Using Internet Video To Encourage Student Engagement in Large Lecture Classes

Jeremy Ramsey
LITT Workshop Presentation
Lycoming College
September 16, 2014
Previous Work

Students in CHEM 110—General Chemistry asked for more in-class practice with difficult concepts/problems

**PLAN**—Move simpler examples to a series of You Tube videos to make room for more involved problem solving
First Attempt at Video

Suppose that 0.275 g of K₂CrO₄ is dissolved in 500.0 mL of water. What is the molarity of K₂CrO₄ in this solution?
Only a fraction of students watched the videos

Students did not participate in class
(~85 students in Heim G09)
I also wanted to improve the video and audio quality
Nuts and Bolts

Editing of Video Performed in Adobe Premiere

Resulting Video Uploaded to YouTube

Main Camera (Canon 6D)

Secondary Camera (Canon 60D)

Audio Recording (Zoom H1)
Suppose that 0.275 g of $K_2CrO_4$ is dissolved in 500.0 mL of water. What is the molarity of $K_2CrO_4$ in this solution?
Is It Working?

Jeremy Ramsey®
Created: Feb 13, 2009  • Videos: 80  • Lifetime views: 2,233

Last 28 days (Aug 17, 2014 – Sep 13, 2014)

Performance

![Graph of views, estimated minutes watched, and subscribers]

Engagement

![Graph of likes, dislikes, comments, shares, favorites added, and favorites removed]

Top 10 Videos

<table>
<thead>
<tr>
<th>Video</th>
<th>Views (%)</th>
<th>Estimated minutes watched (%)</th>
<th>Likes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Conversions between the English and Metric</td>
<td>58 (32%)</td>
<td>197 (27%)</td>
<td>1</td>
</tr>
<tr>
<td>Unit Conversions with Square and Cubic Exp...</td>
<td>40 (22%)</td>
<td>225 (31%)</td>
<td>1</td>
</tr>
<tr>
<td>Unit Conversions Involving Density</td>
<td>31 (17%)</td>
<td>50 (7.0%)</td>
<td>0</td>
</tr>
<tr>
<td>Significant Figures</td>
<td>19 (11%)</td>
<td>109 (15%)</td>
<td>0</td>
</tr>
<tr>
<td>Conversions Involving Density</td>
<td>17 (9.4%)</td>
<td>111 (15%)</td>
<td>0</td>
</tr>
<tr>
<td>Temperature Conversions</td>
<td>11 (6.1%)</td>
<td>29 (4.0%)</td>
<td>0</td>
</tr>
<tr>
<td>Converting between Atoms, Grams, and Moles</td>
<td>3 (1.7%)</td>
<td>1 (0.1%)</td>
<td>0</td>
</tr>
<tr>
<td>Chemical Equation Balancing-- Part 1</td>
<td>1 (0.6%)</td>
<td>0 (0.0%)</td>
<td>0</td>
</tr>
</tbody>
</table>

Tuesday 8:48pm

Kids in Bio lab watching your videos right now. They're talking about it like it's the best thing ever - because it is! So glad you're still doing that.

That literally saved my life in Chemistry, for semesters to come!