#whataretheytalkingabout?:

Technology-Enhanced Learning & The Millennial ICU Trainee

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Objectives

By the end of this session participants will be able to:

1. Cite the learning characteristics of the millennial trainee
2. Explain what is meant by “technology-enhanced learning”
3. Discuss the trends in the current evidence for the use of technology-enhanced learning
A Generation

- **G.I. GENERATION**: Born before 1937, Age 74+
- **SILENT GENERATION**: Born 1937-1945, Ages 65-73
- **OLDER BOOMERS**: Born 1946-1954, Ages 56-64
- **YOUNGER BOOMERS**: Born 1955-1964, Ages 46-55
- **GEN X**: Born 1965-1976, Ages 34-45
- **MILLENNIALS**: Born 1977-1992, Ages 18-33
TIME
The Case Against Over-Parenting
Why Mom and Dad need to cut the strings
BY NANCY GIBBS

Trauma of War: The Private Hell Of PTSD
Obama in Beijing: Why the U.S. Loves China, Really.

THE IDEAS ISSUE

The Case for New-Age Medicine
The Future of Camouflage
Six Steps to Fixing Congress
Pink Floyd: The Playlist of Libyan Revolt

HOW THE CULT OF SELF-ESTEEM IS RUINING OUR KIDS
BY LORI GOTTLIEB

PLUS:
HOW BRAIN SCIENCE WILL TRANSFORM THE COURTROOM

JULY/AUGUST 2011
THEATLANTIC.COM
Technology

Eternal
Immediate
Constant
Shared
Networking

“Jimmy! Will you stop texting on your mobile phone. We are trying to discuss how technology has changed society!”
GROUP IDENTITY

Fear
Tolerance
Globalization
Activism
Environmentalism
Group identity

SOCIAL ECONOMY

Technology
The Millennial Trainee

- 24/7 Content access
- Technologically savvy
- Multi-tasking
Technology-Enhanced Learning

It All Began With Web 1.0
Arterial Puncture for Blood Gas Analysis

Shelly P. Dev, M.D., Melinda D. Hillmer, M.D., BSc.Phm., and Mauricio Ferri, M.D.
Introduction to Critical Care
Problem Orientated Approach
Respiratory Failure
Shock
Renal Failure
Sepsis
And Now Comes Web 2.0
Acute respiratory distress syndrome (ARDS), also known as respiratory distress syndrome (RDS) or adult respiratory distress syndrome (in contrast with infant respiratory distress syndrome) is a severe, life-threatening reaction in adult humans to injuries or acute infections to the lung.

It is a lung syndrome that causes inflammation of the lung parenchyma leading to impaired gas exchange with a systemic release of inflammatory mediators, causing inflammation, hypoxemia and frequently multiple organ failure. This condition has a 90% death rate in untreated patients. With treatment, usually mechanical ventilation in an intensive care unit, the death rate is around 50% but advances in treatment using prone-positioning sessions while the patient is mechanically ventilated have reduced mortality rates to about 25%.[1] A less severe form is called acute lung injury (ALI).

The acronym ARDS formerly signified "adult respiratory distress syndrome" to differentiate it from "infant respiratory distress syndrome", which occurs in premature infants. However, as this type of pulmonary edema also occurs in children, ARDS has gradually shifted to mean "acute" rather than "adult". The differences from the typical infant syndrome remain.

Contents

1 Signs and symptoms
2 Cause
3 Diagnosis
4 Pathophysiology
  4.1 Inflammation
  4.2 Mechanical stress
  4.3 Stress index
  4.4 Progression
5 Treatment
  5.1 Mechanical ventilation
  5.2 Airway pressure release ventilation
  5.3 Positive end-expiratory pressure
  5.4 Prone position
  5.5 Fluid management
  5.6 Corticosteroids
  5.7 Nitric oxide
  5.8 Surfactant therapy
6 Complications
7 Epidemiology
Remember This?
Sure, It’s Cool...

But Is It An Effective Way to Teach?
From:
From:
Should We Use Technology Enhanced Learning?
How Can We Use Technology-Enhanced Learning Most Effectively?
Observed Trends

Better learning outcomes
• Interactivity
• Practice exercises
• Repetition
• Feedback

Greater Learner Satisfaction
• Interactivity
• Online discussion
• Audio
Observed Trends

Better learning outcomes
- Interactivity
- Practice exercises
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- Feedback

Greater Learner Satisfaction
- Interactivity
- Online discussion
- Audio
“[E]ducators will no longer serve mainly as the distributors of content, but will become more involved as facilitators of learning and assessors of competency.”

Ruiz et al. The Impact of E-learning in Medical Education. Acad Med. 2006; 81:207-212
The Millennial Trainee

- 24/7 Content access
- Technologically savvy
- Multi-tasking
The Millennial Doctor

- Critical Thinking
- 24/7 Content access
- Technologically savvy
- Multi-tasking
The Millennial Doctor

- Communicator
- Critical Thinking
- 24/7 Content access
- Technologically savvy
The Millennial Doctor

- Professional
- Communicator
- Critical Thinking
- 24/7 Content access
The Millennial Doctor

• Professional
• Communicator
• Critical Thinking
• 24/7 Content access
Technology-Enhanced Learning

+ Conventional Learning

Conventional Learning

From:
Technology-Enhanced Learning + Conventional Learning

From:
“There aren’t any icons to click. It’s a chalkboard.”
“Millennial student engagement with technology does not automatically result in disengagement with traditional forms of pedagogy.”

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Hidden Objective

✓ Argue the merits of the teacher as the guide to navigate content and develop skills in critical thinking, professionalism and communication
My Favourite Post-
Millennials