

Datafest 2024

Nuggets Forever:

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Outline

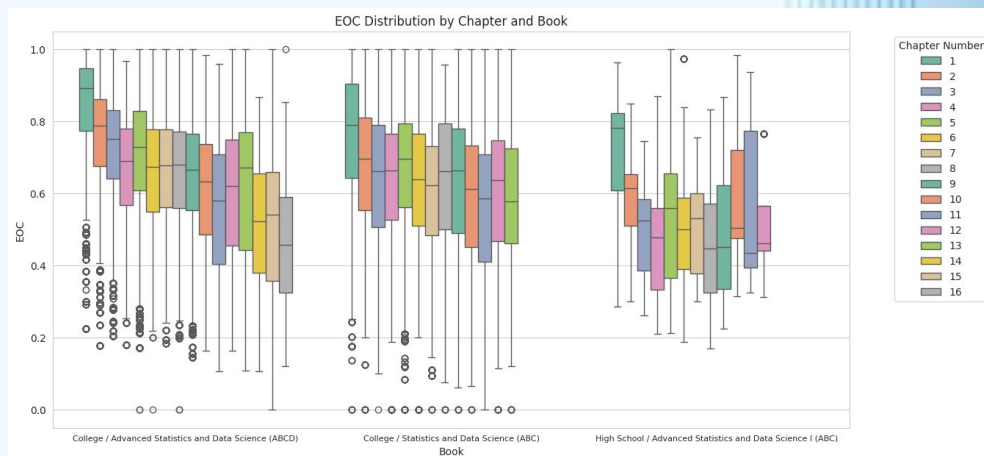
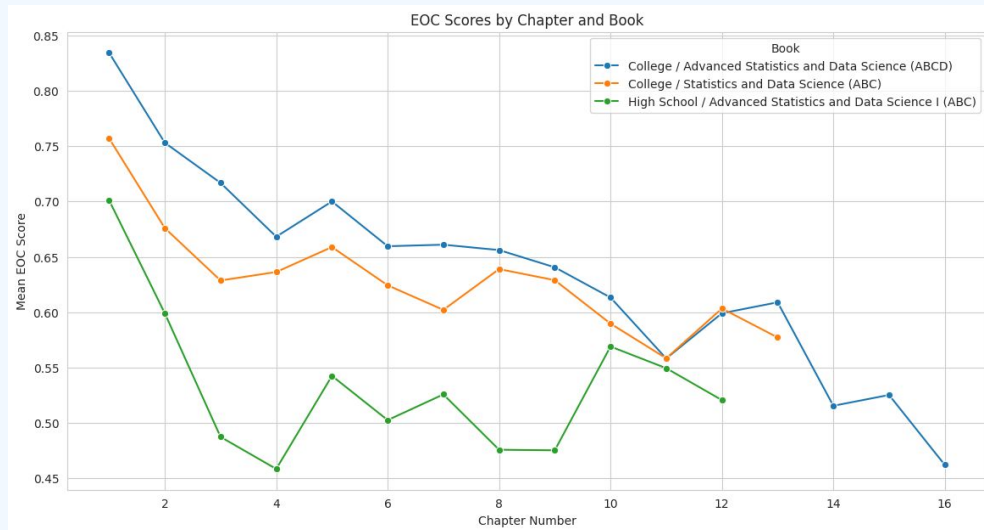
1. Introduction
2. Problems and Suggestions
3. Future Plan
4. Q&A

EOC Trend

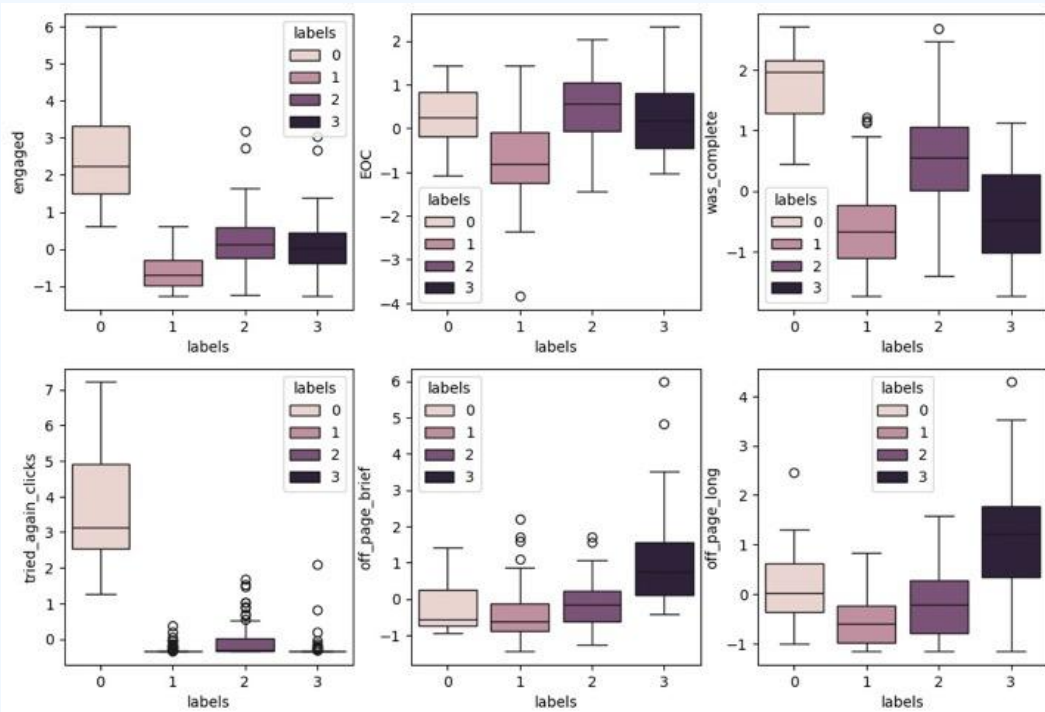
1. Downtrend
2. Relative Low EOC in Chapter 11 (Model Comparison with F)

Suggestion:

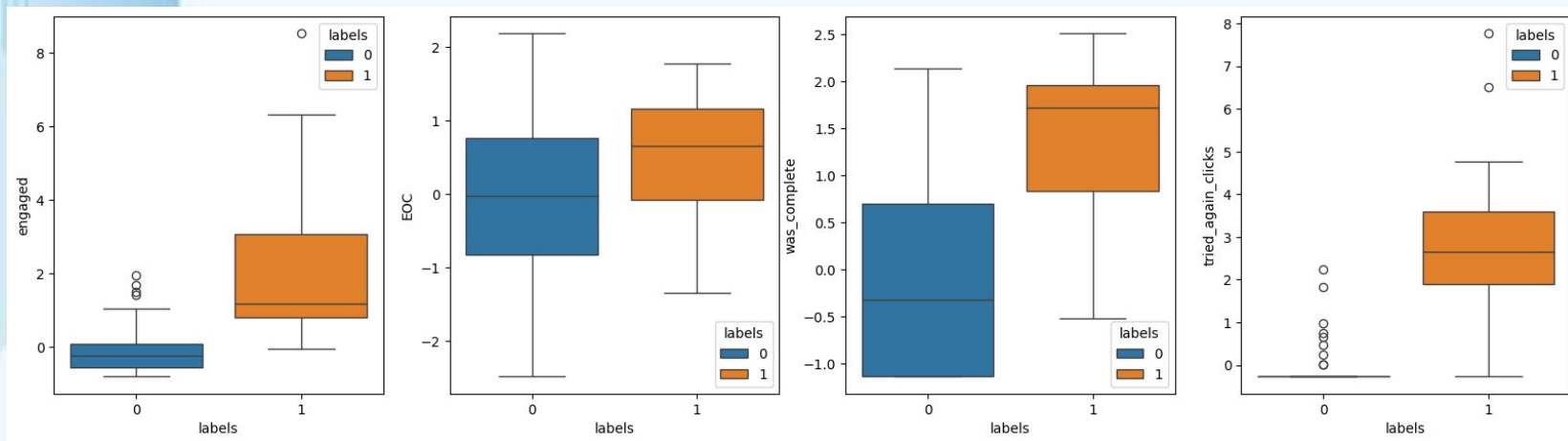
1. Require a midterm review and checkpoint
2. Set a EOC bar for each chapter according to the mean and median. Encourage students to try again if they do not meet the bar.



All Chapters in All Books



Hard Chapters in College ABC



Hard Chapters in College ABC

	engaged	EOC	was_complete	tried_again_clicks
labels				
0	5.929435e+06	0.479923	0.220174	0.022491
1	2.836278e+07	0.579361	0.533665	1.555326

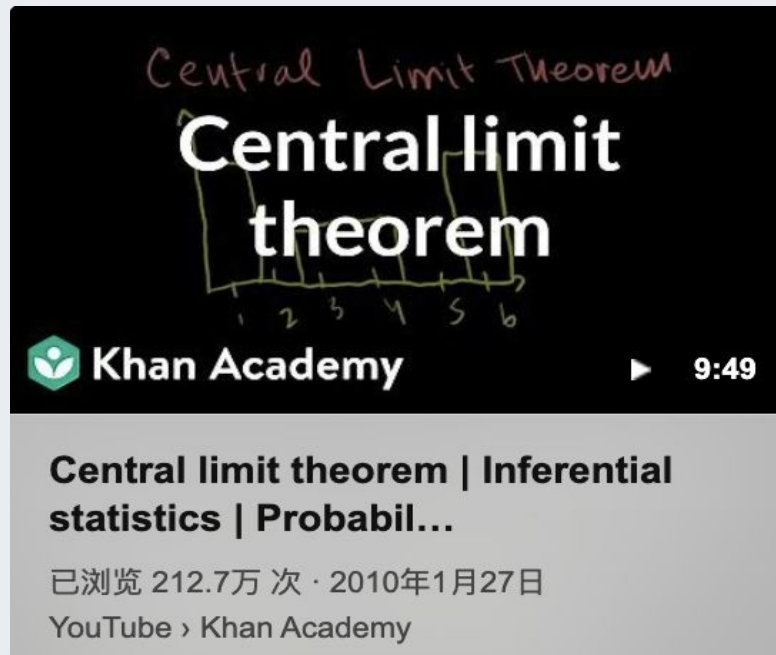
- Encourage periodic reviews of completed contents, for example, keep track of contents the student missed, and have them revisit these contents at the end of each chapter
 - Students with higher EOC are 31% more likely to revisit after completing on average
- Provide incentives or support for retry attempts
 - Students with higher EOC retry 1.53 times more on average than those who have lower EOC
- Remind students for low engagement time
 - Students with higher EOC engage about 2.247×10^7 seconds more on average

Hypothesis Testing On Media Engagement

One-tailed p-value (greater than): 0.06253321

Suggestion:

Enhance the platform with more instructional videos to aid in understanding complex concepts more effectively.

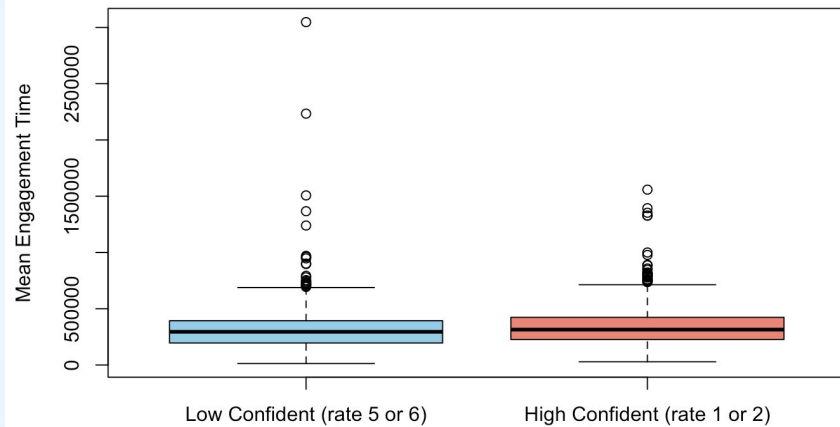


Time Management Perception Survey

I was unable to put in the time needed to do well in the previous chapter.



Engagement Time Distribution for Low and High Confidence Groups



Suggestion:

Offer well-tested and practical study guides for each chapter, including estimated time allocation for each section.

Learning Material Breakdown*:

Week	Module	No. of Videos	Total Duration	No. of Quiz Asses:
1	Python for Data Science	34	~4.5 hours	1
2	Statistics for Data Science	22	~4.2 hours	1

Future Plan

For company:

- Collect and add EOCs about different versions(release) of the textbook in *checkpoint_eoc file*.

For us:

- Explore patterns in the *items* and *responses* CSV files.
- Explore the optimal video length for students' maximum engagement



Thanks For Listening !

Any Questions?