

### Virtual choices, Real Impact: 4<sup>th</sup> Generation E&C Education

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**Wayne Brody,** Senior Member of the Ethics and Compliance Advisory Practice LRN







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- Why '4<sup>th</sup> Generation'? What is it?
- A (Very) Brief History of E&C Education
- The 'Behavior Business'
- Gamification in Theory
- Gamification in Practice
- What's Next
- Adaptive Learning



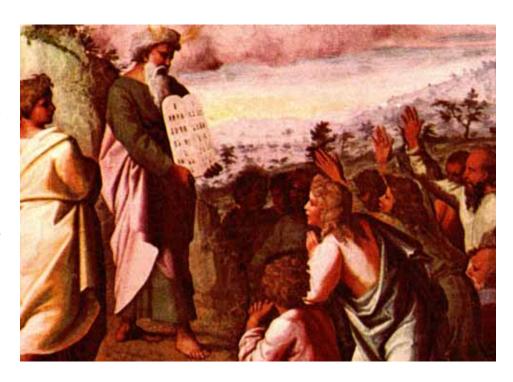


	1990 - 2005	2005 – 2010	2010 - 2015	2015 - 2020
Program Dimension				4G
Orientation	<ul><li>Rules based</li><li>Values ignored</li><li>Command and control</li></ul>	<ul><li>Predominantly rules based</li><li>Values acknowledged</li><li>Acquiescence with established order</li></ul>	<ul><li>Predominantly values based</li><li>Values prioritized</li><li>Individual responsibility for conduct</li></ul>	<ul> <li>Mission driven</li> <li>Strongly values based and purpose driven</li> <li>Values instrumental in inspiring conduct</li> <li>Individual ownership of stakeholder trust and corporate reputation</li> </ul>
Strategy and Platforms	<ul> <li>Develop "defensible" program</li> <li>Emphasize "tone at the top"</li> <li>Implement and train on Code of Conduct</li> <li>Lectures, PPt., CBT</li> </ul>	<ul> <li>Leverage technology to manage risks</li> <li>Emphasize importance of ethical culture and "tone at the middle"</li> <li>Make training more engaging; targeted, scenario-based, humorous, etc.</li> </ul>	<ul> <li>Address extended enterprise risks</li> <li>Strengthen program in relation to enforcement priorities</li> <li>Implement blended learning, manager-led training, role-based</li> <li>Social media as platform and content source</li> </ul>	<ul> <li>Take systemic approach to managing risk</li> <li>Apply strategic, transformative focus on culture and values</li> <li>Turn "push" into "pull" (gamification, on demand advice)</li> <li>Adapt education to individual needs</li> </ul>
Structure	<ul> <li>Ensure program has at least minimal elements prescribed by official guidance</li> </ul>	<ul> <li>Enhance and scale program to serve needs of global enterprise</li> <li>Engage and leverage functional and operational leaders through E&amp;C committees</li> </ul>	<ul> <li>Emphasize independence of E&amp;C function</li> <li>Elevate CECO role</li> <li>Enhance oversight capabilities of board of directors</li> </ul>	<ul> <li>Optimize E&amp;C-related information sharing and collaboration across the enterprise</li> <li>Utilize real-time risk intelligence gathering</li> <li>Leverage technology to enable smart decision making and risk taking</li> </ul>
Business Integration	<ul> <li>Distribute Code of Conduct and corporate policies</li> <li>Require certification of training completion</li> </ul>	<ul> <li>Involve operational managers in training</li> <li>Recruit E&amp;C champions in business units</li> </ul>	<ul> <li>Engage and align business partners</li> <li>Communicate business value contribution of E&amp;C</li> </ul>	<ul> <li>Set and evaluate strategic goals based on core purpose and values</li> <li>Consolidate E&amp;C as core business function</li> <li>Demonstrate business value contribution of E&amp;C</li> </ul>
Social Integration (Culture)	<ul> <li>Mention program in employee onboarding</li> <li>Communicate periodically with employees regarding program</li> </ul>	<ul> <li>Brand program</li> <li>Establish awards and recognition programs</li> <li>Maintain frequent employee communications</li> </ul>	<ul> <li>Include values-based criteria in individual performance appraisals</li> <li>Celebrate acts of ethical leadership</li> </ul>	<ul> <li>Hire for character (as well as skills)</li> <li>Evaluate ethical leadership skills</li> <li>Utilize 360° appraisals, including values-based behavioral assessment</li> </ul>
Evaluation (Effectiveness)	Conduct ad hoc assessments focused mainly on program design	Evaluate program periodically as to its effectiveness in preventing unethical as well as illegal conduct	<ul> <li>Evaluate outcomes as well as design and implementation of program</li> <li>Seek and apply predictive metrics wherever possible</li> </ul>	<ul> <li>Identify and leverage effectiveness drivers</li> <li>Regularly assess organizational culture (especially with behavioral focus)</li> </ul>

## Landmarks in Ethics and Compliance Education: The First Time

#### **Pros:**

- Concise, direct messaging
- 5 bullet points per tablet
- Authoritative presenter
- Strong Tone at the Top



#### Cons:

- Rules-based PoV
- Normative tone ('thou shalt not')
- Not easily customizable (one size fits all)





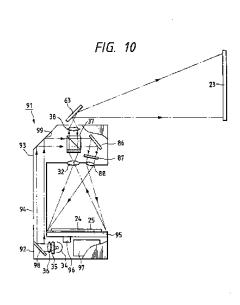
#### World War II: The Training Film Opens in Wide Release





### **A Great Leap Forward**

U.S. Patent June 28, 1994 Sheet 9 of 11 5,325,13"











# Scalabilty, Productivity and Remote Learning: The Search for a Teaching Machine



Characteristics of a "teaching machine":

- content broken down into small (testable) units
- 2. immediate feedback
- 3. students "move at their own pace"
- 4. automation





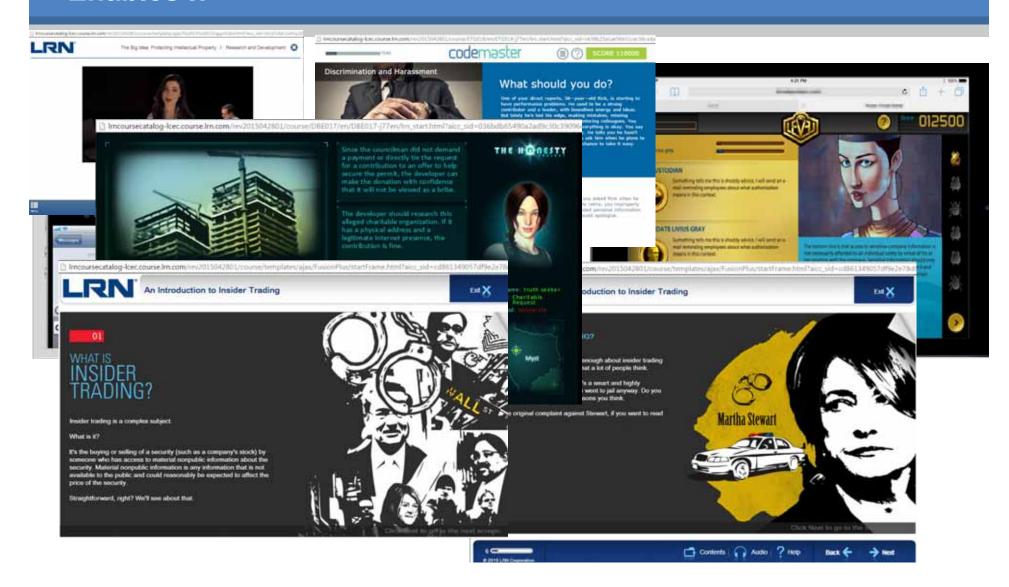
#### Computer-Based Education: Born Champaign-Urbana, 1959







## And Evolving (Almost) as Quickly as the Technology That Enables It







#### Regulatory Expectations Are Straightforward

- DOJ and SEC will evaluate whether a company has taken steps to ensure that relevant policies and procedures have been communicated throughout the organization, including through periodic training ...
- For example, many larger companies have implemented a mix of web-based and in-person training conducted at varying intervals. Such training typically covers company policies and procedures, instruction on applicable laws, practical advice to address real-life scenarios, and case studies.
- Regardless of how a company chooses to conduct its training, however, the information should be presented in a manner appropriate for the targeted audience...
- [C]ompanies may want to consider providing different types of training to their sales personnel and accounting personnel with hypotheticals or sample situations that are similar to the situations they might encounter.





#### **What Fundamental Questions Must We Address?**

#### **DESIGN**

 Is the overall education program well designed?

#### **IMPLEMENTATION**

Is it being applied in good faith?

#### **IMPACT**

Does it work?





### **Employee Expectations are Slightly More Complex**

#### Communication preferences and methods

	The Greatest Generation	Baby Boomers	Generation X	Millennials (Gen Y)
Information Flow	Memos Meetings	Memos Email PowerPoint	Email PowerPoint	Text Social Media Video
Learning	Handbooks Instructional Classroom	PowerPoint Job Aid Instructor Led (in person)	Web-based (recorded / WebEx)	Video 'Gamification'
Meetings	Routine Formal Staff meetings	Routine Formal Staff meetings	As needed Less formal	As needed Collaborative Spontaneous





#### **Questions Worth Considering**

- Are we communicating, educating or inspiring?
- Do we (properly) care about why people do what they do, or just that they do (or don't do) as required?
- Are we in the business of behavior change?
- If we are in the business of behavior change, should we be using all available (lawful, not harmful) technology to accomplish that change?





#### "What we need is a technology of behavior"

"Comparable results have been obtained with pigeons, rats, dogs, monkeys, human children... and psychotic subjects. In spite of great phylogenetic differences, all these organisms show amazingly similar properties of the learning process. It should be emphasized that this has been achieved by analyzing the effects of reinforcement and by designing techniques that manipulate reinforcement with considerable precision. Only in this way can the behavior of the individual be brought under such precise control."

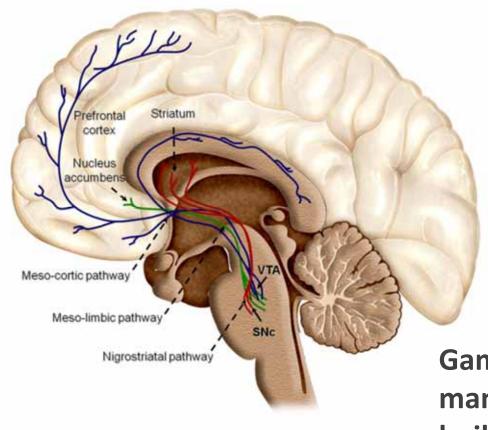
- B. F. Skinner

Thanks to Audrey Watters / Hack Education for concept and quote





#### **Hedonic Feedback**



Anticipation of rewards releases dopamine repeatedly. Sex, hunger, and drug addiction all work in the same compelling fashion.

Gambling, loyalty programs, and all manner of games are intentionally built with these neurochemical processes in mind.





#### **Gamification & Desires**

Game Mechanics	Reward	Status & Achievement	Social & Belonging	Self Expression	Competition	Altruism
Points						
Levels						
Challenges						
Virtual Goods						
Leaderboards						
Gifting & Charity						
Story & Discovery						

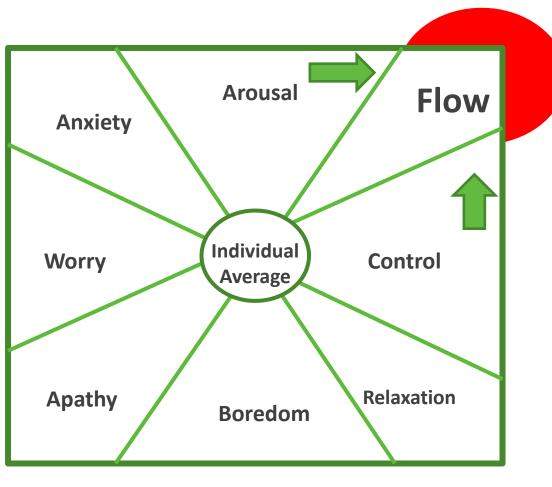
Adapted from Laps (2012)





#### When It Comes to Learning, Go for the Flow

Difficulty / Challenge



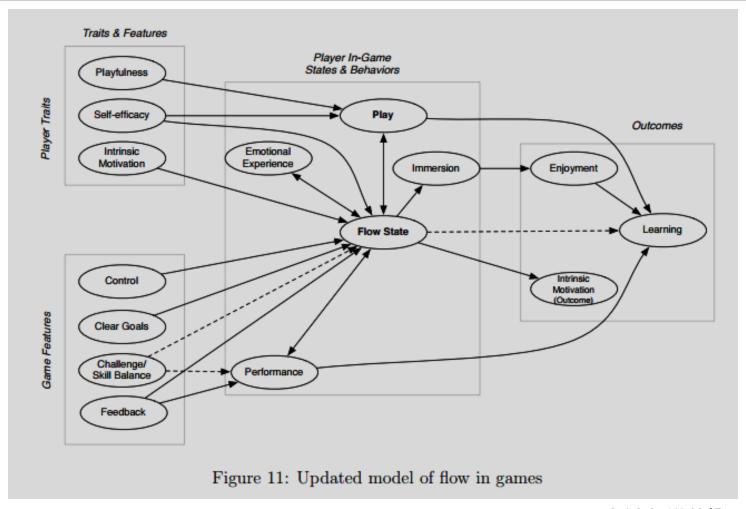
**Skills** 

Adapted from Csikszentmihalyi (2004)





# Flow Doesn't Cause Learning – But It Facilitates and Enhances It



Davin Pavlas, A Model of Flow and Play in Game-based Learning: The Impact of Game Characteristics, Player Traits, and Player States, 2010 (unpublished)





# The Impact on Learning of Variations in e-Learning Design and Flow

	$R^2$	Direct effect	Indirect effect	Total effect
Effect on flow experience	0.547			
Learner interface		0.346 (4.998)		0.346 (4.998)
Interaction		0.269 (4.367)	_	0.269 (4.367)
Instructor attitude		0.107 (1.907)		0.107 (1.907)
Instructor technical competence		-0.030 (0.066)		-0.030 (0.066)
Content		0.388 (5.155)	_	0.388 (5.155)
Effect on attitude towards e-learning	0.546			
Learner interface		0.209 (3.312)	0.082 (2.858)	0.292 (4.777)
Interaction		0.018 (0.319)	0.064 (2.682)	0.082 (1.523)
Instructor attitude		0.079 (1.641)	0.025 (1.672)	0.105 (2.109)
Instructor technical competence		0.146 (2.569)	-0.007 (-0.446)	0.139 (2.361)
Content		0.262 (3.785)	0.092 (2.902)	0.355 (5.323)
Flow experience		0.238 (3.393)	_	0.238 (3.393)
Effect on learning outcomes	0.357			
Learner interface		_	0.197 (5.206)	0.197 (5.206)
Interaction		_	0.106 (3.307)	0.106 (3.307)
Instructor attitude		_	0.065 (2.438)	0.065 (2.438)
Instructor technical competence			0.036 (1.091)	0.036 (1.091)
Content		_	0.229 (5.470)	0.229 (5.470)
Flow experience		0.296 (4.123)	0.077 (2.597)	0.372 (5.677)
Attitude towards e-learning		0.323 (3.864)	_	0.323 (3.864)

Choi, Choi and Kim 2007, ERP training with a web-based electronic learning system: The flow theory perspective





#### Game Structure: An Invitation to the Learner

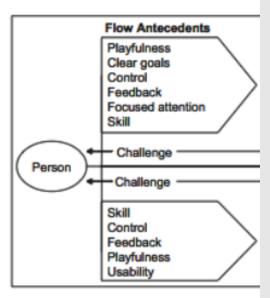


Figure 4: Flow model (reproduced from Kiili, 2005)

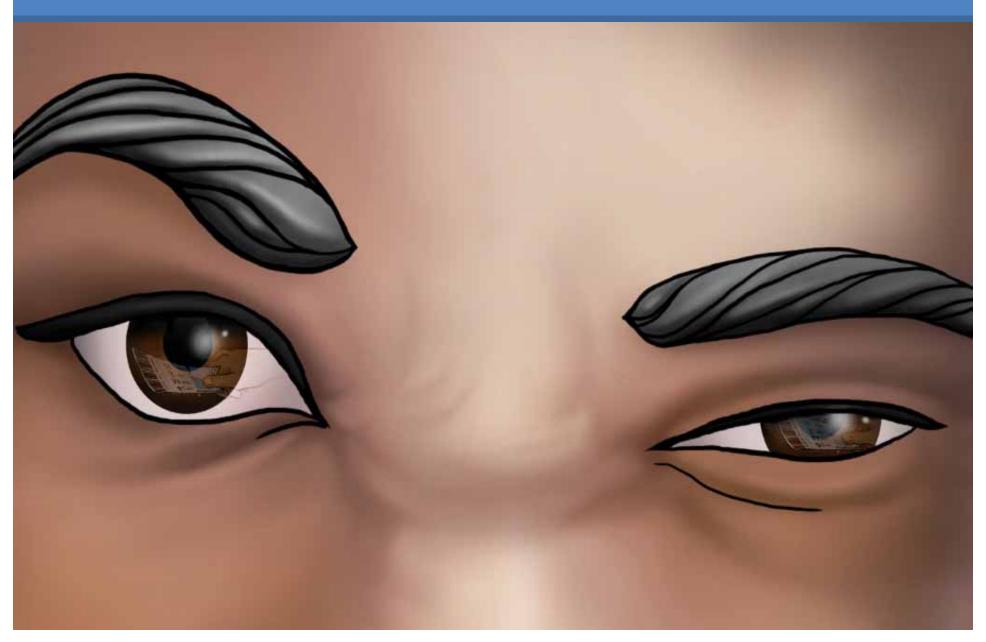
Table 2: Flow requirements linked to game elements

Flow Requirement	Sweetser & Wyeth (2005) Game Element	Cowley et al. (2008) Game Element	Jones (1998) Game Element
A task to accomplish	The game itself.	The complete gaming experience.	Levels provide sub-tasks that lead to completion of whole task.
Ability to concentrate on task	Game provides interesting stimuli & workload.	Presence; Dedicated gaming environment	Creation of convincing worlds to draw users in.
Clear task goals	Primary and intermediate goals are presented.	Missions, plot lines, and levels.	Survival, collection of points, gathering of items, solving puzzles.
Immediate feedback	Feedback is provided via status, score, progress indicators.	Rewards and penalties.	Actions have immediate consequences. Shooting an NPC causes a result, picking up an item moves in.
Sense of control over actions	Player is able to move their avatar(s) and feel control over input devices.	Familiarity or skill with controls, knowledge of game conventions.	Mastering physical inputs such as keyboard or mouse.
Deep but effortless involvement	Game environment should transport player emotionally/viscerally.	High motivation to play, emotional draw to content.	Fantastic environments remove suspension of disbelief and engage players.





## Will They Accept That Invitation?



## Next Gen Case Study - Dell

- Online training for E&C topics since 2002
  - 100 percent custom for many years
  - Migrated to off-the-shelf with customization in 2010
- More recently leveraged short burst of information to build awareness:
  - 3 minute or less videos
  - 'Topic of the Quarter' one-sheets
- Also revived in-person experiences:
  - Sales conference booths
  - Security fairs
  - Locally developed and driven culture events
  - Front line sales people, integrated with consultative selling skills training
- Next step was to slowly enter gaming world
  - Online gamified training
  - Optional in the beginning
  - From off-the-shelf with some customization to 100 percent custom
  - Mandatory in 14 languages













Fresh and engaging learner experience.

Reinforce knowledge using immediate feedback loops.

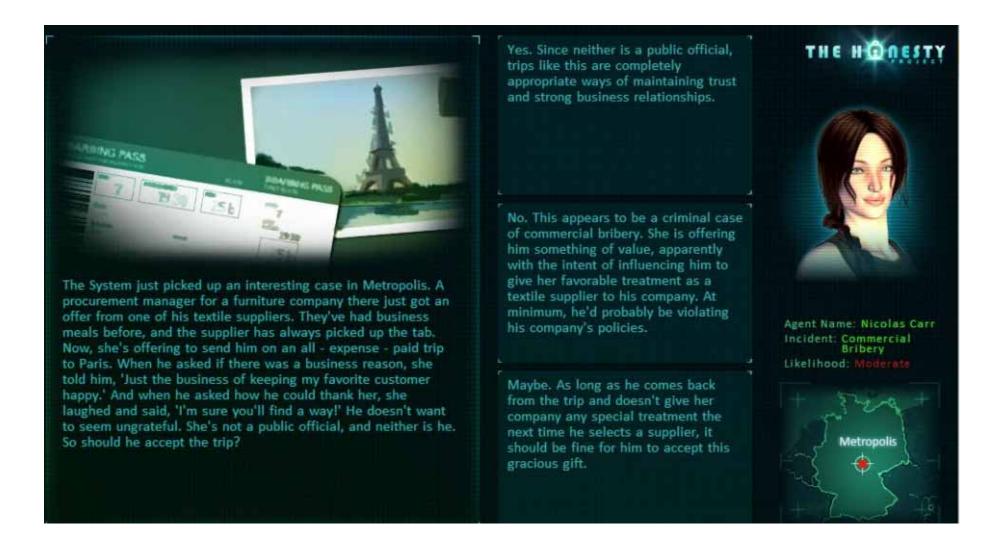
Make decisions and solve problems in a safe, fun, and competitive environment.

Increase retention and application of knowledge gained during course.

Demonstrate effectiveness and impact of E&C education initiatives.

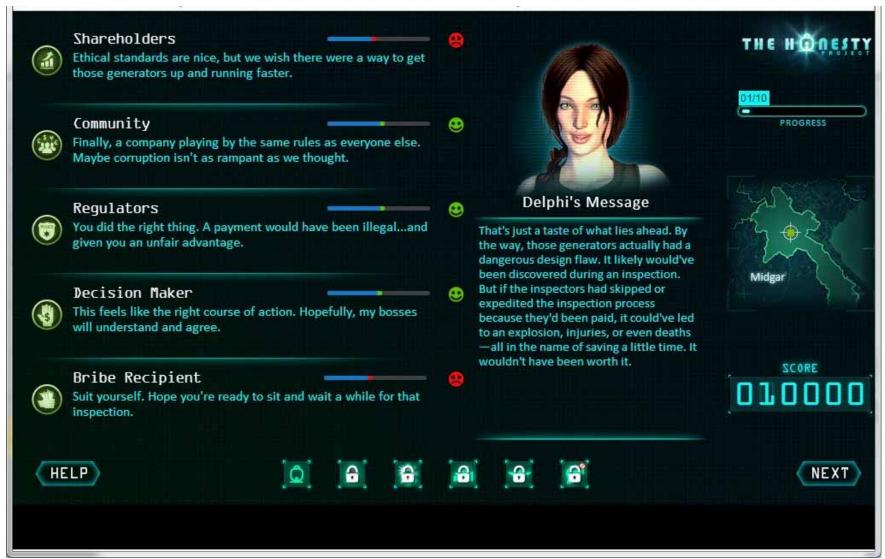


## Phase 1: The Honesty Project - Anticorruption





## The Honesty Project, cont.





## Outcome and feedback: 25,000 completions

What 9,100 team members told us ...

93%

Would recommend *The Honesty Project* to their peers!

95%

Believe they will be able to apply what they learned to their jobs

#### their jobs **Game Format** Audio / Visual **Scenarios** Content Stakeholders Graphics Ability to make Bonus questions What they like feedback decisions "Cool" music Exposer to • A different, Related to real different types of global situations engaging format world situations Interactivity • Liked the "grey" Storytelling aspects of the Fun way to learn situations Easy to navigate presented More levels • "Better" graphics. Increase difficulty More scenarios Opportunities More translations Voice-over all text Less text • Consequences for bad choices Increase More video interactivity Show best answer Bigger fonts



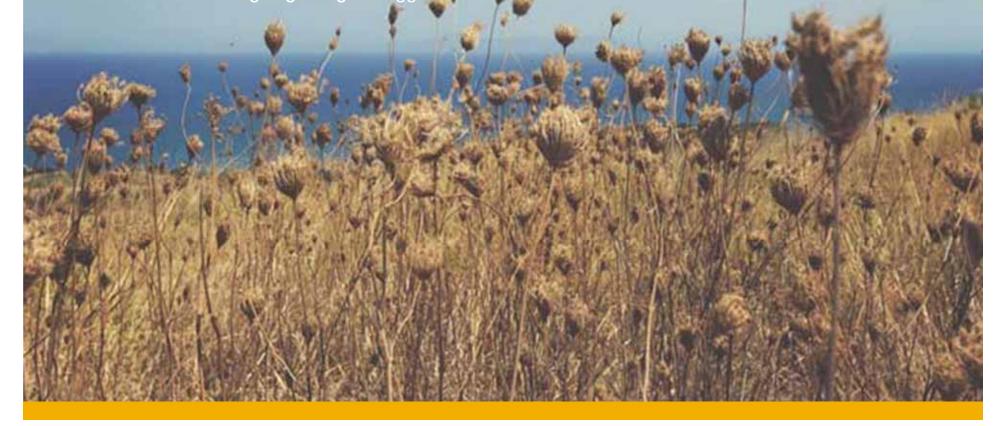
# Phase 2: The Responsibility Project (DPP) & The Courage Project (Code)





#### **#Power of You**

- Reinforcing ethical principles through micro bursts of documentary style video, shot on smart phones and uploaded to central site
- Highlighting everyday acts of respect, integrity or courage
- Similar to internal crowd sourcing
- Voting for highest impact examples with top votes per region receiving deeper dive interviews and highlighting in bigger forums



#### 2015 - 2020

#### 4G

- Mission driven
- Strongly values based and purpose driven
- Values instrumental in inspiring conduct
- Individual ownership of stakeholder trust and corporate reputation
- Take systemic approach to managing risk
- Apply strategic, transformative focus on culture and values
- Turn "push" into "pull" (gamification, on demand advice)
- Adapt education to individual needs
- Optimize E&C-related information sharing and collaboration across the enterprise
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- · Hire for character (as well as skills)
- Evaluate ethical leadership skills
- Utilize 360°appraisals, including values-based behavioral assessment
- Identify and leverage effectiveness drivers
- Regularly assess organizational culture (especially with behavioral focus)

# Where is 4th Generation Education and Communication Going?

#### Balance push and pull

- crowd source issues; user generated content
- engaging and desirable formats
- smaller units of information
- repeated "brand-based" messaging

#### Content

- move from risk focus (prevent and detect) to opportunity (outbehave = outperform)
- align with corporate mission and positive social impact

#### **Formats**

- adapt to learning needs of individual (knowledge levels & needs)
- everything on every platform (fluid delivery)





#### Flow: Beyond Challenge and Ability

#### Games like Cloud



... and The Sims

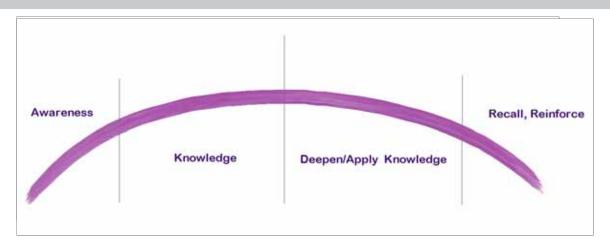


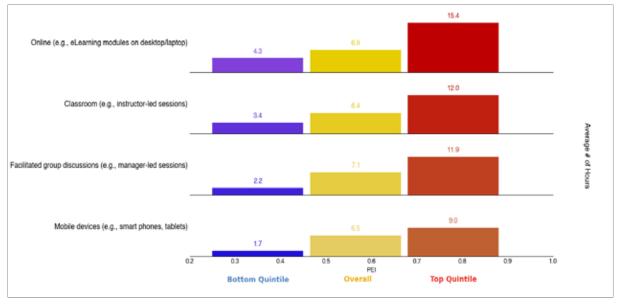
... make it clear that wide varieties of challenges and rewards can generate flow; so can passive activities.





# **Issue-Based and Multi-Modal Campaigns Among Other Developments**









### Why?

### Personalization improves outcomes Reading Area Community College gets results with Pearson's Knewtonpowered MyMathLab According to a recent study by Pearson, "data indicate a significant rise in student outcomes since the 78.0% plan's implementation" ~18% bump in exam scores 66.4% emblematic of results at other schools 2012 2013 Source: Pearson's Math Efficacy Report (2014)





#### What Is Adaptive Learning?

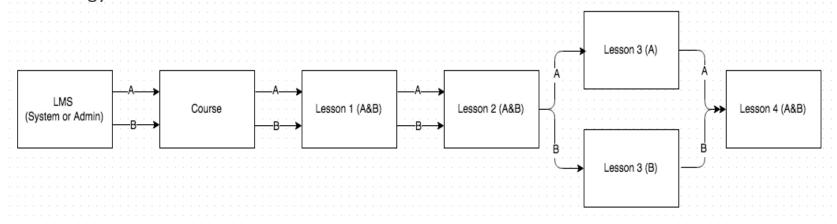
'Students learn best when education is personalized to their needs and goals.'

-- Daniel Greenstein, Director, Postsecondary Success, Bill & Melissa Gates Foundation

Adaptive learning is a computer-based system that modifies the presentation of material in response to student performance / ability.

Adaptive learning ends one size fits all training – instead providing personalized content to the student targeted to their individual needs.

Adaptive learning recreates the most <u>effective</u> way to teach (1-on-1 interaction) using technology.

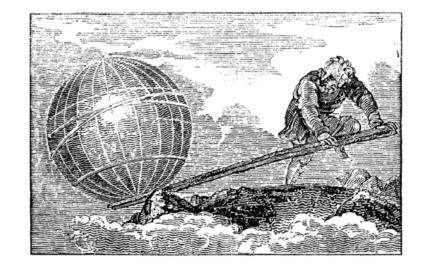






## Beyond Education: 4 Keys to 4<sup>th</sup> Generation Program Effectiveness

- An intentional and strategic focus on culture and values
- Orienting the E&C program toward supporting and enabling business units
- 3. Pursuing **operational integration** of E&C efforts creating programs that are built in, not bolted on
- 4. Setting ambitious **goals**, optimizing program inputs and outputs, and applying numerous, meaningful **metrics**







# LRN Inspiring Principled Performances

how



## Virtual choices, Real Impact: 4th Generation E&C Education

#### **DISCUSSION**

## Thank you

We want your feedback! Use the conference app or visit the Registration desk.

Be sure to join the Twitter conversation: @CW\_2015

