An 🍏 A Day
The Educational Way

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Generation Y

• People born between 1982 and 2005.¹

• Gen Y would like learning to be:
  – Creative
  – Interactive
  – Fun
  – Enjoy thinking outside of the box

¹ Lydia P. Howell, MD, Jesse P. Joad, MD, Edward Callahan, PhD, Gregg Servis, Mdiv, and Ann C. Bonham, PhD. “Generational Forecasting in Academic Medicine: A Unique Method of Planning for Success in the Next Two Decades”
So... What are we doing?

Discuss what we’ve done.

Share some tips.

Team exercises.
Objectives

• Define 2 basic techniques to optimize teaching the current generation.

• Discuss a variety of mobile devices for teaching and optimizing efficiency.

• Discuss safeguards and boundaries surrounding effective use of these tools.
• It all starts with an idea…

“Wouldn’t it be great to know what our current students thought of the new advances in Pediatric Medicine?”
Facebook Explained

- Founded February 2004 by Mark Zuckerberg and 4 other Harvard University students as a mean for students on campus to get to know one another.
- Users create a personal profile and add other users as “friends”.
- Allows users to join common interest groups.
- As of October 2012, has over 1.01 billion active users.\(^2\)

How does it work?

My Co-Worker Karen

My Friend Katie

Teresa

My Sister Michelle

My Classmate Chelsea
Personal Newsfeeds
The Assignment

• Each week, one student finds an article about a new study or advancement in pediatric medicine.
• The student must use a reputable news source.

• Students then link their article to the page and share their opinion of the article.
• All other students then read the article and post opinions.
Abhiram Bhashyam

I find it interesting that there's so many positive correlations on a child's outcomes with breastfeeding (some of which are far in the future!) and we still don't have a great idea why. Also, from a policy standpoint, what's changing moms' minds to increase the rate all of a sudden? It'd be nice to know how to tailor our messages... http://www.latimes.com/news/science/la-heb-breastfeeding-boost-20120801.0,4407100.story

Katherine Schiavoni

Also interesting that there is so much state to state variation in breastfeeding rates. I wonder what factors are leading to differences and if there are practices that could be shared from higher rate regions

Amy Xu

I was surprised to observe that breastfeeding mechanics are highly emphasized during well-child visits in the out-patient pediatric clinic. Cambridge Hospital even hosts "breastfeeding clinics" twice a week to advise mothers on proper positions, troubleshoot pain during breastfeeding, and suggest appropriate interventions (ie, nipple shields). Breastfeeding can be very painful- nipples with deep fissures, enough blood being drawn to cause hematochea, yeast infections... Walking home from clinic that afternoon, my first priority was to call my mom to thank her :)

Shalin Patel

Cool article, Abhiram! I agree - lots of correlations between breastfeeding and beneficial effects for both the mother and the child. I was interested to learn about the correlation between breastfeeding and the prevention of childhood obesity. I looked into it a bit more and came across this great e-pamphlet made by JAMA: http://archpediatrics.ama-assn.org/article.aspx?articleid=1107363. I found it to be a nice one-page info sheet made for patients addressing breastfeeding and its role in obesity prevention. It discusses how breastfeeding helps the infant develop healthy eating patterns that regulate their food intake later in life, how delaying the introduction of solid foods until 6 months of age lowers the risk of obesity and food allergies, and more! Hopefully others will also find it useful, and might even print it out for mothers who ask about this specifically.

Just in time for Healthcare Reform...
WARNING

• What may originally be an idea to actively involve medical students in their own learning, may excite Residents, Fellows and Attendings as well.

• Past students may also not want to stop following or posting on your Facebook page.
Facebook: Great Idea?

“Maybe some other means of journal club or article sharing other than Facebook…”

“Facebook Articles: an extra responsibility with little added value”

“Reduce the amount of times we’re required to post to Facebook”
A Longitudinal Approach to Shelf Preparation

• Finding a platform that would allow us to quiz only our students with clinical presentations.
Twitter Explained

• Twitter is a real-time information network that connects you to the latest stories, ideas, opinions and news about what you find interesting.³
• Twitter is made up of 140-character bursts of information called Tweets.
• Tweets can also contain photos and videos.

³ Twitter. “About Twitter” Twitter Inc.17 August 2012
Twitter

PediMGHHMS3 @PediMGHHMS3
This picture is from 1983 in Ireland when I was an intern. She died 2 days later; also had FTT. What is the diag pic.twitter.com/KfXwJdhR5

PediMGHHMS3 @PediMGHHMS3
Yes these are lines of petechiae seen in scarlet fever.

Afam @mgfcstudent2
@PediMGHHMS3
Looks like Henoch-Schonlein purpura. It can also affect the kidneys.

Monica @mgfcstudent4
@PediMGHHMS3
could these be Pastia lines suggesting scarlet fever? Confluent petechiae in skin creases, how interesting!

PediMGHHMS3 @PediMGHHMS3
this kid has fever and these lines in the elbows pic.twitter.com/P8DhDCjw8a

PediMGHHMS3 @PediMGHHMS3
yes also affect joint and GI. Yes a small percentage go onto kidney failure

PediMGHHMS3 @PediMGHHMS3
Yes HSP - a systemic vasculitis of small vessels c- 2- to 10-mm erythematous hemorrhagic papules in a distribution, over buttocks, and legs.
The Opportunity

- Students are assigned a twitter account. Each account “follows” 3 people, the 2 course directors and me.
- Director posts every evening.
- Students then have 24 hours to answer.
The Set-Up

Dr. Carter

Dr. Kinane

Teresa

Chris

Katie

Daniel

Rob
a child presents to ER and is found to have this blood gas ph 7.2, HCO3 15 and pCO2 39. What drug did he ingest and what is the treatment

Aspirin toxicity? Sodium bicarbonate and activated charcoal
The ability to use photos as well
Okay some you thought this was trauma. But the end of the humerus is moth eaten; thus osteosarcoma or osteosarcoma. No fever so tumor

Proximal humeral fracture at the surgical neck?
Presents with pain, dysfunction, ecchymosis.

Osteosarcoma. Intramedullary destruction with no distinct margins, mixed radiodense and radiolucent areas; periosteal reaction

AC joint separation (Shoulder separation).
Ligaments avulsed or torn, clavicle dislocation resulting in bump on shoulder.

this is an osteosarcoma of the proximal humerus, common at the metaphysis with sunburst appearance

moth eaten.

I will go with osteosarcoma

features of destructive bone lesion with irregular borders, fluffy appearance in metaphysis- maybe osteosarcoma
So...Does it work?

Participation

All feedback is based on anonymous responses of 57 Students
Average Participation Per Week

All feedback is based on anonymous responses of 57 Students
Found it Helpful?

All feedback is based on anonymous responses of 57 Students
Twitter Thoughts …

“Even when I did not participate, I found it helpful to see the pictures and the answers.”

“excellent way to teach visual dx”

“Great way to review topics for the shelf.”

“I'd prefer just emailing the pictures than Twitter.”

“I'd love to have access after finishing peds.”

“Very helpful for derm and radiology”

“Very easy to use on the iPad”
The Devices
The Upgrade

iPad 2

Advantages to iPads

• Electronic Books
• Medical Education Apps (Case Files)
• Accessibility to tutorial materials
• Clinical Apps (EMR)
• Bedside Rounds
Disadvantages to iPads

- Bulky
- Big Responsibility
A Variety of Personal Smartphones
Computers
Sanity Savers

• Know what you need
• Don’t be afraid to reach out to the manufacturers
• Look for alternatives
Tutorials
<table>
<thead>
<tr>
<th>User Name</th>
<th>Device Status</th>
</tr>
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<tbody>
<tr>
<td>Amanda Dilger</td>
<td>No Device</td>
</tr>
<tr>
<td>Davis Stephen</td>
<td>No Device</td>
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<tr>
<td>Shaan-Chirag Gandhi</td>
<td>No Device</td>
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<tr>
<td>Tariro Mupumbwa</td>
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Amazon Kindle

Kindle in college

Study Smarter with Kindle

X-Ray for Textbooks – Available on Kindle Fire HD 8.9” and the Kindle app for iPad
Explore the most important terms in your textbook using X-Ray, including links to Wikipedia and YouTube content.

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Review all of your notes, highlights, and bookmarks in one place using Notebook. Mark and filter your most important items to study.

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Help

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› Provide Feedback

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› Protect your information by requiring a password on your Kindles if desired.
› Control how your Kindles are used with the

Distribute Kindle Content

› Wirelessly procure and distribute Kindle books to your organization's Kindles or any PC, Mac, iPad, iPhone, Android tablet or phone with the free Kindle app.
› Take advantage of apps from the Amazon Appstore for Android that you can buy and send directly to Kindle Fire tablets.
› Meet the unique needs of your users by organizing them into groups for a specific class, grade level, or corporate department to send relevant content and documents.
› Share information by uploading and distributing documents (.pdf, .doc, .docx) to
Safeguards & Boundaries

- Familiarize yourself with the Social Networking Policy for your institution
- Thoroughly explain boundaries to students
- iPad Etiquette
- Social Network Privacy Settings
- Monitor Closely
Tips on Planting Apple Seeds

empower yourself
engage your students
educate one another
empower yourself

• Mixing the old with the new, using old ideas and adding a twist.
• Look for gaps
• Brainstorm possible solutions
• Determine an appropriate platform
• If a platform doesn’t look quite right…
• Assignments you would want to actively participate in (chances are you will have to).
engage your students

• Ask them about programs/platforms they use
• Challenge them for ideas
• Solicit feedback before and after you launch
• If a platform doesn’t look quite right…
• Discover new platforms
• Develop new resources
• Advance markets
References

1 Lydia P. Howell, MD, Jesse P. Joad, MD, Edward Callahan, PhD, Gregg Servis, Mdiv, and Ann C. Bonham, PhD. “Generational Forecasting in Academic Medicine: A Unique Method of Planning for Success in the Next Two Decades”


3 Twitter. “About Twitter” Twitter Inc. 17 August 2012