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PROJECT TWO: EDA

“WE CAN BUT TRY”

US STATE LEVEL SAT SCORES AND YOUTUBE POPULARITY

- The SAT is a standardised test widely used for college admissions in the United States.
- YouTube is a ubiquitous part of modern internet culture.

**Is there a relationship between two popular
YouTube channels and SAT scores by state?**

PEWDIEPIE

- ▶ 56 million YouTube subscribers.
- ▶ Foul-mouthed Swedish video-game commentator



CRASH COURSE

- ▶ 6.2 million YouTube subscribers
- ▶ Educational YouTube channel started by the Green brothers, Hank Green and John Green.



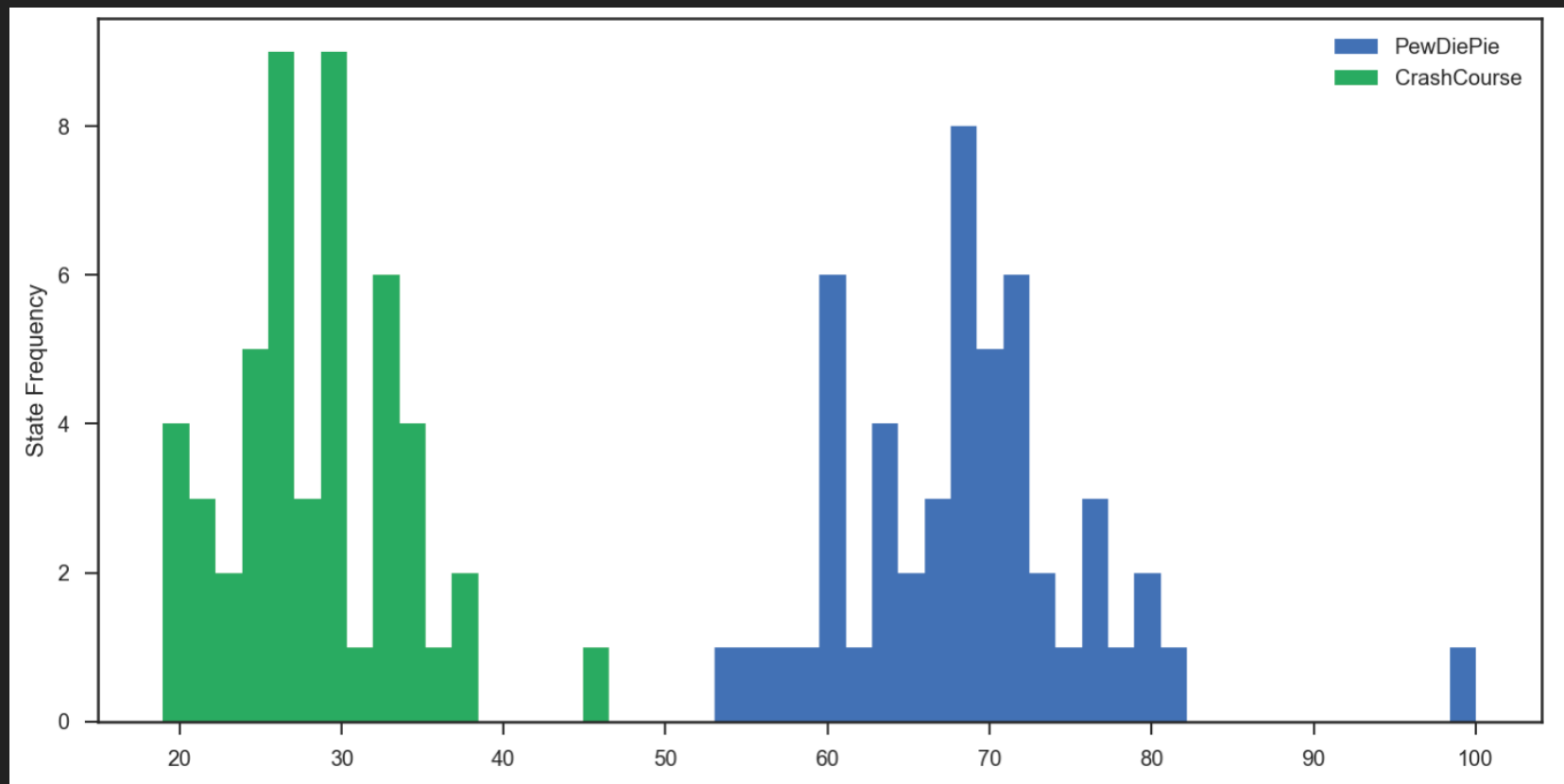
MY INITIAL HYPOTHESIS

- ▶ Crash Course playlists include courses in physics, philosophy, games, economics, U.S. government and politics, astronomy, anatomy & physiology, world history, biology, literature, ecology, chemistry, psychology, and U.S. history.
- ▶ PewDiePie, I don't actually know. I know he yells a lot and plays video games. He also had the Nazi fiver scandal recently.

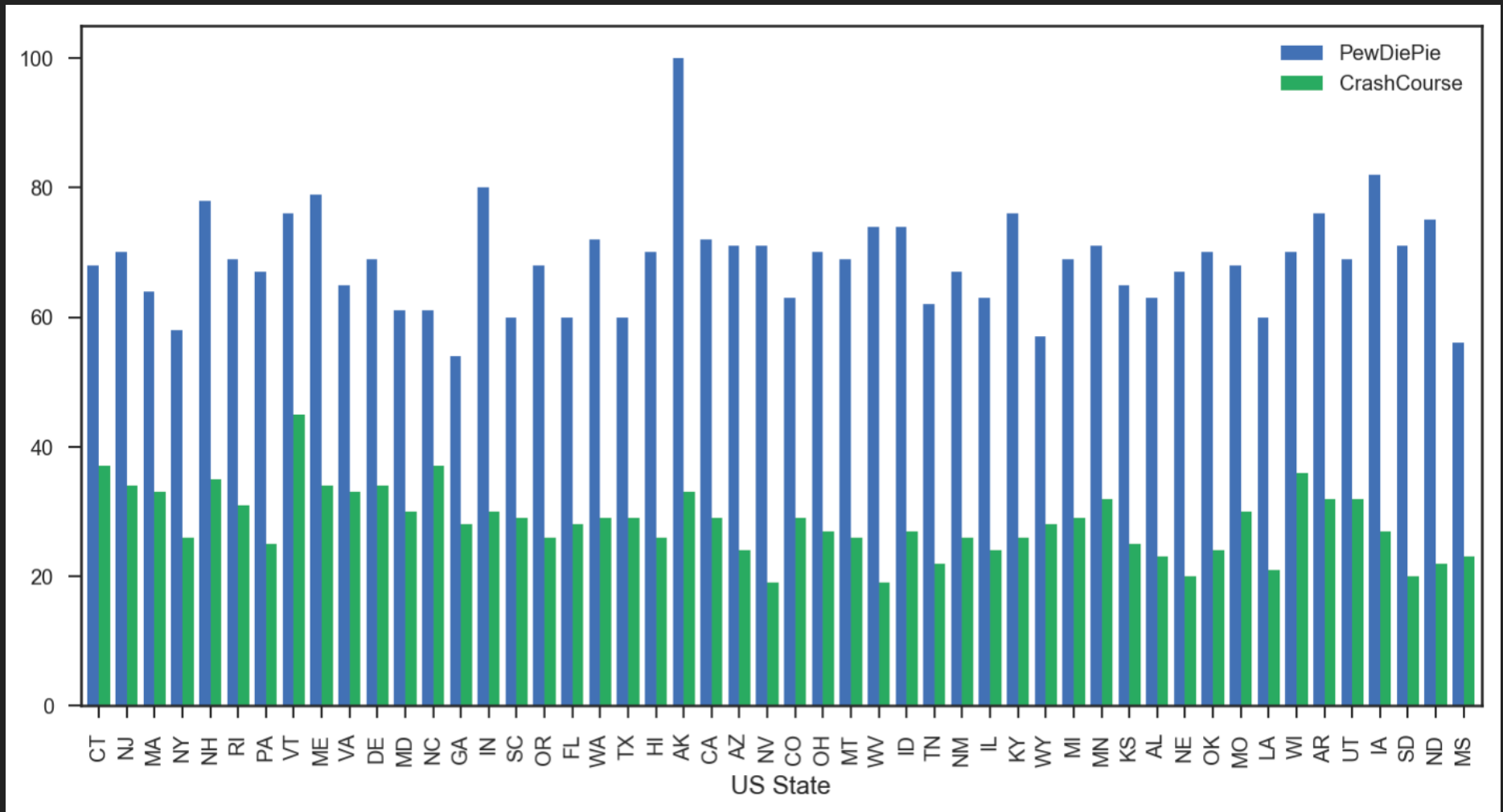
Anticipate Crash Course to have a stronger relationship than PewDiePie in respect to SAT scores.

PEWDIEPIE IS FAR MORE POPULAR

- ▶ with 56m subscribers vs. 6.2m, PewDiePie would clearly have a higher audience level across states.



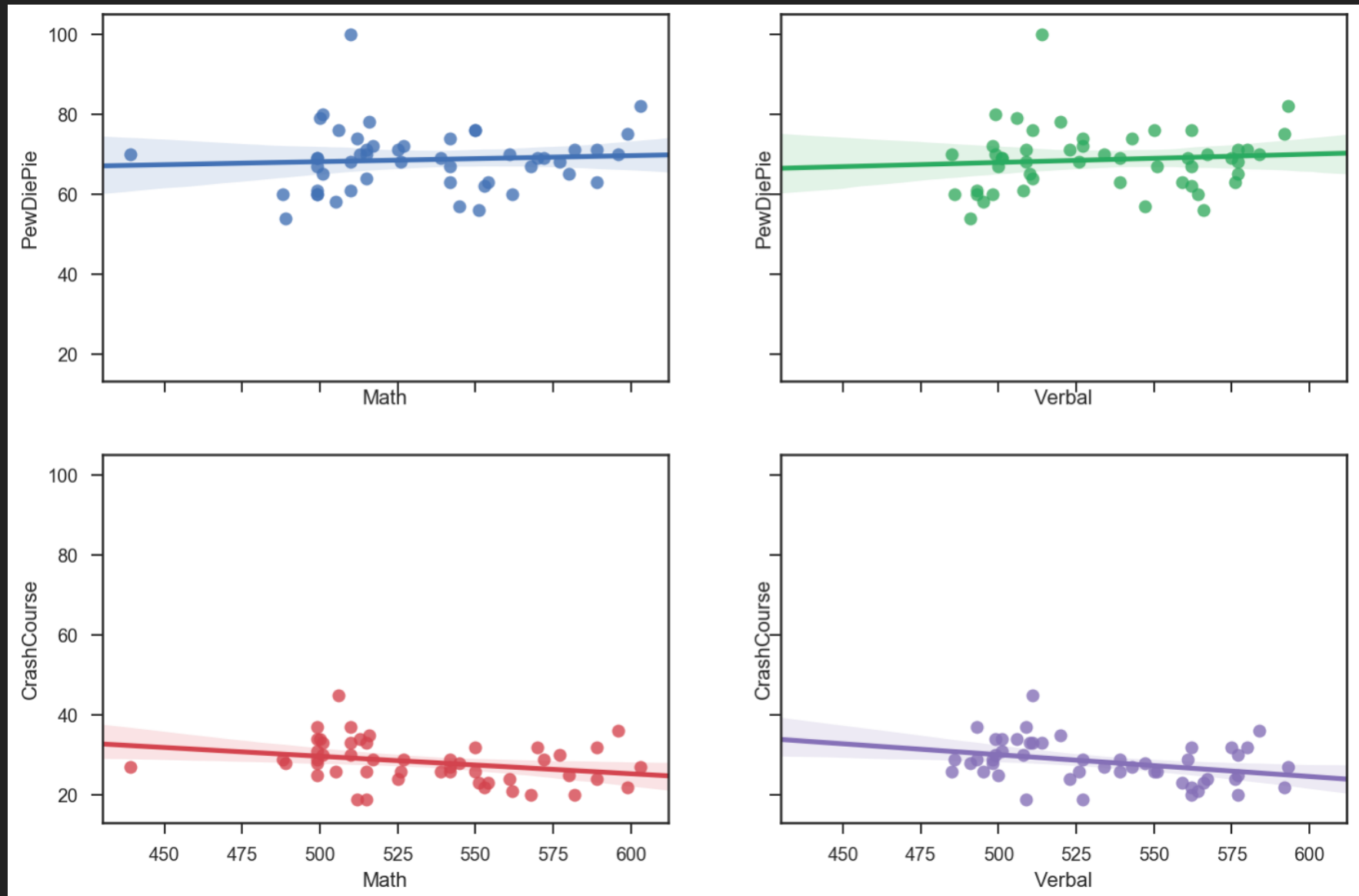
A TOPOGRAPHIC HEAT MAP VIEW WOULD BE CLEARER...



THESE AREN'T THE CORRELATIONS WE WERE LOOKING FOR...

	PewDiePie	CrashCourse	Verbal	Math
PewDiePie	1.000000	0.213916	0.086666	0.068280
CrashCourse	0.213916	1.000000	-0.338595	-0.295194
Verbal	0.086666	-0.338595	1.000000	0.899909
Math	0.068280	-0.295194	0.899909	1.000000

NO STRONG RELATIONSHIPS WITH VERBAL OR MATHS SCORES



MY FAILED HYPOTHESIS

- ▶ PewDiePie did not have correlation with either SAT Verbal and Maths scores.
- ▶ Crash Course, had weak negative correlations - perhaps it's the last minute disorganised students trying to short cut understanding via. these videos.

**Should've tried something more obvious.
But no correlation is still a result.**