

2014

# Usage of “New Media” Channels For Pre-Medical Curriculum In Classrooms And Distance Learning Environments

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Healthcare



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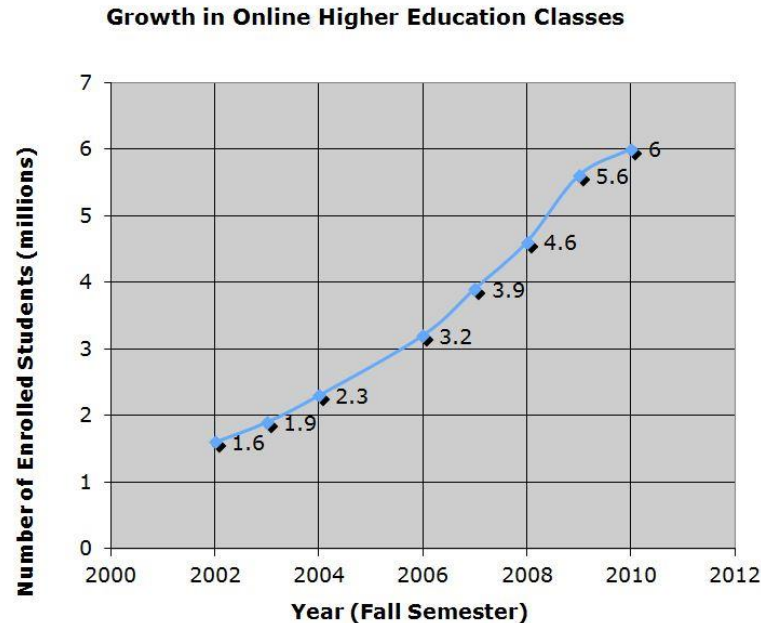
# Overview

- Background
- Purpose
- Methods
- Results
- Conclusions
- How to set up a Wordpress RSS feed in an institutional IT environment.



# Background

- Distance learning has dramatically increased and evolved in the last decade.
- Between 2002 and 2010 the number of students enrolled in online courses rose from 1.6 million to 6 million.<sup>1,2,3</sup>



# Background

- Higher education institutions have historically used virtual private networks to host professors' files on secure servers.
- Examples:
  - Syllabi
  - Lesson assignments
  - Grades
- This has expanded to audio/video lecture recordings and podcasts (i.e., new media or on-demand learning).<sup>4</sup>



# Purpose

- To study the use of media in the premedical population.
- An effort to design career mentorship tools and ensure content delivery.
- Add to the growing body academic literature about the impact of technology advances on education.



# Methods

- Phase 1: Develop an academic and career guidance curriculum.
- Phase 2: Collect data on preferred media formats.



# Methods

- Phase 1: Develop an academic and career guidance curriculum.
  - Surveyed American Medical Student Association Pre-Med students at the University of Houston.
  - Created a curriculum based upon their real-time needs.
  - Produced the content in a variety of multimedia formats.
- Phase 2: Collect data on preferred media formats by the premedical population at large.



# Methods

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  - Surveyed American Medical Student Association Pre-Med students at the University of Houston.
  - Created a curriculum based upon their real-time needs.
  - Produced the content in a variety of multimedia formats.
- Phase 2: Collect data on preferred media formats.
  - **Used metrics tools to compare media formats:**

<b>Media Type</b>	<b>Metrics Tool Used For Usage</b>
Email	Aweber.com
Website	Google Analytics
Live Lectures	Sign-In sheet
Audio MP3	Podpress Statistics
Video	Yahoo.com





# Results

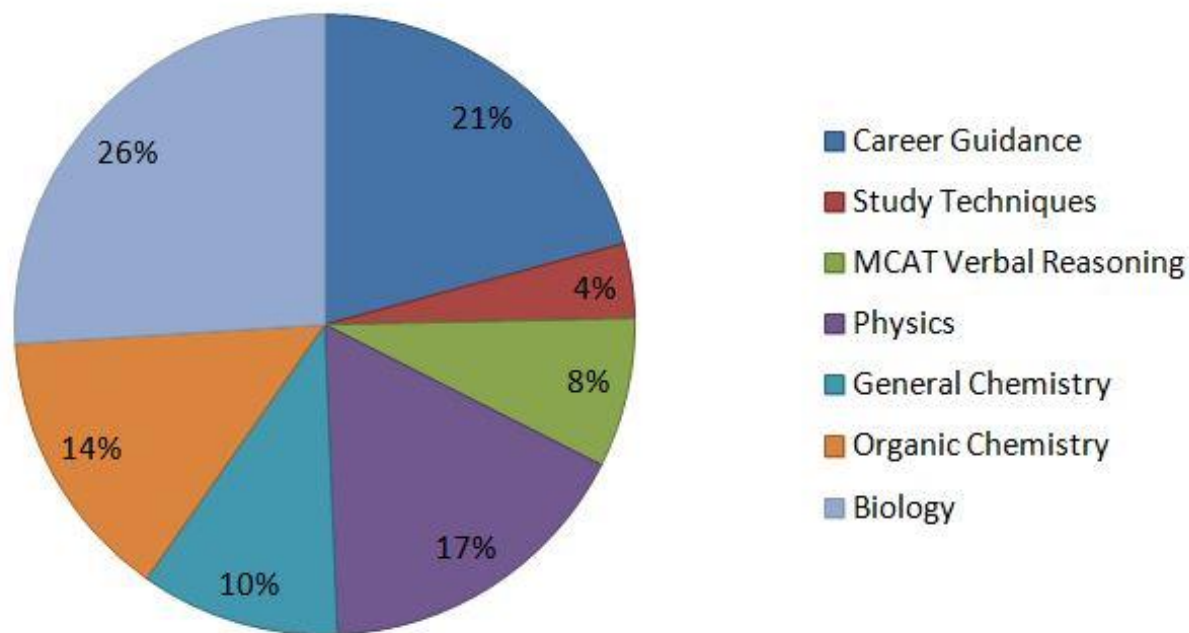
- Phase 1:

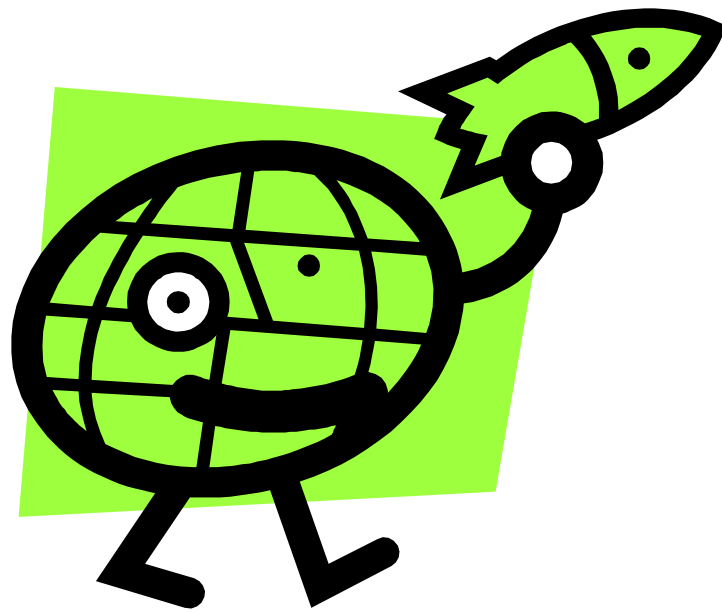
Category	Number (%)	Characteristic
Age	Total number of students: 38	Average age 26.89 Median age 25 Age range 18-45
Race/ethnicity	23 (60.53) 6 (15.79) 2 (5.26) 2 (5.26) 2 (5.26) 2 (5.26) 1 (2.63)	White or Caucasian Asian American Indian or Alaskan Native Black or African American Hispanic or Latino Native Hawaiian or Other Pacific Islander Chinese
Gender	18 (47.37) 20 (52.63)	Female Male
Country of Adolescence*	33 (86.84) 2 (5.26) 1 (2.63) 1 (2.63) 1 (2.63)	United States Canada India Japan Zimbabwe
Number of College Credit Hours	9 (23.68) 9 (23.68) 5 (13.16) 6 (15.79) 4 (10.53) 3 (7.89) 2 (5.26)	> 120 (not in a post-bach program) >120 (in a post-bach program) 91-120 61-90 31-60 0-30 Still in high school
Current Degrees	1 (2.63) 6 (15.79) 20 (52.63) 5 (13.16)	Ph.D. Master's degree Bachelor degree Associate degree
Undergrad. Major	26 (68.42) 12 (31.58)	Science Non-science
Grade Point Average	Total number of students: 33	3.46 Overall GPA 3.44 Science and Math only GPA
Number of Publications	28 (73.68) 5 (13.16) 1 (2.63) 1 (2.63) 3 (7.89)	0 1 4 5 7 or more



# Results

- Phase 1: Table of Contents





# Results

- Phase 2:

Total number of audio podcasts consumed	66,373
Number of audio podcasts fed through RSS to remote player such as iTunes, iPhones, and iPods	63,537 (95.7%)
Number of audio podcasts played on other web sites	2,225 (3.4%)
Number of audio podcasts played from our website	611 (0.92%)

**Table 3:** Audio podcast consumption during the first 17 months of release of comprehensive premedical curriculum online.



Total number of website visits	14,611
Number of unique visitors	11,782
Percentage of visitors that were new	80.5%
Number one traffic source: Google	9,871 (67.6%)
Number two traffic source: Direct	3,302 (22.6%)

**Table 4:** Website usage data for the first 9 months after release of premedical curriculum.



Total number of email opt-ins	1,618
Number of unsubscribed opt-ins	247 (15.3%)
Number of active opt-ins	1,371 (84.7%)
Average percentage of emails opened (n=10)	48.5%
Average percentage of email complaints (n=10)	0.09%

**Table 5:** Usage of opt-in email list for consuming premedical curriculum.



Total number of videos	33
Total number of views	77,661
Range of number of views	31 – 13,293
Average number of views per video	2,353

**Table 6:** Usage data of YouTube videos for consuming premedical curriculum.



# Results

- Summary of Data:

<b>Media Type</b>	<b>Usage Data</b>
Video lessons	77,661 video views
Audio podcasts	66,373 downloads
Website visits	11,782 unique visitors
Email	1,618 opt-in subscribers
Physical bundle of books and DVDs	12 shipments





# Conclusions

- Audio podcasts and videos appear to be the preferred method of consumption of premedical curriculum online, with email lists and directly visiting the author's website falling well behind.
- The Apple iTunes platform and YouTube videos are exceptionally effective.
- The days of physical text books, CD's, DVD's and paper handouts are practically obsolete for the self-directed premedical online learner.



# Conclusions

- Limitations:
  - Lack of a control group
  - Cross-pollination
  - A forum was not included



# Future Research

- Mentorship and career guidance
- Academic progress
- Recruitment



# References

- <sup>1</sup>The Future of Online Teaching and Learning: The Survey Says... Kim, Kyong-Jee; Bonk, Curtis J. Educause Quarterly. 2006; Number 4:22-30.
- <sup>2</sup>Growing by Degrees: Online Education in the United States, 2005. Allen, I.E. and J. Seaman. Needham, Mass.: The Sloan Consortium, 2005.
- <sup>3</sup>Going the Distance: Online Education in the United States, 2011. Allen, I.E., Seaman, J. Newburyport, Mass.: The Sloan Consortium, 2011.
- <sup>4</sup>Explorations in Course-Casting: Podcasts in Higher Education. Bongey, Saray Bryans; Cizadlo, Gerald; Kalnbach, Lynn. Campus-Wide Information Systems. 2006;23(5):350-367.
- <sup>5</sup>Wikis, Blogs and Podcasts: A New Generation of Web-Based Tools For Virtual Collaborative Clinical Practice and Education. Boulos, Maged N Kamel; Maramba, Inocencio; Wheeler, Steve. BCM Medical Education 2006, 6:41.
- 6 Facts: Applicants, Matriculates, Enrollment, Graduates, MD/PhD, and Residency Applicants Data, Association of American Medical Colleges.  
<https://www.aamc.org/data/facts/>
- 7 [www.The-Membership-Formula.com](http://www.The-Membership-Formula.com) – Page 1, video #12.



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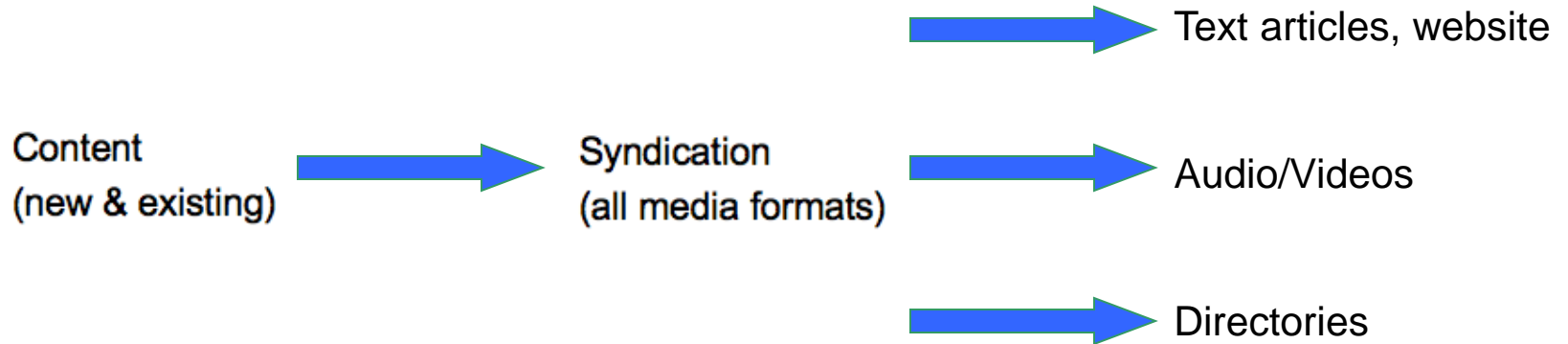


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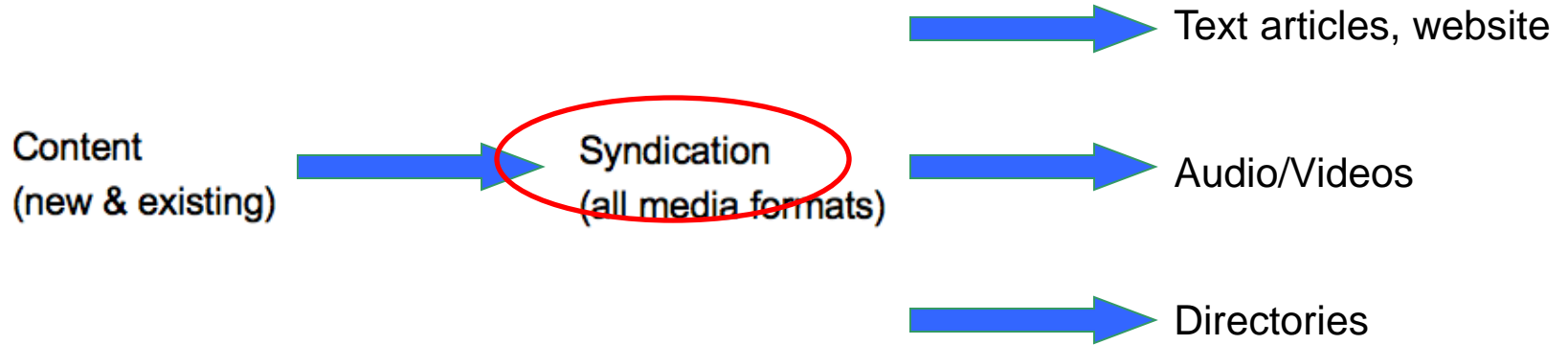
# Tutorial: Really Simple Syndication



# How?



# How?





# Really Simple Syndication (RSS)

- Text file that automatically updates a “feed”
- A “feed” is a stream of updated content.



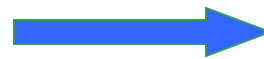
Content  
(new & existing)



Syndication  
(all media formats)



Text – News Journal



Audio - iTunes podcasts



Video – MSN, PBS



# RSS in an Institutional Environment

- Install Wordpress to a subdomain of your school website.
- Get access to the Wordpress directory files and folders.
- Hire a graphic designer to make your Wordpress installation look like the rest of the school's website. (\$)
- Visit [www.The-Membership-Formula.com](http://www.The-Membership-Formula.com):
  - Page 1
  - Video 12 and beyond...





## Download Free Checklists

A graphic of a smartphone displaying a checklist icon (a person with a green checkmark). A red arrow points from the smartphone towards the form below.

Name:

Email:

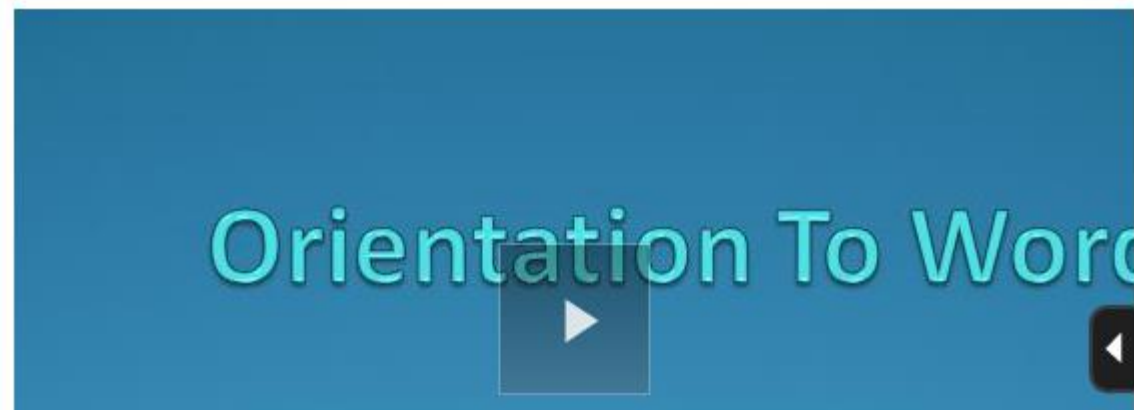
*We respect your email privacy*

Powered by AWeber email marketing

## 12. SETTING UP YOUR WORDPRESS SITE



## 13. ORIENTATION TO WORDPRESS ADMINISTRATION



Questions?

