

Evolution Of a truly open arithmetic MOOC



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Image Source: <http://www.flickr.com/photos/danielrowe/5743445752/>

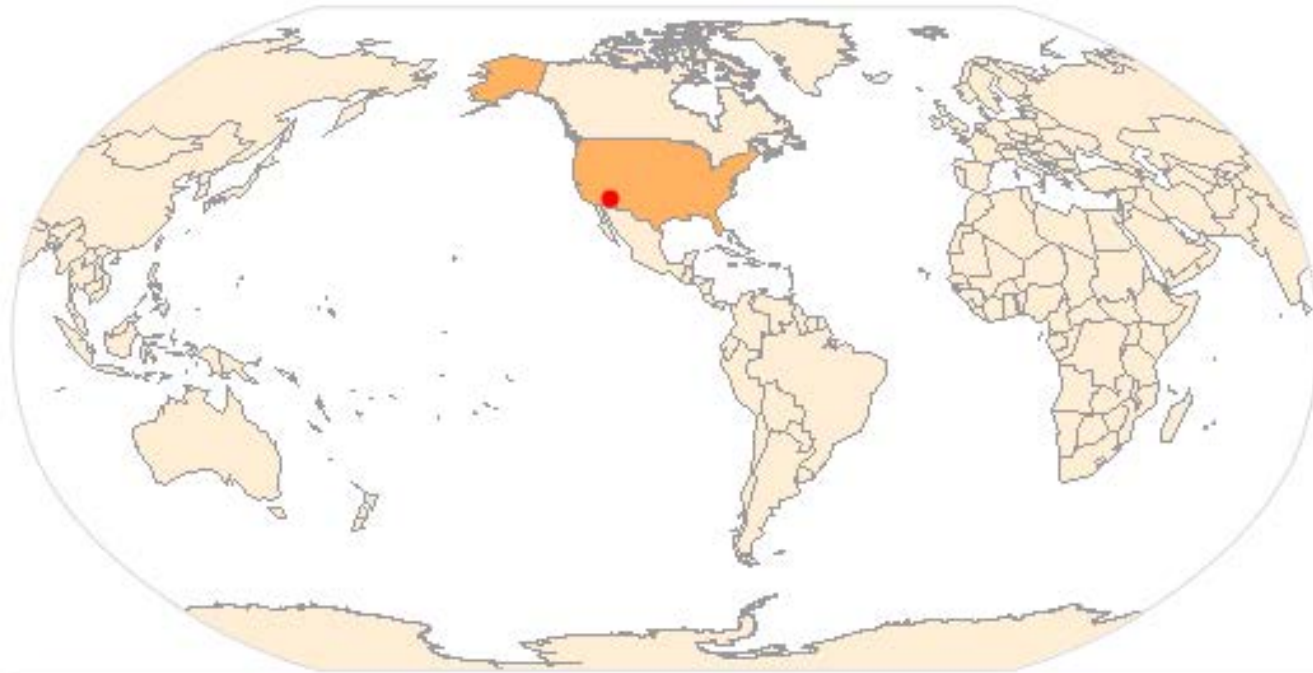
Location:

[Hide world map](#)

[Show coordinates](#)



Scottsdale, Arizona



[Satellite Image »](#)

Image Source: Wolfram Alpha



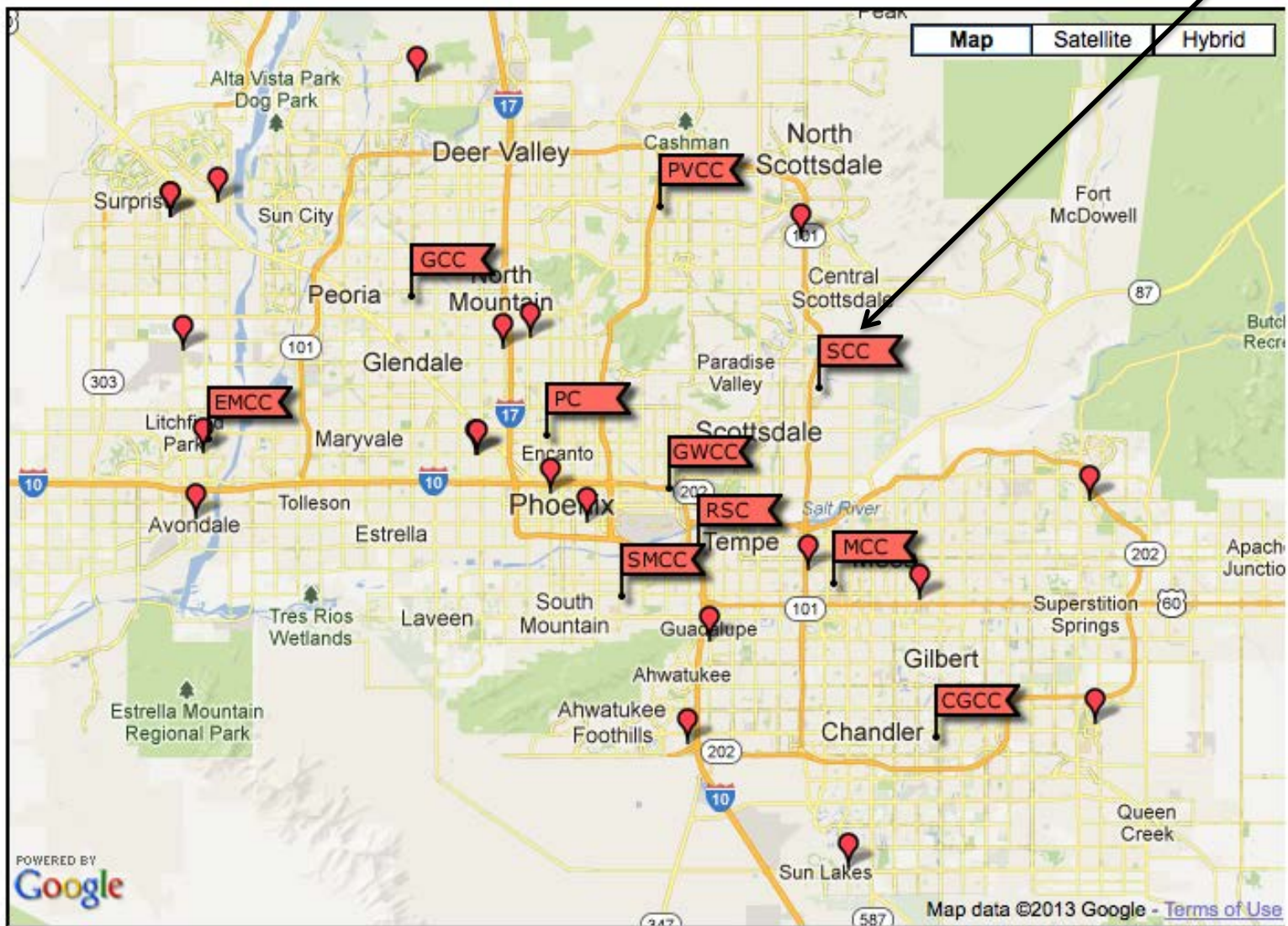
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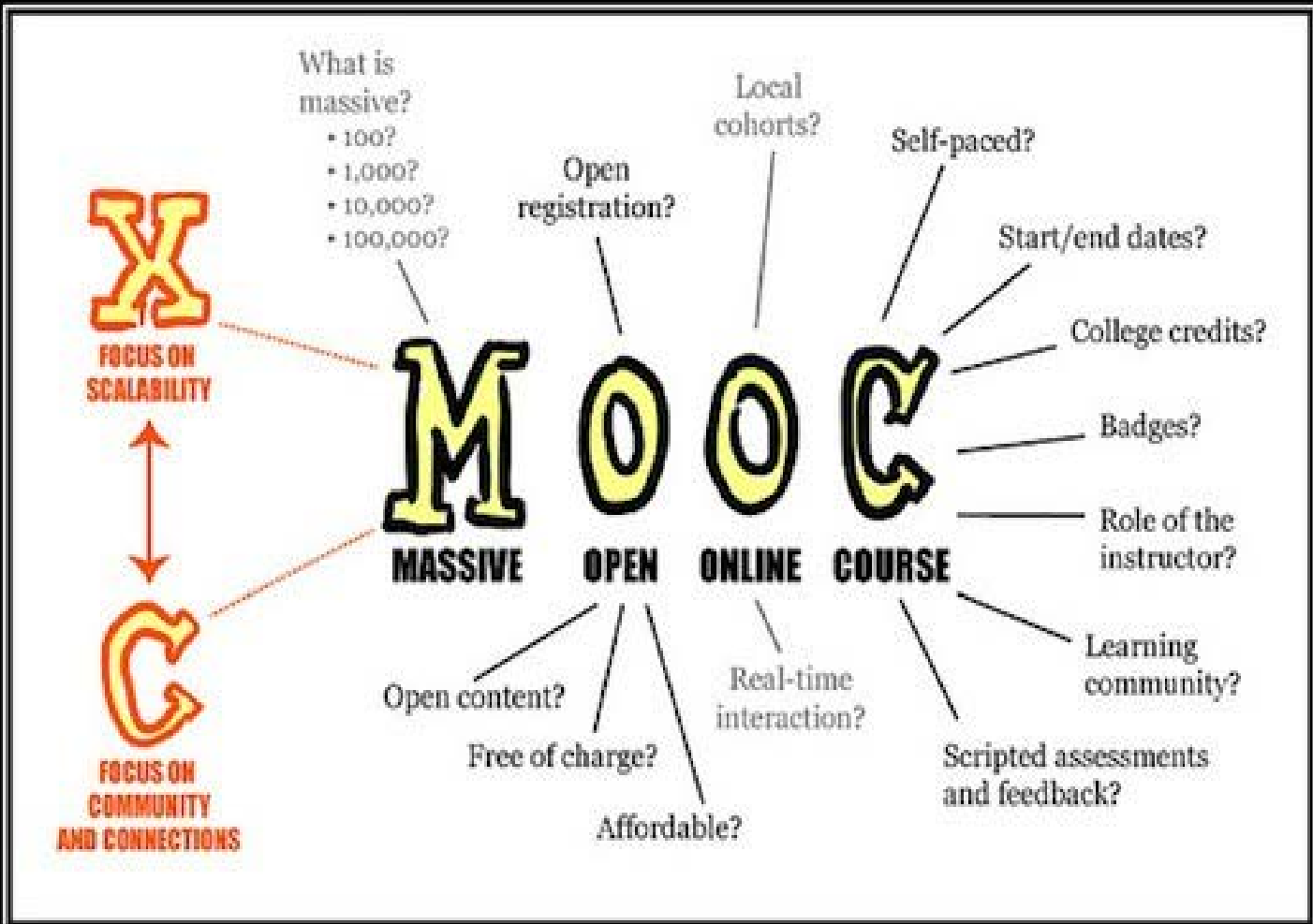
Scottsdale Community College



Image Source: Donna Gaudet

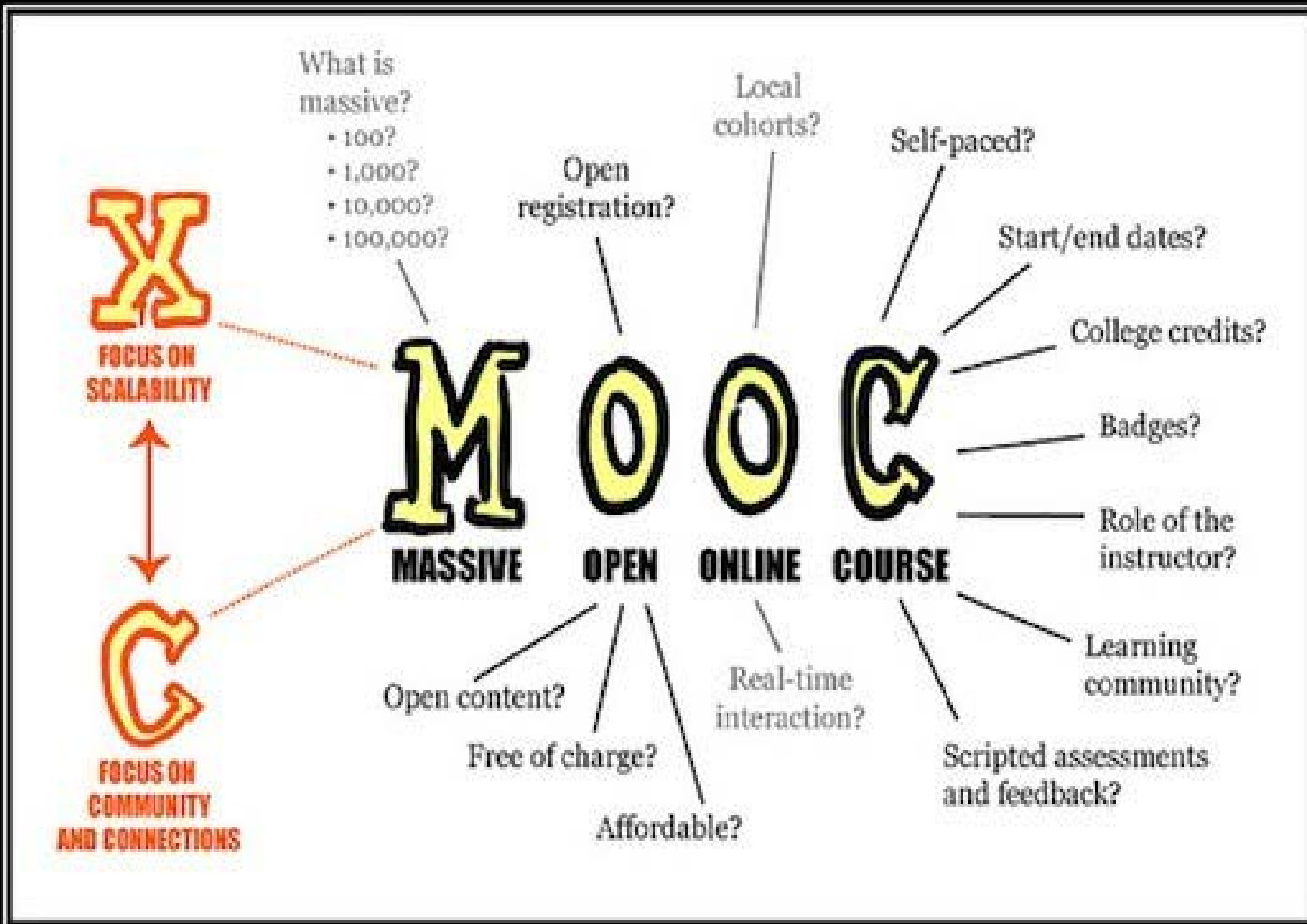
One of 10 Colleges – Maricopa Community College District





M ♦ O ♦ O ♦ C

Every letter is negotiable.



Who?

What?

When?

Where?

Why?

M ♦ O ♦ O ♦ C

Every letter is negotiable.





This is a paid advertisement from The Bovine Community reminding you that they have feelings too.

Image Source: http://www.flickr.com/photos/tracy_n_brandon/346828878/

MOOC GROWTH RATE

Number of MOOCs offered vs. Year

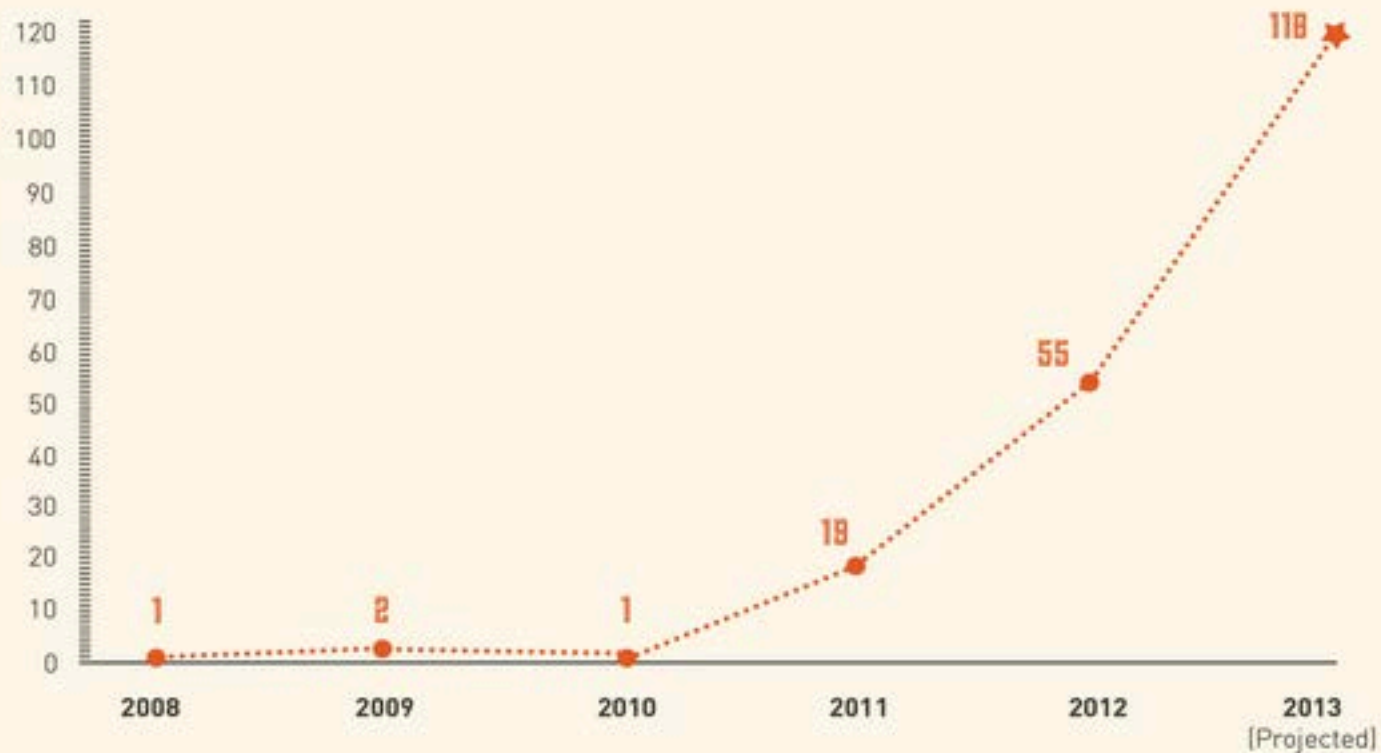


Image Source:

<http://elearningindustry.com/subjects/general/item/438-the-rise-and-history-of-moocs-infographic-prezi-presentation>

MAJOR MOOC PLAYERS

coursera

FUNDING
\$22 Million

COURSES
210

PARTICIPATING SCHOOLS
37

CERTIFICATION
Yes, signed by instructor,
University name
not included

UDACITY

FUNDING
\$15 Million

COURSES
15

PARTICIPATING SCHOOLS
0

CERTIFICATION
Yes, based on placement
after testing

edX

FUNDING
\$60 Million

COURSES
9

PARTICIPATING SCHOOLS
6

CERTIFICATION
Yes, edX and University
name included

NOTE: Udemy and 2U are two other educational start-ups often associated with MOOCs, but since both charge for access to courses, they are not listed here as true MOOCs.

Image Source:

<http://elearningindustry.com/subjects/general/item/438-the-rise-and-history-of-moocs-infographic-prezi-presentation>

Image Source: <http://www.flickr.com/photos/auvet/133562765/>

M assive



50

100

1000

10,000

23000

23000


160,000



SCOTTSDALE
COMMUNITY COLLEGE

500

Basic Arithmetic

A black and white cow is the central focus of the image, looking directly at the camera. The cow has a white blaze on its face and white patches on its body. The background is a bright blue sky with scattered white clouds. A white speech bubble is positioned on the left side of the image, containing text.

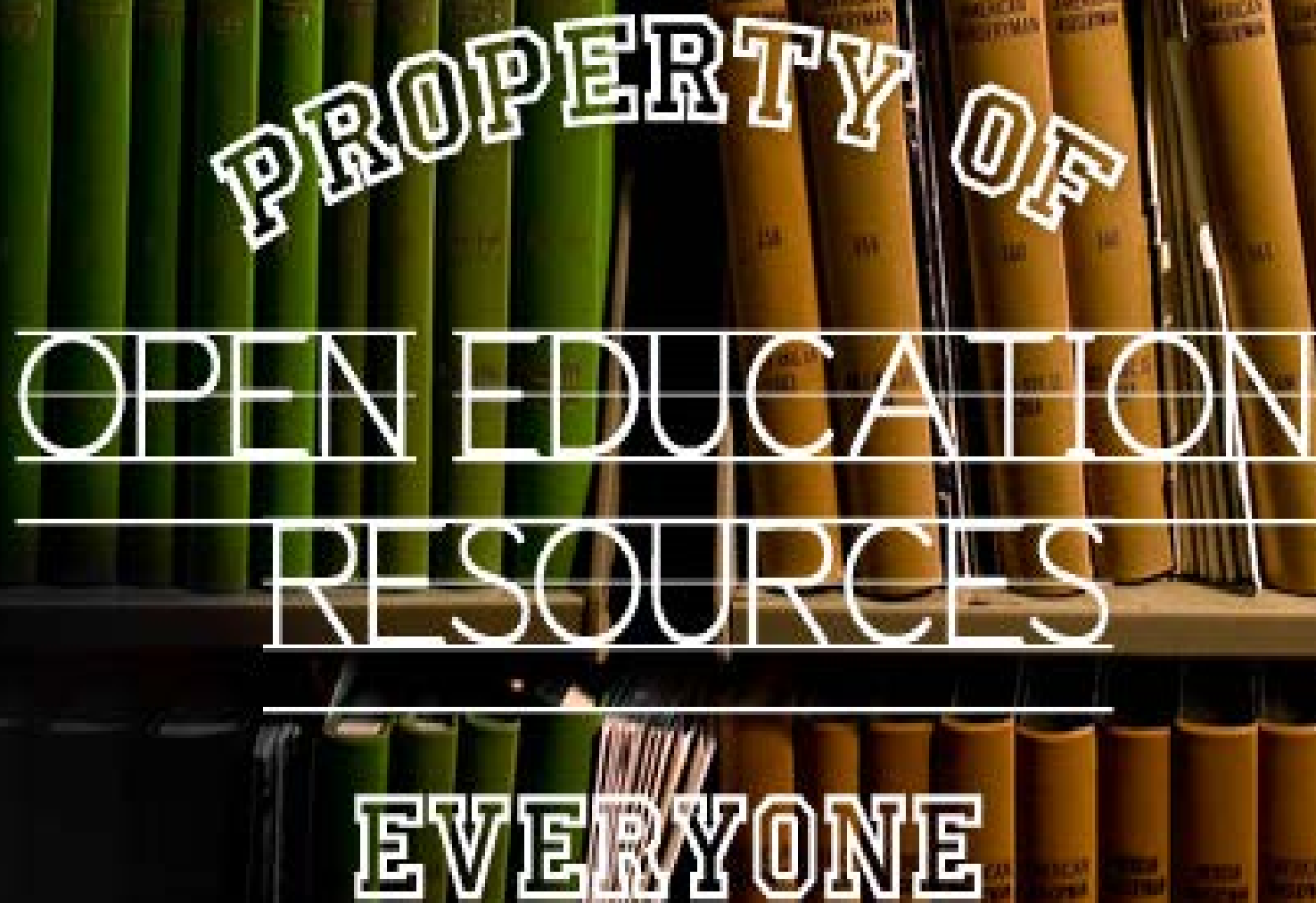
Does this
MOOC make my
CLASS look BIG?

@donagee

Image Source: <http://www.flickr.com/photos/qcom/6872493830/>

Open



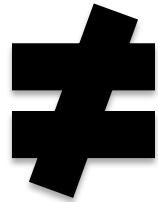


PROPERTY OF
OPEN EDUCATION
RESOURCES
EVERYONE

Image Source: <http://www.flickr.com/photos/opensourceway/6554315179/>

What does OPEN really mean?

Massively **Open** Online Course



Open Educational Resources



Basic Arithmetic

Scottsdale Community College

Feb 4, 2013 to May 3, 2013

Class Full

Mailing List



Provides video lectures



Provides opportunities to interact with the instructor or students



Uses discussion forums



You will not be given a final grade in this course

Basic Arithmetic – The Start

Feb 4 – May 3, 2013

Registration Stats | **Basic Arithmetic**

Locations



Registration Stats | **Basic Arithmetic**

Locations

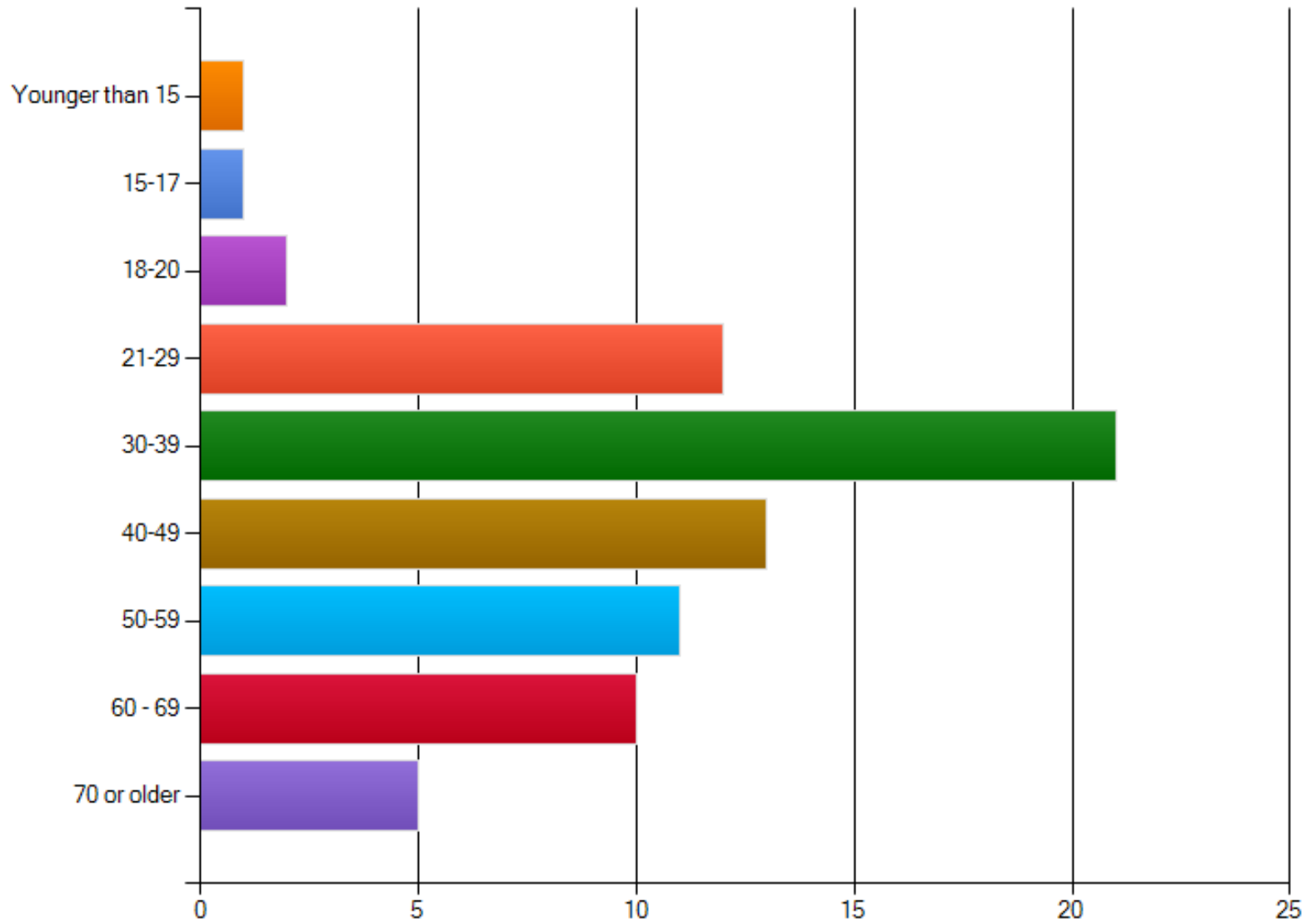


500 Students from around the world!



Image Source: <http://www.flickr.com/photos/25521202@N02/8251715282/>

Which category below includes your age?



What category below contains the highest level of education you have completed?

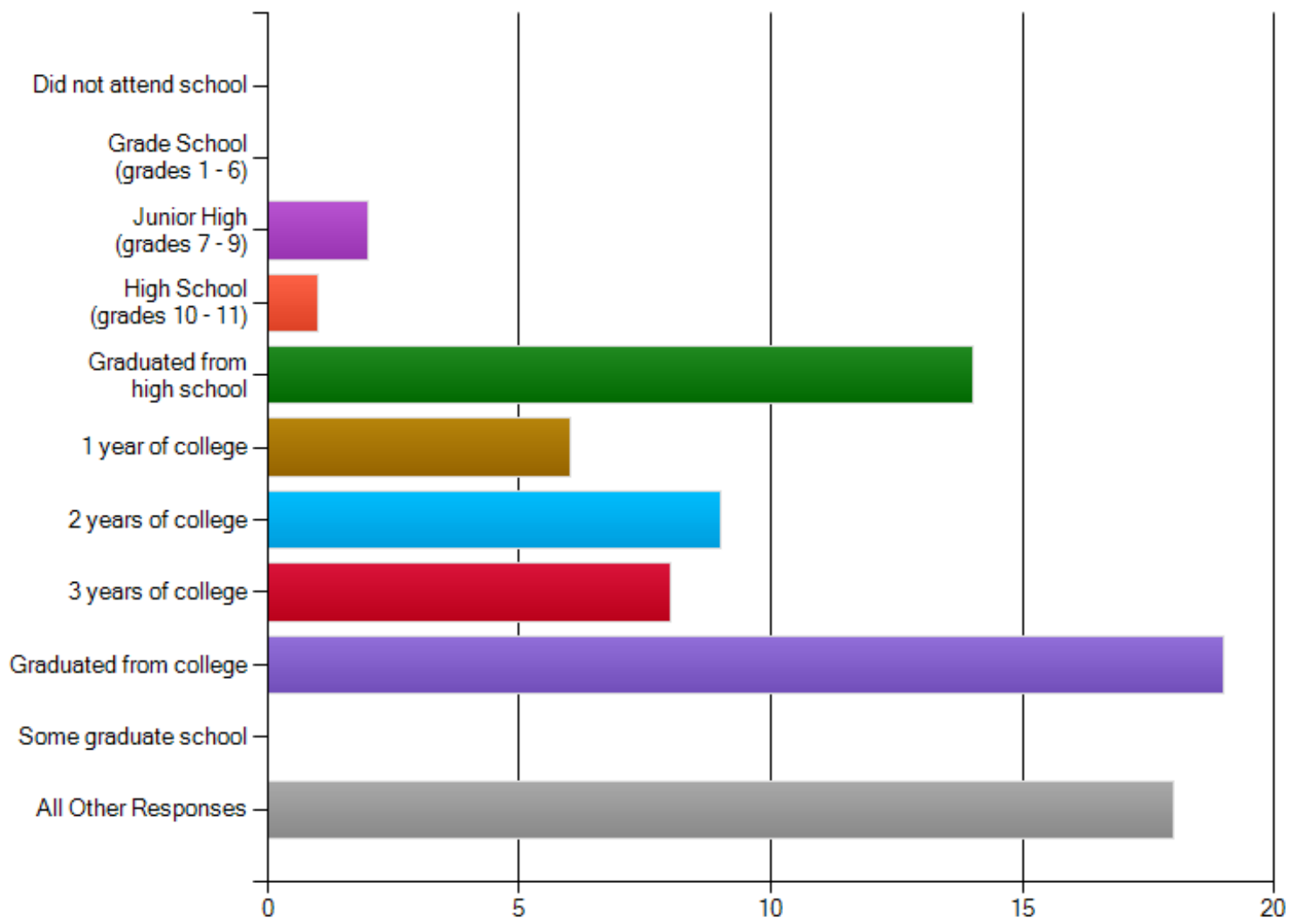
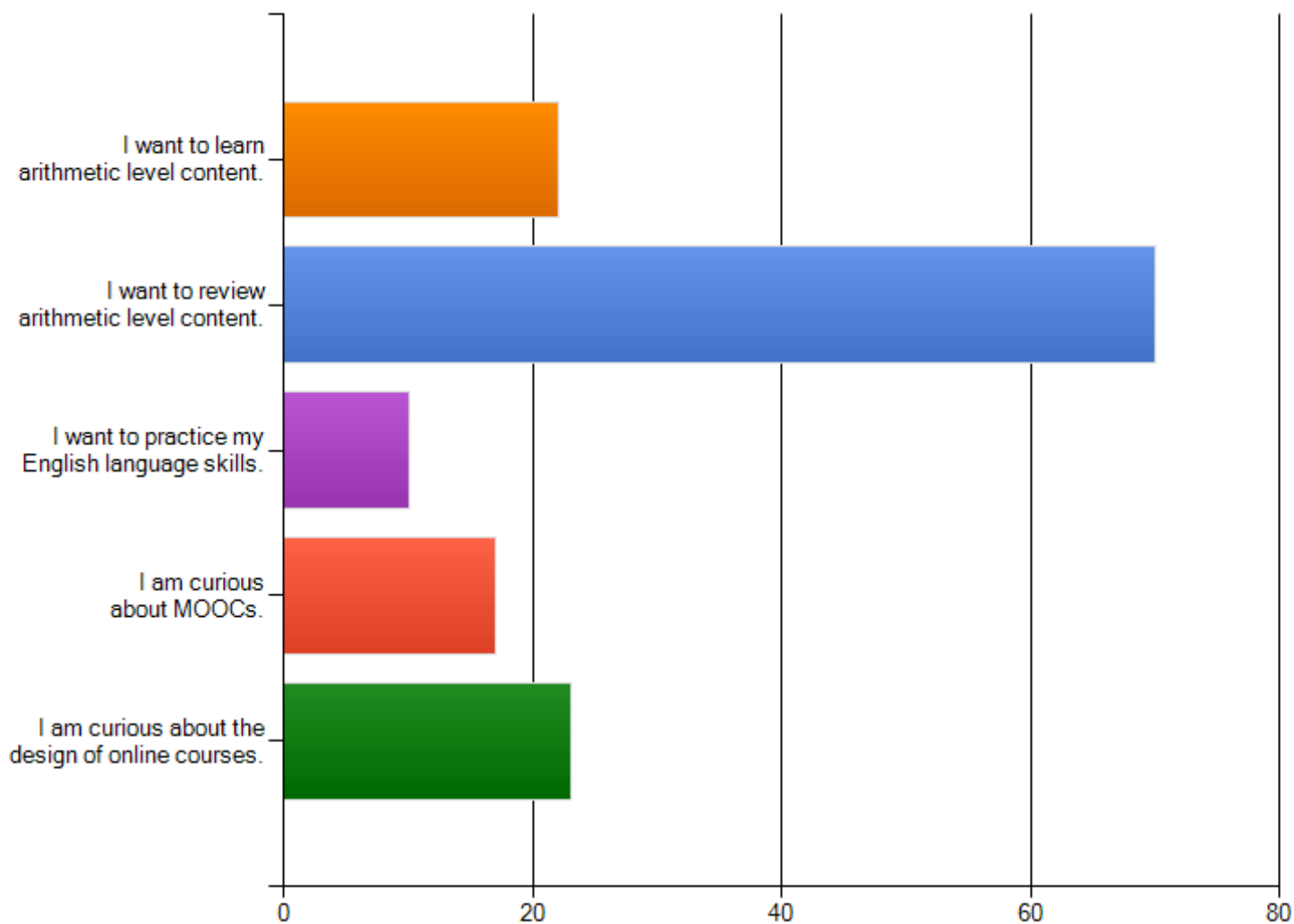


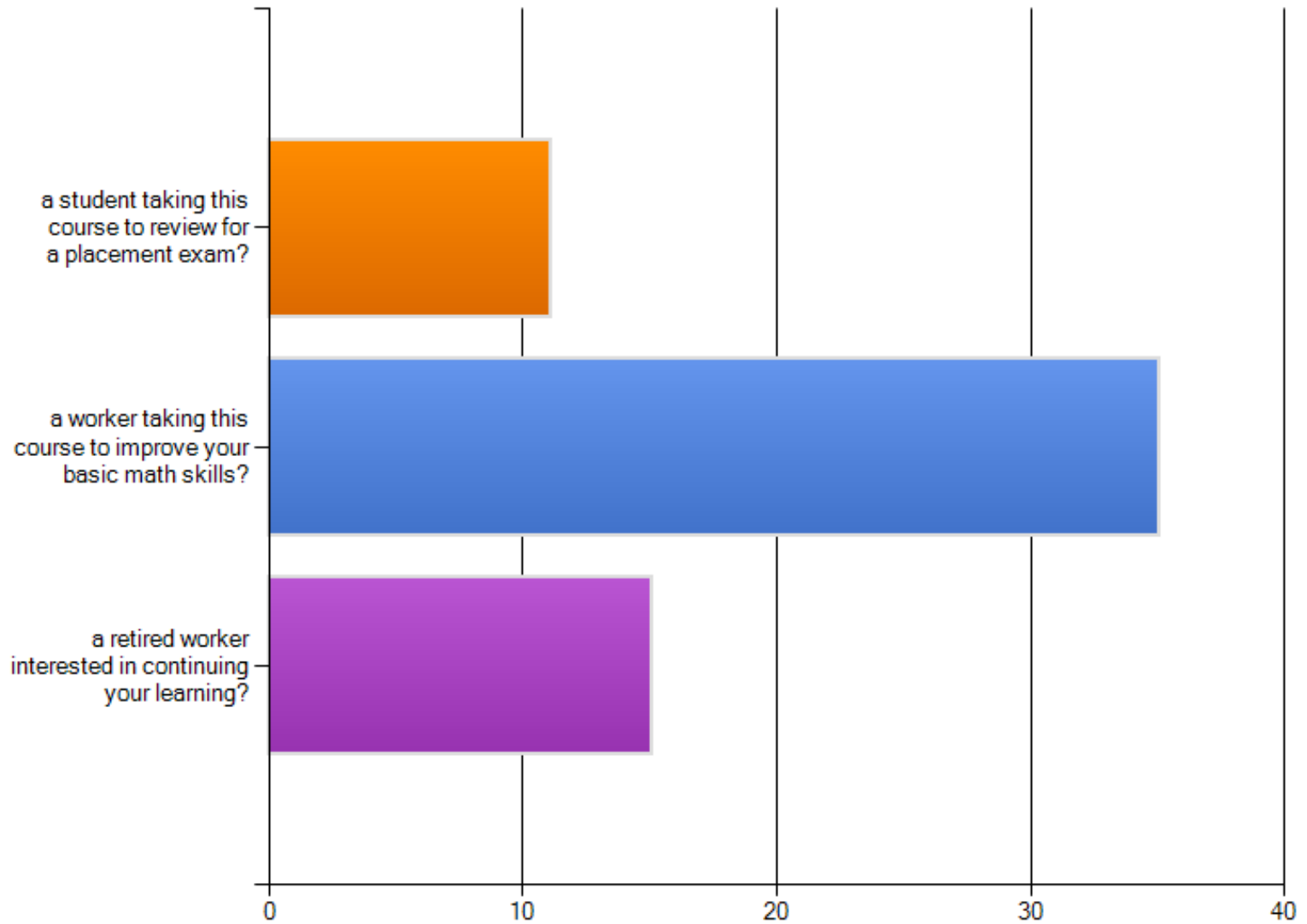


Image Source: <http://www.flickr.com/photos/wingedwolf/5471047557/>

What is your motivation for enrolling in this course? (Select all that apply)



Are you...



The content areas covered in this course include: Whole Numbers, Fractions, Decimals, Percents, Ratios & Proportions, Statistics, Measurement, Geometry, & Signed Numbers. Are you planning to:

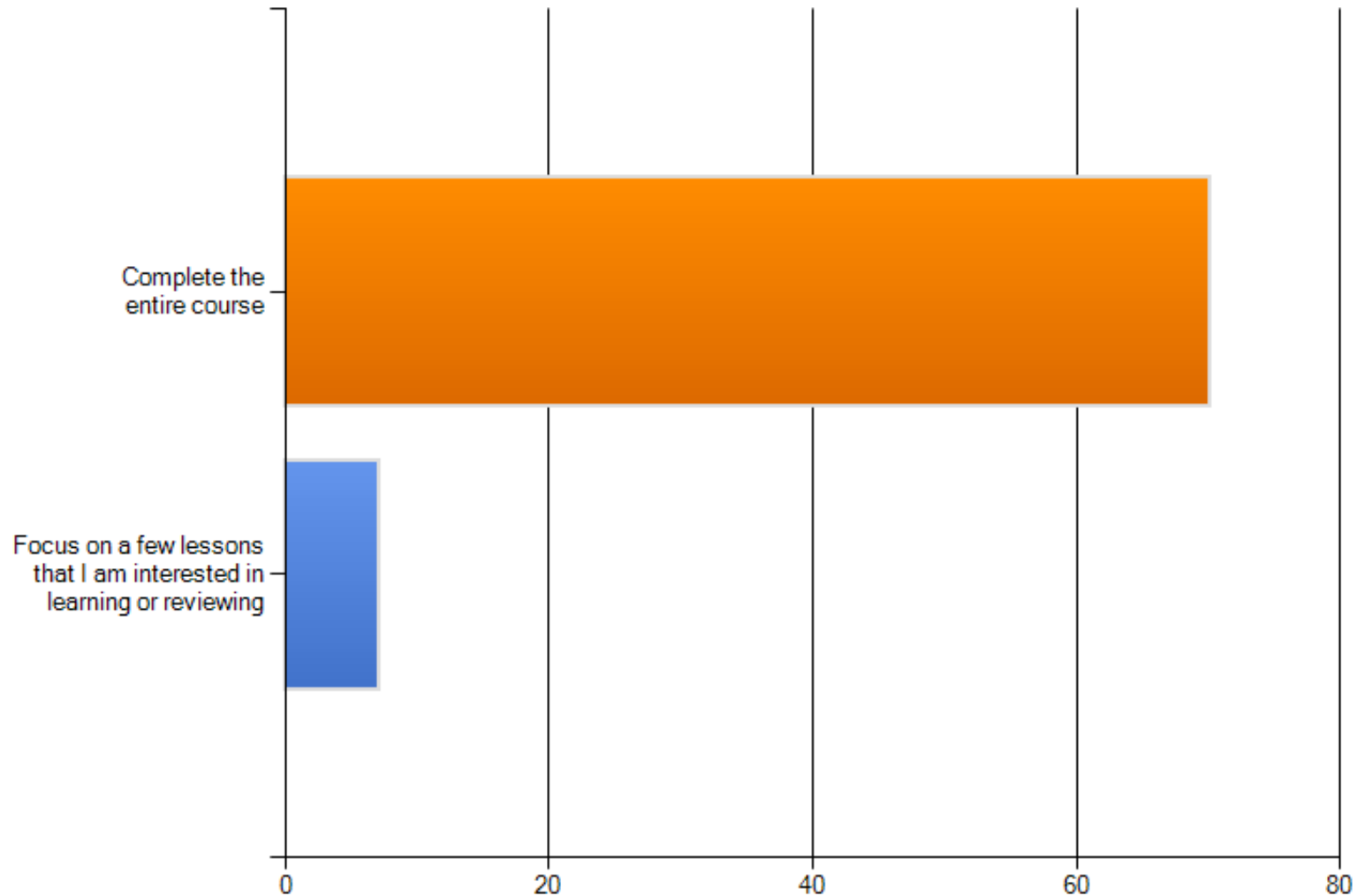




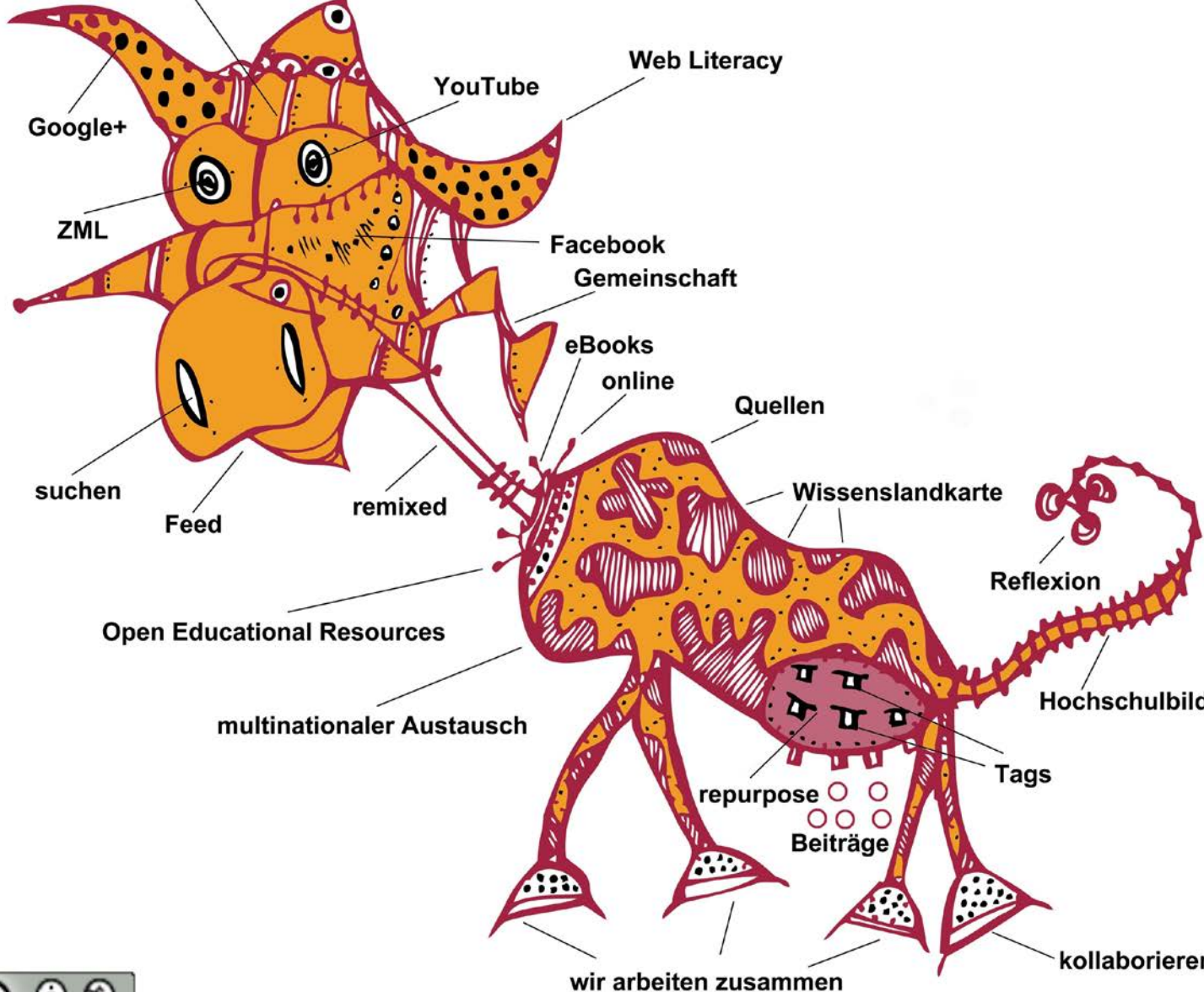
Image Source: <http://www.flickr.com/photos/purplemattfish/3918004964/>



MOOC!!!!!!

selbstorganisiertes
Wissensmanagement

ExpertInnen



Google+

YouTube

Web Literacy

ZML

Facebook
Gemeinschaft

eBooks
online

Quellen

suchen

Feed

remixed

Wissenslandkarte

Reflexion

Open Educational Resources

multinationaler Austausch

Hochschulbildung

repurpose
Beiträge

Tags

wir arbeiten zusammen

kollaborieren



The C's of MOOC Design

Content

Communication

Checkup

Certification

Content

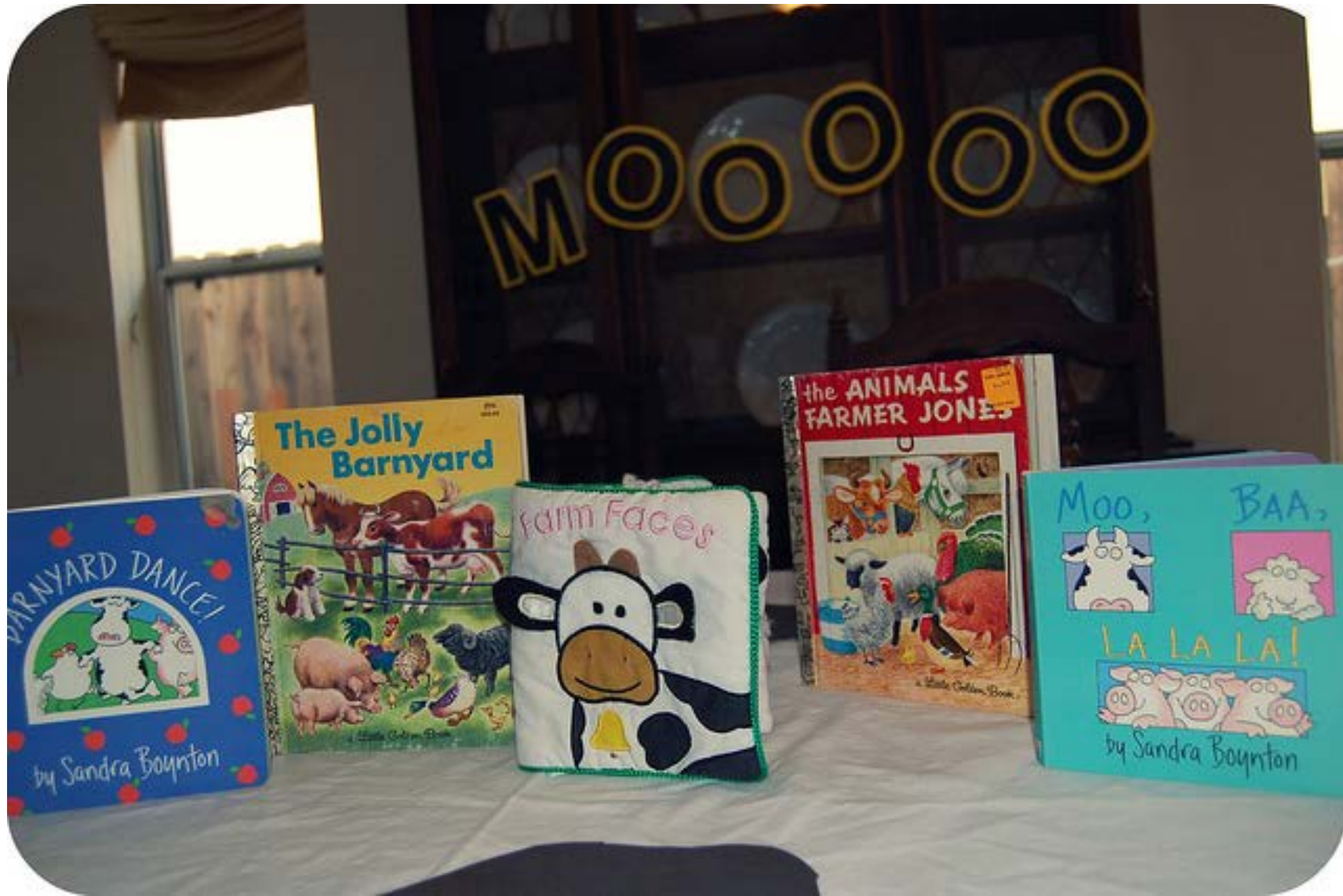


Image Source: <http://www.flickr.com/photos/meganmills/4874175864/>

Structured

Structured

Interactive

Structured

Interactive

Complete

12 Lessons covering all content for the course

Basic Arithmetic

Lesson 1 – Whole Numbers

MINILESSON

WHOLE NUMBERS, PLACE VALUE, AND ROUNDING

Whole numbers are often referred to as “the counting numbers plus the number 0”. The first few *whole numbers* are written as: 0, 1, 2, 3, 4, 5, 6, 7, ...

BILLIONS			MILLIONS			THOUSANDS			ONES		
100	10	1	100	10	1	100	10	1	100	10	1



Example 1: Place each number in the chart above. What place value does the digit “0” occupy in each number?

a. 25,032

b. 105,243

c. 12, 340,412

Workbook with Interactive Videos

BILLIONS			MILLIONS			THOUSANDS			ONES		
100	10	1	100	10	1	100	10	1	100	10	1

Place each number in the chart above. What place value does the digit "0" occupy in each number?

a. 25,032

b. 105,243

c. 12,340,412

i want to identify then the place value
occupied by the digit zero



0:09 / 2:10



Online Practice and Assessment

Questions

- Q 1 (0/5)
- Q 2 (0/5)
- Q 3 (0/5)
- Q 4 (0/5)
- Q 5 (0/5)
- Q 6 (0/5)
- Q 7 (0/5)
- Q 8 (0/5)
- Q 9 (0/5)
- Q 10 (0/5)
- Q 11 (0/5)
- Q 12 (0/5)
- Q 13 (0/5)
- Q 14 (0/5)
- Q 15 (0/5)
- Q 16 (0/5)
- Q 17 (0/5)

Consider the number 434,85

Write the digit for the given place value in the whole number above.

ten thousands:

hundreds:

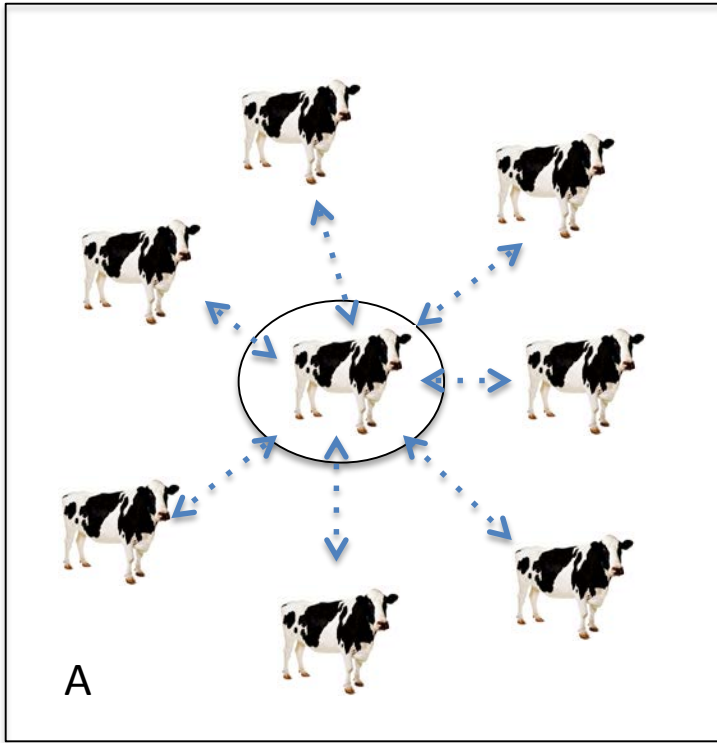
ones:

Get help: [Worked Example 1](#)

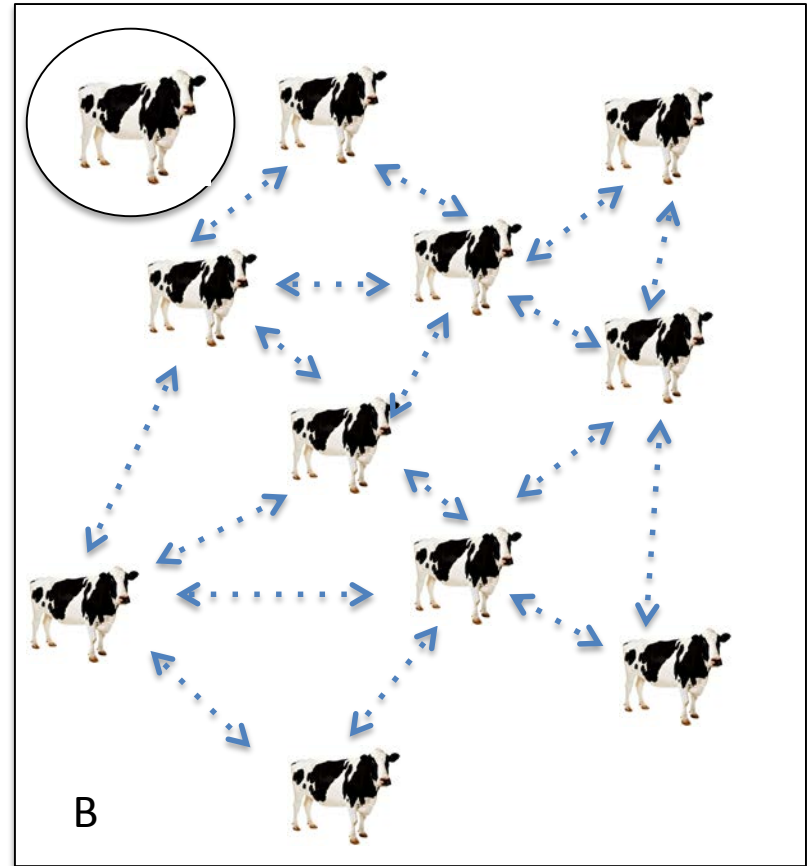
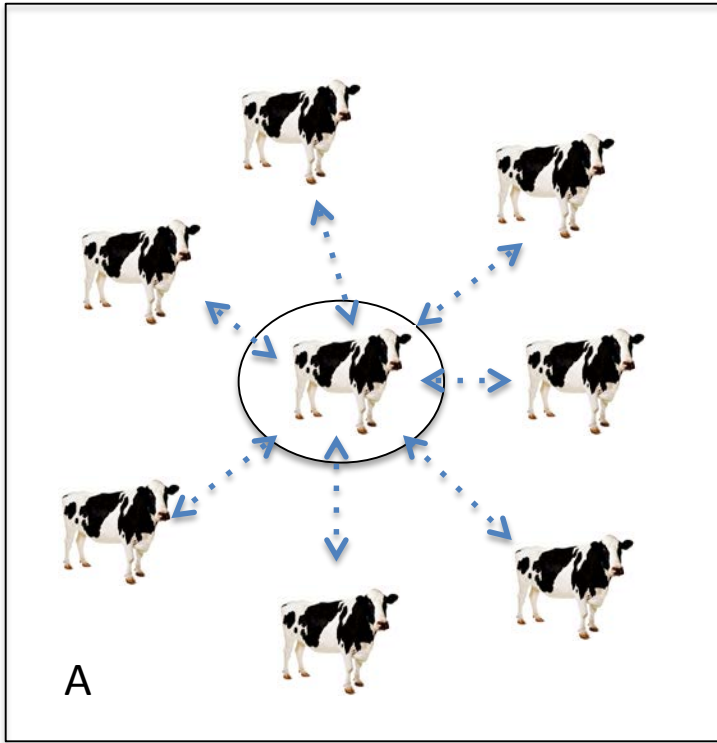
Points possible: 5
This is attempt 1 of 3.

Submit

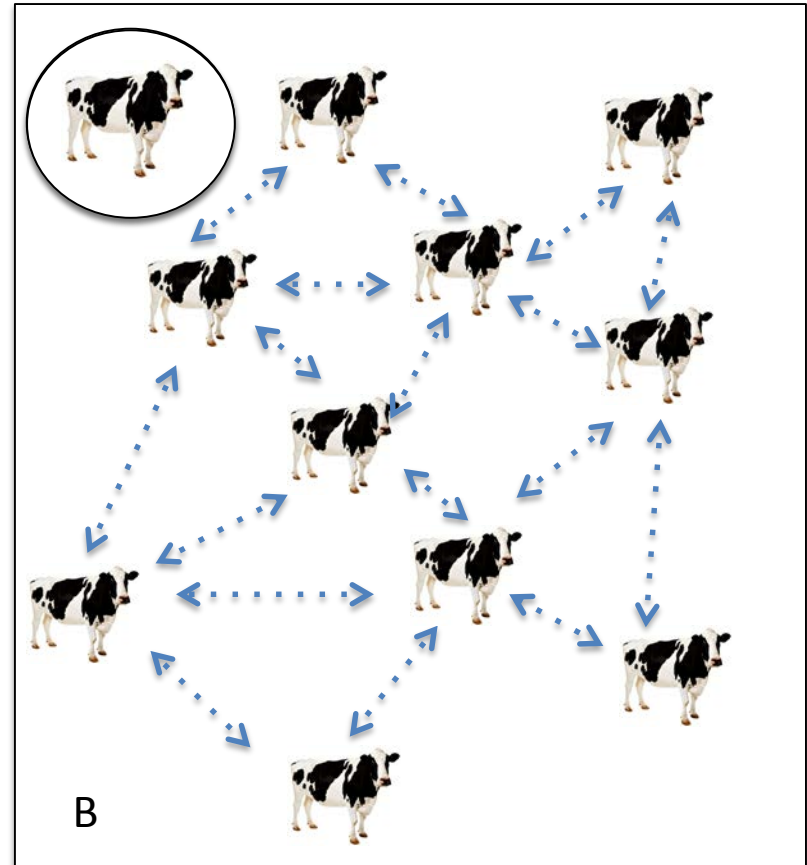
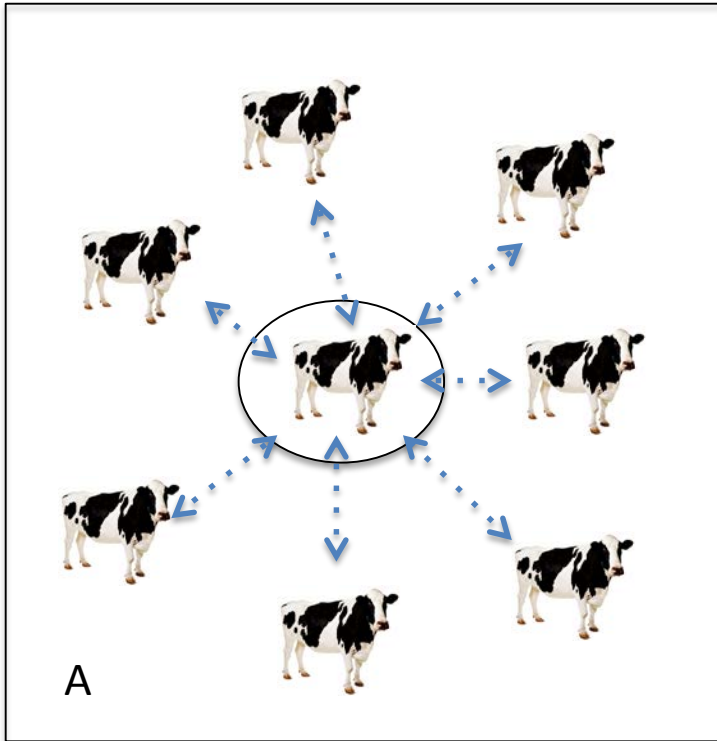
Communication



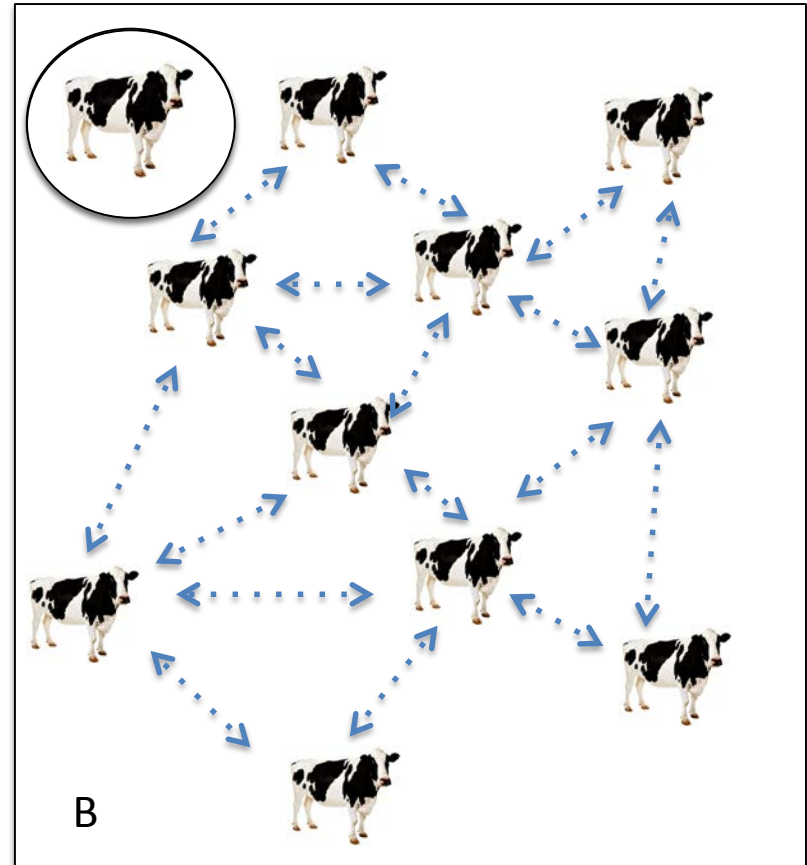
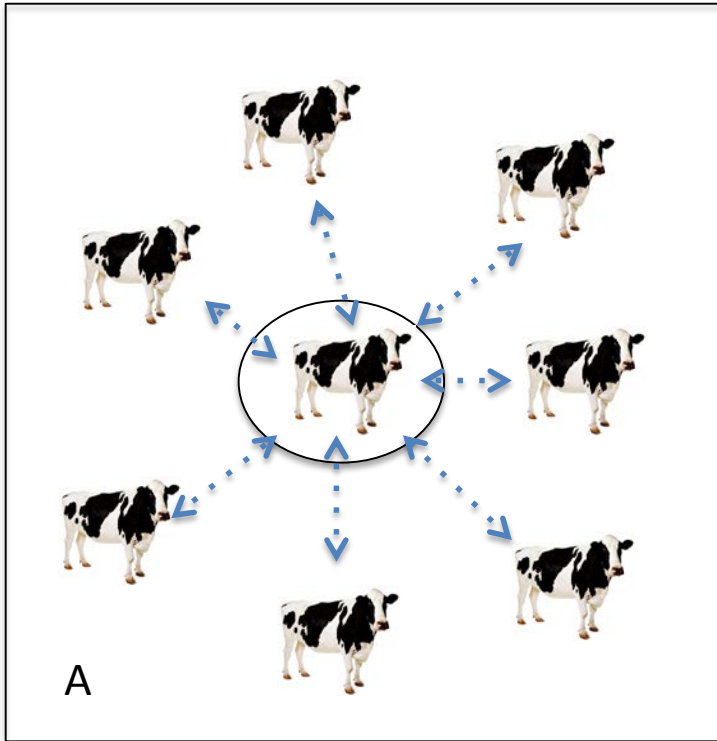
Communication



Communication



Communication



Communication



Make a New Set of Groups



View Course Roster

Group Pages

Discuss MOOC Pedagogy

[Discuss MOOC Pedagogy](#)

Students - Group

[Students - Group 1](#)

[Students - Group 10](#)

[Students - Group 2](#)

[Students - Group 3](#)

[Students - Group 4](#)

[Students - Group 5](#)

[Students - Group 6](#)


[Students - Group 7](#)

[Students - Group 8](#)

[Students - Group 9](#)



 [Make a New Set of Groups](#)

 [View Course Roster](#)

Group Pages

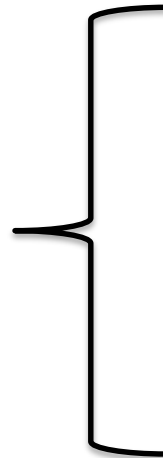
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Automatically Placed



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- [Students - Group 7](#)
- [Students - Group 8](#)
- [Students - Group 9](#)

Self-Enroll →

Automatically Placed {

My role in this class is that of designer and coordinator. I am kind of like the person that takes care of, say, a soccer field and gets it ready for practice and play. I will not be able to respond to individual emails and messages about the class but I will be lurking around the discussion boards and participating there.







Image Source: <http://www.flickr.com/photos/lipstickproject/7324730764/>







Check

Auto or Self Grading

Auto or Self Grading

Score on last attempt:  3.3 out of 5 (parts:  1.67/1.67,  1.67/1.67,  0/1.66)

Score in gradebook:  3.3 out of 5 (parts:  1.67/1.67,  1.67/1.67,  0/1.66)

[Reattempt last question](#)

[Try another similar question](#)

Auto or Self Grading

Solution Files

Auto or Self Grading

Solution Files

YOU TRY PROBLEMS - UPDATED ANSWERS

 [Updated Answers - You Try Problems from Student Workbook Appendix A](#)

ANSWERS TO END OF LESSON ASSESSMENTS

In the workbook, you will find a short assessment at the end of each lesson. Completion of these assessments is not part of the recommended lesson flow but is certainly an option for you if you so choose. The answers to these problems are below. Keep in mind that only the online tests in MathAS are counted toward your overall online percentage for the class.

 [Answers - End of Lesson Assessments from Student Workbook](#)

Auto or Self Grading

Solution Files

Final results

Auto or Self Grading

Solution Files

Grade Book Student Detail

()

Final

Item	Possible	Grade	Percent
L1 - HW	200 (Not Counted)	-	0%
L1 - QUIZ	100 (Not Counted)	-	0%
L1 - TEST	75 pts	-	0%
L2 - HW	200 (Not Counted)	-	0%
L2 - QUIZ	100 (Not Counted)	-	0%
L2 - TEST	75 pts	-	0%
L3 - HW	200 (Not Counted)	-	0%
L3 - QUIZ	100 (Not Counted)	-	0%
L3 - TEST	75 pts	-	0%

Auto or Self Grading

Solution Files

Final results

Certification

Basic Arithmetic

*Completion Statement

May 1, 2013

Student Name:

Student Email:

Congratulations on successful completion of the *Massively Open Online Course: Basic Arithmetic* offered from February 4 – May 3, 2013. In order to complete the course, students were asked to watch videos, complete exercises both online and in a workbook, and take 12 lesson tests and one final test.

My records show that you earned the scores below on graded assignments:



Basic Arithmetic

Scottsdale Community College

Feb 4, 2013 to May 3, 2013

Class Full

Mailing List



Provides video lectures



Provides opportunities to interact with the instructor or students



Uses discussion forums



You will not be given a final grade in this course

Basic Arithmetic - Results

The Potential...500 Students!

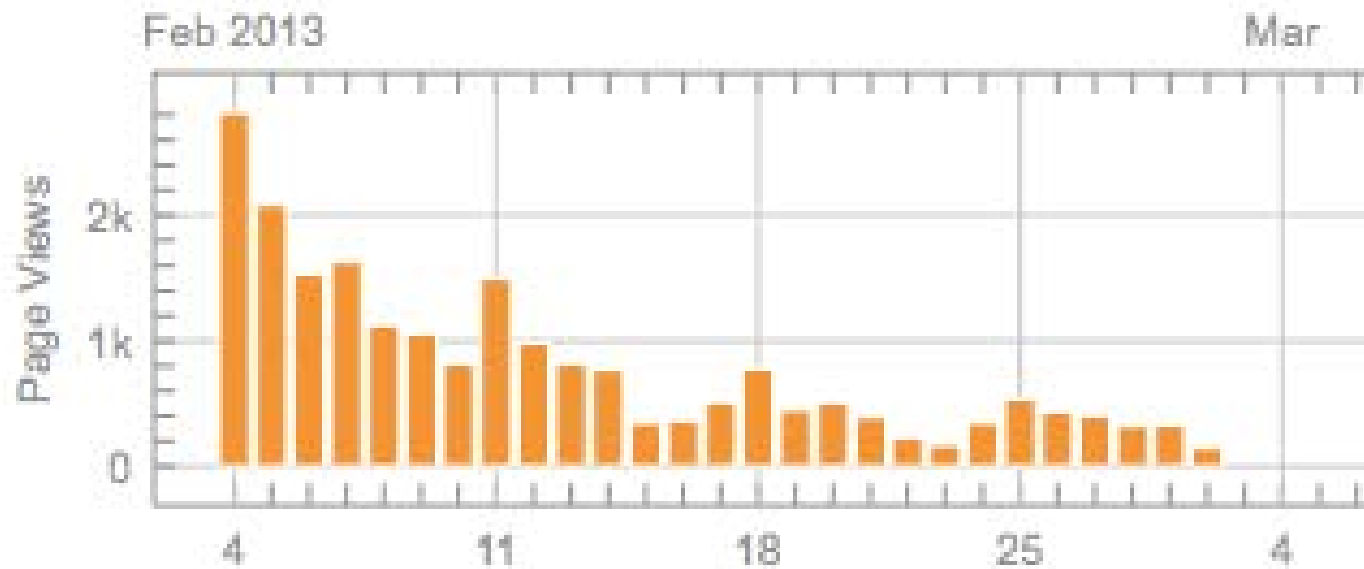
[Registration Stats](#) | **Basic Arithmetic**

Locations



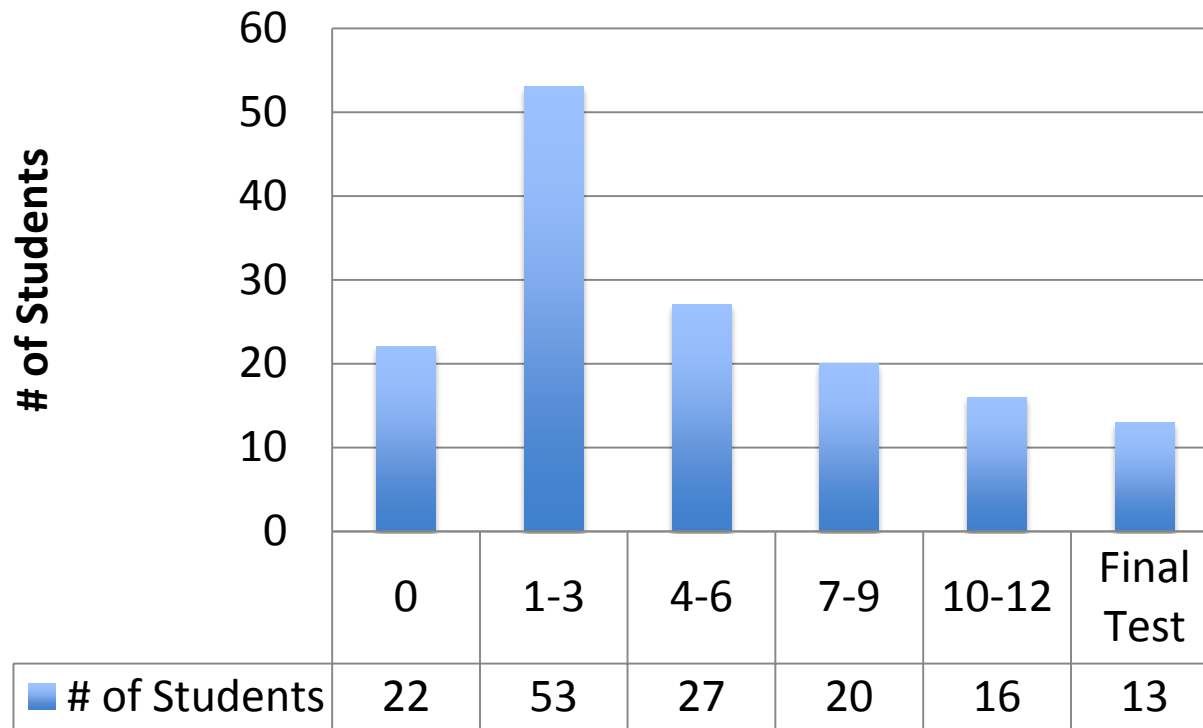
The Reality...

Activity	Participation
Signed up	512
Orientation Quiz	103
Created MathAS Account	75
Completed Lesson 1	53



The Final Stats...Lesson Completion

of Lessons Completed (75 students)



%	29	71	36	27	21	17
---	----	----	----	----	----	----

The Final Stats...Course Completion

Course Completion Out of Those Who...	%
Signed up	2.5%
Completed the orientation quiz	12.6%
Created a MathAS account	17.3%
Completed Lesson 1	24.5%

Lessons Learned...Future Offerings

Lessons Learned...Future Offerings

- Enrollment Size – increase to 1000

Lessons Learned...Future Offerings

- Enrollment Size – increase to 1000
- Decrease duration of class (13 weeks to 6 weeks)

Lessons Learned...Future Offerings

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- Advertise Certificate of Completion early on

Lessons Learned...Future Offerings

- Enrollment Size – increase to 1000
- Decrease duration of class (13 weeks to 6 weeks)
- Advertise Certificate of Completion early on
- Leave discussion groups all together to promote more interaction and sense of community

Course Completion...after changes

Cohort	%
Summer 2013	19/350 = 5.4%
Fall 2013	41/727 = 5.6%

Including at least 4 current SCC students in the Fall Cohort...

Och, aye...



MOOC

1. Help Students learn arithmetic


1. Help Students learn arithmetic

2. SCC Enrollment Potential

1. Help Students learn arithmetic

2. SCC Enrollment Potential

3. Learn about & investigate MOOCs

A black and white cow is the central focus of the image, looking directly at the camera. The cow has a white blaze on its face and white patches on its body. The background is a bright blue sky with scattered white clouds. A white speech bubble is positioned on the left side of the image, containing text.

What about all the
MOOC hype and
hoopla over the past
year?

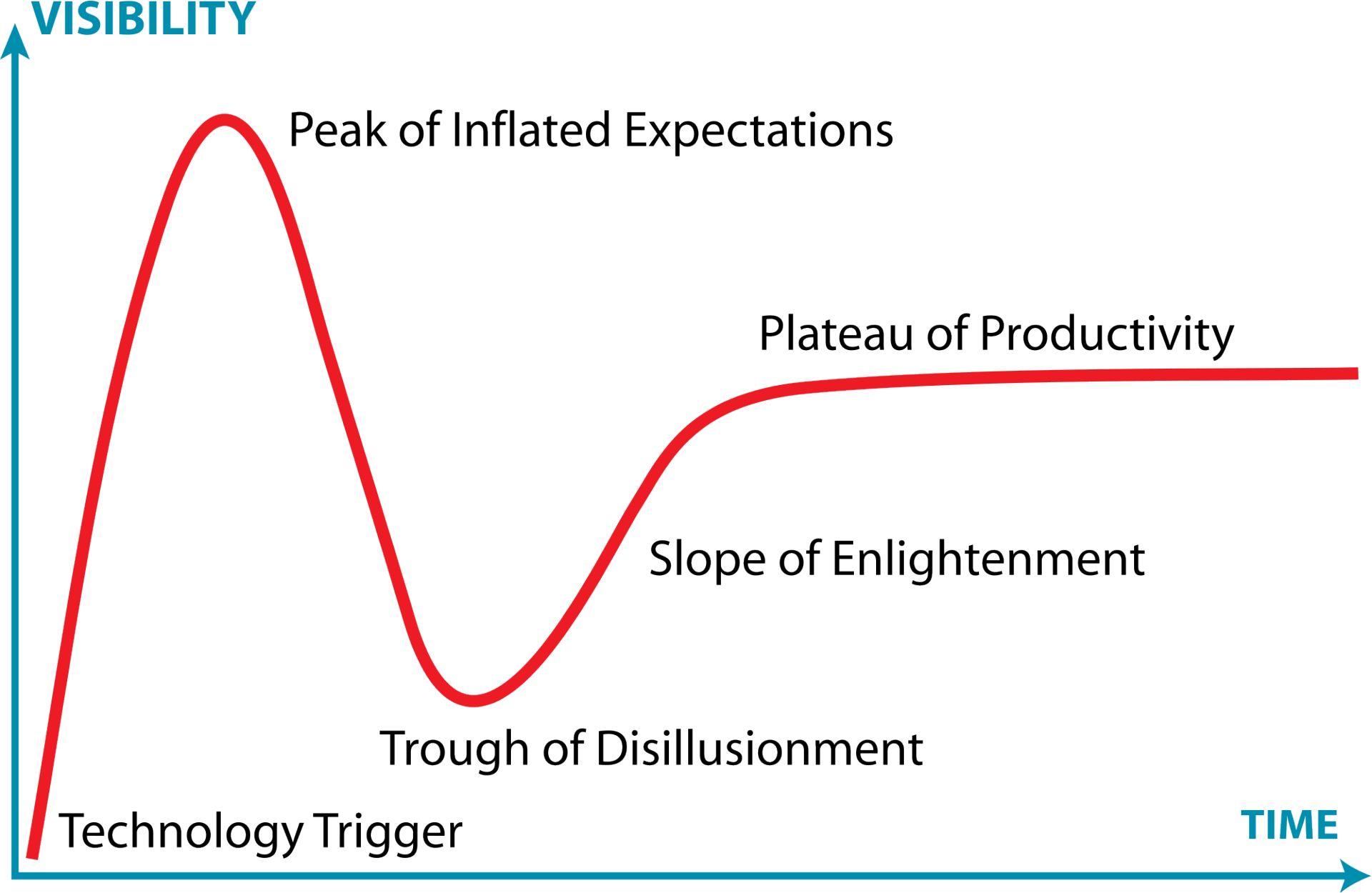


Image Source: http://en.wikipedia.org/wiki/File:Gartner_Hype_Cycle.svg

The King of MOOCs Abdicates the Throne

Sebastian Thrun and Udacity's "pivot" toward corporate training.

By *Rebecca Schuman*



Sebastian Thrun speaks during the Digital Life Design conference on Jan. 23, 2012, in Munich.

Photo by Johannes Simon/Getty Images

Image

Source: http://www.slate.com/articles/life/education/2013/11/sebastian_thrun_and_udacity_distance_learning_is_unsuccessful_for_most_students.html



Susan Adams, Forbes Staff

I cover careers, jobs and every aspect of leadership.

+ **Follow** (2,581)

LEADERSHIP | 12/11/2013 @ 6:23PM | 8,975 views

Are MOOCs Really A Failure?

+ **Comment Now** + **Follow Comments**

That's what *The New York Times* [suggested today](#), drawing on new [research](#) from the University of Pennsylvania. But as the *Times* also acknowledged, in some ways MOOCs (short for massive open online courses) show great promise.

According to the [research](#), conducted by Penn's Graduate School of Education, only about half of the people who register for MOOCs even look at a single lecture, and an average of just 4% of enrollees complete the courses. In some classes, just 2% of students finish. The Penn



Changing his priorities? Sebastian Thrun

Image Source <http://www.forbes.com/sites/susanadams/2013/12/11/are-moocs-really-a-failure/>

The Promise of MOOCS for CC's?

- Still early...not many CC's in the MOOC space
- Completion numbers are not encouraging
- May be some potential for a hybrid MOOC (online option with in-person, regular instructor support)

MOOCS ...to be continued

MOOCS ...the beginning
of a MOOvement
to unbundle
educational goods and
services and rethink
traditional education
@donagee

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Arizona, USA

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