The MOOC Phenomenon: Who Takes Massive Open Online Courses and Why?

Working Paper

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Abstract: Massive open online courses (MOOCs) have commanded considerable public attention due to their sudden rise and disruptive potential. But there are no robust, published data that describe who is taking these courses and why they are doing so. As such, we do not yet know how transformative the MOOC phenomenon can or will be. We conducted an online survey of students enrolled in at least one of the University of Pennsylvania’s 32 MOOCs offered on the Coursera platform. The student population tends to be young, well educated, and employed, with a majority from developed countries. There are significantly more males than females taking MOOCs, especially in developing countries. Students’ main reasons for taking a MOOC are advancing in their current job and satisfying curiosity. The individuals the MOOC revolution is supposed to help the most—those without access to higher education in developing countries—are underrepresented among the early adopters.
Introduction

Massive Open Online Courses (or MOOCs) have taken higher education by storm. Just three years ago, MOOCs were an idea. Today they are an industry. Millions of students from around the globe have enrolled; thousands of courses have been offered; hundreds of universities have lined up to participate. The world has taken notice. (1-5) Commentators contend that “Nothing has more potential to lift more people out of poverty…Nothing has more potential to unlock a billion more brains to solve the world’s biggest problems…than the massive open online course.” (6)

Doubtless because of their sheer size and disruptive potential, MOOCs may represent a “budding revolution.” But fundamental questions remain about this revolution: Will MOOCs expand access to higher education to those who do not already have the means to obtain it? Will MOOCs help people gain skills for high quality jobs or satisfy a desire for edification? (7-9)

At this point, we do not yet know. Several institutions have surveyed student populations from individual or small sets of MOOCs, (10-14) but there are no robust, published data on information across a wide range of courses. To begin filling that void, we conducted a survey of students enrolled in University of Pennsylvania courses on Coursera, a for-profit online education platform that is among the largest providers of MOOCs in the world.

Methodology

As of July 2013, the University of Pennsylvania’s Open Learning Initiative had offered 32 sessions of 24 unique courses on Coursera, the second largest number of courses on the platform after Stanford (27 unique courses). Penn courses include humanities courses, such as world music and poetry, business courses, such as gamification, math and science courses, such as
calculus and behavioral neurology, and social science and policy courses, such as American health policy and microeconomics. At the time of the survey, students in Penn’s Coursera courses accounted for 20.2% of Coursera’s total enrollees across all partner institutions.

Eligible respondents were students who had enrolled and watched at least one lecture for one of the 32 University of Pennsylvania courses on Coursera. The students were contacted only once with a brief e-mail message asking them to complete a web survey. We received 34,779 completed responses from individuals having watched at least one course lecture for a response rate of 8.5% of eligible respondents. The response rate from our entire e-mail list, including individuals who never returned to any Coursera webpage after enrolling in the course was 4.3%.

In order to help validate the representativeness of our sample, we compared the self-identified country of residence from our survey population to the physical location of every Coursera account in the whole sample, derived from the last known IP address of the user (Table 1). Among the ten countries with the largest student populations according to IP address, there was never more than a 1.52% difference between the measured student population according to the survey and the estimated student population according to IP address. Individuals from countries where computer access and internet connectivity are less consistent may have been less likely to respond to our e-mail survey, but this geographic IP address analysis indicates the survey reached an accurate cross-section of students around the world. Given the magnitude of differences we identify across different demographic groups, we would not expect even a strong non-respondent bias to significantly alter the findings of this study.

The survey consisted of 18 questions relating to the respondent’s demographic information, history with Coursera, and reasons for taking Coursera courses (see Appendix).
Data Analysis

We report findings based on simple descriptive statistics and cross-tabulations with Pearson’s Chi-Squared tests to determine significant relationships (p<.001). We create regional groups by aggregating from the country/territory level into four categories: 1) United States (34.3%) 2) Non-US OECD Countries (31.0%), 3) Brazil, Russia, India, China, and South Africa (BRICS, 14.8%), and 4) Other developing countries (19.9%). The 32 Coursera course offerings are coded into one of three types: 1) Social science, economics, or business, 2) Science, healthcare, or math, and 3) Humanities.

Results

Who Takes MOOCs?

Across all geographic regions, MOOC students have very high levels of educational attainment: 83.0% of students have a post-secondary degree (2 or 4 years), 79.4% of students have a Bachelor’s degree or higher and 44.2% report education beyond a Bachelor’s degree. The educational attainment of MOOC students across the world far surpasses the general educational attainment of their national peers (Figure 1). In no area is the disparity more pronounced than in the BRICS countries, where according to the Barro and Lee educational attainment dataset, updated in 2010, 5.1% of the population over 25 years old has a tertiary degree while 79.4% of MOOC students from the same countries have a tertiary degree.

In addition to being highly educated, the Coursera student population tends to be young, male, and employed, with a majority from developed countries (Table 2). Over 40% of MOOC students are under 30 years of age, with less than 10% over 60. Significantly more males
than females take MOOC courses (p<0.001). More than half (62.4%) report being employed full-time or self-employed, while only 13.4% report being unemployed or retired.

Within the MOOC student population, students from BRICS countries and other non-OECD countries are significantly younger than their OECD counterparts. They are also more likely to be male (Table 2). Nearly two thirds of BRICS students (63.4%) are under the age of 30 while only 23.5% of US students are under 30 years old and 37.1% of non-US OECD students are under 30 (p<0.001 for both comparisons). In the U.S. nearly 20% of students are over 60 and 14.0% are retired; in BRICS countries only 1.6% of students are over 60 and just 1.2% are retired (p<0.001 for comparison on age and retirement between US and BRICS). Over two thirds (67.9%) of BRICS students are male compared to 48.1% male students in the US and 58.4% in non-US OECD countries.

Why Do Students Take MOOCs? And What Courses do They Take?

There are two main reasons survey respondents cite for enrolling in a MOOC course: advancing in a current job and curiosity (Table 3). Nearly half of MOOC students report their reason for enrolling in a course as “curiosity, just for fun” while 43.9% report enrolling to “gain skills to do my job better.” This result differs depending on the type of course. For example, 74.6% of respondents report taking humanities courses, such as poetry, Greek mythology, or world music, out of curiosity and only 11.9% report taking such courses to do their job better. Conversely, more than half of respondents (54.1%) report taking social science courses to “gain skills to do my job better” while nearly half did it for curiosity. Similarly, 39.0% of students selected science, health science and math courses for gaining skills to do a job better. In the United States the highest percentage of students (44.6%) enrolled in Science and Healthcare-related
classes while in the rest of the world the highest percentage enrolled in Social Science, Economics, and Business courses.

The reasons for enrolling in MOOC courses varied by country (Table 3). Students from the U.S. were less likely to enroll in courses to enhance their skills for a job or for a degree and more likely than students from BRIC and other developing countries to take courses for curiosity (Table 3).

**Discussion**

The students who have participated in MOOCs thus far appear to be predominantly highly-educated and employed, and they are more likely to be men than women, especially in BRICS and other developing countries. They also appear to be drawn in large numbers to the social science and business courses on the platform in hopes of using the knowledge they acquire to advance in their current jobs.

The education level of MOOCs students stands in stark contrast to the educational distributions of the populations in each of the countries or regions in this study. While one may expect that students participating in MOOCs would be somewhat more likely to exhibit higher levels of education than the population writ large, the extent of this divide is greater than one might reasonably expect. The findings of this study indicate that MOOCs are not reaching high numbers of less educated individuals in developing countries. Despite the optimistic and aspirational declarations of many MOOC providers, these courses are not, as of yet, making education “borderless, gender-blind, race-blind, class-blind, and bank account-blind.” (15) MOOCs may have potential to someday mitigate some of the world’s educational disparities by expanding access to high-quality collegiate education, but the early adopters of the MOOC
phenomenon are those who have already attained the highest levels of education in their countries.

**Limitations**

This survey may not be generalizable. The students surveyed were only those who enrolled in one of University of Pennsylvania’s 32 Coursera course offerings. While the fact that the University of Pennsylvania accounts for 20% of all Coursera enrollments leads us to believe findings from this population would generalize to the general MOOC student population, further studies from other institutions and other MOOC platforms are needed to corroborate the data we have put forth in this study.

Another potential limitation is the response rate. The 34,779 survey respondents from among Penn Coursera users who had watched at least one course lecture constitute an 8.5% response rate. While lower than we would have liked, other single-contact e-mail surveys of this scale, including political polls for presidential elections and a survey conducted internally by Coursera administrators, have reported comparable response rates. Coursera’s internal survey had a response rate of approximately 6%, although this included all users, even those who never returned to Coursera after enrolling in a class. (16) Results from Coursera’s survey, as well as other smaller surveys, corroborate our findings on key demographic variables including gender distribution and education level. (16)

Despite the low response rate, our geographic testing and comparison to similar studies suggest our sample is valid. The number of respondents, drawn from 201 different countries and territories, is unprecedented in this field and the dataset provides a major step forward in our understanding of this population.
Conclusion

The MOOC phenomenon is very recent. The main users, especially in BRICS and developing countries tend to be young, well-educated males who are trying to advance in their jobs. While there is tremendous hope for this educational platform, the individuals the MOOC revolution is supposed to help the most – those without access to higher education in developing countries – are conspicuously underrepresented among the early adopters.

References and Notes:

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C. Do, Software Engineer at Coursera, Personal Communication

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Table 1. Comparison of geographic location of students by self-identification and IP address

<table>
<thead>
<tr>
<th>Country</th>
<th>Respondents from Survey Sample</th>
<th>Physical IP Analysis of Full Student Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>34.32%</td>
<td>33.92%</td>
</tr>
<tr>
<td>India</td>
<td>5.76%</td>
<td>7.28%</td>
</tr>
<tr>
<td>Brazil</td>
<td>4.07%</td>
<td>4.37%</td>
</tr>
<tr>
<td>Great Britain</td>
<td>3.57%</td>
<td>3.89%</td>
</tr>
<tr>
<td>Canada</td>
<td>3.50%</td>
<td>3.42%</td>
</tr>
<tr>
<td>Spain</td>
<td>3.60%</td>
<td>2.74%</td>
</tr>
<tr>
<td>Russia</td>
<td>3.25%</td>
<td>2.46%</td>
</tr>
<tr>
<td>China</td>
<td>1.08%</td>
<td>2.04%</td>
</tr>
<tr>
<td>Australia</td>
<td>1.99%</td>
<td>1.93%</td>
</tr>
<tr>
<td>Germany</td>
<td>1.73%</td>
<td>1.76%</td>
</tr>
</tbody>
</table>
**Table 2. Who Takes MOOCs?**

<table>
<thead>
<tr>
<th></th>
<th>Total (34,779 respondents)</th>
<th>US (11,933 respondents)</th>
<th>Non-US OECD (10,784 respondents)</th>
<th>BRICS (5,151 respondents)</th>
<th>Other developing countries (6,911 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>56.9%</td>
<td>48.1%</td>
<td>58.4%</td>
<td>67.9%</td>
<td>61.5%</td>
</tr>
<tr>
<td>Female</td>
<td>41.3%</td>
<td>49.4%</td>
<td>39.9%</td>
<td>31.1%</td>
<td>37.3%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 30</td>
<td>41.1%</td>
<td>23.5%</td>
<td>37.1%</td>
<td>63.4%</td>
<td>58.8%</td>
</tr>
<tr>
<td>Over 30</td>
<td>58.9%</td>
<td>76.5%</td>
<td>62.9%</td>
<td>36.6%</td>
<td>41.2%</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>17.4%</td>
<td>9.8%</td>
<td>16.4%</td>
<td>28.2%</td>
<td>23.9%</td>
</tr>
<tr>
<td>Part-time employed</td>
<td>6.9%</td>
<td>7.2%</td>
<td>7.5%</td>
<td>5.3%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Full-time employed</td>
<td>50.0%</td>
<td>51.1%</td>
<td>48.9%</td>
<td>49.4%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Self-employed</td>
<td>12.4%</td>
<td>11.2%</td>
<td>14.2%</td>
<td>11.8%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>6.6%</td>
<td>6.6%</td>
<td>8.2%</td>
<td>4.1%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Retired</td>
<td>6.8%</td>
<td>14.0%</td>
<td>4.8%</td>
<td>1.2%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>
Table 3. Why Do Students Participate in MOOC Courses?

<table>
<thead>
<tr>
<th>Course type</th>
<th>Region of respondent</th>
<th>Total (n=34,779)</th>
<th>Social science courses (n=17,156)</th>
<th>Science, healthcare, and math courses (n=13,156)</th>
<th>Humanities courses (n=6,902)</th>
<th>US (n=11,933)</th>
<th>Non-US OECD (10,784 respondents)</th>
<th>BRICS (n=5,151)</th>
<th>Other developing countries (6,911 respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain knowledge to get my degree</td>
<td></td>
<td>13.2%</td>
<td>12.1%</td>
<td>16.0%</td>
<td>7.0%</td>
<td>6.8%</td>
<td>12.1%</td>
<td>20.3%</td>
<td>20.9%</td>
</tr>
<tr>
<td>Gain specific skills to do my job better</td>
<td></td>
<td>43.9%</td>
<td>54.1%</td>
<td>39.0%</td>
<td>11.9%</td>
<td>37.0%</td>
<td>46.4%</td>
<td>47.7%</td>
<td>49.0%</td>
</tr>
<tr>
<td>Gain specific skills to get a new job</td>
<td></td>
<td>17.0%</td>
<td>23.2%</td>
<td>12.8%</td>
<td>3.6%</td>
<td>12.9%</td>
<td>16.9%</td>
<td>21.0%</td>
<td>21.3%</td>
</tr>
<tr>
<td>Curiosity, just for fun</td>
<td></td>
<td>50.05%</td>
<td>49.5%</td>
<td>48.7%</td>
<td>74.6%</td>
<td>55.5%</td>
<td>52.5%</td>
<td>43.7%</td>
<td>41.2%</td>
</tr>
</tbody>
</table>

Note: Respondents were asked the following: Why did you choose to enroll in <course name>? Choose all that apply. Columns may add to more than 100% because respondents could choose all applicable answers.

Appendix (Attached): Copy of July 2013 University of Pennsylvania Survey
Default Question Block

Your answers to the following questions will be used to generate a better understanding of the population of students who are participating in massive open online courses (MOOCs).

Your participation in this survey is voluntary. All responses are confidential. No information will be presented or published that would in any way permit the identification of any individual respondent.

Have you taken a free open online course on any other online platform (such as edX or Udacity)?

- Yes
- No

In how many free open online courses have you enrolled?

For how many free open online courses have you watched the first lecture?

For how many free open online courses have you watched the last lecture?

For how many free open online courses have you received a certificate or statement of accomplishment upon completing the course?
In which of the following Coursera courses offered by the University of Pennsylvania have you enrolled? Choose all that apply.

<table>
<thead>
<tr>
<th>Course</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Health Policy and the Affordable Care Act</td>
<td></td>
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<tr>
<td>Fundamentals of Pharmacology</td>
<td></td>
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<tr>
<td>Gamification</td>
<td></td>
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<tr>
<td>Vaccines</td>
<td></td>
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<tr>
<td>Listening to World Music</td>
<td></td>
</tr>
<tr>
<td>Modern and Contemporary American Poetry</td>
<td></td>
</tr>
<tr>
<td>Networked Life</td>
<td></td>
</tr>
<tr>
<td>Greek and Roman Mythology</td>
<td></td>
</tr>
<tr>
<td>Introduction to Operations Management</td>
<td></td>
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<tr>
<td>Experimental Genome Science</td>
<td></td>
</tr>
<tr>
<td>Design: Creation of Artifacts in Society</td>
<td></td>
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<tr>
<td>Calculus: Single Variable</td>
<td></td>
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<tr>
<td>Pay Attention! ADHD Through the Lifespan</td>
<td></td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td>Rationing and Allocating Scarce Medical Resources</td>
<td></td>
</tr>
<tr>
<td>Cardiac Arrest, Resuscitation Science, Hypothermia</td>
<td></td>
</tr>
<tr>
<td>Growing Old Around the Globe</td>
<td></td>
</tr>
<tr>
<td>The Global Business of Sports</td>
<td></td>
</tr>
<tr>
<td>Introduction to Financial Accounting</td>
<td></td>
</tr>
<tr>
<td>Neuroethics</td>
<td></td>
</tr>
<tr>
<td>Basic Behavioral Neurology</td>
<td></td>
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<tr>
<td>Corporate Finance</td>
<td></td>
</tr>
</tbody>
</table>

Why did you choose to enroll in **Health Policy and the Affordable Care Act**? Choose all that apply.

- Gain specific skills to do my job better
- I wanted to take a course with this particular professor
- I wanted to see what online courses are like
- Gain knowledge to get my degree
- Curiosity / Just for fun
- I wanted to take a course offered by the University of Pennsylvania
- Gain specific skills to get a new job
- Other
  - Someone I know recommended this course to me
- None of these

Why did you choose to enroll in **Fundamentals of Pharmacology**? Choose all that apply.

- Gain specific skills to do my job better
- I wanted to take a course with this particular professor
- I wanted to see what online courses are like
- Gain knowledge to get my degree
- Curiosity / Just for fun
- I wanted to take a course offered by the University of Pennsylvania
- Gain specific skills to get a new job
- Other
  - Someone I know recommended this course to me
- None of these
Gain knowledge to get my degree

Gain specific skills to do my job better

Gain specific skills to get a new job

Curiosity / Just for fun

I wanted to see what online courses are like

I wanted to take a course offered by the University of Pennsylvania

I wanted to take a course with this particular professor

Someone I know recommended this course to me

Other

None of these

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Why did you choose to enroll in **Gamification**? Choose all that apply.

Gain specific skills to do my job better

Gain knowledge to get my degree

I wanted to take a course with this particular professor

I wanted to see what online courses are like

Someone I know recommended this course to me

I wanted to take a course offered by the University of Pennsylvania

Curiosity / Just for fun

Gain specific skills to get a new job

Other

None of these

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Why did you choose to enroll in **Vaccines**? Choose all that apply.

Curiosity / Just for fun

Gain knowledge to get my degree

Someone I know recommended this course to me

Gain specific skills to do my job better

I wanted to take a course with this particular professor

I wanted to take a course offered by the University of Pennsylvania

I wanted to see what online courses are like

Gain specific skills to get a new job
Why did you choose to enroll in **Listening to World Music**? Choose all that apply.

- Gain specific skills to get a new job
- Gain specific skills to do my job better
- Gain knowledge to get my degree
- I wanted to take a course offered by the University of Pennsylvania
- Curiosity / Just for fun
- Someone I know recommended this course to me
- I wanted to take a course with this particular professor
- I wanted to see what online courses are like
- Other
  - 
- None of these

Why did you choose to enroll in **Modern and Contemporary American Poetry**? Choose all that apply.

- Someone I know recommended this course to me
- I wanted to take a course offered by the University of Pennsylvania
- Gain knowledge to get my degree
- Curiosity / Just for fun
- Gain specific skills to do my job better
- I wanted to take a course with this particular professor
- I wanted to see what online courses are like
- Gain specific skills to get a new job
- Other
  - 
- None of these

Why did you choose to enroll in **Networked Life**? Choose all that apply.
Why did you choose to enroll in Greek and Roman Mythology? Choose all that apply.

- I wanted to take a course offered by the University of Pennsylvania
- Gain knowledge to get my degree
- I wanted to take a course with this particular professor
- Someone I know recommended this course to me
- Curiosity / Just for fun
- Gain specific skills to do my job better
- I wanted to see what online courses are like
- Gain specific skills to get a new job
- Other
- None of these

Why did you choose to enroll in Introduction to Operations Management? Choose all that apply.

- I wanted to take a course offered by the University of Pennsylvania
- Curiosity / Just for fun
- Gain knowledge to get my degree
- I wanted to take a course with this particular professor
- Someone I know recommended this course to me
- Gain specific skills to get a new job
- I wanted to see what online courses are like
- Gain specific skills to do my job better
- Other
- None of these
<table>
<thead>
<tr>
<th>Why did you choose to enroll in <strong>Experimental Genome Science</strong>? Choose all that apply.</th>
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</thead>
<tbody>
<tr>
<td>I wanted to see what online courses are like</td>
</tr>
<tr>
<td>Gain specific skills to get a new job</td>
</tr>
<tr>
<td>I wanted to take a course offered by the University of Pennsylvania</td>
</tr>
<tr>
<td>Someone I know recommended this course to me</td>
</tr>
<tr>
<td>Gain specific skills to do my job better</td>
</tr>
<tr>
<td>Curiosity / Just for fun</td>
</tr>
<tr>
<td>I wanted to take a course with this particular professor</td>
</tr>
<tr>
<td>Gain knowledge to get my degree</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>None of these</td>
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<thead>
<tr>
<th>Why did you choose to enroll in <strong>Design: Creation of Artifacts in Society</strong>? Choose all that apply.</th>
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</thead>
<tbody>
<tr>
<td>Gain specific skills to get a new job</td>
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<tr>
<td>I wanted to take a course offered by the University of Pennsylvania</td>
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<tr>
<td>Gain knowledge to get my degree</td>
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<tr>
<td>Someone I know recommended this course to me</td>
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<tr>
<td>Gain specific skills to do my job better</td>
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<th>Why did you choose to enroll in <strong>Calculus: Single Variable</strong>? Choose all that apply.</th>
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</thead>
<tbody>
<tr>
<td>Gain knowledge to get my degree</td>
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<tr>
<td>None of these</td>
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</tbody>
</table>
Why did you choose to enroll in **Pay Attention! ADHD Through the Lifespan**? Choose all that apply.

- [ ] I wanted to take a course with this particular professor
- [ ] I wanted to see what online courses are like
- [ ] I wanted to take a course offered by the University of Pennsylvania
- [ ] Someone I know recommended this course to me
- [ ] Gain specific skills to do my job better
- [ ] Curiosity / Just for fun
- [ ] Gain specific skills to get a new job
- [ ] Gain knowledge to get my degree
- [ ] Other
- [ ] None of these

Why did you choose to enroll in **Principles of Microeconomics**? Choose all that apply.

- [ ] Gain specific skills to get a new job
- [ ] I wanted to take a course with this particular professor
- [ ] I wanted to see what online courses are like
- [ ] Curiosity / Just for fun
- [ ] Gain specific skills to do my job better
- [ ] Someone I know recommended this course to me
- [ ] I wanted to take a course offered by the University of Pennsylvania
- [ ] Gain knowledge to get my degree
- [ ] Other
- [ ] None of these
None of these

Why did you choose to enroll in **Rationing and Allocating Scarce Medical Resources**? Choose all that apply.

- [ ] I wanted to take a course offered by the University of Pennsylvania
- [ ] I wanted to see what online courses are like
- [ ] Curiosity / Just for fun
- [ ] Gain specific skills to do my job better
- [ ] Gain specific skills to get a new job
- [ ] Someone I know recommended this course to me
- [ ] I wanted to take a course with this particular professor
- [ ] Gain knowledge to get my degree
- [ ] Other
  - [ ] None of these

Why did you choose to enroll in **Cardiac Arrest, Resuscitation Science, Hypothermia**? Choose all that apply.

- [ ] Gain specific skills to do my job better
- [ ] I wanted to take a course with this particular professor
- [ ] Gain knowledge to get my degree
- [ ] I wanted to take a course offered by the University of Pennsylvania
- [ ] I wanted to see what online courses are like
- [ ] Someone I know recommended this course to me
- [ ] Gain specific skills to get a new job
- [ ] Curiosity / Just for fun
- [ ] Other
  - [ ] None of these

Why did you choose to enroll in **Growing Old Around the Globe**? Choose all that apply.

- [ ] Gain specific skills to get a new job
Why did you choose to enroll in The Global Business of Sports? Choose all that apply.

- Curiosity / Just for fun
- Gain specific skills to get a new job
- I wanted to take a course offered by the University of Pennsylvania
- I wanted to see what online courses are like
- Someone I know recommended this course to me
- Gain specific skills to do my job better
- Gain knowledge to get my degree
- I wanted to take a course with this particular professor
- Other
- None of these

Why did you choose to enroll in Introduction to Financial Accounting? Choose all that apply.

- Gain knowledge to get my degree
- Someone I know recommended this course to me
- Gain specific skills to get a new job
- Gain specific skills to do my job better
- I wanted to take a course with this particular professor
- I wanted to take a course offered by the University of Pennsylvania
- Curiosity / Just for fun
- I wanted to see what online courses are like
Why did you choose to enroll in **Neuroethics**? Choose all that apply.

- [ ] I wanted to take a course offered by the University of Pennsylvania
- [ ] Curiosity / Just for fun
- [ ] I wanted to take a course with this particular professor
- [ ] Gain specific skills to get a new job
- [ ] Someone I know recommended this course to me
- [ ] I wanted to see what online courses are like
- [ ] Gain knowledge to get my degree
- [ ] Gain specific skills to do my job better
- [ ] Other
- [ ] None of these

Why did you choose to enroll in **Basic Behavioral Neurology**? Choose all that apply.

- [ ] I wanted to see what online courses are like
- [ ] Gain specific skills to do my job better
- [ ] I wanted to take a course with this particular professor
- [ ] Someone I know recommended this course to me
- [ ] Curiosity / Just for fun
- [ ] I wanted to take a course offered by the University of Pennsylvania
- [ ] Gain specific skills to get a new job
- [ ] Gain knowledge to get my degree
- [ ] Other
- [ ] None of these

Why did you choose to enroll in **Corporate Finance**? Choose all that apply.

- [ ] Curiosity / Just for fun
For each of the courses in which you enrolled, approximately how many hours per week did you spend watching lectures, doing readings, completing assignments, etc.?

<table>
<thead>
<tr>
<th>Course</th>
<th>0-1 hours</th>
<th>1-3 hours</th>
<th>3-5 hours</th>
<th>5-8 hours</th>
<th>8-10 hours</th>
<th>10-12 hours</th>
<th>12-15 hours</th>
<th>15+ hours</th>
<th>N/A, this course has not started</th>
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<td>Health Policy and the Affordable Care Act</td>
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<td>Gamification</td>
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<td>Listening to World Music</td>
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<td>Experimental Genome Science</td>
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<td>Design: Creation of Artifacts in Society</td>
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<td>Principles of Microeconomics</td>
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<td>Science, Hypothermia</td>
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Given your experience taking Coursera courses offered by the University of Pennsylvania, would you be willing to pay $\{e://Field/Price\} for access to your next course?

- Yes
- No

Which of the following problems have you encountered while taking a Penn Coursera course? Choose all that apply.

- Difficulty interacting with the instructors and TAs
- Limited access to a computer
- Poor video quality
- Difficulty navigating the Coursera website
- Ineffective discussion forums
- Poor audio quality
- Lack of time
- Slow internet connection
- Poor troubleshooting and technical assistance
- None of these

In which of the following subjects would you like to see more course offerings on Coursera? Choose all that apply.

- Mathematics - such as Calculus, Statistics
- Fine Arts and Design - such as Music, Theater, Film, Photography, Sculpture, Architecture, Spacial Design
- Information and Computer Science - such as Programming, Software Engineering, Algorithms, Data and Informatics
- Law - such as Contracts, Criminal Law, Constitutional Law
- Social Sciences - such as Economics, Psychology, Political Science, Social and Public Policy
- Business and Management - such as Finance, Accounting, Marketing
- Medicine and Health - such as Anatomy, Nutrition, Neurology, Disease Prevention
- Humanities - such as History, Literature, Poetry
- Physical and Biological Sciences - such as Physics, Biology, Chemistry, Astronomy, and Geology
- I think the course offerings are sufficient
How did you first find out about Penn’s course offerings on Coursera?

- Recommended by friend or colleague
- Newspaper article or radio story about Coursera/MOOCs
- Social media link or posting
- Coursera web page
- From Penn’s website or announcements
- Email or other announcement
- Other

How did you first find out about Penn’s course offerings on Coursera?

In which country do you reside?

United States

What is your gender?

- Male
- Female
- Prefer not to answer

What is your age?

Which of the following best describes your employment status?

- Student
- Part time employed
- Full time employed
What is the highest level of education you have completed?

- Less than High School / Secondary School
- High School / Secondary School / GED
- Some college
- 2 year college degree (such as Associate's degree) or equivalent
- Technical degree or certification
- University degree (such as BA, BS) or equivalent
- Master's degree (such as MA) or equivalent
- Professional degree (such as JD, MD, MBA) or equivalent
- Doctoral degree (PhD)

Are you a graduate of the University of Pennsylvania?

- Yes
- No

We are interested in using our open course initiatives to strengthen our ties with Penn alumni. Your email address, should you be willing to share it in the space provided below, will help us do so. (This is optional.)