Picturing the Pedagogy of Feedback

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Goal: To use sentiment analysis to visualize feedback pedagogy from courses in the gamified LMS, Gradecraft.

Sentiment Scoring

Parsed Data

Lecture:
- boring: 28
- felt: 19
- dry: 13
- bland: 8
- confusing 7
- …

Exams:
- hard: 18
- structured: 12
- not difficult: 12
- not covered: 12 …

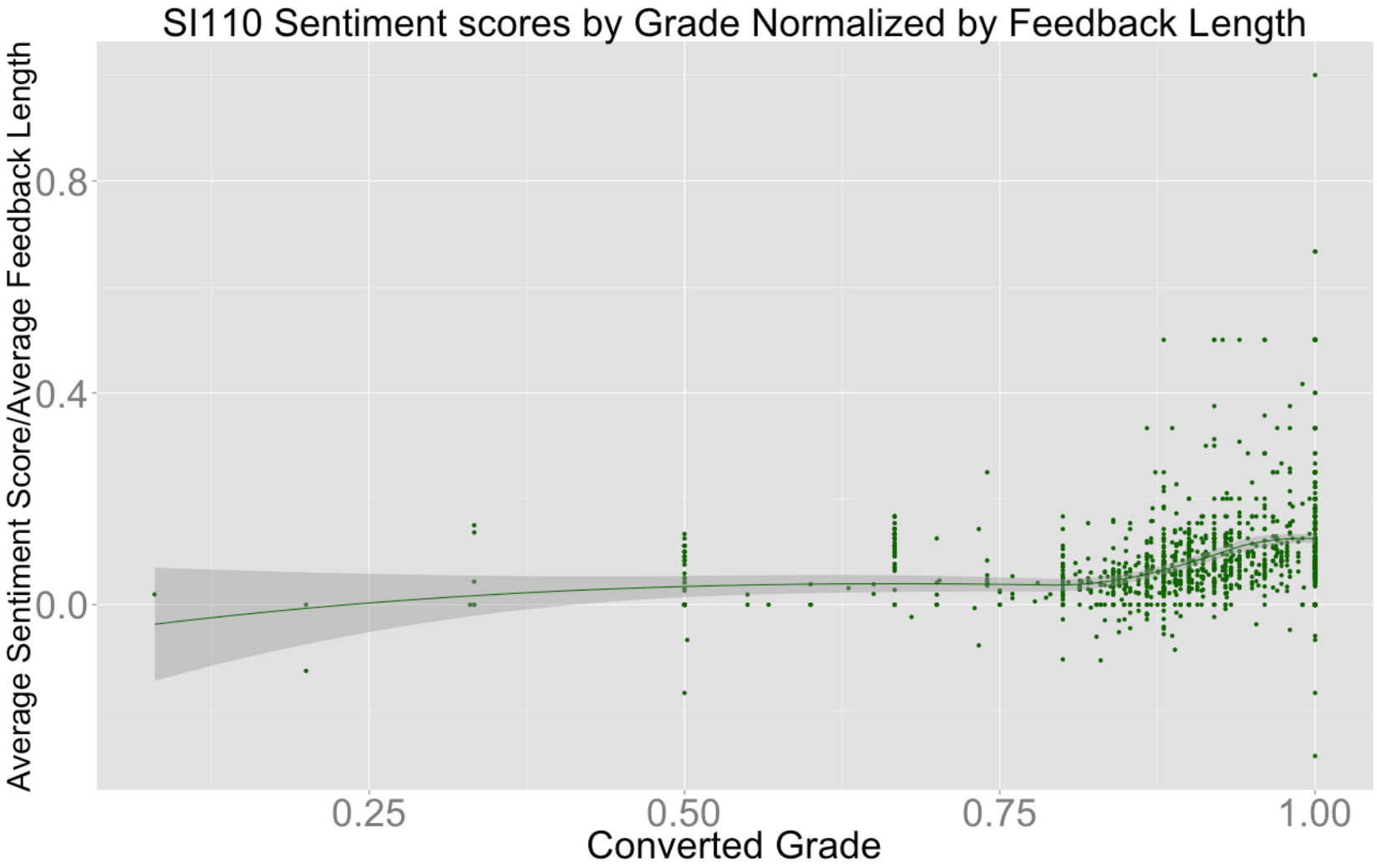
This **text analysis** method uses a predefined or learned **dictionary of positive and negative words/strings**.

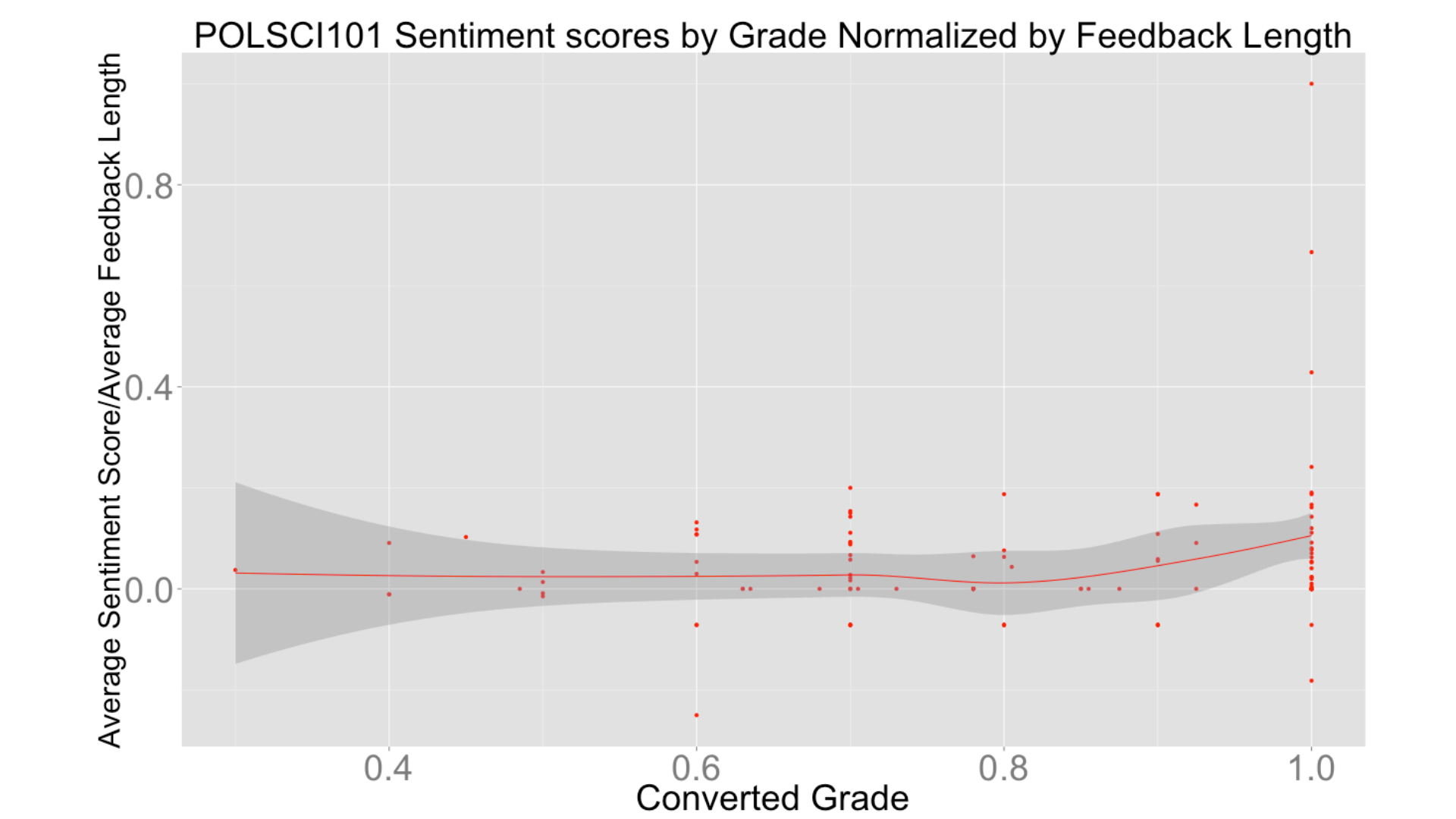
Positive Word Examples:
Accomplish, adore, consistent, enjoy, evenly, liked, supported, and win.

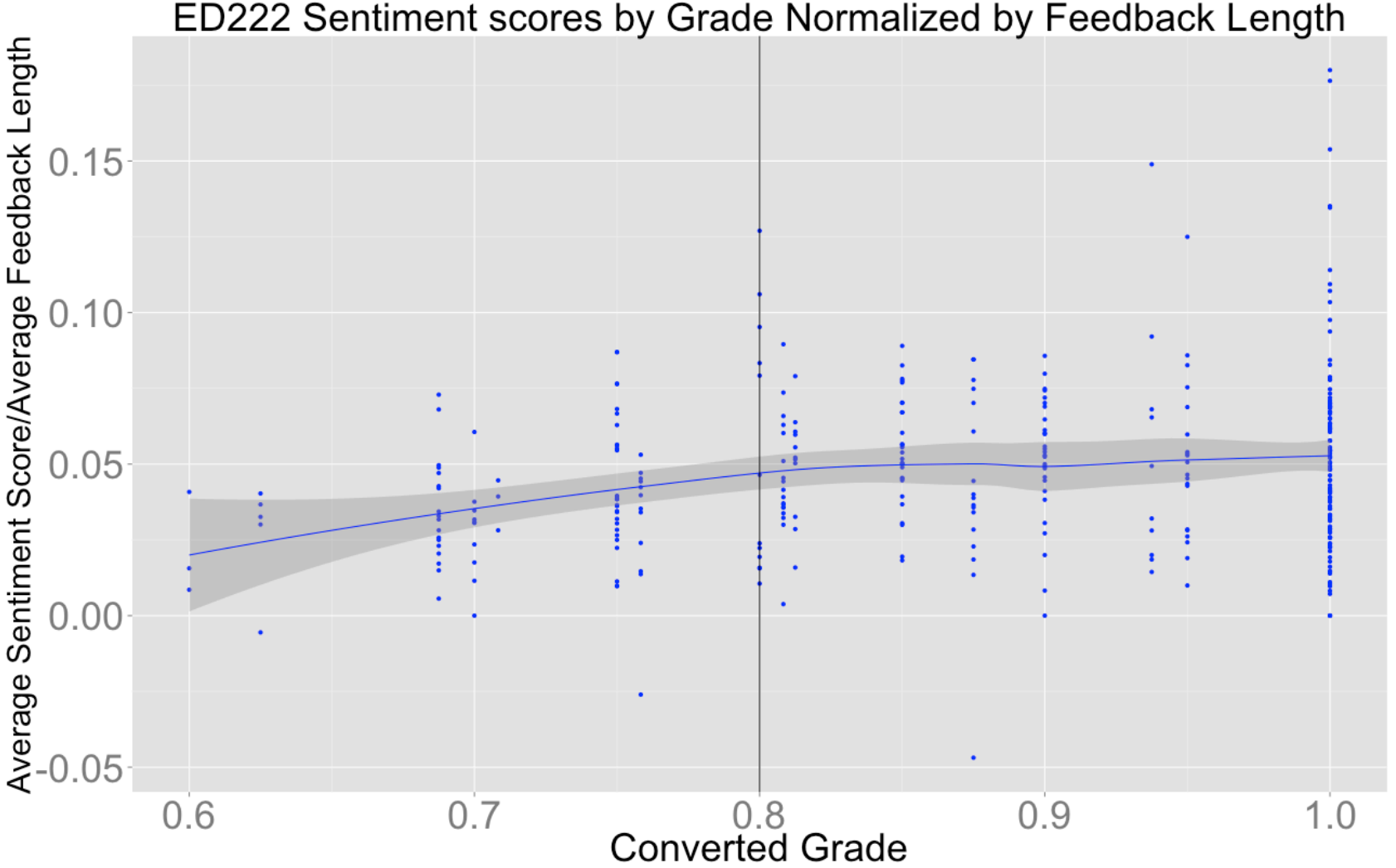
Negative Word Examples:
Dislike, agonizing, buggy, excessive, illogical, nasty, oversimplify, and yawn.

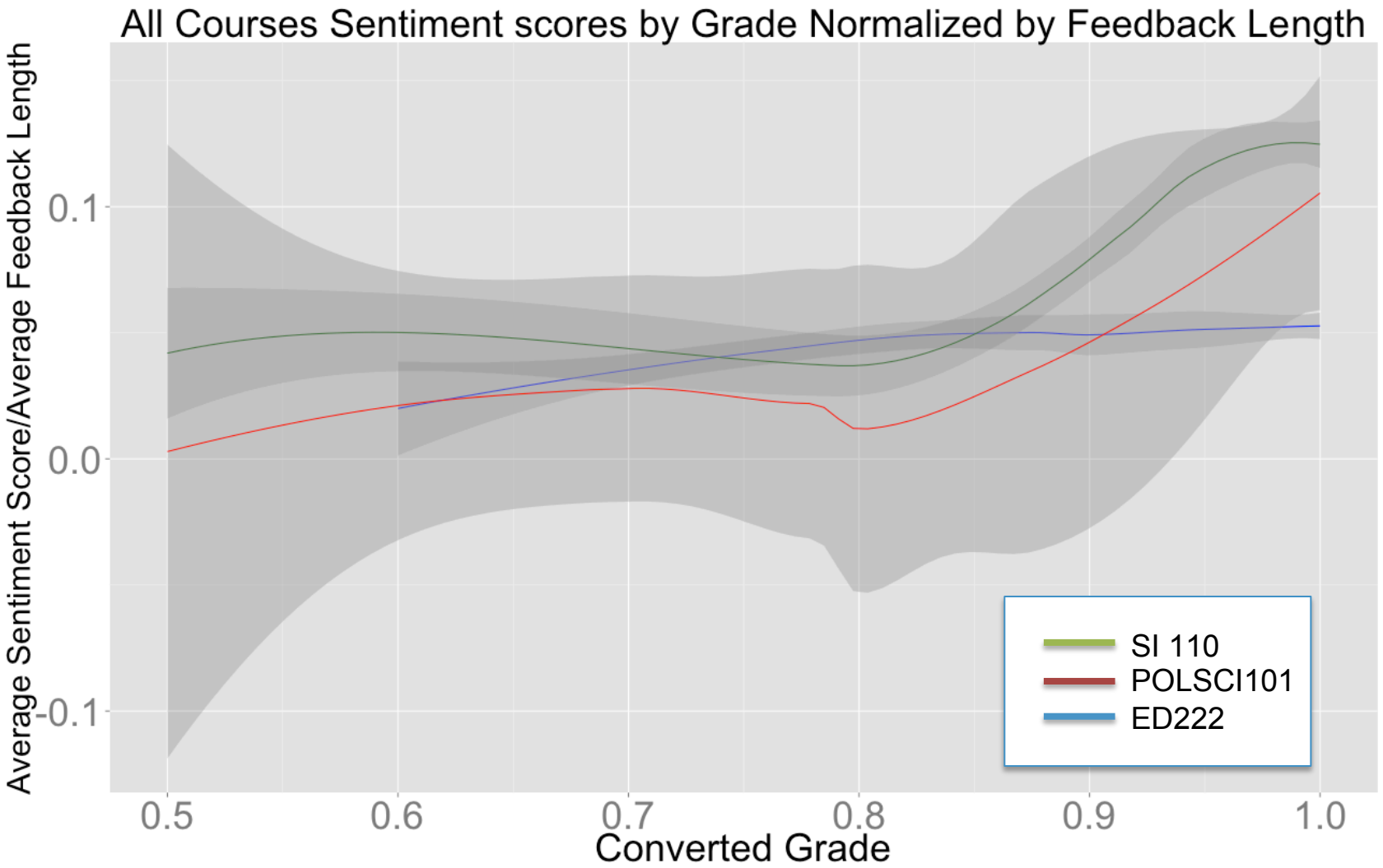
Sentiment Score

Lecture Score: -28 – 8 – 7 = -43
Exam Score: -18 + 12 = -6


SI110 Sentiment scores by Grade Normalized by Feedback Length
Average Sentiment Score/Average Feedback Length
0.8
0.4
0.0
0.25
0.50
0.75
1.00
Converted Grade


POLSCI101 Sentiment scores by Grade Normalized by Feedback Length
Average Sentiment Score/Average Feedback Length
0.8
0.4
0.0
0.4
0.6
0.8
1.0
Converted Grade

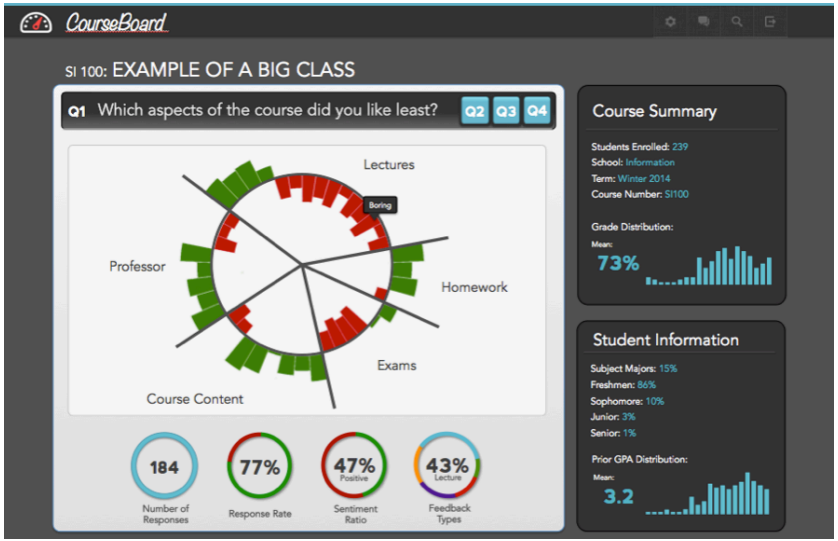

ED222 Sentiment scores by Grade Normalized by Feedback Length
Average Sentiment Score/Average Feedback Length
0.15
0.10
0.05
0.00
-0.05
0.6
0.7
0.8
0.9
1.0
Converted Grade


All Courses Sentiment scores by Grade Normalized by Feedback Length
Average Sentiment Score/Average Feedback Length
0.1
0.0
-0.1
0.5
0.6
0.7
0.8
0.9
1.0
Converted Grade
SI 110
POLSCI101
ED222

The Future

Analyzing student end of the year surveys 2008-2014.

Building an analytics tool for instructors.



See you at SLAM in the Fall!

*Holman, Cait. Retrieved from GradeCraft LMS (2014).
* Liu, Bing. Sentiment Dictionary accessed (2014) at: http://www.cs.uic.edu/~liub/FBS/sentiment-analysis.html#lexicon