Millennials, Technology and Healthcare of the Future

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Objectives

At the conclusion of this presentation, learners will:

• Develop and apply potential solutions to challenges for the education of healthcare professionals related to
  • Generational differences in the workplace
  • Evolving technologies
  • Anticipated changes to future healthcare system(s)
Session Outline

• Brief review of generations in the workplace info
• Presentation/discussion: evolving technologies
• Activity
• Wrap-Up
# Generations in the Workplace

<table>
<thead>
<tr>
<th>Generation</th>
<th>Work Characteristics</th>
<th>Comfort w/ Technol</th>
<th>Strength/Weakness</th>
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</thead>
<tbody>
<tr>
<td>Traditionalists</td>
<td>Value formality, hierarchy, and loyalty; very hard-working</td>
<td>Low</td>
<td>(+) team-oriented, (-) technology</td>
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<td>(1925-1945)</td>
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<tr>
<td>Baby Boomers</td>
<td>Workaholics, competitive, consensus builders, mentors</td>
<td>Medium</td>
<td>(+) work ethic, (-) technology</td>
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<td>(1946-1964)</td>
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<tr>
<td>Generation X</td>
<td>Value work-life balance, comfortable with change, question authority</td>
<td>High</td>
<td>(+) technology, (-) less driven</td>
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<td>(1965-1980)</td>
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<tr>
<td>Millennials</td>
<td>Feedback-oriented, team-oriented, appreciate cultural diversity, idealistic, want to make impact quickly</td>
<td>Very High</td>
<td>(+) technology, (-) impatient, bored</td>
</tr>
<tr>
<td>(1981-1999)</td>
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</tbody>
</table>
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NMC Horizon Report: 2015

Topics from the NMC Horizon Report > 2015 Higher Education Edition

CHALLENGES

SOLVABLE
> Blending Formal and Informal Learning
> Improving Digital Literacy

DIFFICULT
> Personalized Learning
> Teaching Complex Thinking

WICKED
> Competing Models of Education
> Rewards for Teaching

TRENDS

SHORT-TERM
1-2 years in each direction
> Increasing Use of Blended Learning
> Redesigning Learning Spaces

MID-TERM
3-4 years in each direction
> Growing Focus on Measuring Learning
> Proliferation of Open Educational Resources

LONG-TERM
5+ years in each direction
> Advancing Cultures of Change and Innovation
> Increasing Cross-Institution Collaboration

TECHNOLOGIES

NEAR-TERM 1 year or less
> Bring Your Own Device
> Flipped Classroom

MID-TERM 2-3 years
> Makerspaces
> Wearable Technology

FAR-TERM 4-5 years
> Adaptive Learning Technologies
> The Internet of Things

TRENDS, CHALLENGES, AND TECHNOLOGIES FOR HIGHER ED
Learning Theories

- Behaviorism – classical conditioning, social learning
- Cognitivism – attribution, cognitive load
- Humanism
- **Constructivism**
  - Cognitive apprenticeship
  - Communities of Practice – Lave and Wenger
  - Social Development Theory – Vygotsky
- **Connectivism**
Constructivist Learning Theory

Knowledge is constructed based on personal experiences and hypotheses of the environment.

Learners continuously test these hypotheses through social negotiation.

The learner is not a blank slate (*tabula rasa*) but brings past experiences and cultural factors to a situation.

New learning is linked to prior knowledge.
The Half-Life of Knowledge

- Time from when knowledge is gained → obsolete
- Exponential growth
  - Once measured in decades
  - Now measured in months/years
- Knowledge in the world doubled 1990 – 2000
- Now doubling every 18 months or less

*The shrinking half-life of knowledge!*
Connectivism: Learning Theory for the Digital Age

- Informal, networked and technology-enabled
- Learning
  - Can reside outside of ourselves (others, organizations, data sets)
  - Focused on connecting specialized information sets
  - Connections that enable us to learn more are more important than our current state of knowing.
Disruptive Innovation
Disruptive Innovation
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Activity: “Flip It”

- Generations in the Workplace
- Technology: Generations
- Technology: Healthcare Systems
- Disruptive Innovation

What fears related to these topics do you have for educating healthcare professionals in the future?
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A good hockey player plays where the puck is.

A great hockey player plays where the puck is going to be.

Wayne Gretzky
References

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