

# Does Quantity = Quality? Data-Driven Best Practices for Video Lectures in the University Setting

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**In-video Collaboration Widget**



**Interactive Timeline**



Timestamp

TP Yesterday I copied a comment from the comments space to my personal notes. Super helpful! 1y 1

JD Julia Dolan 0:07:18 1y This is also very useful:

Annoto - Unleashi...

Gilli 0:08:03 1y Pay attention to this part. We'll talk about it later on this semester

Add a comment...

## Collaboration

- comments
- replies
- likes

# Research Questions

- What factors predict students' completion of videos?
- What factors predict students' engagement with a video?

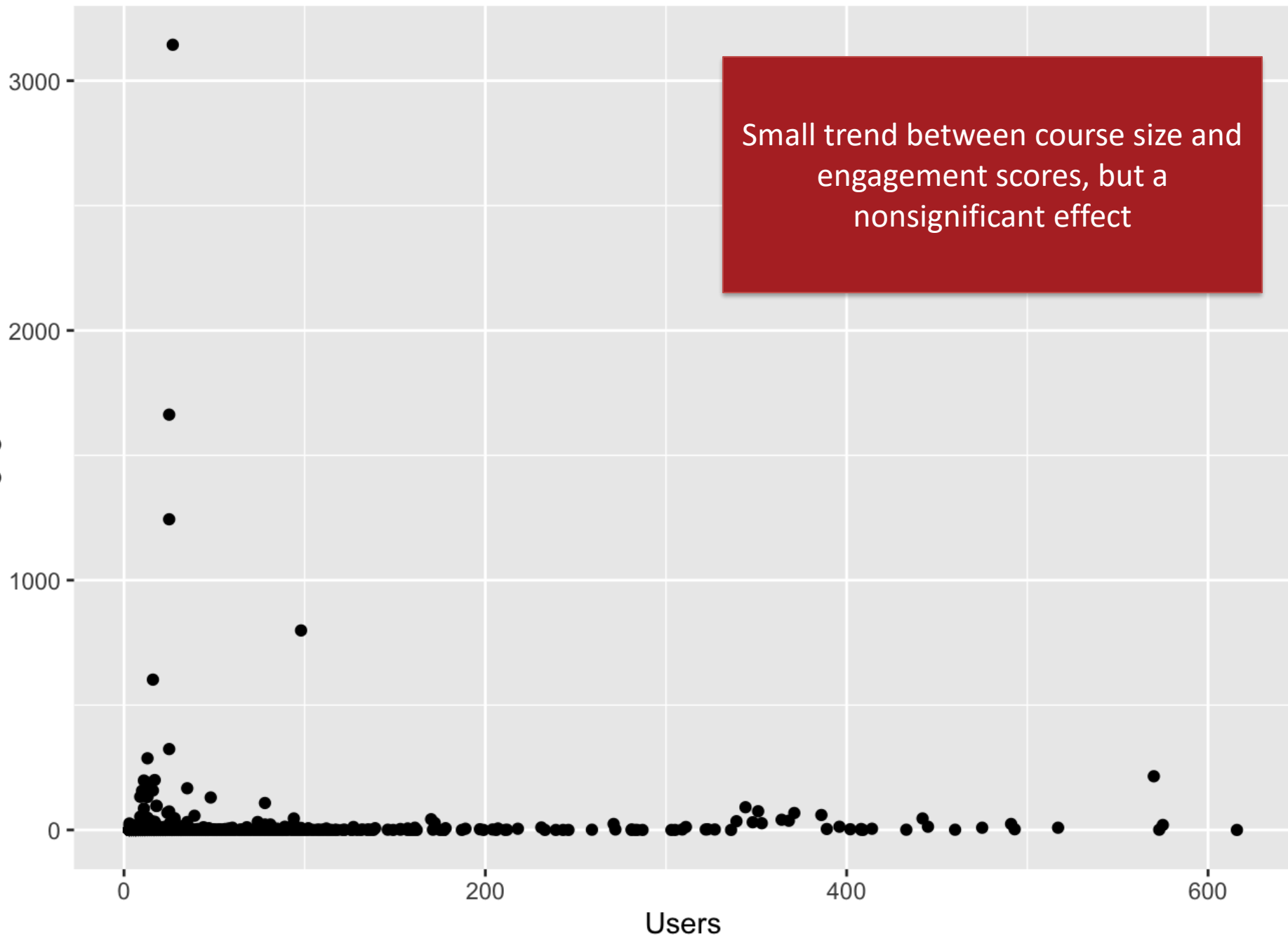
# Annoto Metrics

- A user's **engagement** indicates active learning. The user not only watched the video, but actually had a meaningful interaction with it - creating content and/or by consuming it.
- **Average Completion Rate** is sum of percent watched in each view session divided by number of views. A metric for determining how well the video performs in terms of dropout. This metric answers the question of how much of the video the users watch each time they view it.

# Method

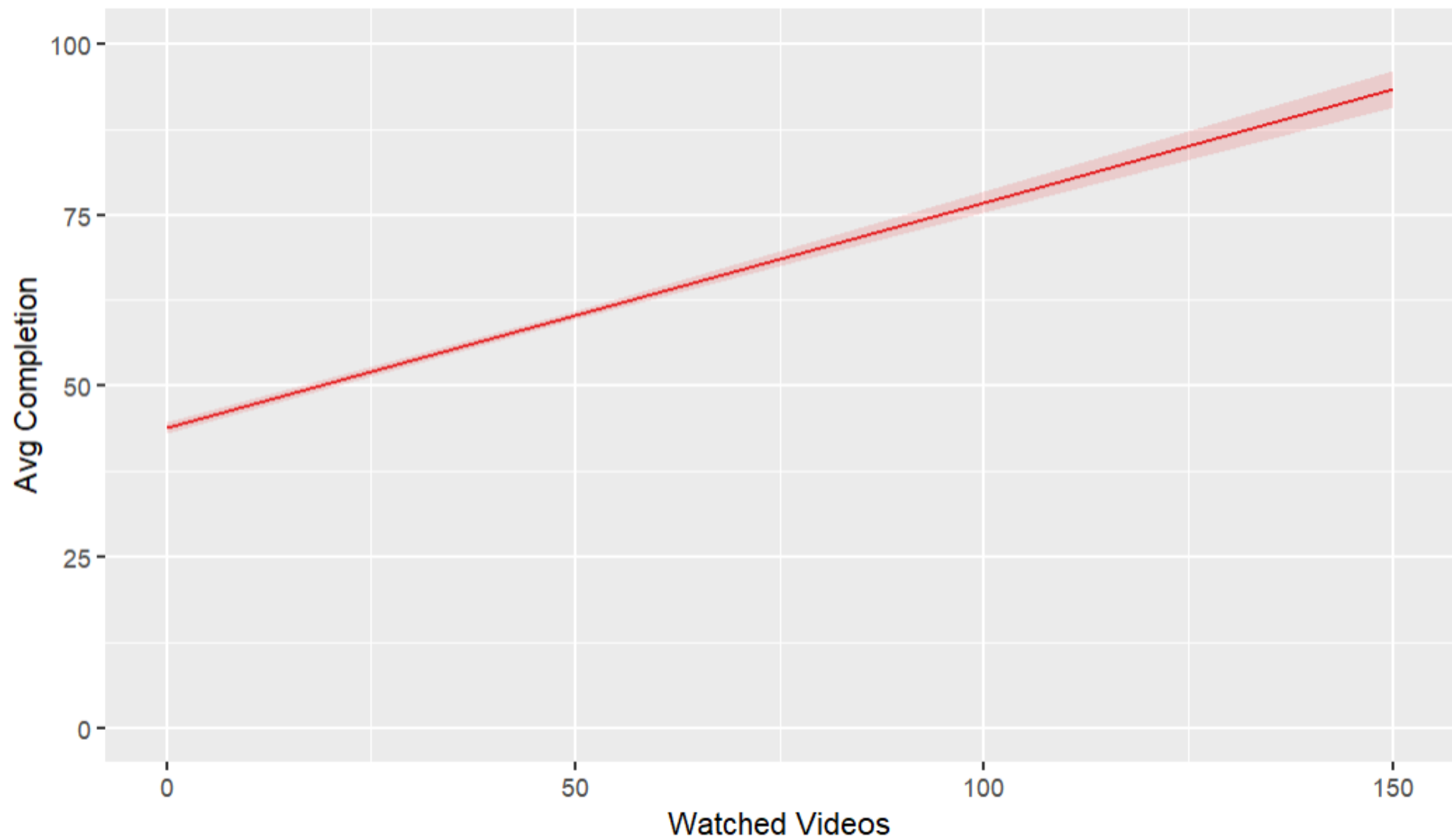
- Course and user data from Annoto
- January 1, 2021 and August 31, 2023
- ~26,000 users and ~12,000 courses.

Engagement



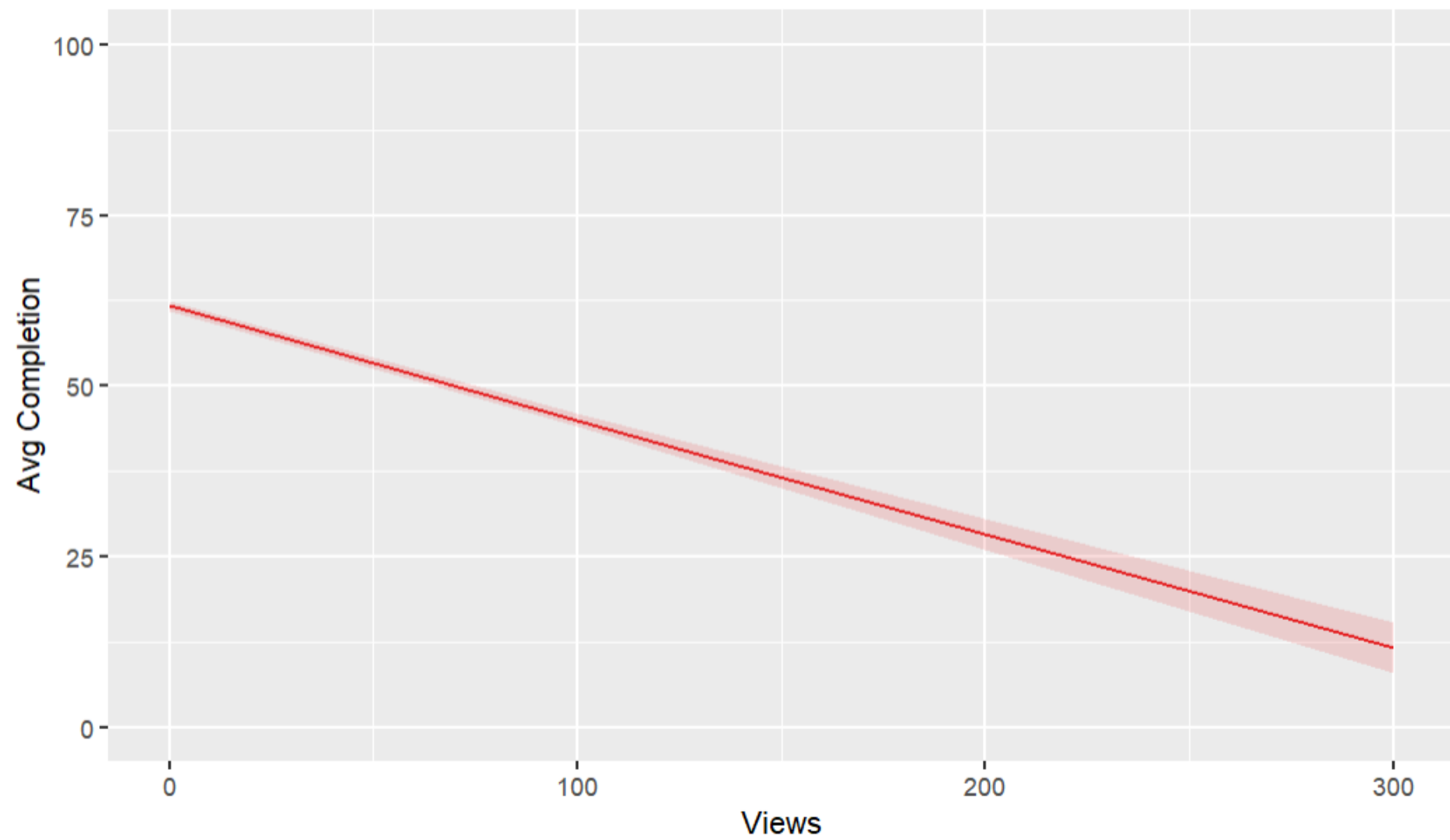
<i>Predictors</i>	<b>Avg Completion</b>		
	<i>Estimates</i>	<i>CI</i>	<i>p</i>
(Intercept)	51.45	51.05 – 51.86	< <b>0.001</b>
Role [moderator]	-2.56	-4.80 – -0.31	<b>0.026</b>
Role [super-mod]	-20.45	-22.06 – -18.83	< <b>0.001</b>
Watched Videos	0.33	0.31 – 0.35	< <b>0.001</b>
Views	-0.17	-0.18 – -0.15	< <b>0.001</b>
Engagement	0.06	-0.02 – 0.14	0.156
Collaboration	0.03	-0.08 – 0.15	0.544
Replies	0.03	-0.77 – 0.83	0.944
Votes	-0.28	-1.45 – 0.88	0.633
Notes	-0.03	-0.18 – 0.11	0.672
ThumbsUp Badges	0.10	-0.57 – 0.77	0.764

Predicted values of Avg Completion





Predicted values of Avg Completion



# Summary of Results

- Completion rates positively related to total videos watched (students who watch more videos have higher completion rates on average than students who watch fewer videos)
- Completion rates negatively related to total views (students who take more individual viewing sessions per video are less likely to complete the video than students who have fewer viewing sessions per video).
- Completion rates unrelated to engagement and collaboration metrics

# Key takeaways

- Watching more videos related to greater average completion rates
- Total views and engagement seemingly unrelated
- Engagement likely differs based on course expectations, e.g., graded interactions vs. supplemental/optional videos
- Shorter videos *may* drive completion
  - Future research question, supported by literature