict simulation or wargame clubs with faculty support
 - call upon hobby gamers for support





STRATEGIC CRISIS SIMULATIONS
THE GEORGE WASHINGTON UNIVERSITY



1. Why?

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Best practices

- Start with educational objectives: what are you trying to do?
- Consider constraints (time, space, participants) and trade-offs.
- Integrate with course curriculum, either to identify issues for further examination or to highlight/explore material already covered.
- Think about atmospherics and student engagement.
- Start simple (as a neophyte simulation user).
- Keep it simple (as a game designer).
- Plagiarize! (as a game designer).
- Make use of free technology (email, blogs, course software, Facebook, Twitter, Skype).

Best practices

- **Prebriefing**
 - what should students expect?
 - *...although some surprises are fine*
 - how should students prepare?
 - *preparation/background assignments*

Best practices

- **Debriefing**
 - what should student know about what happened?
 - in some games, players may not be aware of all that transpired
 - what should students learn from the experience?
 - what should students **NOT** learn?
 - learning from “bad” games
 - debrief/reflection assignments
 - student feedback can help to refine the game design or implementation

Best practices

- **Assessment**
 - game reviews should be graded
 - game designs should be graded
 - preparation and debrief assignments should be graded
 - simulation participation might or might not be graded:
 - **yes:** rewards students for effort
 - **no:** distorts game play, may be difficult to assess
 - **sort of:** optional assignment/bonus or class participation grades

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Additional resources

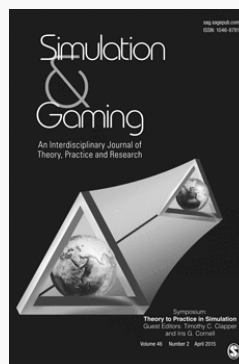
- 🎮 **PAXsims**
🌐 <http://www.paxsims.org>
- 🎮 **Active Learning in Political Science**
🌐 <http://activelearningsps.com>
- 🎮 **Gaming Political Science**
🌐 <http://www.k-state.edu/polsci/gaming/>
- 🎮 **Play the Past**
🌐 <http://www.playthepast.org>
- 🎮 **Inklewriter**
🌐 <http://www.inklestudios.com/inklewriter/>



Additional resources

Journals

- 🌐 *PS: Political Science and Politics*
- 🌐 *International Studies Perspectives*
- 🌐 *Simulation & Gaming*



Additional resources

Books

- 🌐 Peter Perla, *The Art of Wargaming* (1990)
- 🌐 Katie Salen and Eric Zimmerman, *Rules of Play: Game Design Fundamentals* (2004)
- 🌐 Philip Sabin, *Simulating War: Studying Conflict Through Simulation Games* (2012)
- 🌐 Mark C. Carnes, *Minds on Fire: How Role-Immersion Games Transform College* (2014)
- 🌐 John Curry and Tim Price, *Matrix Games for Modern Wargaming* (2014)
- 🌐 Natasha Gill, *Inside the Box: Using Integrative Simulations to Teach Conflict, Negotiation and Mediation* (2015)
- 🌐 Pat Harrigan and Matthew Kirschenbaum, *Zones of Control: Perspectives on Wargaming* (MIT Press, forthcoming 2016)