



Lecture Capture Service Feedback Spring 2011

Services

Media platform services:
iTunes U and YouTube

Media services for your course
website, blog, wiki

Content

Lecture recordings

Course-related video

Hardware

Software

Techniques

Online resources

Educational
Technologist

Faculty Support
Lab

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Podcasting in education

*"The results from a pilot scheme delivering supplementary lecture materials as audio and video podcasts...reveal **students' enthusiasm** for podcast recordings of lecture materials and their primary use by students in revision and preparation for assessments. Survey responses also suggest **little likely impact** on lecture **attendance** as a consequence of podcasting..."*

Copley, Jonathan (2007).

"Audio and video podcasts of lectures for campus-based students: production and evaluation of student use."



Audio



Enhanced Audio



Video



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Opencast Matterhorn -or- "Lights, Camera, Lecture!"

Josh Holtzman (University of California, Berkeley), Adam McKenzie (University of Saskatchewan), Micah Sutton (University of Nebraska, Lincoln)

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Date: Wed, May 23 2011 - 08:30

Contributor: -

Language: English

Views: 2308

Series: Jasig's Spotlight on Open Source Conference | May 23-25, 2011

Presenter: Josh Holtzman (University of California, Berkeley), Adam McKenzie (University of Saskatchewan), Micah Sutton (University of Nebraska, Lincoln)



Introduction:

Welcome to the *Frontiers of Science: Scientific Habits of Mind* website. This site is designed to assist students in coming away from their undergraduate education with the habits of scientific thinking. It provides content in all Columbia graduates.

This Web site and its contents are created by the CCNMTL. For more information, see "[Site Access](#)" for more information on how to use the site.

The text is divided into several chapters:

- [Chapter 1: A Sense of Scale](#) (Self-reflection)
- [Chapter 2: Discoveries on the Back of an Envelope](#)
- [Chapter 3: Insights in Lines and Dots](#)
- [Chapter 4: Expecting the Improbable](#)
- [Chapter 5: Lies, Damned Lies and Statistics](#)
- [Chapter 6: Correlation, Causation...Causation](#)
- [Chapter 7: What is Science?](#)

See "[Help Documentation](#)" for more explanation. Click the "Enter Site" button at any time to enter the site.

Welcome to Frontiers of Science
 A public repository of undergraduate science materials

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Welcome to Frontiers of Science

This community-based Frontiers of Science (FOS) web site is a free resource for college science teachers who seek to access materials for undergraduate science instruction. The e-textbook, lectures, media, activities, problem sets, seminar guides, and other exemplary teaching materials on this site were generated for use in Columbia University's innovative core course, Frontiers of Science. Search for freely downloadable content based on discipline and/or resource type in the Navigation Toolbar above. Keyword-based and advanced search tools are also available.

Content highlights

Student Activities

Discover a wealth of student activities covering the primary scientific disciplines discussed in FOS. Activities include classroom seminar based work to individual student assignments.

Example: Wombats

Instructor Guides

Find teaching advice and tips ranging from effectively planning and leading discussions to developing successful exam questions.

Example: Discussing a Science Article from the Popular Press

Video Lectures

Watch an extensive collection of full lecture videos from Columbia University's FOS faculty.

Example: The Human Brain at Work

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Columbia University > Courses 2010 - 2011 > C1000 Frontiers of Science - Audio

C1000 Frontiers of Science



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2 Brain & Behavior 2 (Kelley) (Jan 31, 2011)	1/31/11	1:16:43	Columbia University	C1000 Frontiers of Science - Audio	Free GET
3 Brain & Behavior 3 (Kelley) (Feb 7, 2011)	2/7/11	1:14:00	Columbia University	C1000 Frontiers of Science - Audio	Free GET
4 Brain & Behavior 4 (Kelley) (Feb 14, 2011)	2/14/11	1:30:00	Columbia University	C1000 Frontiers of Science	Free GET
5 Physics 1 (Hughes) (Feb 21, 2011)	2/21/11		Columbia University	C1000 Frontiers of Science - Audio	Free GET
6 Physics 2 (Hughes) (Feb 21, 2011)	3/7/11	1:14:13	Columbia University	C1000 Frontiers of Science - Audio	Free GET
7 Physics 3 (Hughes) (Mar 7, 2011)	3/7/11	1:29:58	Columbia University	C1000 Frontiers of Science	Free GET
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9 Evolutionary Biology 2 (Pollack) (Apr 4, 2011)	4/4/11	1:29:58	Columbia University	C1000 Frontiers of Science	Free GET
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11 Earth Science 1 (Plank) (Apr 18, 2011)	4/18/11	1:29:58	Columbia University	C1000 Frontiers of Science	Free GET
12 Earth Science 2 (Plank) (Apr 25, 2011)	4/29/11	1:29:57	Columbia University	C1000 Frontiers of Science	Free GET
13 Earth Science 3 (Plank) (May 2, 2011)	5/3/11	1:29:58	Columbia University	C1000 Frontiers of Science	Free GET



Personality Scales Associated with the Serotonin Transporter Promoter-Region Polymorphism

NEO-PI-R "Neuroticism" and "Agreeableness" (-)

Subscales (facets):	Anxiety	Trust (-)
	Angry Hostility	Compliance (-)
	Depression	
Straightforwardness (-)	Vulnerability	

Cattell's 16-PT "Anxiety"

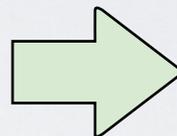
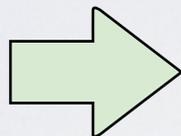
Subscales (factors):	Tension
	Suspiciousness

Cloninger's Tridimensional Personality Questionnaire "Harm Avoidance"

Subscales:	Worry and Pessimism
	Fear of Uncertainty
	Fatigability

Lesch KP, et al. (1996) Science 274:1527





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<http://www.profcast.com>



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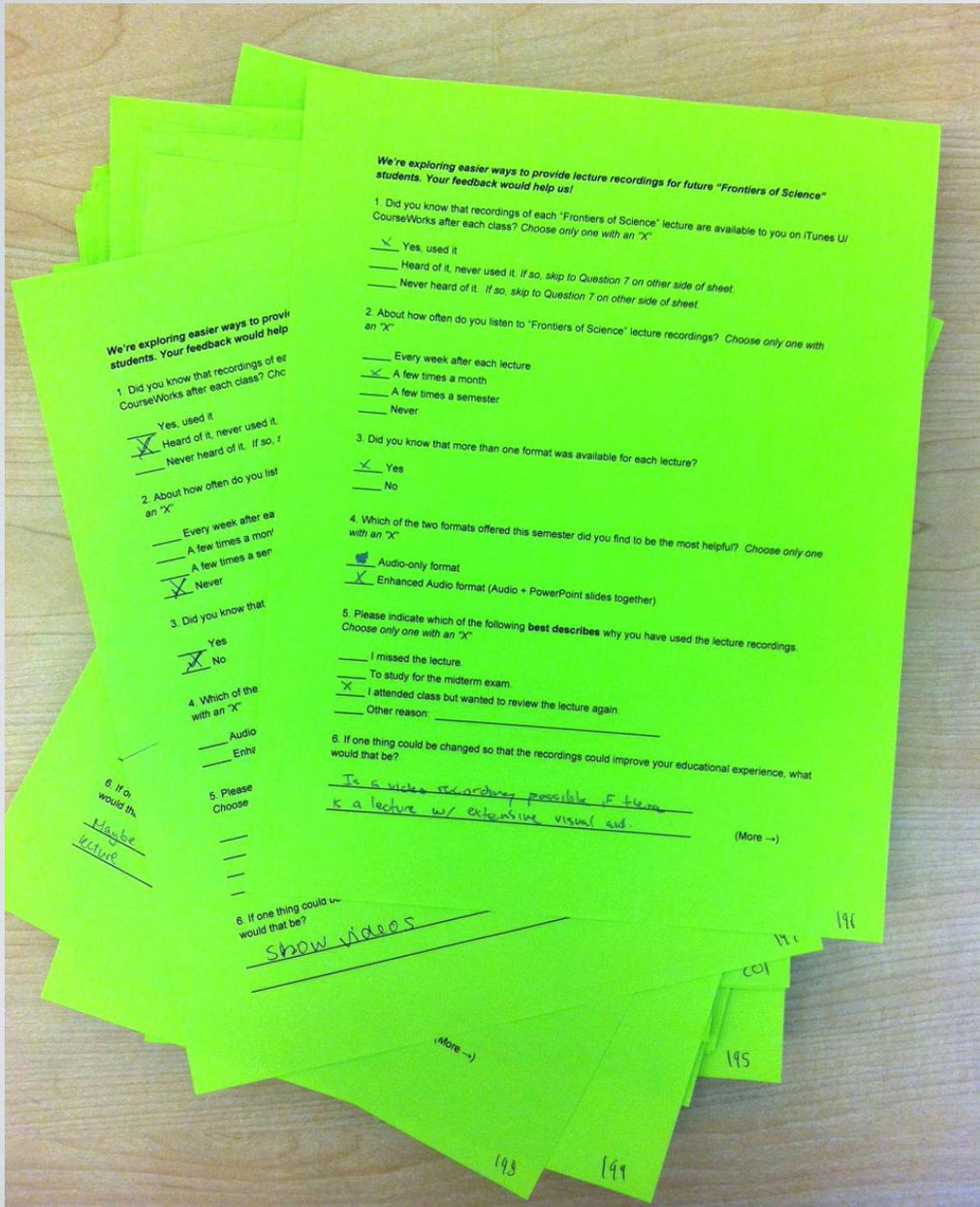
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13 songs

Questionnaire Methodology



2010 - 2011 C1000 Frontiers of Science course enrollment:

534 students

On March 28, 2011, distributed 325 paper-based questionnaires.

—roughly 60.8% of the class.

Questionnaire does not report on the 209 students who did not attend lecture.

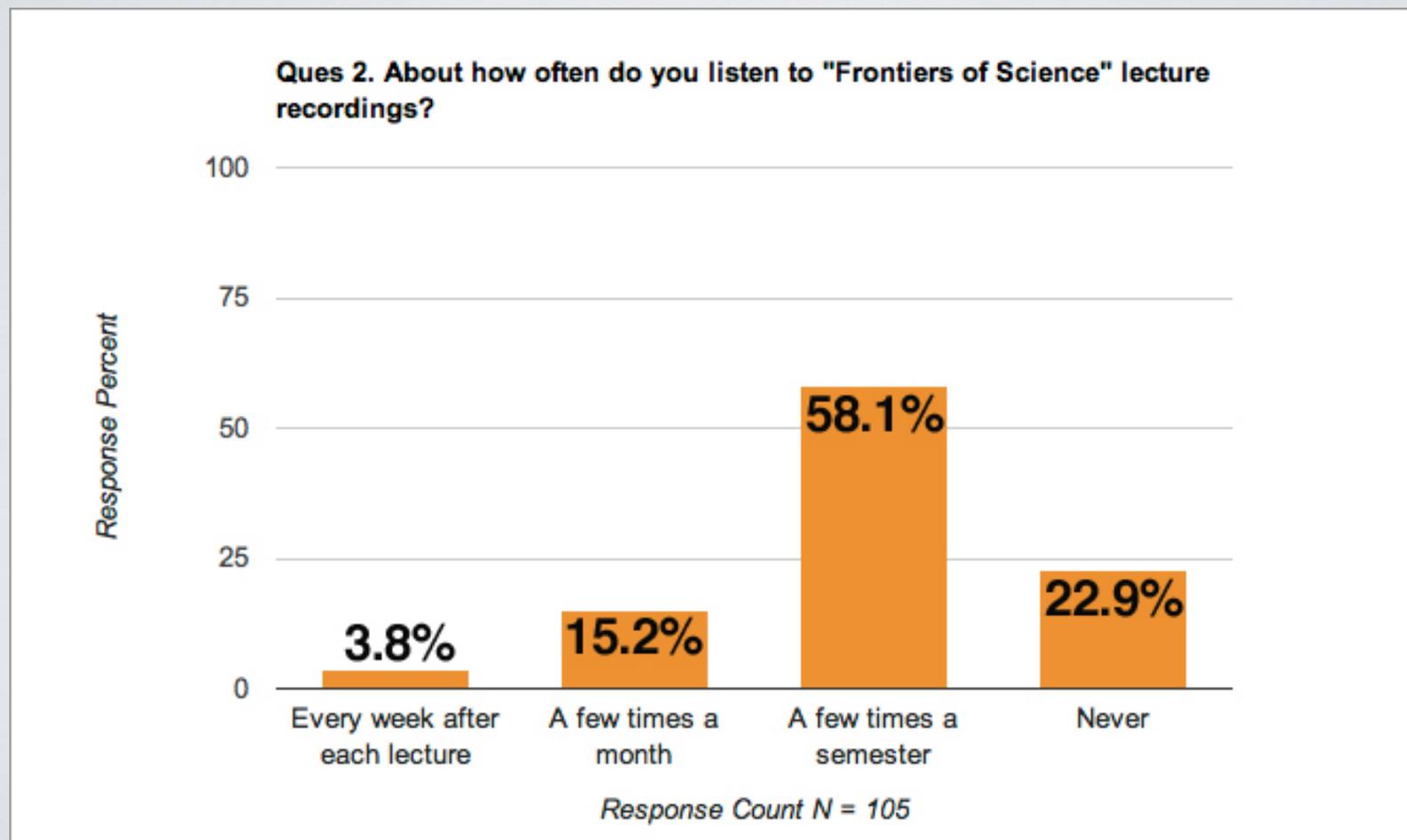
207 completed questionnaires were collected after class was over.

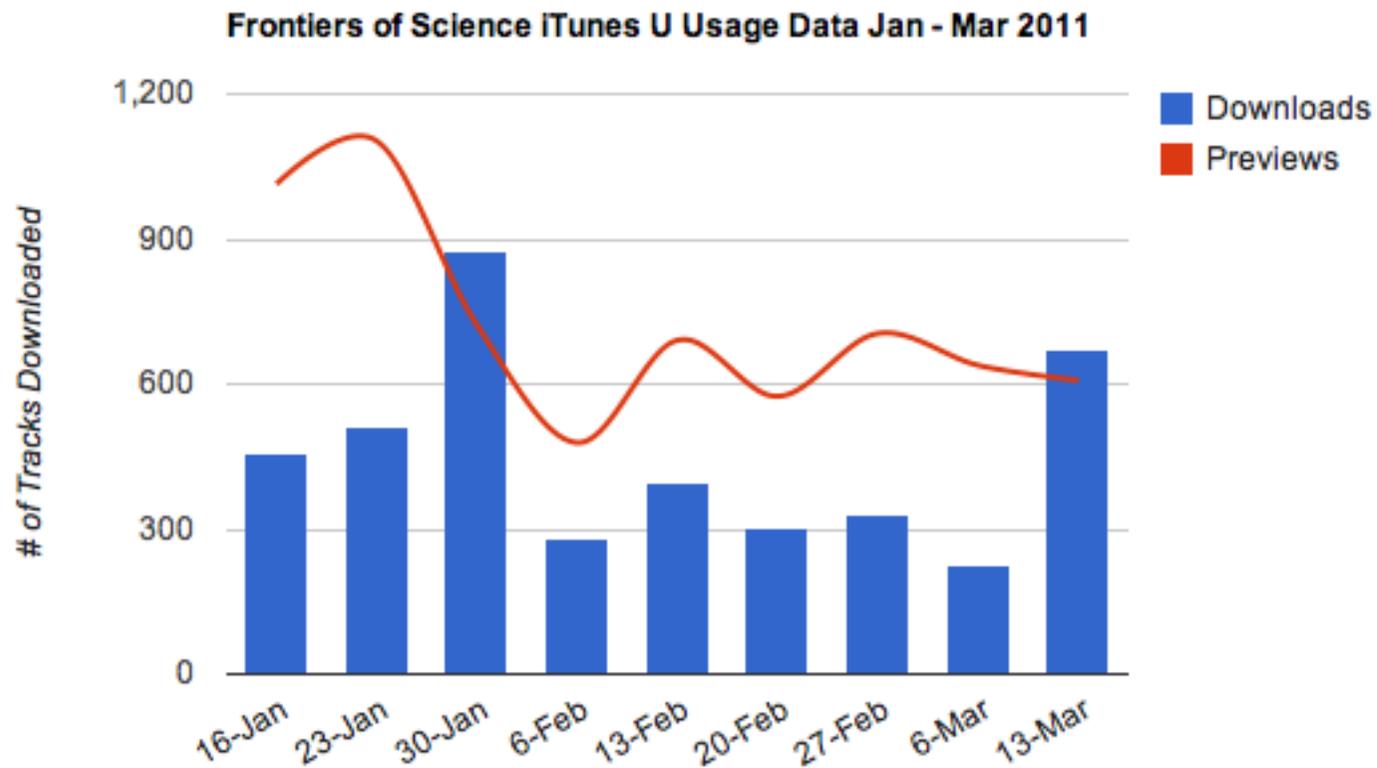
Response rate: **63.7%**.

Overall response rate of total students enrolled in the course was **38.76%**.

Student Awareness of Current Lecture Recordings

- **Most students (50.2%) indicated they did not use recordings**, while a slightly smaller number of students did use the recordings (41%).
- Of the students who knew about the Frontiers of Science recordings (41%), **most listened to the lecture recordings a few times a semester (58.1%)**, some listened a few times a month (15.2%), and some each week after the lecture (3.8%). (*Figure 1*)



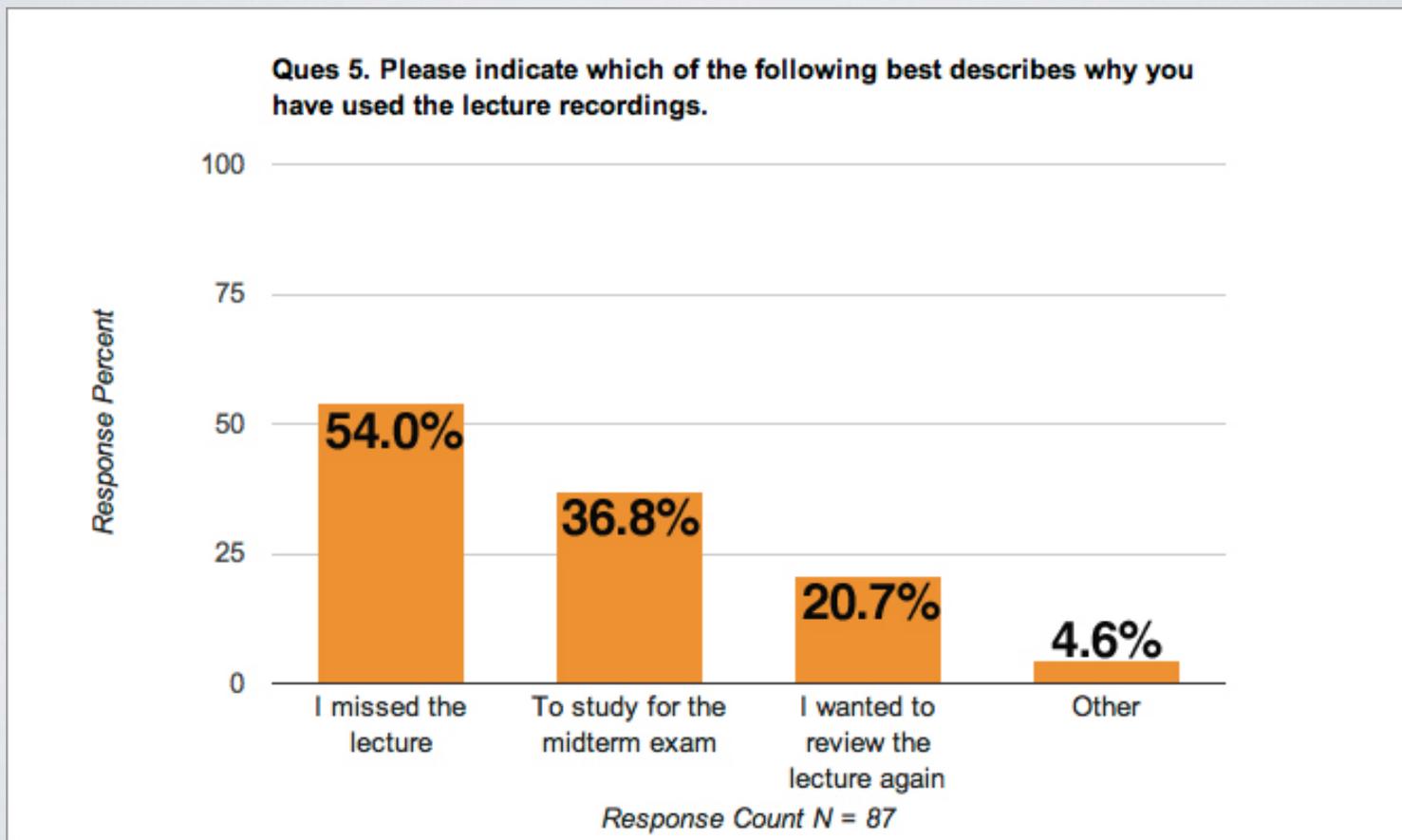


Date	Downloads	Previews	Total
16-Jan	458	1011	1469
23-Jan	513	1100	1613
30-Jan	875	719	1594
6-Feb	279	476	755
13-Feb	398	688	1086
20-Feb	303	572	875
27-Feb	332	702	1034
6-Mar	225	636	861
13-Mar	671	605	1276
Totals	4054	6509	10563

* Recordings were only accessible to students enrolled in the course.

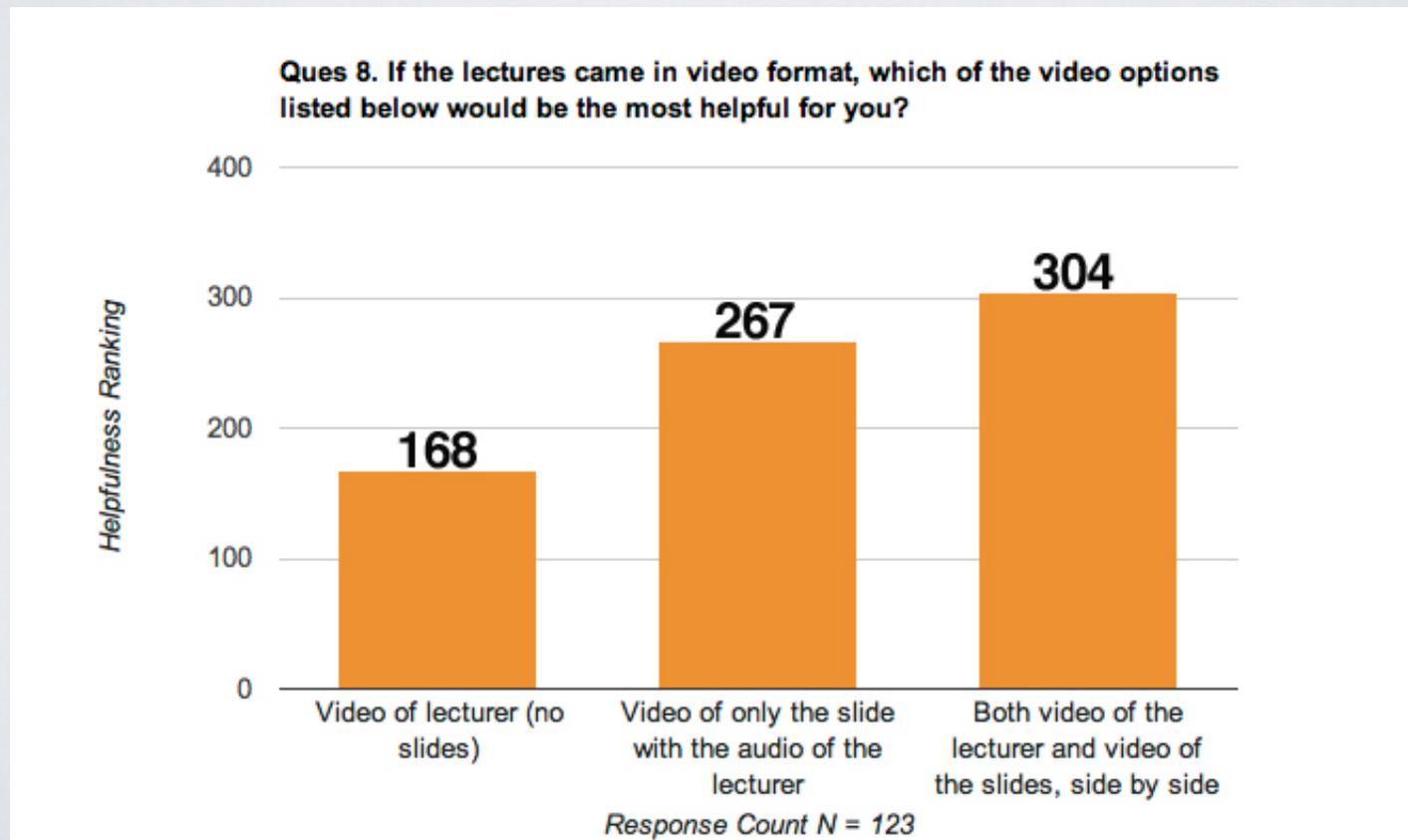
Student Awareness of Recordings Formats

- The **majority of students (58.5%)** were aware that **two formats were available for download**—preferred the **Enhanced Audio** format over the Audio-only format (**60.0%**).
- *The situation that best described why students used the lecture recordings was **because they had missed class (54%)**. (Figure 2)*



Student-Preferred Format: Audio or Video?

- If both audio and video recordings of each lecture were to be made available, **91.9% of the students indicated that they would prefer to use the video version.**
- 17 comments specifically asked for features that added “video”.
- In terms of potential viewing options in the case the lectures recordings were offered in a video format, **both video of the lecturer and video of the slides, side by side was ranked as being most helpful.** (*Figure 3*)





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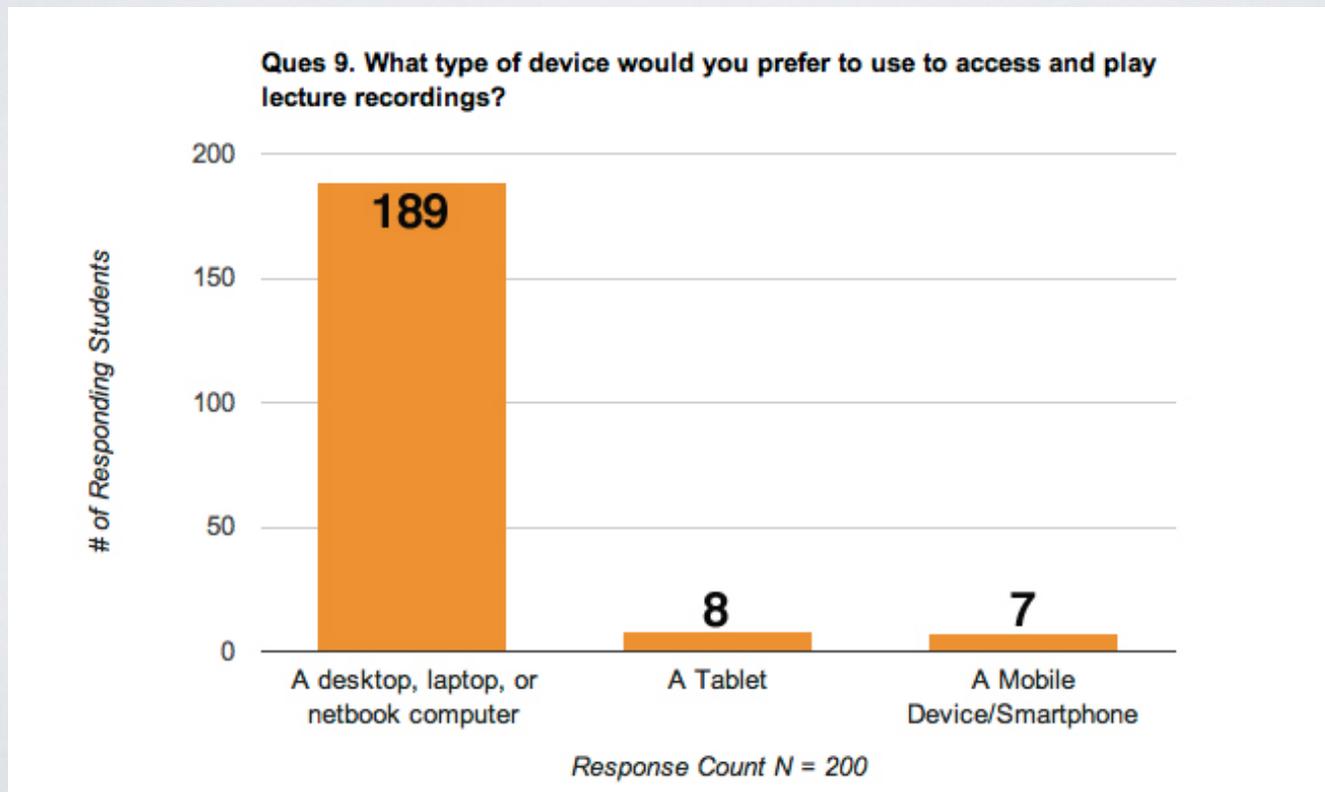
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Where and How Students Receive Lecture Recordings

Out of the 200 students who answers the question on what type of device is preferred to use to access and play lecture recordings, **a desktop, laptop, or netbook computer was the preferred device platform for accessing & using lecture recordings by a large margin (189 students).**

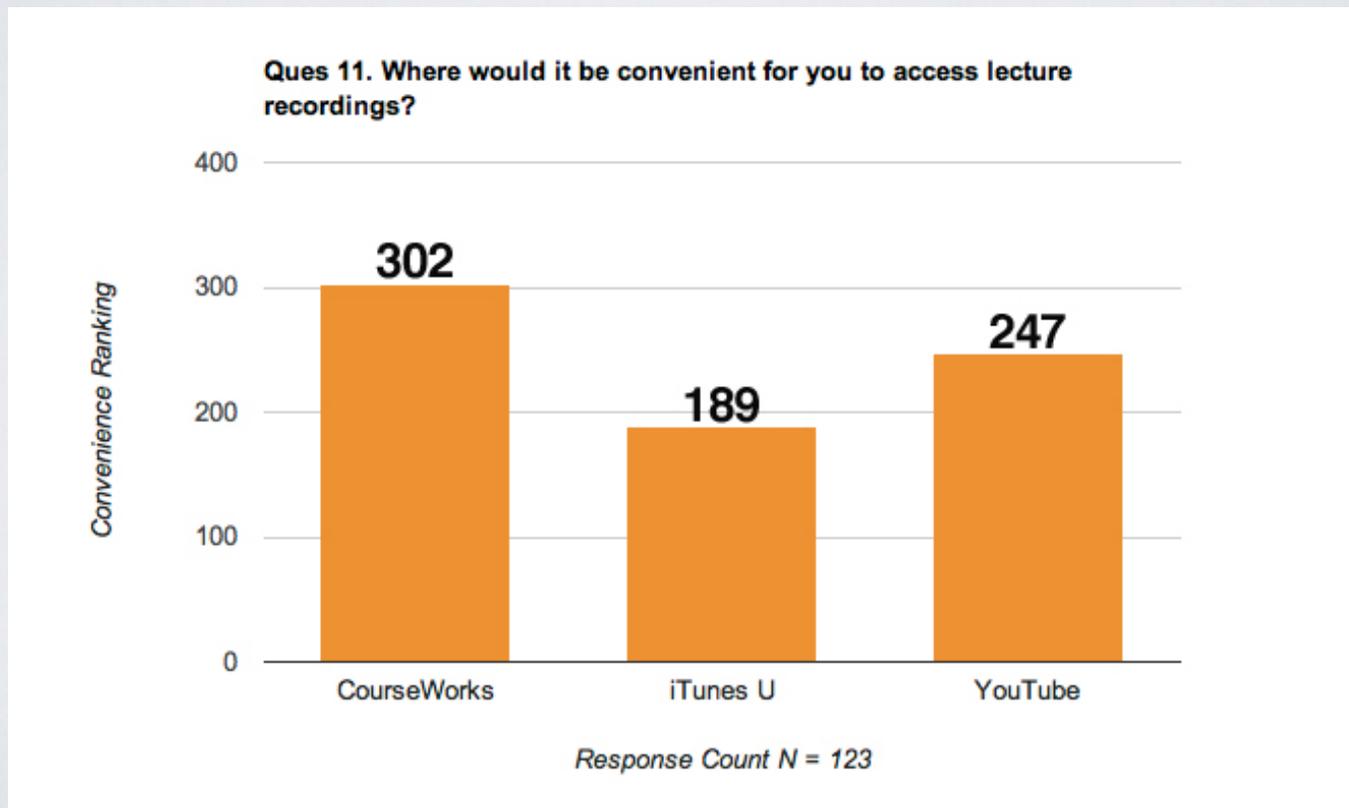
A mere 8 students indicated Tablet as preferred, while 7 indicated Mobile Device/Smartphone. *Note: Some students chose more than one choice. (Figure 4)*



Where and How Students Receive Lecture Recordings

The questionnaire asked students to rank which course platform would it be most, somewhat, and least convenient for accessing lecture recordings: CourseWorks, iTunes U, or YouTube.

Of these three options: **CourseWorks was ranked most convenient**, followed by YouTube as being somewhat convenient. Of the three options, iTunes U was ranked as least convenient place to access recordings. (Figure 5)



Discussion & Recommendations

- Frontiers of Science lecture **recordings should be focused on CourseWorks distribution**, using easy to access streaming web video
- **Web browser-based or desktop application-based delivery of lecture recordings should remain the priority**. Mobile options can continue to be explored
- Technologies that employ **video recording and distribution be considered for future Frontiers of Science lecture recording services**, focus on side-by-side i.e. dual stream video
- CCNMTL should **continue to work with the Frontiers of Science team and related faculty to increase the awareness and usage of lecture recordings**, as well as **advocate the utility of the lecture recordings** as a study and review aid for the course

Next Steps

This questionnaire provided initial insight into student awareness and student preference in terms of medium formats and access, and provide our team with a foundation upon which we can build further research for improved pedagogy and innovative teaching. There are two principal areas that could warrant further investigation:

(1) *Why* students prefer a video format over audio should be analyzed further.

(2) *How* students use the recordings—not just how they receive them, but what they actually do with them.

A way to continue this research would be to organize focus groups of students who participated in the questionnaire in an effort to gain more insight into this and other topics related to how lecture recordings can be improved as a learning tool.



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