# Cognitive, On-line, Branching Simulation As A Disruptive Technology For Workforce Education And Training



Modeling and Simulation Congressional Caucus Leadership Summit

Ken Spero February 25, 2019



### Workforce Development Challenge

# **Exercising Good** Judgment

"Knowledge is being aware of what you can do. Wisdom is knowing when not to do it."

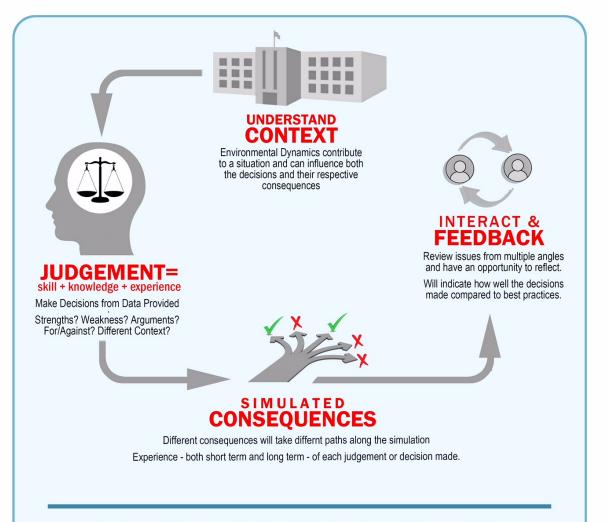
## Being Resilient

"Good judgment is the result of experience. Good Experience is often the result of bad judgment."



### Experience IS the Best Teacher!!

**How does Simulation Provide Experience to Improve Decision** Making?



### **ELS SIMULATION**

#### **BENEFITS:**

Research supports that the deployment of a simulation-driven approach is ideal for adult learning.

- Confidence & High Retention
- Measurable Results
- Resilience
- Better Problem Solving

### The Power of Experience

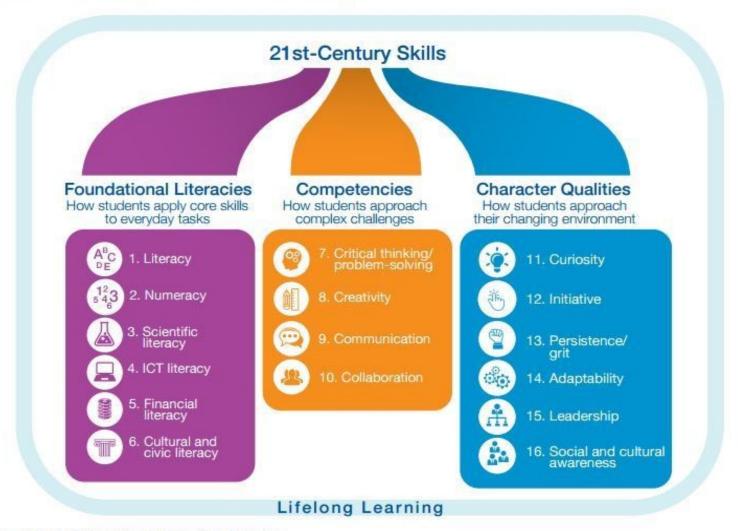
Core abilities: critical thinking systems thinking creative thinking



Value skills: decision making problem solving collaboration

### Simulations and Lifelong Learning

Exhibit 1: Students require 16 skills for the 21st century



Note: ICT stands for information and communications technology.





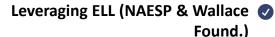


### Ed Leadership Sims, LLC Experience Is the Best Teacher



Simulation Titles

- Difficult Conversations: Dress Code
- Academic year goal setting (Common Core)
- ▼ The Disruptive Teacher: Adult Bully
- **Girls Basketball Coach: Angry Parent**
- Post-Observation Meeting
- **Board Relations: Superintendent**
- **Small District in Budget CRISIS**
- Student Safety and Playground **Protocols**
- School-Based Budget Cut Decision-Making
- Student Untimely Death
- **Community Partnerships Digital** Readiness
- **Difficult Conversations: Race**
- 1st Week for New Administrator
- Middle School Turnaround
- The Leadership Challenge (NYC)
- Social Media: Integrity in Community



- The Transgender Student (Drake U.)
- Cyber-bullying and Ethics (Auburn U.)
  - Cultural Competence (Gwinnett)
- Student Retention (The College of NJ)
  - Ending the School Year (NYCDOE)
- Recognizing Abuse (Prince George's County)
- Special Education (Former NYS Sup't)
  - The Teacher Blog (PELS)
  - School Counseling (U. of Indianapolis)
- School Counseling and Security (Series w/U. of Indianapolis)
  - School Climate (Series w/Gwinnett)
    - Governance (PDK International) 🕢
  - Leadership & Equity (Series with ALAS)
    - Managing Conflict (Catholic U.)



**Upcoming Titles** 











www.edleadershipsims.com





## Why SIMS – Flexibility and Scalability

- 1. Can be delivered in groups Face to Face or Virtual
- 2. Can be delivered Asynchronously
- 3. Do not require any additional resources or technology (beyond computer and browser)
- 4. Can be delivered to any level of aspiring leader (participants experience at the level they are at)
- 5. Focus is on <u>Critical Thinking</u> (failure is truly an option) not on "getting it right"
- 6. Benefit from Power of Framing
- 7. Opportunity for Unconscious Bias



### Why use Simulation?

#### facing humanity Sustainable development and climate change Global ethics 15 2 Clean water Population Science and and resources technology

15 Global Challenges

convergence of IT

We have far more data, evidence, and computer models to make decisions today, but that also means we have far more information overload and excessive choice proliferation. The number and complexity of choices seem to be growing beyond our abilities to analyze, synthesize, and make decisions. The acceleration of change reduces the time from recognition of the need to make a decision to Democratization completion of all the steps to make the right decision. ... Many of the world's decision making processes are inefficient, slow, and ill informed.1

> <sup>1</sup>The Millennium Project, "15 Global Challenges. Facing Humanity," last modified 2009, http://www.millenniumproject.org/millennium/challeng.html.

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by The Millennium Project www.millennium-project.org

Long-term

perspectives

Global

Rich - poor gap

Health issues

Energy

Transnational

organized crime

Status of women

Peace and conflict

10

Capacity to decide

# Why use Simulation?





**Experiencing Best Practices Enables Critical Thinking** 

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# Why use Simulation?

- Sims provide experience emotional engagement
- Sims expand the evocable experience base, they become part of your experience portfolio/"gut"
- Sims encourage a Systems Thinking approach Cause & Effect
- Sims <u>consequate</u> Mindlessness and <u>encourage</u> Mindfulness
- Sims provides an opportunity for participants to learn from failure, to Fail Forward
- Sims enable time acceleration to feel affects of delay
- Sims provide a bridge between:

**Engagement** → **Retention** → **Retrieval** 

Sims leverage the power of Storytelling

### **Experience Design: Creating Experience**

- Narrative flow Power of Story Telling
  - Conversation amongst the team
- Choice Options Encourage Critical Thinking
  - Conversation amongst the team
- Consequences Make it Memorable
  - Conversation amongst the team
- Scorecard feedback Make it realistic / measurable
  - Conversation amongst the team
- Narrative feedback Repetition / memorable
  - Conversation amongst the team
- Small Group debriefings and opportunities to share / expand the experience / consequences
- Large Group debriefings to establish additional connections with larger initiative and/or subject matter

#### **HOW ELS SIMULATIONS SUPPORT THE NEW PRINCIPAL STANDARDS**

The ELS Simulations are designed to touch on many of the Professional Standards for Educational Leaders (PSEL). While no one simulation is intended to provide in depth training in any one

competency, the simulations are designed to provide practice using the relevent skills to resolve real life issues. \* = Topic represents the core of simulation \* = Topic touched upon

competency, the simulations are	designed to provide practice using the relevent skills to resolve real life issues. *= Topic represents the core of simulation * = Topic touched upon  Professional Standards for Education Leaders 2015 (PSEL)									
ELS Simulation Titles	1. Mission, Vision, & Core Values	2. Ethics & Professional Norms	3. Equity & Cultural Responsiveness	4. Curriculum, Instruction, & Assessment			7. Professional Community for Teachers & Staff	8. Meaningful Engagement of Families & Community	9. Operations & Manage- ment	10. School Improvement
1. Difficult Conversation: Dress Code		*					*		*	*
2 . HS Coach		*					*	*		
3. Disruptive Teacher		*			*	*	*		*	
4. Goal Setting				*	*	*	*			
5. Playground Mishap		*	*		*			*	*	
6. Middle School Budget Challenge	*			*		*		*	*	*
7. New Teacher Evaluation						*	*		*	
8. Student in Crisis		*			*		*	*		
9. District Budget Crisis		*	*					*	*	
10. Board Relations		*	*		*			*	*	
11. First Week for Administrator	*						*	*	*	*
12. Difficult Conversations: Race	*		*	*	*	*		*		
13. Digital Readiness & Community					*	*	*	*	*	
14. School Finance		*				*			*	*
15. Lost Phone		*			*		*	*		
16. Stakeholder Management			*	*	*	*			*	
17. Principal Voice with ELL			*	*	*	*			*	*
18. Cyberbullying		*	*		*			*	*	
19. Student Support (Transgender)	*		*		*			*		
20. Cultural Competency			*	*		*		*		
21. End Of School Year	*			*		*	*			
22. Special Education					*	*		*	*	
23. Recognizing/Reporting Abuse		*			*		*	*		
# of SIMS covering as Core Topic	0	3	4	1	5	3	4	4	7	0
# of SIMS touching on Topic	5	8	5	6	9	9	7	11	7	5



#### Your Dashboard

At various points in the simulation, your Dashboard (to the right) will give you a sense of the environment and level of positive engagement you have with Administrators, including the Superintendent, with Teachers, and with Parents. This will help you gauge the effectiveness of your decisions in terms of the needs and desires of these stakeholders. Mouse over each of the three rows to see their labels.



Click the "Current State" button below to see where you stand at the beginning of the school year.



Current State

If the dashboard light goes to amber, you've got some problems to deal with, as per Admin Satisfaction above.

The green dashboard light for Teacher Morale indicates a high sense of faculty satisfaction - no significant complaints.

The amber/green lights show you are in fairly good shape with regard to Parent Support, but there are areas for increased attention.

If the dashboard light goes to red, you've got significant problems to deal with.











Time: 0:16

@ 2016



#### Meeting with APs

You are meeting with your two APs, continuing to discuss teachers who are not following up with students who miss assignments. It seems like the higher levels of attendance have accentuated this problem. At the same time, you are still pushing for any remaining LTAs to return to school.

You have gotten some pushback from Karen, and expect to get more at today's meeting. As usual, your other AP, Kevin Turner, makes limited contributions to the conversation.















Time: 4:16

@ 2016



#### Addressing Class Sizes

Given the success of your improved attendance initiative, what will you communicate to teachers regarding class sizes for the second semester?

Pick the option below that would provide the most leverage:

- You will consider reducing class sizes.
- Class sizes are not changing they are still under the contractual limit.
- If teachers have issues with their class sizes they should communicate that to you directly.
- Solicit what needs teachers have for support, such as professional development or push-in teachers, with the expectation that class sizes will not change.













Time: 7:24

@ 2016



#### Addressing Class Sizes

Given the success of your improved attendance initiative, what will you communicate to teachers regarding class sizes for the second semester?

Pick the option below that would provide the most leverage:

Your choice and option scores:

- You will consider reducing class sizes.

Other Choice(s):

- Solicit what needs teachers have for support, such as professional development or push-in teachers, with the expectati ...
- If teachers have issues with their class sizes they should communicate that to you directly.
- Class sizes are not changing they are still under the contractual

While you may want to consider reducing class sizes, this response does not communicate the limitations you are working within. You need to also help teachers understand and adapt to those limitations while taking responsibility for each student's success.

2/8







@ 2016

**ED LEADERSHIP SIMS** 



### Ed Leadership Sims, LLC Experience Is the Best Teacher

### Contact

### **Ken Spero**

215 565 5598

kspero@EdLeadershipSims.com

- 28 years of experience with Simulation
- CEO, Ed Leadership Sims LLC
- Adjunct Faculty at Penn GSE Experience Design & Simulation Technology (Penn CLO and MedEd)

To see more and to play the Dress Code Simulation again, visit the ELS website:

www.EdLeadershipSIMS.com