

PROJECT WHOOPPEE & PANOPTO

Engaging Students Through Technology
Symposium 2015

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Introduction

- Wharton Online Ordinal Peer Performance Evaluation Engine (WHOOOPPEE)
 - History
- Panopto....

Whooppee: Goals

- Goals:
 - Better learning outcomes
 - More efficient/transparent grading process
 - More collaborative involvement with the course
 - A chance to “practice what we preach”

WHOOOPPEE: Process

- Students upload papers through Canvas assignment
- Each paper is randomly assigned to 5 others for ranking
- Each reviewer gives unique ranks (1-5) for their set of papers
- WHOOOPPEE algorithm accounts for different strength of each set
- Grader reliability is a function of their own score
- “Gold Standard” reviews
 - Faculty and TA team ranked several batches of 5 as well

WHOOPEE Algorithm

- Algorithm was fine-tuned and tested over both assignments
 - But basic specification was the same for both
- Strong statistical support for differential weights (based on grader's own paper quality)
- Gold Standard reviews have weights equal to that of the best overall student for each assignment

WHOOPEE Results

- No grades were changed from the algorithm
 - All outliers were explainable
 - Detailed information on algorithm and specific scores provided to students
 - General belief that WHOOPEE grades were more valid than in previous years using traditional grading
- Student Survey (N=87):
 - 50.5% were confident their work was accurately assessed
 - 93% felt peer review improved their understanding of concepts
 - 46% significantly improved

Head's Up Learning

- Encourage Class Participation instead of Note Taking
- Classroom recordings immediately available to students for review
- Capture all elements of class: lecture, practical application (Excel) and ad-hoc examples (document camera instead of caulk board)
- all elements are searchable within a class and across all classes of a course

Class Capture and Contextual Search

Computing DERT

For a customer with transaction history (x, t_x, n) ,

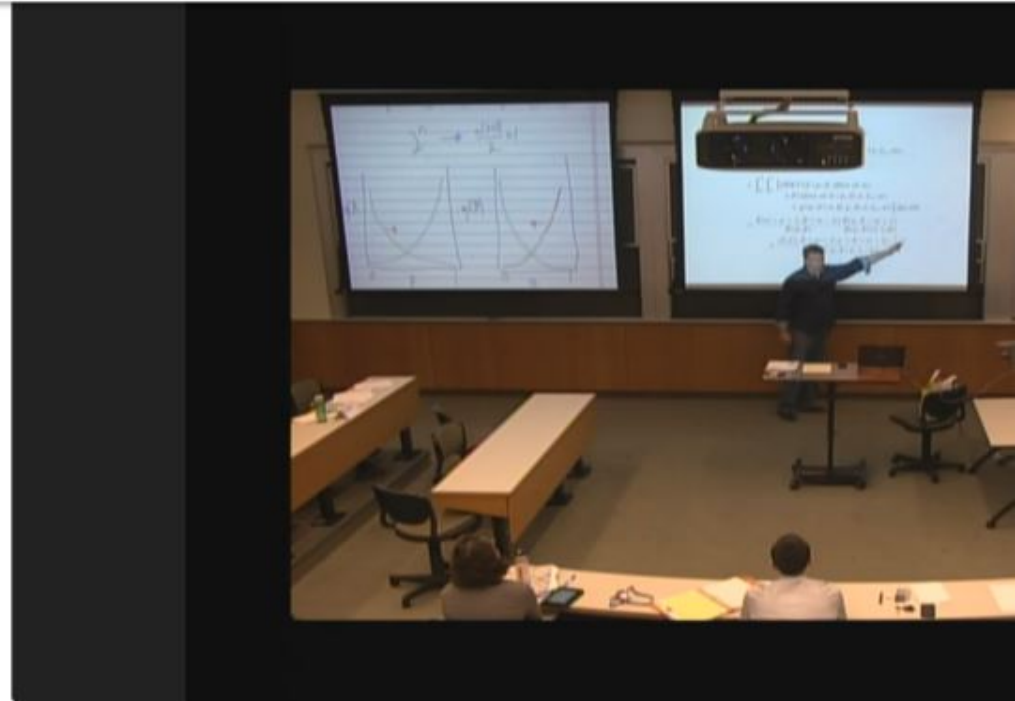
$$\begin{aligned} & DERT(\alpha, \beta, \gamma, \delta, d; x, t_x, n) \\ &= \int_0^1 \int_0^1 \left\{ DERT(d \mid p, \theta, \text{alive at } n) \right. \\ &\quad \times P(\text{alive at } n \mid p, \theta; x, t_x, n) \\ &\quad \times g(p, \theta \mid \alpha, \beta, \gamma, \delta; x, t_x, n) \Big\} dp d\theta \\ &= \frac{B(\alpha + x + 1, \beta + n - x)}{B(\alpha, \beta)} \frac{B(\gamma, \delta + n + 1)}{B(\gamma, \delta)(1 + d)} \\ &\quad \times \frac{{}_2F_1(1, \delta + n + 1; \gamma + \delta + n + 1; \frac{1}{1+d})}{L(\alpha, \beta, \gamma, \delta \mid x, t_x, n)}. \end{aligned}$$

84

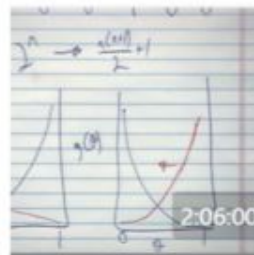


Computing DERT

Contents	Computing DERT	39:30
Notes	Computing DERT	1:00:00
Bookmarks	Computing	2:08:30
Comments	DERT	2:10:10
	DERT	2:12:00
	DERT	2:13:20
	Computing DERT	2:35:40



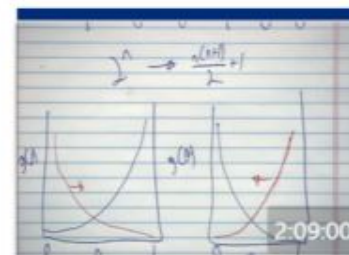
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2:06:00



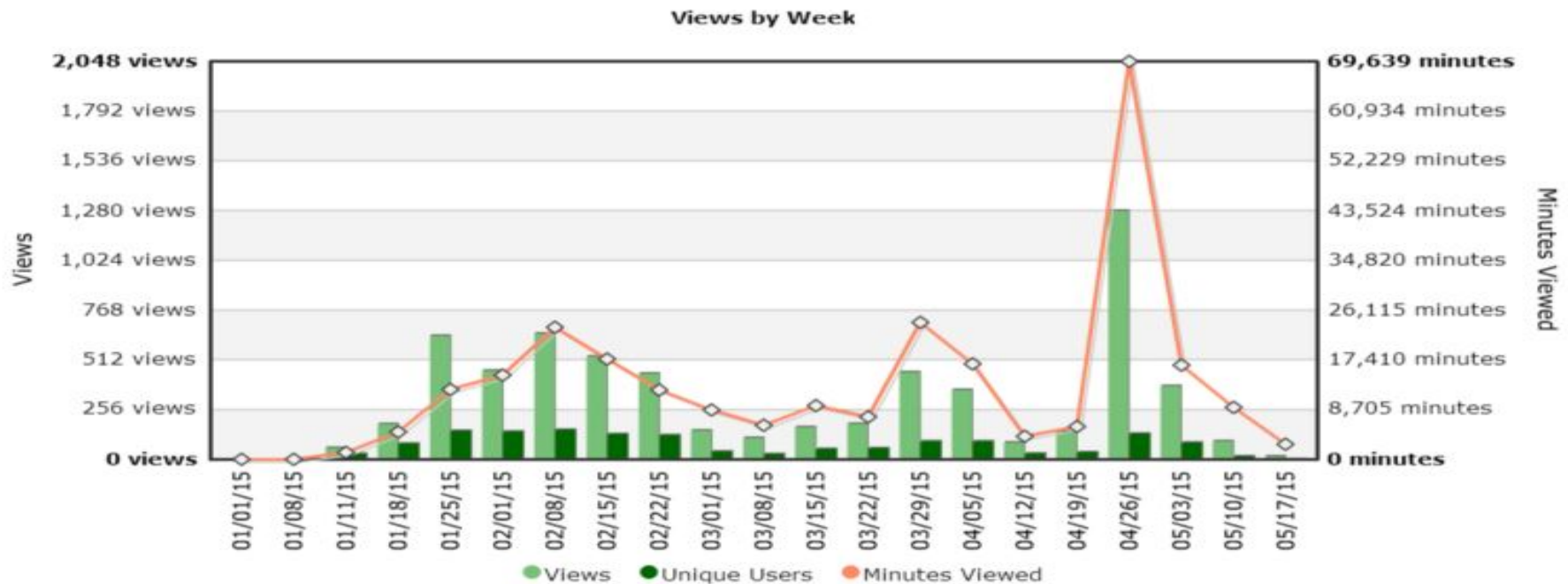
2:09:00



2:09:00

How and When Class Recordings are Consumed

Folder stats: MKTG/STAT 476 & MKTG 776 (Prof. Fader) - Spring 2015



Past Day | Past Week | Past Month | Past Year | All Time | **Custom Range**

From 01/01/2015

To 05/22/2015

Apply

Students Will Invest Time Outside of Class

Usage

[Refresh](#)[Filter by date](#)[Create new report](#)

<input type="checkbox"/>	Name	Sessions	Hours Recorded	Views	Hours Viewed ▼	Disk Space
<input type="checkbox"/>	MKTG/STAT 476 & MKTG 776 (Prof. Fader) - Spring 20...	30	91.37	6,572	4,661.88	None
<input type="checkbox"/>	SPIKE Videos	96	127.44	2,425	479.35	None
<input type="checkbox"/>	MKTG 211 (Saka) - Fall 2014	27	40.44	1,541	414.26	None
<input type="checkbox"/>	FNCE 613 (Prof. Abel) - Spring 2015	65	96.83	785	398.99	None
<input type="checkbox"/>	MGMT 101 - Spring 2015 - HAAS	15	22.47	709	318.07	None
<input type="checkbox"/>	BEPP 250/950 - Spring 2015 - HARRINGTON	28	43.22	786	250.98	None
<input type="checkbox"/>	FNCE 100 - Spring 2015 (Jaffe)	7	12.63	469	205.37	None

Viewing 1 - 10 of 625

Results per page: **10** | 25 | 50 | 150 | 250

1 | 2 | 3 | 4 | 5 | ... | 63 | [Next >](#)

Name of Presentation



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