Teaching through MOOCs: Professors Share Their Insights

February 12, 2014
AHEAD@NU Meeting

Todd Murphey, Associate Professor, Mechanical Engineering, McCormick
Course: Everything is the Same: Modeling Engineered Systems

Owen Youngman, Knight Professor of Digital Media Strategy, Medill
Course: Understanding Media by Understanding Google

Esther Barron, Clinical Professor of Law and Director, Entrepreneurship Law Center
Stephen Reed, Clinical Professor of Law and Assistant Director, Entrepreneurship Law Center
Course: Law and the Entrepreneur
HOMES OF THE ‘GRADUATES’

- Canada: 51
- Spain: 58
- UK: 51
- India: 94

[Map showing the homes of the graduates worldwide]
# LEADING LANGUAGES

<table>
<thead>
<tr>
<th>Language</th>
<th>Count</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>English (41%)</td>
<td>305</td>
<td></td>
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<tr>
<td>Spanish and related* (10%)</td>
<td>73</td>
<td></td>
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<tr>
<td>Languages of India (7%)</td>
<td>51</td>
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<tr>
<td>German</td>
<td>27</td>
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<tr>
<td>Languages of China</td>
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<tr>
<td>Italian</td>
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<tr>
<td>Portuguese</td>
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<tr>
<td>Greek</td>
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<tr>
<td>Russian**</td>
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<tr>
<td>Dutch</td>
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<tr>
<td>Polish**</td>
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<td>French</td>
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<tr>
<td>Hungarian**</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Filipino</td>
<td>12</td>
<td></td>
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</tbody>
</table>

n=754 of students who passed

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How would you rate the difficulty of taking the course in English, understanding the concepts and completing assignments?

- **Very difficult**
- **Very easy**
- **Fairly difficult**
- **Just right**
- **Fairly easy**

n=449 non-native English speakers

*includes Basque, Catalan, Galician

**All Slavic languages: 92 (1.2%)
FROM THE STUDENT PERSPECTIVE

• “In grading the first assignment, I encountered an unexpected problem. One is written in Russian!”

• “I’m learning how to read for intended meaning. This has always been particularly difficult for me and because of that I think it’s a seriously useful skill to have.”

• “It’s been a bit challenging sometimes reading other people’s papers when their English skills aren’t great, but I think of what it must be to try and write complex ideas in another language.”

• “I want to take a moment to express my awe and admiration over the number of course participants for whom English is not a native language. You are amazing!”
Coursera MOOC

*Everything Is The Same: Modeling Engineered Systems*

Todd Murphey
Mechanical Engineering
Northwestern University

When you see

\[
\frac{\partial C(x)}{\partial t} = D \frac{\partial^2 C(x)}{\partial x^2}
\]

Get here only starting with basic calculus
At-Home Demonstrations

Short Lectures

- 24 Lectures, 6.5 min each
- 65 pages of course notes
- 24 exercises and 7 homework sets and 1 final
- Demonstrations: $30
- Online students can be very motivating to in-class students

Demonstrations

Eddy current demonstration from online student
Flipped Classroom

- Students were unhappy and angry at first, but the course evaluations ended up quite high
- “Are MOOCs more or less worthwhile now?”
  28 More/ 1 Less/ 7 Neutral
- “Is On-Campus Learning more or less worthwhile now?”
  25 More/ 2 Less/ 9 Neutral
Law and the Entrepreneur

This course will highlight the critical legal and business issues entrepreneurs face as they build and launch a new venture. We will explore real world scenarios, and address the legal and business issues that entrepreneurs face, from the moment they conceive of the "million dollar idea" to all of the important junctures along the path to success.

About the Course

Are you a passionate entrepreneur with a new business idea, but feeling intimidated by the law? Or perhaps you are a lawyer or aspiring lawyer looking to break into the exciting world of start-ups? This course addresses the legal aspects of entrepreneurship, and is appropriate both for entrepreneurs and lawyers who hope to represent entrepreneurs. Entrepreneurs face many challenges as they pursue a new business idea. With the right legal tools, they can take steps that provide significant legal protections and avoid future liability. Among other subjects, the course will cover American law on choice of entity (corporation, limited liability company, partnership, sole proprietorship), selection of a company name and trademark, protecting intellectual property of the business with patent, trade secret, trademark.
Questions and Discussion