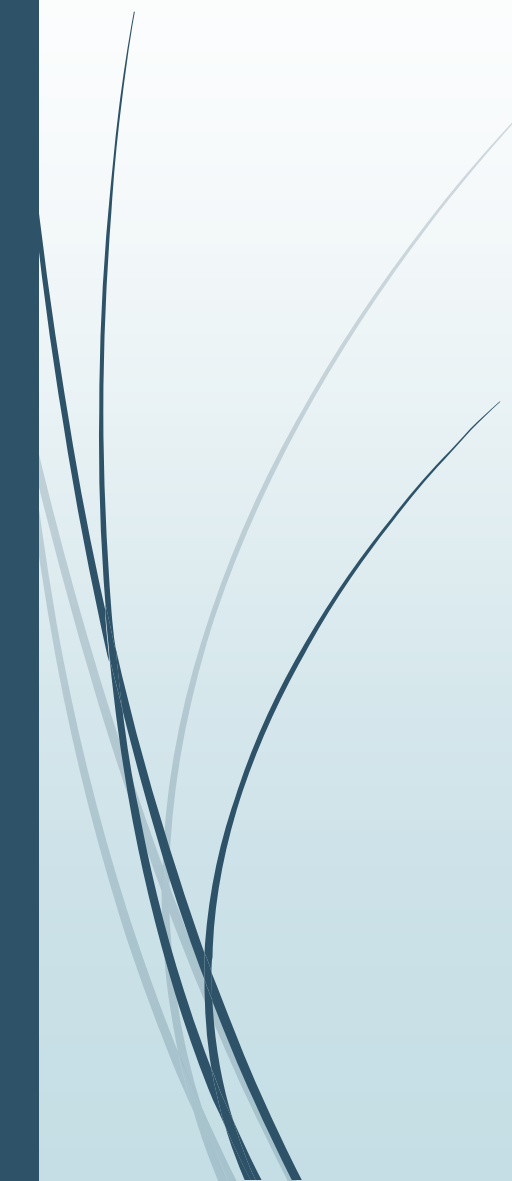# Active Learning in Simulations and Games

Nicholas Thomas* (CityU) and Tanya Kempston** (HKU)

Outline of presentation

- Simulations: what are they good for?
- Considerations in developing a simulation
- Our simulation
- Lessons Learned
- Conclusion

Purpose of Simulations

- To construct a platform for advanced learning

- Challenge: to get as close to the real world as possible

- Without: (a) compromising the students' safety or (b) compromising learning objectives

- In so doing: extend the proximal space for learning

China-ASEAN negotiations

Constructing a simulation

- Effectiveness is an outcome of alignment to the real-world: in terms of actors, institutions, and/or processes or issues;

- Simulations are textual but verbally based;

- Reactions to the text are aggregations of intra- and extra-group dynamics;

- Reactions redefine the text;

- Scaffolded but not predetermined:
    - A Challenge: The more text, the more "the reader's degrees of interpretative freedom are annulled" (Bruner);

- So, a balance is essential.

Less about a final destination and more about constructing a zone of knowledge and learning.

Dual Realities

- A series of interpretive realities

- Shaped by the agglomeration of the multiple understandings that participants

- Participants are both the characters and the readers who shape the skein of the simulation

- The closer a simulation gets to reality, the more intensely participants will identify themselves as characters within an unfolding story

- Example of the Rashomon

Learning occurs when the participants identify with the simulation and seek to develop their perspective in the pursuit of required or desired outcomes.
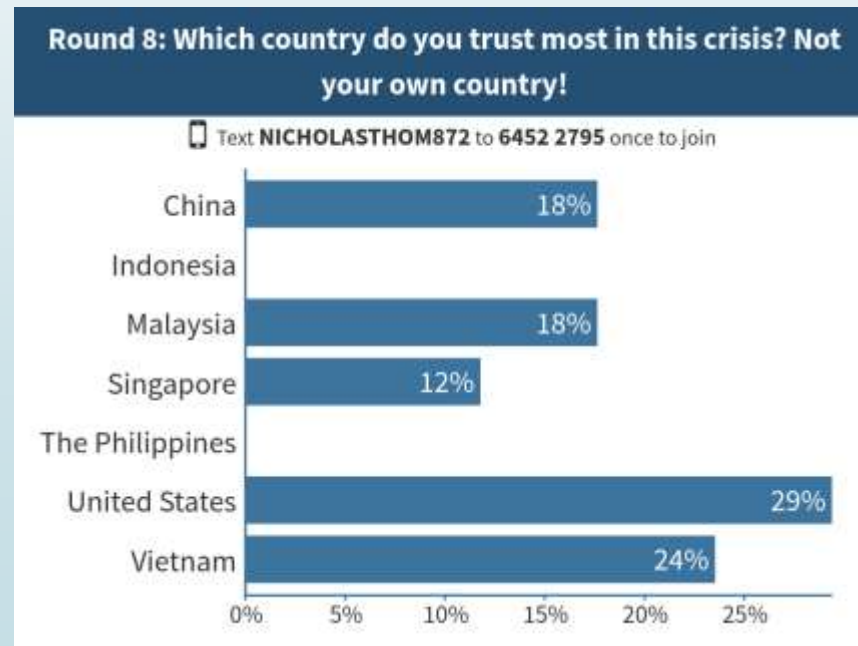
Applying a Simulation

- 2 week simulation

- A crisis in the South China Sea of unknown etiology

- Students prepare in country teams from Week 1, ensuring a detailed knowledge of the problem against a learning backdrop of regional governance and security

- Simulation runs for 10 rounds (but can be extended)

- Purpose is to attempt to resolve the current crisis while applying the lessons from the course in a real-world environment.

- Uses false and real news reports, embassy materials, country specific information packets, videos, asymmetric data

- Encourages teamwork, application of acquired knowledge, real-time information processing and analysis, the development of cooperative strategies: all within the "fog of war"

"The simulation in the last few lectures was interesting and unforgettable. It provided a chance for us to think independently and build teamwork spirit."

"The simulation is of great value in our study of related Asian issues, which provided us with practical knowledge about Asian security."

How Close?

- Time: expansion and compression

- Space

- Technology: news, asymmetric information, videos, real-time polls

Round 8: Which country do you trust most in this crisis? Not your own country!

Text **NICHOLASTHOM872** to **6452 2795** once to join

Country	Percentage
China	18%
Indonesia	
Malaysia	18%
Singapore	12%
The Philippines	
United States	29%
Vietnam	24%

Students perceptions

Country: Indonesia	Power Balances			Trust
	Politically	Militarily	Economically	
China	6 vs 7**	7 vs 7***	7 vs 7***	2.6 vs 4.3*
Malaysia	4.1 vs 4**	4 vs 3.3**	4.6 vs 3*	3.6 vs 4**
Singapore	3.1 vs 4**	6 vs 3.6*	6.6 vs 6**	3.6 vs 2.6**
The Philippines	3.6 vs 5*	3.6 vs 2.3**	3.1 vs 1.6*	4.6 vs 4.3**
United States	6 vs 6.3**	7 vs 7***	7 vs 7***	4 vs 3*
Vietnam	3.6 vs 1.6*	4 vs 2.3*	3.1 vs 1.6*	4.3 vs 4**

Country: China	Power Balances			Trust
	Politically	Militarily	Economically	
Indonesia	2 vs 2.6**	1.6 vs 2**	1.3 vs 1.6*	3.3 vs 4.3**
Malaysia	1.3 vs 2.6*	1.3 vs 2**	2.3 vs 1.6**	3.6 vs 4.3**
Singapore	3.3 vs 3.6**	1.6 vs 2.3**	3.3 vs 2.6*	3.3 vs 2.6*
The Philippines	2 vs 2***	1 vs 1.3**	1.3 vs 1*	2.6 vs 3**
United States	6.3 vs 5.3**	6.3 vs 5.3**	6.6 vs 5.3*	2.3 vs 3.6*
Vietnam	2.6 vs 1.6**	1.6 vs 1.6***	1.3 vs 1.3***	3 vs 2.6**

Country: The Philippines	Power Balances			Trust
	Politically	Militarily	Economically	
Indonesia	3.6 vs 3.6***	3 vs 4**	3.3 vs 5*	4.6 vs 5**
Malaysia	3.6 vs 4**	3 vs 3.3**	3.6 vs 4**	4.6 vs 4.6***
Singapore	4.6 vs 5**	3.3 vs 4**	5.6 vs 5.3**	4.3 vs 3.3**
Vietnam	4 vs 3.6**	4 vs 4***	2.6 vs 3.3**	4.3 vs 5.6*
China	6.6 vs 6**	6.6 vs 6.6***	6.6 vs 6.3**	3.6 vs 4.3**
United States	7 vs 6**	7 vs 7***	7 vs 7***	5.3 vs 4.3**

Issues Arising

- Asymmetric Information
- Asymmetric Trust

- Essential debrief
- Too real

Table 1: Which Country Do You Trust Most In This Crisis?

Rounds	Countries (as a % of N)							N
	China	Indonesia	Malaysia	Singapore	The Philippines	United States	Vietnam	
4	11	0	6	22	17	22	22	18
6	17	6	17	6	0	22	22	18
8	18	0	18	12	0	29	24	17
10	6	12	18	18	18	12	18	17

N= Number of respondents

Conclusion

- Simulations can be useful additions to teaching and learning activities

- More preparation but greater gains

- Structure and scaffolds are important

- Student led

- Enriching the curriculum through discovery

Defence Ministers' Meeting

Thank you. Questions?

*Nicholas Thomas won the 2016/17 CityU Teaching Excellence Award.

**Tanya Kempston won the 2016/17 HKU Faculty of Education Outstanding Teacher Award