Podcasting Computer Science E-1

Computer Science E-1: Understanding Computers and the Internet
Harvard Extension School

`www.computerscience1.org`

SIGCSE
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with

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The Podcast

Many students accessed it via iTunes.

The Podcast

It's simply an RSS feed.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<rss xmlns:itunes="http://www.itunes.com/dtds/podcast-1.0.dtd" version="2.0">
 <channel> [...]
  <item>
   <title>Lecture 1 (video): Hardware</title> [...]
   <itunes:author>David J. Malan</itunes:author>
   <itunes:summary>Computation. Overview. Bits and bytes. ASCII. Processors. Motherboards: connectors, ports, slots, and
    sockets and system bus. Memory: ROM, RAM, level-1 and -2 cache, secondary storage, and virtual memory.</itunes:summary>
   <itunes:duration>1:43:43</itunes:duration>
   <enclosure url="http://www.courses.dce.harvard.edu/~cscie1/podcasts/lecture1.mov"
              type="video/quicktime"
              length="210092794" />
   <pubDate>Thu, 22 Sep 2005 19:30:00 EST</pubDate>
  </item> [...]
 </channel>
</rss>
```

The Podcast

**45% of students used the podcast for review,
18% as an alternative to attendance.**

"I love this feature, I have an hour to an hour and a half commute each way to work everyday and to have the podcasts helped with reviewing the lectures (on the go)."

"I think it was also very much in line with the course curriculum to have students learn about and use the technologies that are available, including the iPod. How very cutting edge we were!"

"It's simply a good way to review and listen to lectures."

The Podcast

Most students watched or listened on their computer, not iPod.
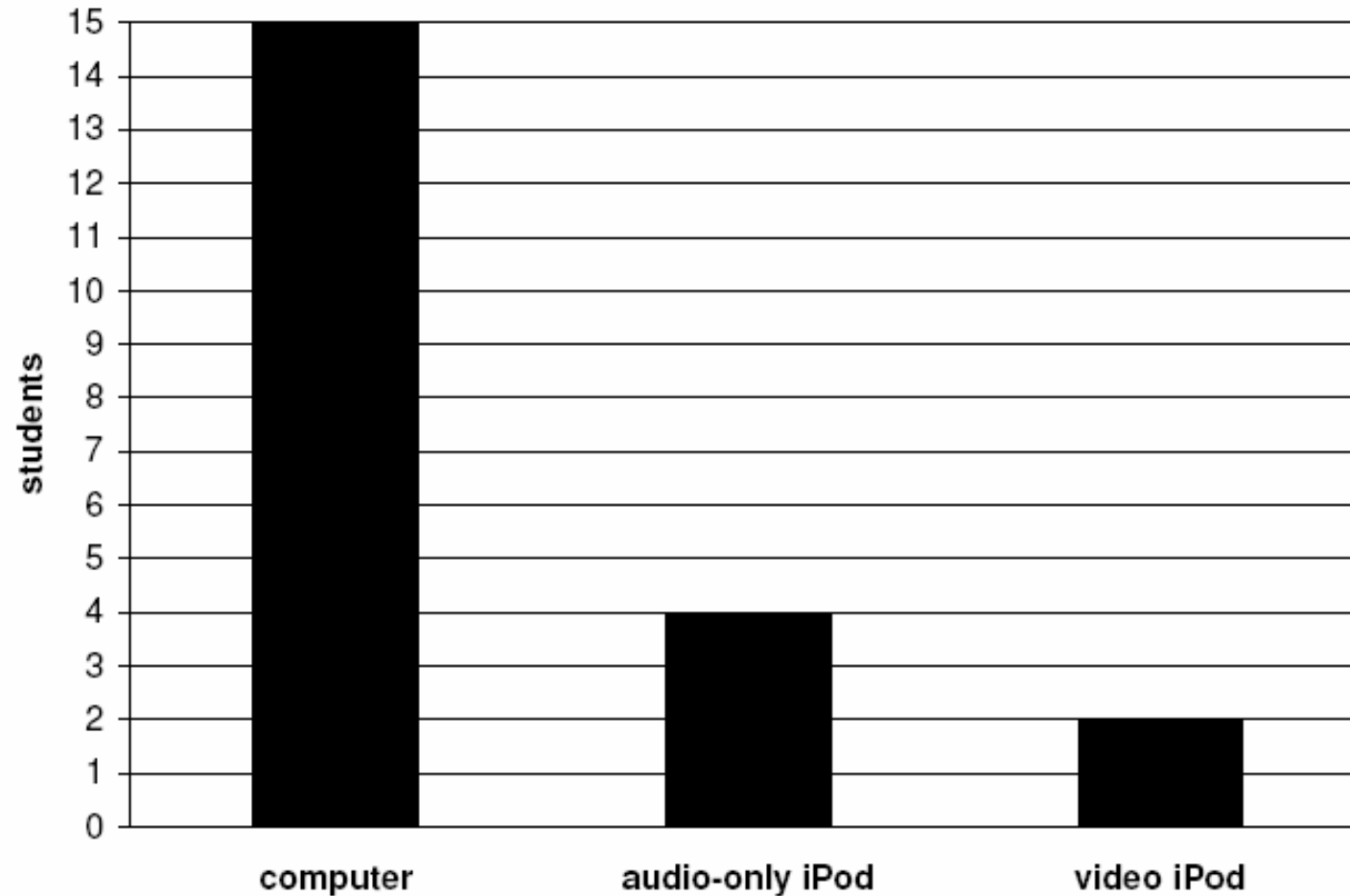
The Podcast

Enthusiasm != Usage.

"I really liked [the] concept of using podcasting as an educational medium. It extends the reach in very affordable ways...
I think I only listened to one podcast and none of the videos."

"I think podcasting is a good idea.
The more formats information is made available in, the better.
However, I did not listen to any of the podcasts."

The Podcast

Logs suggest 6,000 – 10,000 subscribers between September 2005 and September 2006.
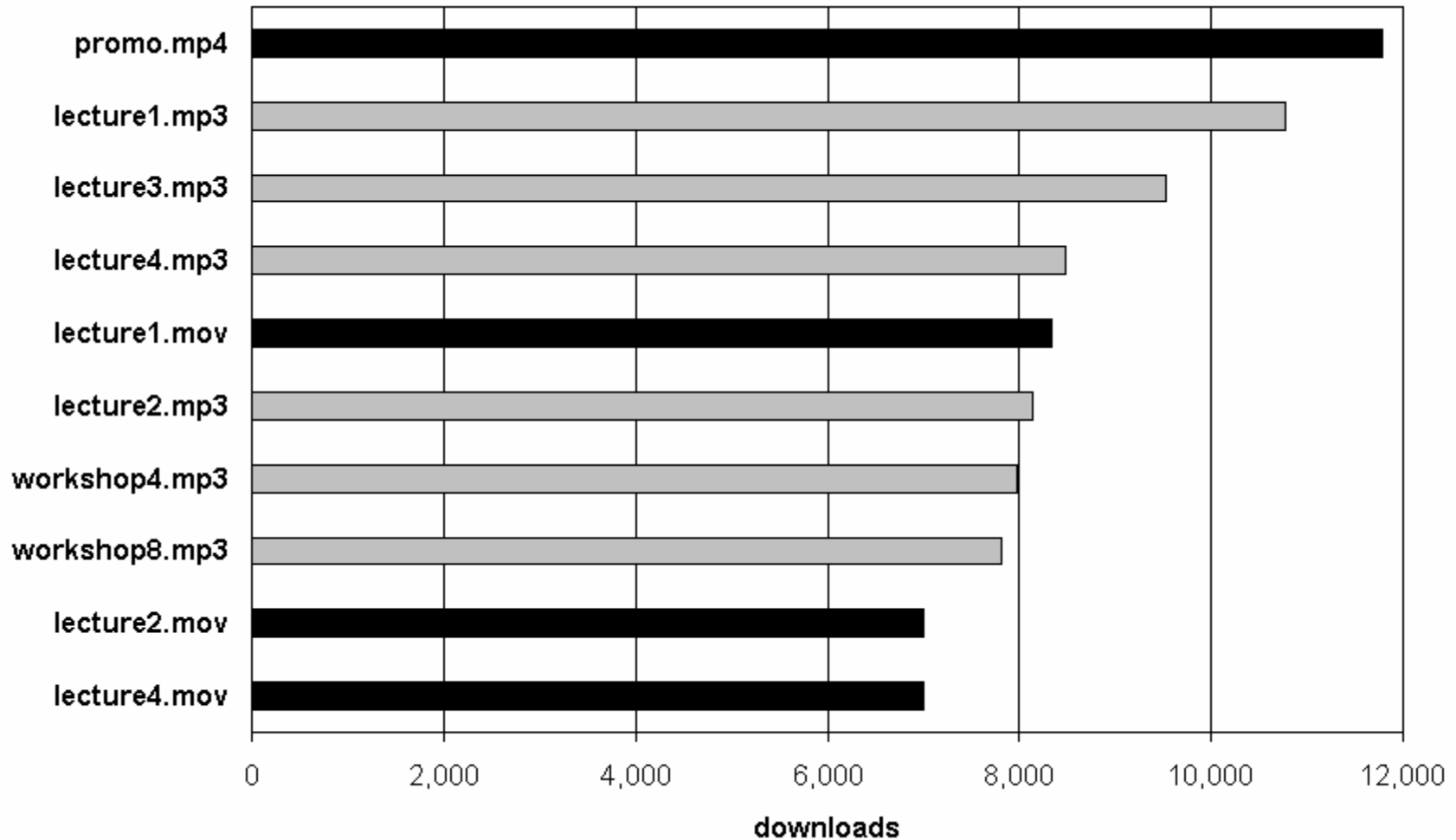
The Podcast

Subscribers were from over 50 countries.

Other Countries (21%)

Germany (2%)

Australia (3%)

Japan (3%)

Canada (4%)

United Kingdom (5%)

United States (62%)

The Podcast

Emails from Subscribers

"I live in the central interior of British Columbia, Canada, and am surrounded by forest, the nearest town is twenty minutes drive. . . . I pay a great deal of money to connect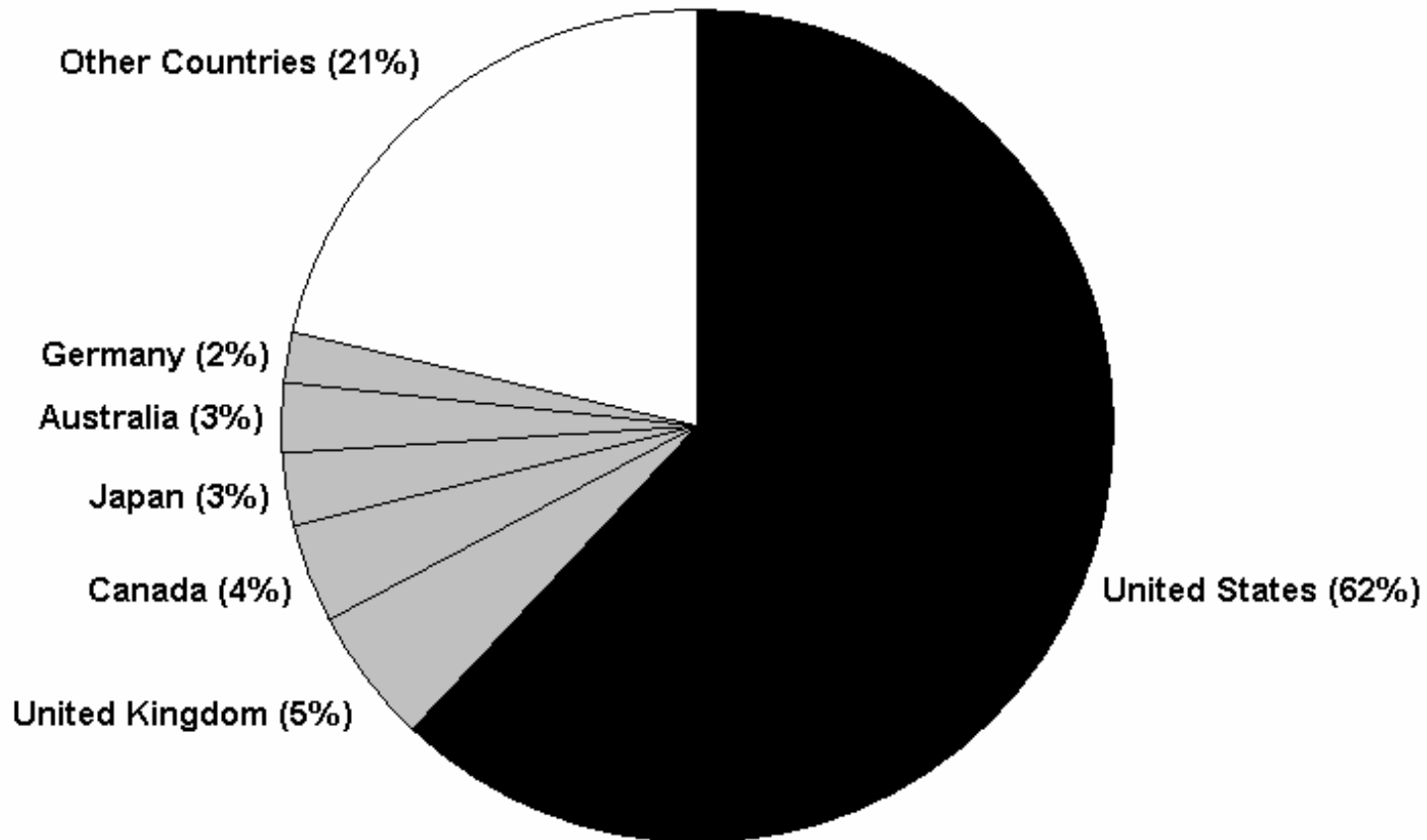 to the Internet via satellite. . . . I consider the lessons I have learned from you and your colleagues to have completed paid for this service."

"I would like to thank you for posting your . . . lectures . . . as podcasts. The commute to Cambridge from . . . Israel is a bit too much for me to attend the course in person. Nevertheless, your podcasts have been a great 'second best.'"

The Value

Overstated with hype?

"Could ivy-covered lecture halls become
as obsolete as the typewriter?"

Newsweek, 28 November 2005

The Value

Podcasting (or future equivalent) offers universities new opportunities to teach populations at large.
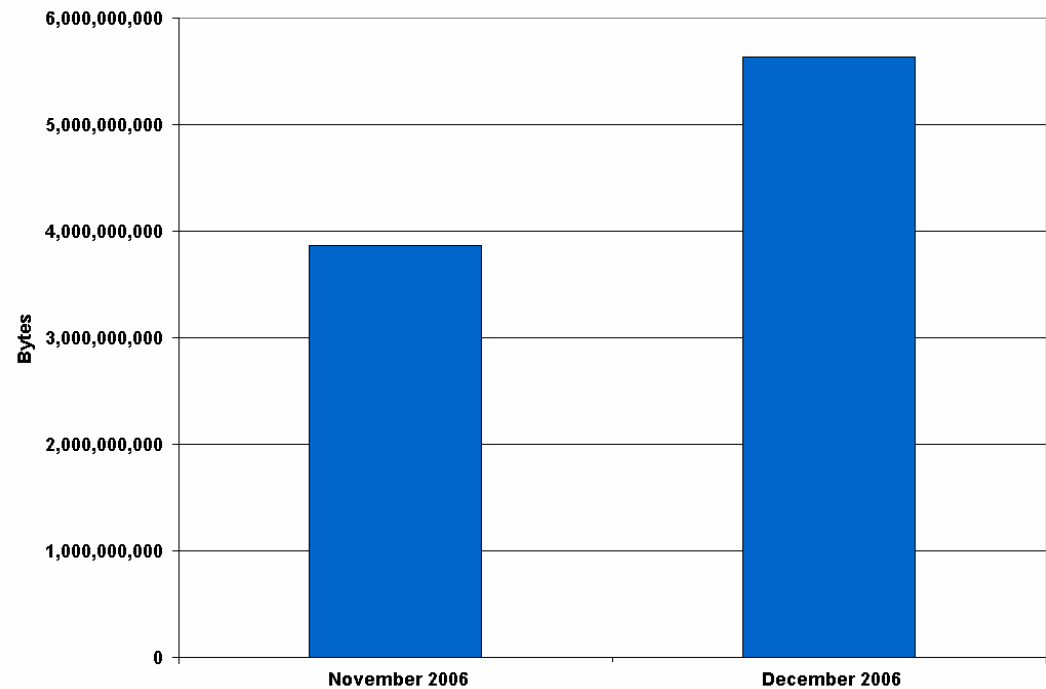
The Issues

Perhaps best tackled on a course-by-course basis.

- Production Costs
    - Storage
    - Bandwidth
- "Branding"
- Will students stop attending?
- Who owns the content?
- Uttering Mistakes (and Opinions) on Camera
- Students' Privacy
- Fair Use
- "I paid $40,000 for those classes."
- …

Conclusions

Podcasting (or future equivalent)...

- ... is a marginal improvement on trends long in progress.
- ... is perhaps a "next best thing" for those for whom attendance is simply not possible.
- ... offers to extend universities' reach more than it offers to improve education itself.

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