Implementing KhanAcademy.org into your Classroom

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Today's Talk

- What is Khan Academy and who is Sal Khan?
- How does Eric use it in his classes?
- Question-Answer time.
- Join KhanAcademy.org and experiment/explore the website.



Let me get this out of the way at the beginning....





What is Khan Academy?

A non-profit educational website, created by Sal Khan in 2006.

According to KhanAcademy.org:

Our mission is to provide a free, world-class education for anyone, anywhere.

Who is Sal Khan?

- Born in 1976 near New Orleans, LA.
- Attended MIT, earning BS degrees in mathematics, electrical engineering, and computer science and later earned MS degrees in computer science and electrical engineering.
- Also earned an MBA from Harvard Business School.
- From 2003-2009, worked as a hedge fund analyst.
- In 2003, he began tutoring his cousin over the internet and eventually posted his videos on YouTube.com.
- His videos became so overwhelmingly popular that Sal quit his job in 2009 to develop Khan Academy.



Free

- Funded through donations with significant backing from:
 - ▶ The Bill & Melinda Gates Foundation
 - > Ann and John Doerr
 - ► Google
 - The Lemann Foundation (Brazil)

WHEN LIFE GIVES YOU FREE STUFF,



Khan Academy is not-for-profit and committed to remaining free. There are no ads on the website and there are no contracts to sign or subscription services to join.

World Class Education

- Subjects include:
 - ► Math
 - Physics
 - Biology
 - Economics
 - Art History
 - Computer Science
 - And much more!



Khan Academy has also partnered with NASA, MOMA, the College Board, MIT, the Stanford School of Medicine, NOVA Labs, and more for additional content.

For Anyone, Anywhere

- Khan Academy is translated into 36 languages, with full versions of their website available in Spanish, French, and Brazilian Portuguese.
- 4.7 million hits per day
- 860,000 visits per day
 - ▶ 56.8% from the US
 - ▶ 8.9% from India
 - > 2.5% from Canada
 - > 2.0% from South Korea
- ▶ Globally, ranked 1197th
- In the US, ranked 449th
 - Outranks CheapTickets.com, BBB.org, Geico.com, UFC.com, NY.gov, and RateMyTeachers.com



Math on Khan Academy

- Probably the most developed section of the entire website.
- Complete (or at least near complete) courses are available for:
 - "Early math" (grades K-2)
 - Grades 3-8
 - Arithmetic
 - Pre-Algebra
 - Probability & Statistics

- Algebra 1 and 2
- Geometry
- Trigonometry
- Pre-Calculus
- Differential Calculus



- Courses can be learned in a recommended sequence or you can control the order of topics.
- Thousands of new problems have recently been added that align with the <u>Common Core</u>. (This is something they're still working on!)

Assigning and Grading Skills

- Eric typically assigns 2-4 skills (usually 3) per night.
 - If 3 skills assigned:
 - 40% (complete one skill) + 30% (complete two skills) + 20% (complete three skills) + 10% (if all skills completed in 15 problems total)
 - > Or, 75% if the student worked 45 minutes (or more) on the assigned skills
 - Eric will take whichever score is higher:
 - So, if a student completes two skills (70%), but works for 40 minutes
 (40/45 × 75% = 67%) then the student will receive a 70% in the grade book.
- Eric pairs skills with a <u>formal lesson</u> in class that reflects the knowledge needed.
- Videos on the website supplement Eric's lessons.
- Easy to transition into a "flipped classroom" set-up (if you want).



I ALSO LIKE TO LIVE DANGEROUSLY

Teacher ("Coach") Resources

Coaches can organize students into classes and assign skills to an entire group or just individual students.

COOL TEACHER

RESOURCES

- Coaches have access to a student's "dashboard," where they can view a students progress such as:
 - Skills practiced.
 - Problems attempted (how many correct/incorrect and which ones).
 - Videos watched (and how long they were watched).
 - ▶ How long students have <u>actively</u> worked (and when they worked).
 - Which topics students have demonstrated a level of understanding
 - (or lack of understanding).
 - Struggling vs. Competency vs. Mastery
 - > Points earned through website interaction.
- A guide to Khan Academy coach reports.

Los Altos, California

- K-8 school district near San Francisco.
- Typically, a very high performing school district (even among peer schools with similar demographics).
 - Consistently ranked in the top 1% of all school districts in California.
 - ▶ 3 of the 9 schools have been recognized nationally for excellence.
 - ▶ All 9 schools have been recognized in California for excellence.
- Piloted several Khan Academy programs and gave input on how to improve the website.
 - > 2010-2011: 3 teachers and 120 students (struggling grade 7 only)
 - 2011-2012: ~50 teachers and 1000+ students (all grades 5-8)
 - Currently, it is used district wide, grades 4-8.
- 7:16 <u>clip</u> on the program.



Start Your KhanAcademy.org Account!

- You can sign-up using:
 - ► Facebook
 - ► Google+
 - Any e-mail
- Explore the website Eric mentioned a lot, but there is a bunch of neat stuff to explore!
 - Lots of neat topics to learn (or relearn) even for adults!
 - Eric enjoys the Computer Science section.

If you get a chance, watch Sal Khan's <u>TED Talk</u> (20 minutes) from 2011.

I have no special talent. I am only passionately curious.

ALBERT EINSTEIN



Presentation and Contact Info

- ▶ If you want the PowerPoint or any of Eric's resources, just contact him.
 - Explore links and watch videos we didn't use today. Lots more information!
 - ▶ Take a look at the website. Lots of cool things going on and it is updated regularly.
- Eric's contact information:
 - EBray@gow.org (preferred)
 - ▶ 716-687-2017

