



We Taught Game Dev MOOCs and Lived to Tell the Tale

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GAME DEVELOPERS CONFERENCE® | FEB 27-MAR 3, 2017 | EXPO: MAR 1-3, 2017 #GDC17



GDC

GAME DEVELOPERS CONFERENCE®

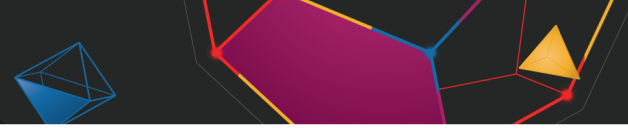
| FEB 27-MAR 3, 2017 | EXPO: MAR 1-3, 2017 #GDC17



You want to learn gamedev?

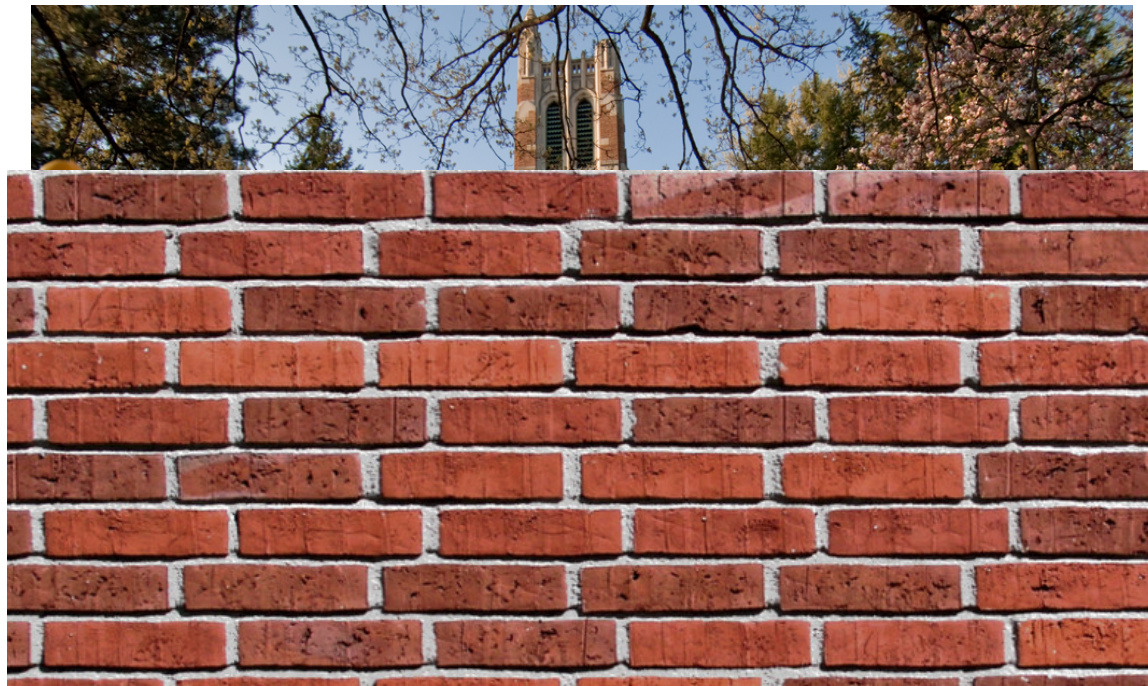
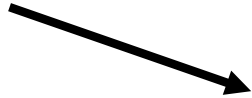


UBM



But...there are barriers to get in

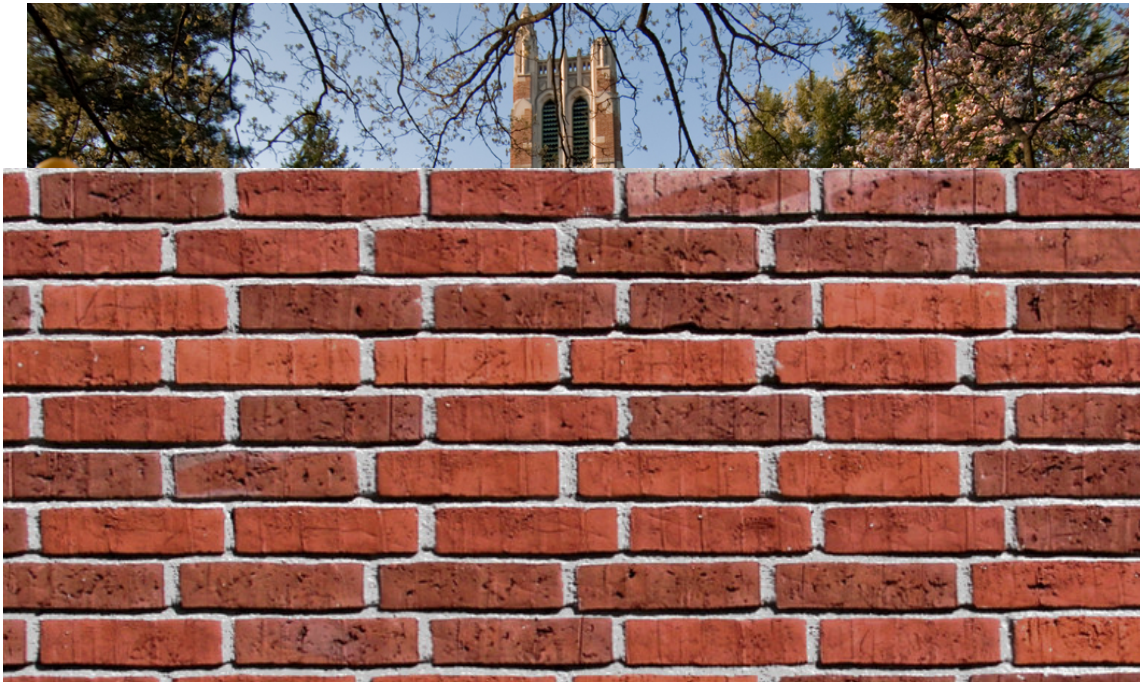
The Wall





What barriers?

HS Degree
GPA/Rank
SAT/ACT
TOEFL
Experiences
Essay



“Extreme
Vetting”

\$\$\$

Location

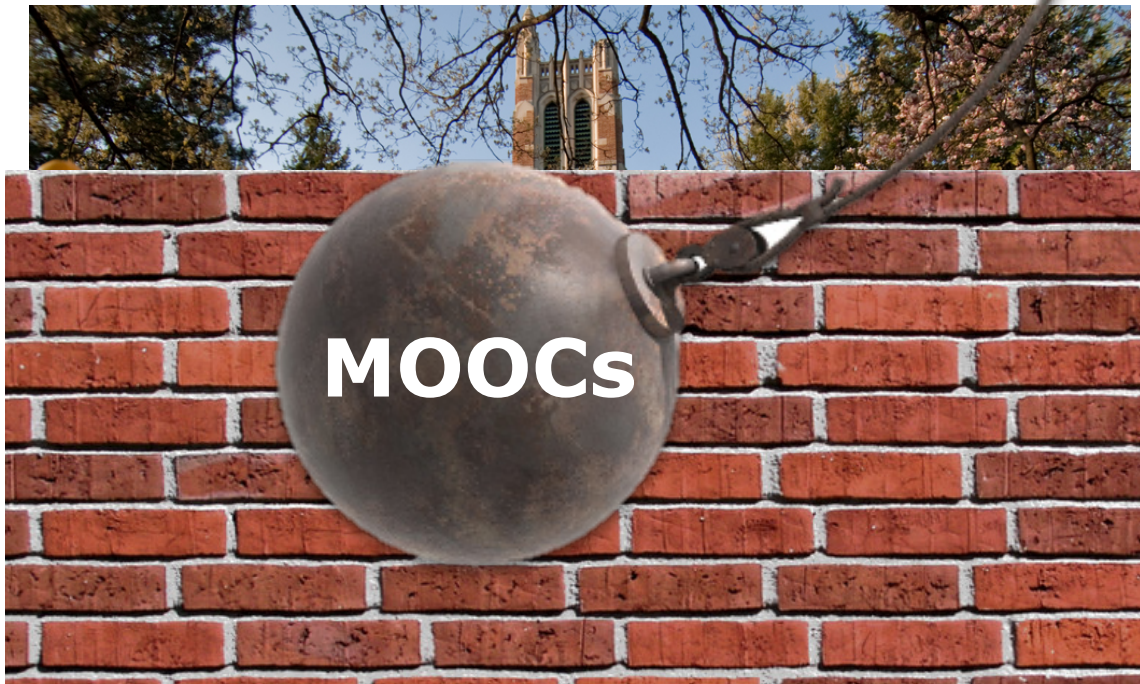
Additional
Barriers





But, is there another way?

HS Degree
GPA/Rank
SAT/ACT
TOEFL
Experiences
Essay



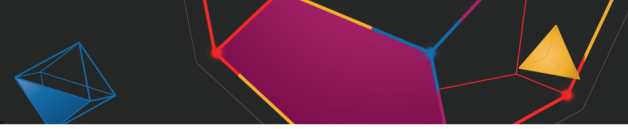
“Extreme
Vetting”

\$\$\$

Location

Additional
Barriers

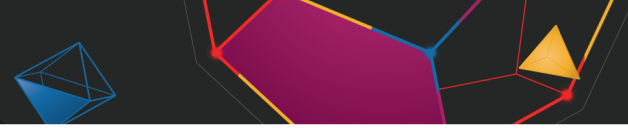




What is a MOOC?

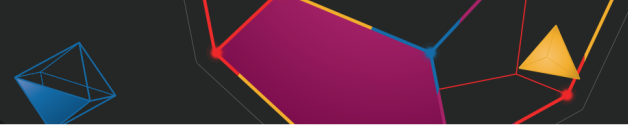
*M*assive
*O*pen
*O*nline
*C*ourse





What is a MOOC?

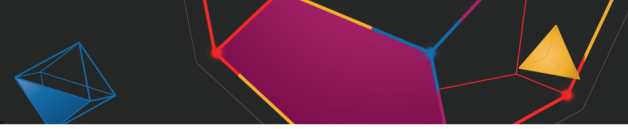
The Coursera logo, featuring the word "coursera" in a blue, lowercase, sans-serif font.The edX logo, featuring the letters "ed" in a pinkish-red color and "X" in a blue color, all in a sans-serif font.The Udacity logo, featuring a stylized blue "U" icon followed by the word "UDACITY" in a grey, uppercase, sans-serif font.The Udemy logo, featuring a green square icon with a white "u" followed by the word "demy" in a black, lowercase, sans-serif font.



Credit? Training? Informal Ed?

- Free vs. Certificates
- Credit? Up to the school delivering the content
- Anything from zero credit to grad credit in combinations of courses
- edX just started offering a “MicroMasters”
- low-cost entry ramps into post-BA/BS programs





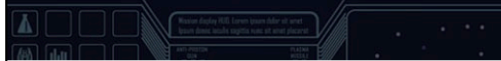
MSU / Coursera Case-Study



MICHIGAN STATE
UNIVERSITY

Build a Game Using Unity 3D

Design and create your own game, and bring it to market, in five hands-on courses.



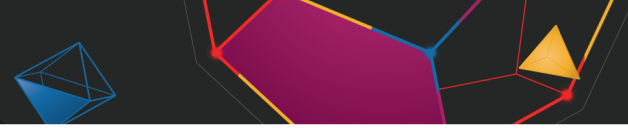
About This Specialization

Break into the video game industry with theoretical, technical, and business knowledge from one of the world's best programs.

This Specialization covers the theoretical and practical foundations of video game production using the Unity 3D game engine. The Specialization is taught by faculty at Michigan State University with over fifty years of combined experience building games and teaching game production. Michigan State University is one of the top-rated game design and development programs in North America. You'll learn to develop a game concept; prototype, test, and iterate on your ideas; and navigate licensing, marketing, and other business considerations. The specialization builds a solid foundation for industry roles as a gameplay designer, level designer, technical designer, technical artist, programmer, or producer. The capstone partner for the specialization is the online game portal Kongregate, which provides an avenue for distribution of the capstone project, as well as a pathway for monetization for aspiring game developers.

coursera





Why we MOOC'd?

- Make learning GameDev accessible
- Reach "non-traditional" students
- Solidify MSU's "brand" in the field
- Attract students to MSU
- Alternate revenue stream to support "internal" initiatives
- If we don't do it, someone else will





Timeline

Submitted Proposal

2015

May

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| 26 | 27 | 28 | 29 | 30 | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 1 | 2 | 3 | 4 | 5 | 6 |

June

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| 31 | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |

July

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| 28 | 29 | 30 | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 | 1 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |

August

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| 26 | 27 | 28 | 29 | 30 | 31 | 1 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | 1 | 2 | 3 | 4 | 5 |

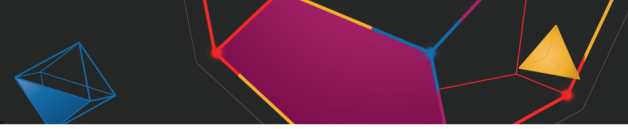
Proposal Accepted

Learned of Coursera RFP

Coursera Workshop

Course 1 Launch





Timeline

2015

September

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| 30 | 31 | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Course 1

October

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| 27 | 28 | 29 | 30 | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Course 2

November

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |

Course 3

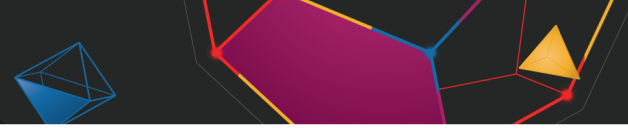
December

| S | M | T | W | T | F | S |
|----|----|----|----|----|----|----|
| 29 | 30 | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Course 4

Course 5





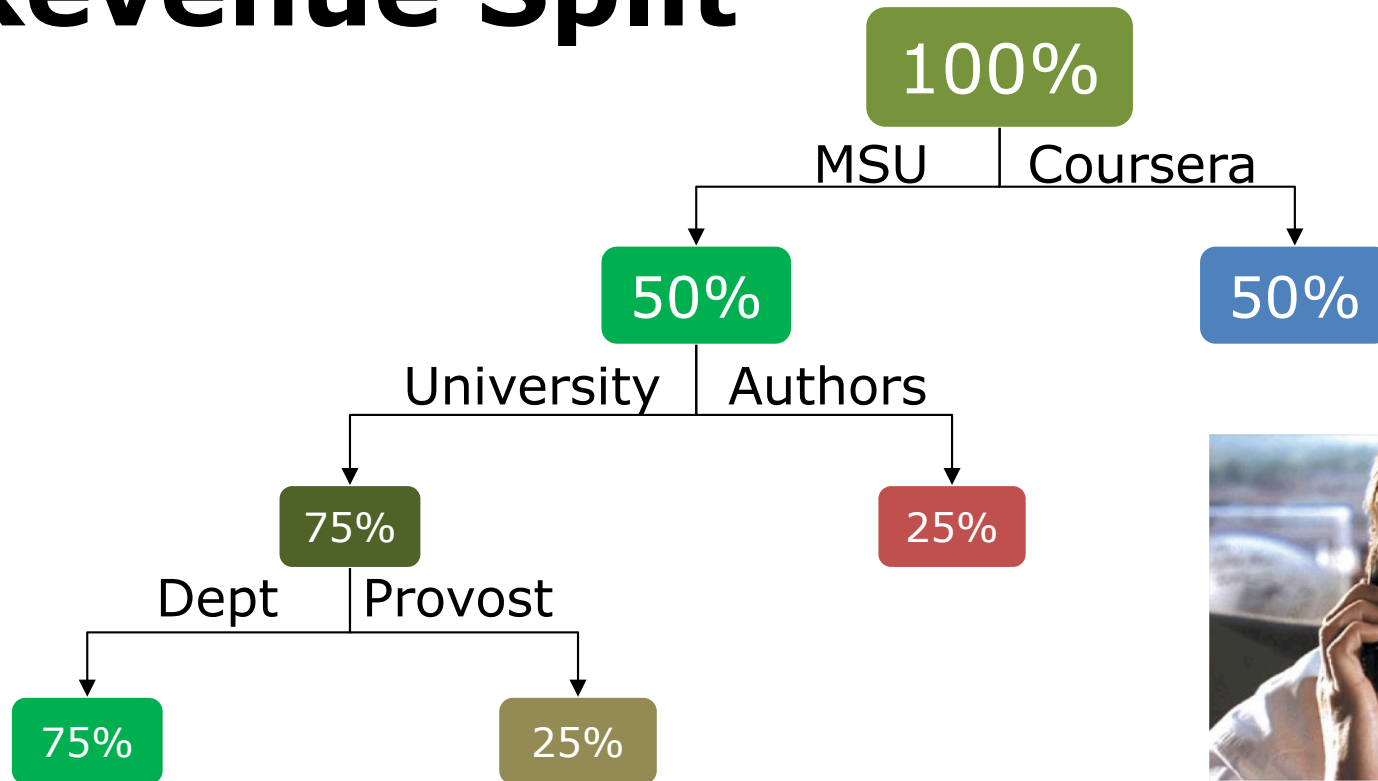
Our support

- \$100K advance (but...)
- Some summer salary for authors
- Some MSU production support
 - Primarily video shooting and editing
- Actual cost ~\$45K





Revenue Split

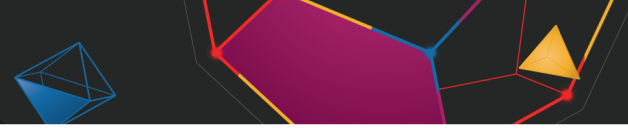




Course Structure

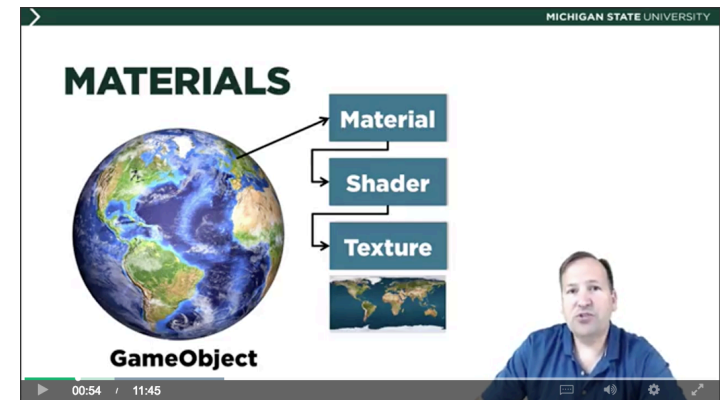
- 4-week course
- 4-modules per week
- ~1 hour per module
- = ~16 hours per course (+ “homework”)

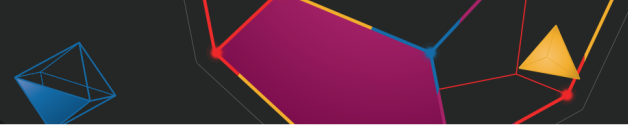




How we covered “theory”

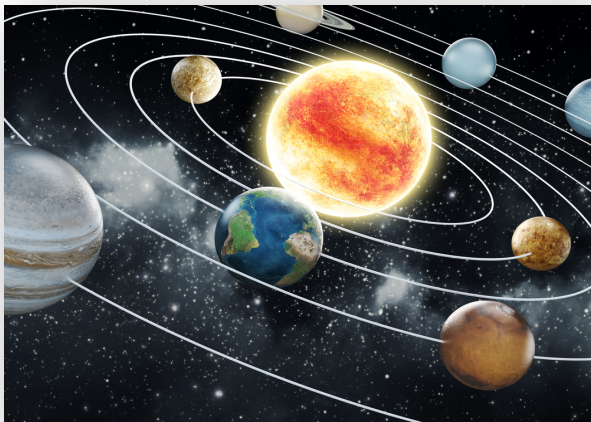
- Grounded in practice
- Project-based learning
- Mini-Lectures + Readings
- Asynchronous discussions



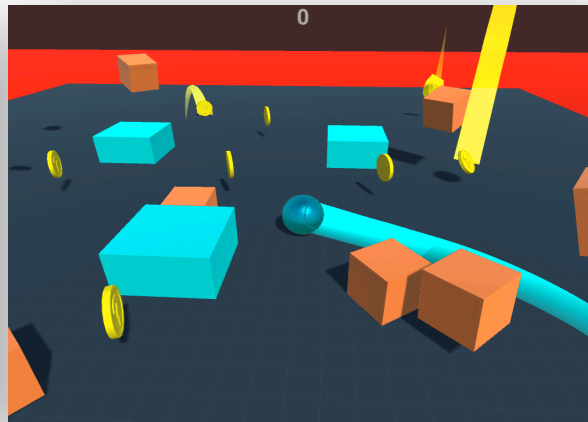


How we covered “practice”

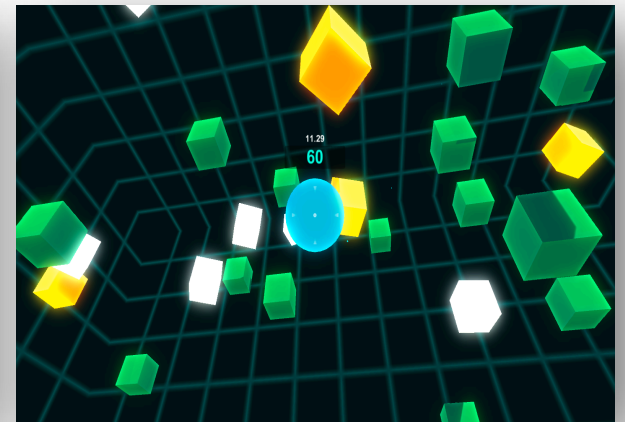
- Hands-on Unity3D projects



Solar System

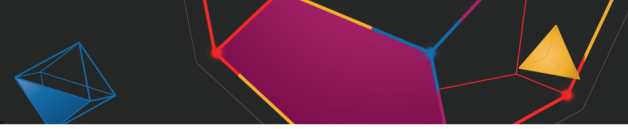


Roller Madness



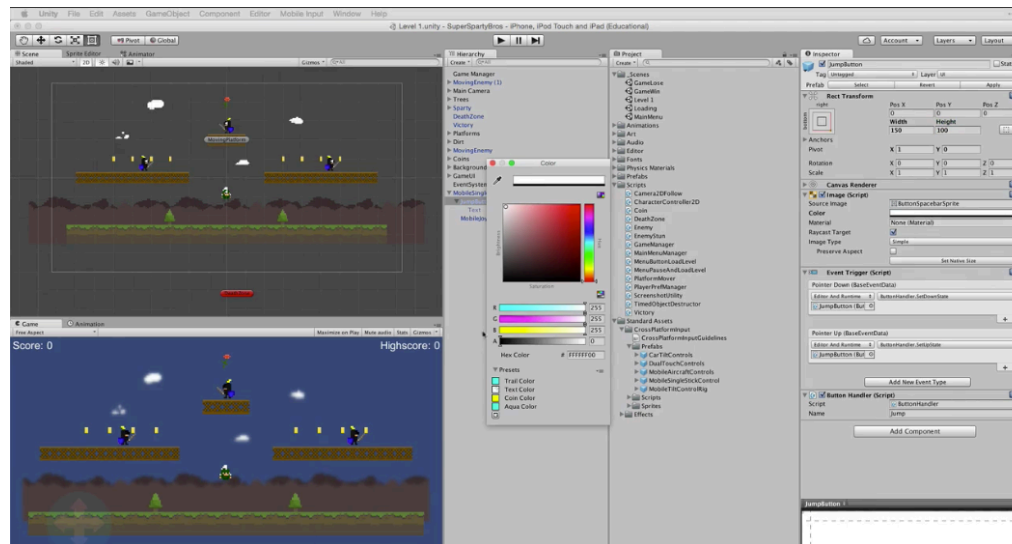
Box Shooter

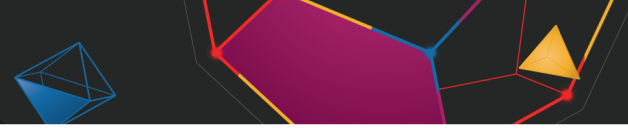




How we covered “practice”

- Screencast tutorials

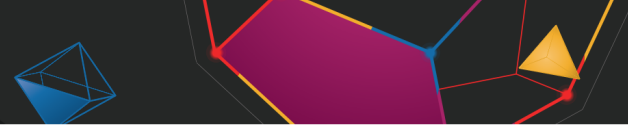




Assessment

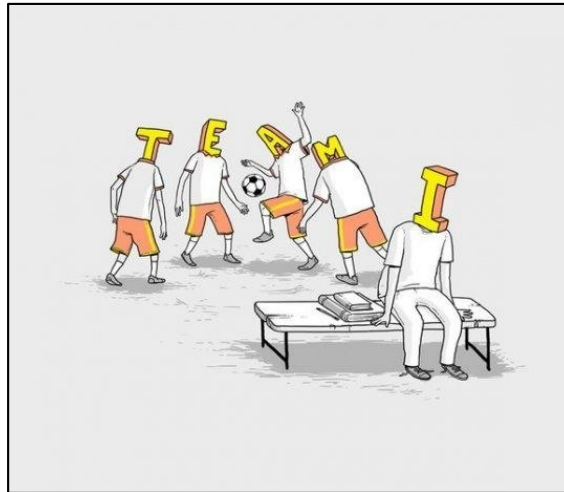
- Quizzes
- Peer Evaluations

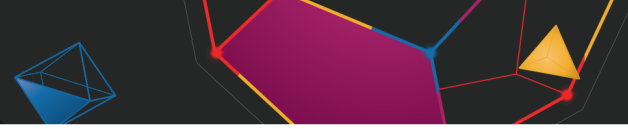




What is missing?

- Group work!



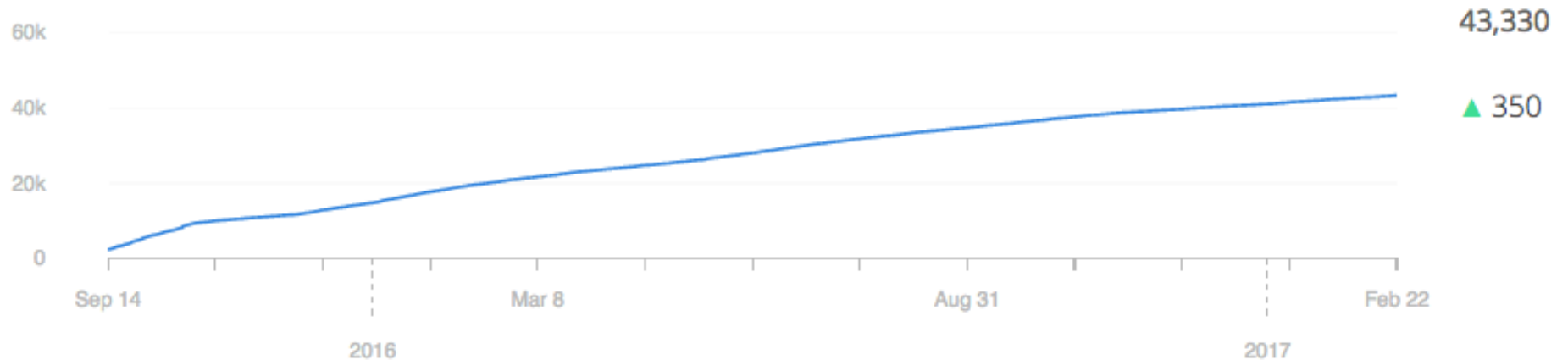


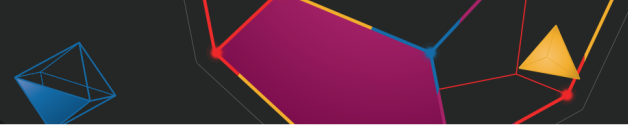
Course 1 Rollout

Total Enrolled Learners

Course Completers

4,400





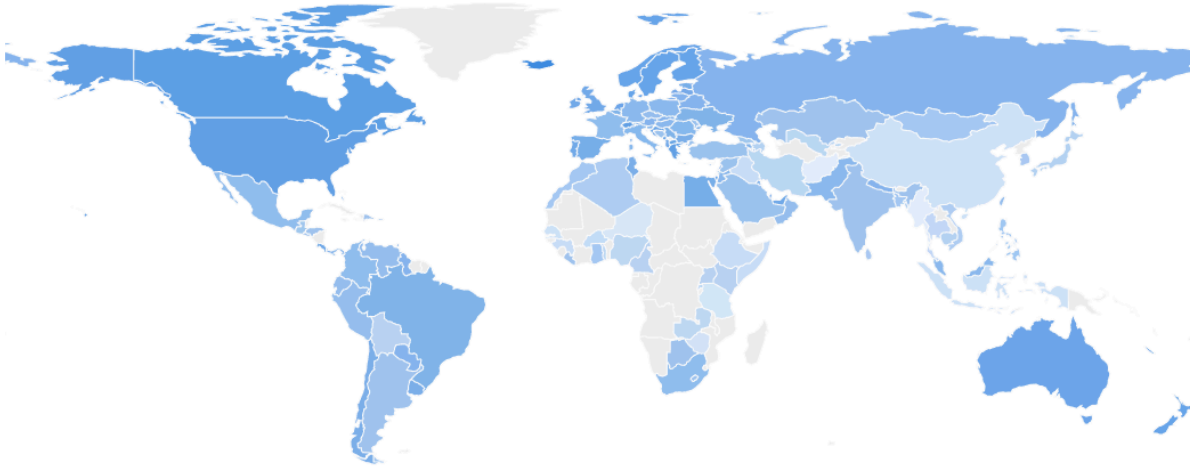
Comparison

| | Live Course | Coursera |
|-------------------|-------------|-----------------|
| Years | 17 | 1.5 |
| Courses/year | 1 | 26 |
| Students/offering | 40 | ~113 |
| Total Students | 680 | 43,330 |
| Course Completers | 646 (-34) | 4,400 (-38,930) |

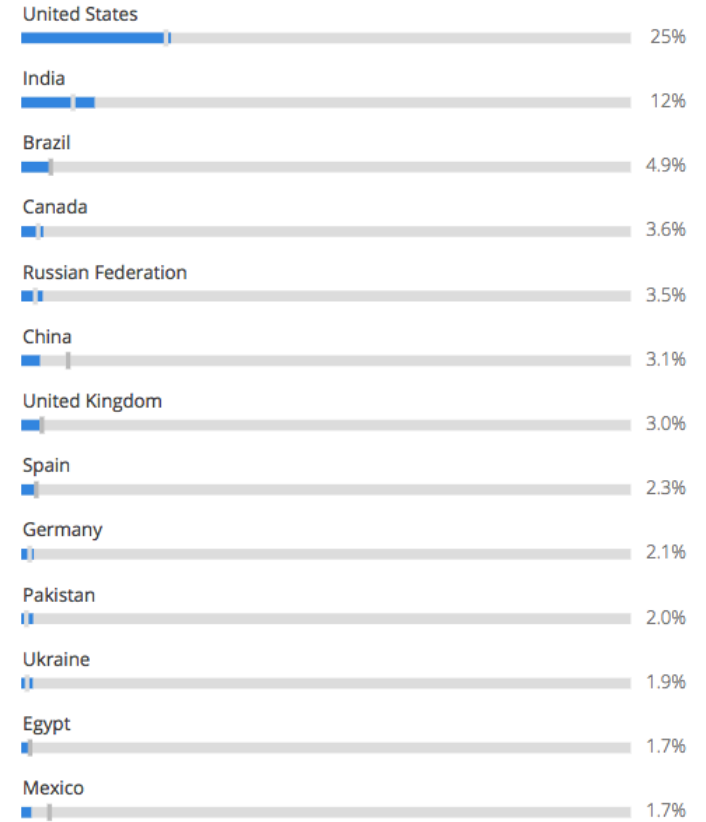


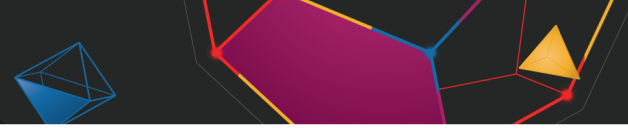


Course 1 Reach



181 Countries!!!





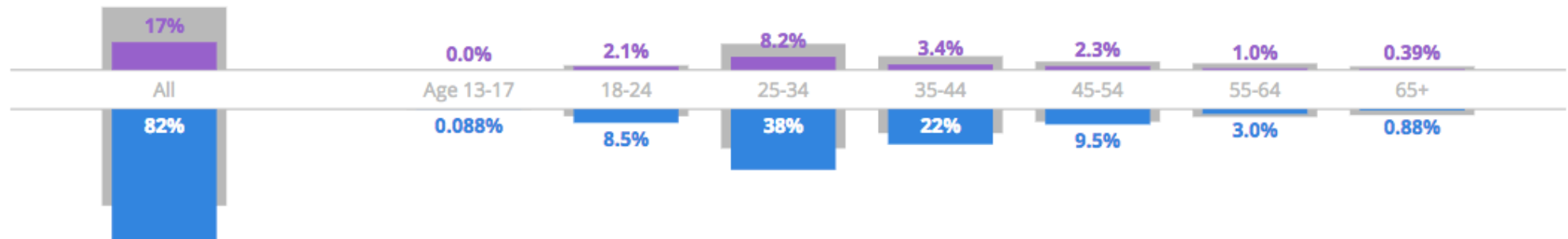
Course 1 Audience

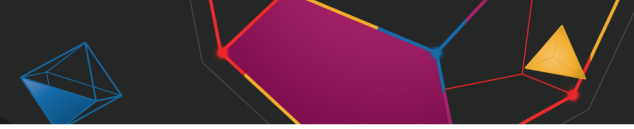
Your course

All Coursera

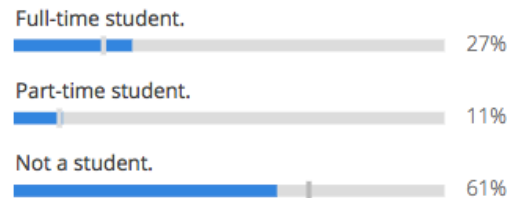
Women

Men



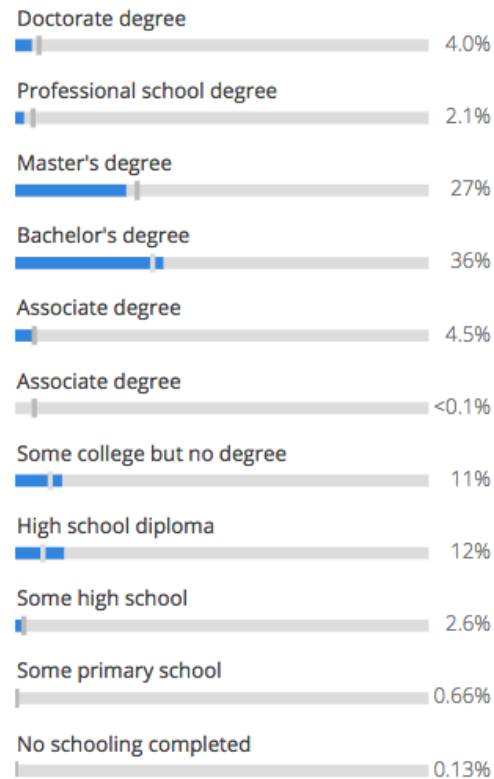


Student Status



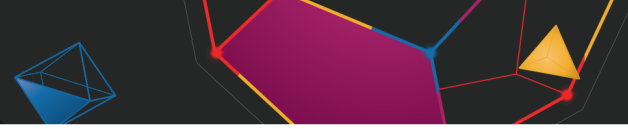
A Based on data from 2,277 learners. Estimates accurate to ± 2.1 percentage points. ⓘ

Highest Education



Employment Status



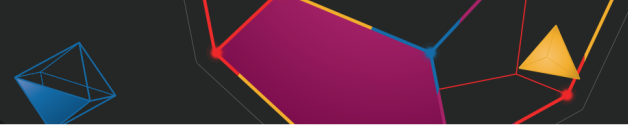


Course Completions

- ~10% complete course
- ~10% pay

| | | |
|---|--|-------|
| 1 | Introduction to Game Development | 4,400 |
| 2 | Principles of Game Design | 1,504 |
| 3 | Business of Games and Entrepreneurship | 944 |
| 4 | Game Development for Modern Platforms | 923 |
| 5 | Game Design and Development Capstone | 213 |





But learners love it!

★★★★☆ 1,950 Ratings

4.8 out of 5 stars

586 Reviews



23 Feb 2017

Great course! Simple and clean instructions. Specially the course instructor "Brian Winn", lots of <3 <3 <3 for you sir :D





Lessons Learned

- People want to make games EVERYWHERE
- Incubate Course Mentors (TAs)
- Students will still find you and fill your inbox. :-)
- Developing an online course front loads a great deal of your work





Lessons Learned

- Business timelines are intense
- Business models change often
- As does learning platform / tools

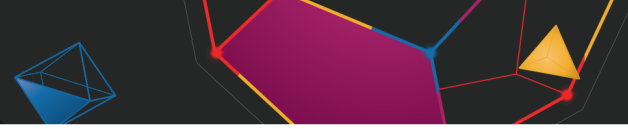




Benefits of MOOCing

- Impacting lives
- Additional revenue
- Improved our on-campus offerings
- Created a “prereq” for our program





RIT/edX: Certificate

Focused on career exploration vs. skills acquisition





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R·I·T

Video Game Design

Learn the tools for a successful career in game design from experts at one of the top-ranked game design and development programs.



Start the Series

View Courses

Meet the Instructors

Why XSeries?

XSeries Program Overview

Imagine what it would be like to turn your love of playing video games into a career. What skills would you need to become a successful video game designer, and what job opportunities could you pursue in the industry?

In this XSeries, those questions and more will be answered by Rochester Institute of Technology's Game Design and Development faculty and the director of the International Center for the History of

[See more](#)

Length: 5 weeks per course

Effort: 3 hours per week

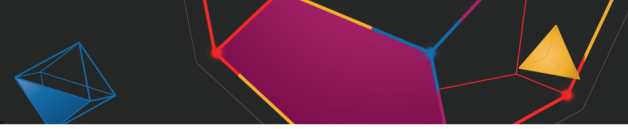
Subject: [Computer Science](#)

Institution: [RITx](#)

Language: English

Video Transcripts: English





Video: Early Tabletop Games: Pre-1700



>> When you think about the long history of games

and game design it's useful first of all to begin

with play, everyone plays, all people play.

They engage in activities that are voluntary, that are done

for their own sake that are fun.

In fact, not only humans but many animals play as well,

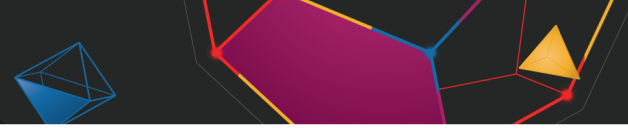
almost all mammals play and so





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CHECK YOUR UNDERSTANDING

For students seeking a certificate, these questions do not contribute to your final grade.





LEVEL-UP YOUR KNOWLEDGE

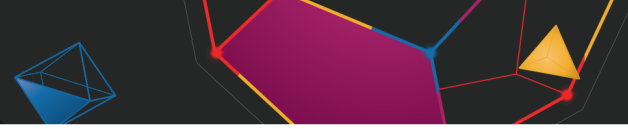
The histories of “traditional games” are longer and more diverse than we might first assume, and they’ve often gone through complex evolutions. Learning more about them can give you greater insight into how they’ve come about and give you a new perspective on how video games evolve.

(Links open in a new window)

Virtual Reference Shelf

- ["The Online Guide to Traditional Games"](http://tradgames.org.uk), tradgames.org.uk
- ["Board Game Geek"](http://boardgamegeek.com), boardgamegeek.com

- Game Histories
- Deep Dive
- Just for Fun
- Games in the online collections of The Strong



GAMEPLAY

It's time to have fun gaming. Play, physically or digitally, some of our oldest games and build your foundation in game history.

(Links open in a new window)

What to Play

- Play mancala or backgammon, either online or using physical sets with other players. If you play backgammon try playing with and without a [doubling cube](#). If you are unable to do either, review and compare the rules of the games.

Online Versions

- [Mancala](#) *RocketSnail.com*
- [Backgammon](#) *247backgammon.org*
- [Chess](#) *Chess.com*

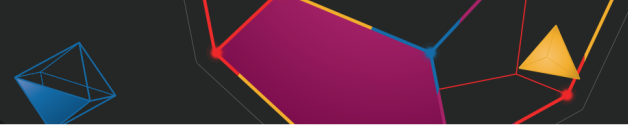


[illegible]



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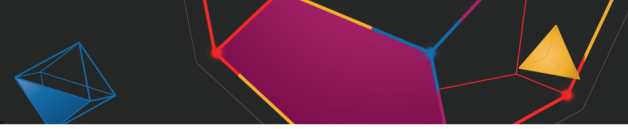


BOSS BATTLE QUIZ:

The result of this graded quiz is part of your final grade and **only one attempt is allowed per question.**

This quiz is open to all students. Those who are seeking a verified certificate must achieve a final course grade average of at least 75%.

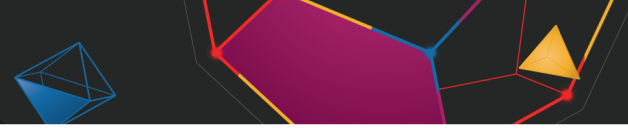




Faculty Support

- Development: Summer \$ or one release
- Delivery: Summer \$ or one release
- Revenue Share: % after production costs are met
- Student moderators trained by On-Line Learning





Faculty Support

Curriculum and materials development:

Fully supported by

- On-line Learning
- Teaching and Learning Services.



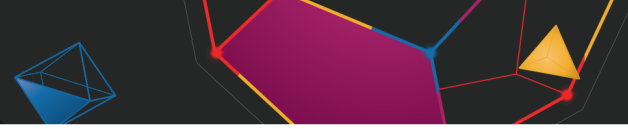


Production Timeline

Contract with edX signed 10/16, first courses due within 12 months.

- RIT had no process or guidelines for MOOC dev and 3rd party development
- Internal plans completed April/May
- Production of 1st course began 7/25 and it opened on 10/31 😊



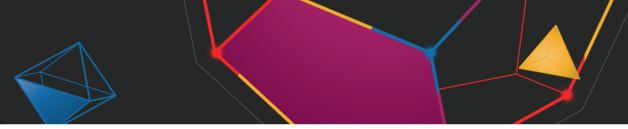


Delivery Timeline

Courses are accessible for six months

- First five weeks have a high level of instructor engagement
 - “Pinned” and direct responses to discussion 2/week
 - “Here’s what you missed” email end of each week
- Afterwards, Moderation only



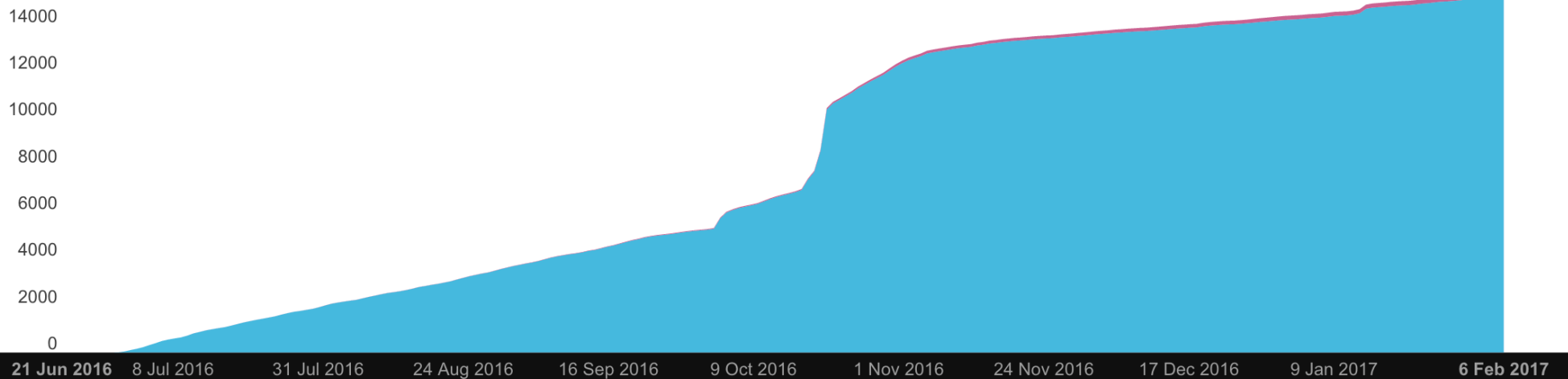


Demographics: Numbers

Daily Learner Enrollment

How many learners are in my course?

Enrollments

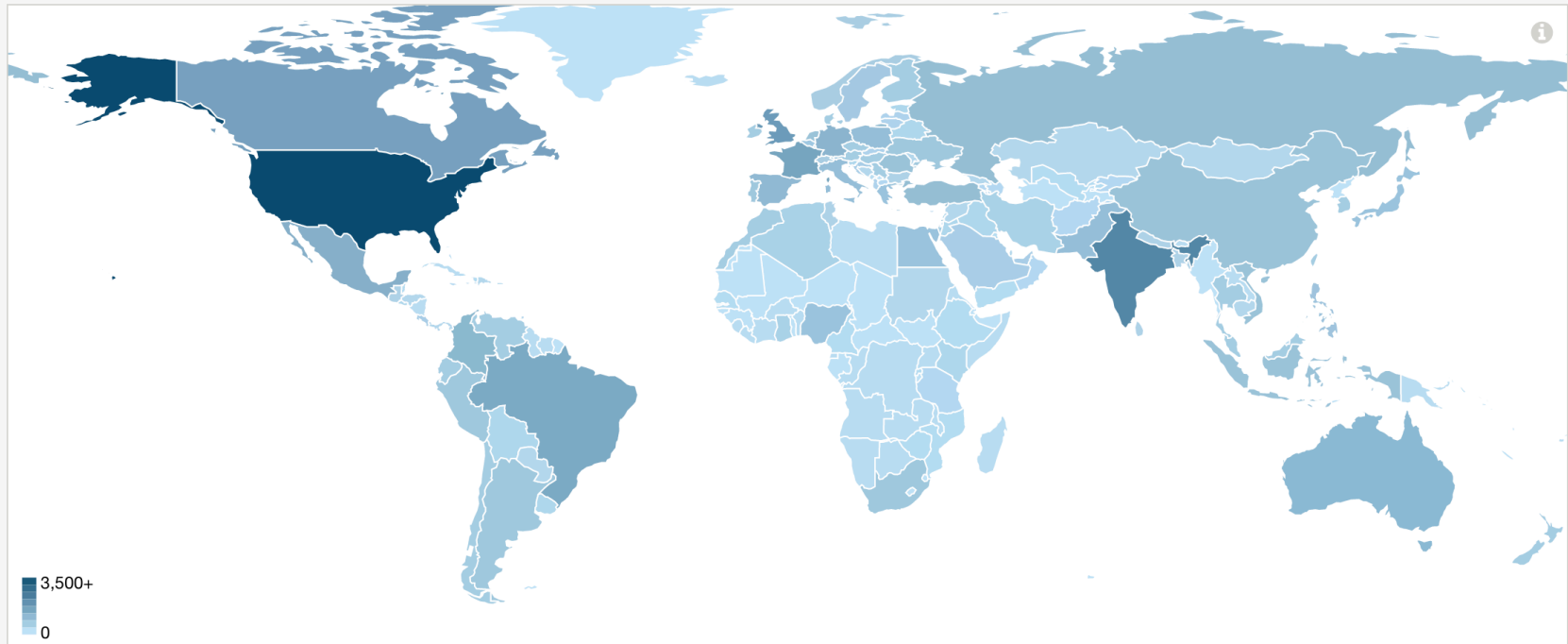


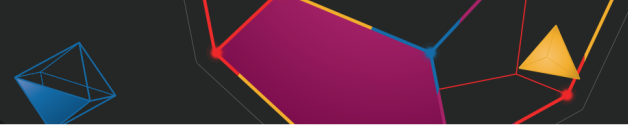


Demographics: Location

Geographic Distribution

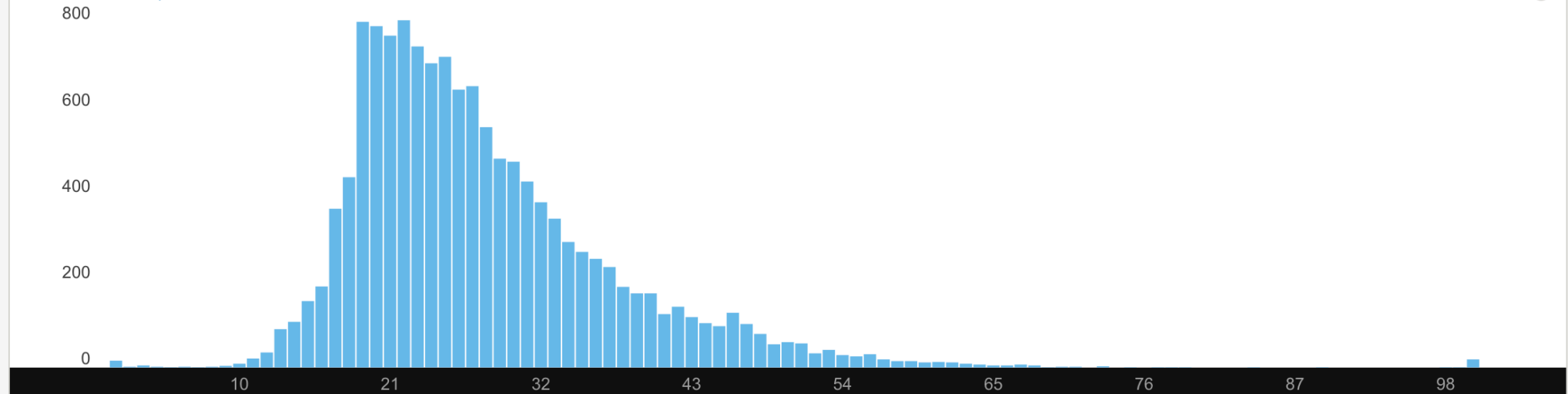
Where are my learners?

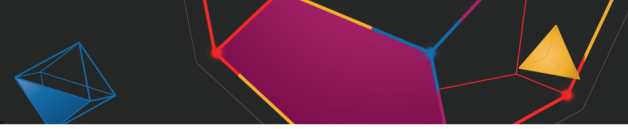




Demographics: Age

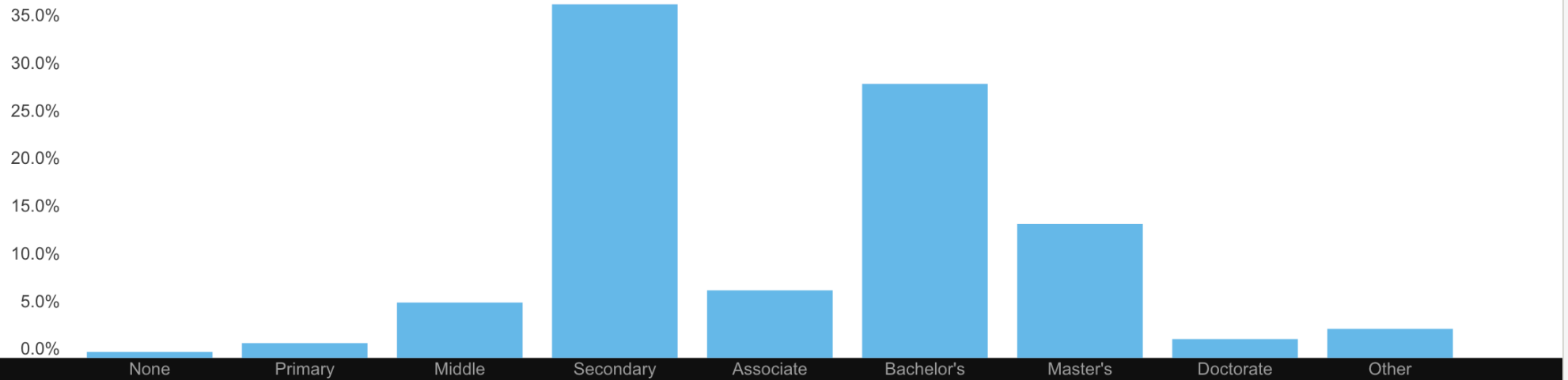
Learners (Self-Reported)

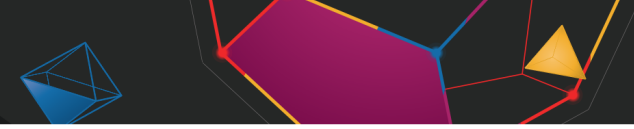




Demographics: Education

Learners (Self-Reported)





How they liked it

Please rate the following on a scale of 1 to 5, with 1 being very poor and 5 being very good.

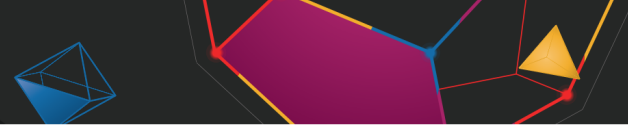
RESULTS

| | 1 - Very Poor | 2 - Poor | 3 - Fair | 4 - Good | 5 - Very Good | N/A |
|---|---------------------|-------------|----------|-------------|---------------------|-----|
| Overall Experience with this course | 1% | 1% | 10% | 38% | 50% | 0% |
| The quality of video lectures | 1% | 1% | 12% | 35% | 50% | 1% |
| The effectiveness of quizzes | 2% | 8% | 30% | 31% | 27% | 2% |
| Student-to-student interaction in the discussion forums | 2% | 5% | 21% | 20% | 9% | 43% |
| Interaction with course staff in the discussion forums | 2% | 3% | 15% | 17% | 15% | 48% |

Submit

Results gathered from 329 respondents.





Benefits So Far?

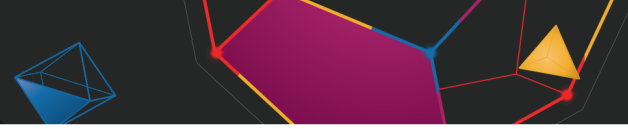
University:

Marketing, Visibility and Brand. Too early to know if there are enrollment bumps, etc.

Academic Unit:

In addition to the above, outreach, additional lecture content faculty can draw on or refer back to, possible “elective use” if combined with other assignments



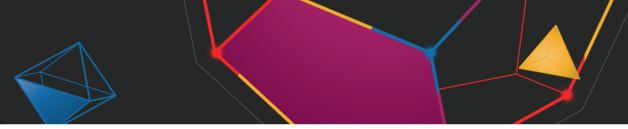


Benefits So Far?

Faculty:

- New style of teaching experience
- Learned a lot from international student experiences
- Worked with a great team
- “Inside producer” experiences





Questions?

We'll start here and then hit the "Wrap Up Room" if there's still interest.

