Our Educator's Mental Health and Well-being

Better Help's Educator Alliance Initiative

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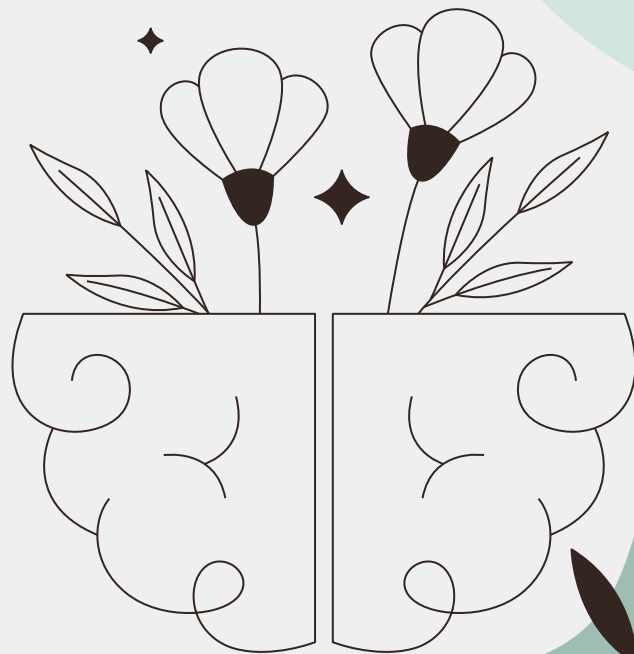
Presentation Contents

Below is a brief overview of what will be discussed during this presentation

Introduction	Problem statement review
Sources	A brief overview of the data source & other outside sources
Outside Research	Discuss outside research
EDA / Modeling Process	Description of EDA and the modeling process
Winning Model	In depth review of the winning model
Conclusion	An executive summary of all materials

Introduction

- Teacher Burnout

- Who is **Better Help**?

- Educator Alliance Initiative

Problem Statement

Once the Educator Alliance Initiative goes live, Better Help is expecting a mass influx in inquires.

Those in the inquiry intake department will need to be able to quickly and effectively determine if that customer is a candidate for program.

Better Help has enlisted my assistance in building a model that will be able to read any incoming inquiry and predict whether or not to place that customer into their new initiative with at least 90% accuracy.

Sources

01
Psychology Today

02
Better Help

03
ValuePenguin

04
Mira

05
Think Impact

06
Reddit

r/teaching
r/mentalhealth

07
GA

Outside Research

- 500,000 educators are uninsured
- Average cost of a single therapy session:
  - $138 – $300
- 1 hr session / week:
  - ~ $1,200 / month

- 51% of teachers fear for their mental and physical health when teaching.

- 90% of teachers reported that their feelings of burnout were a serious problem for them and their job.

- 30% of new teachers are quitting their job within 5 years of teaching.
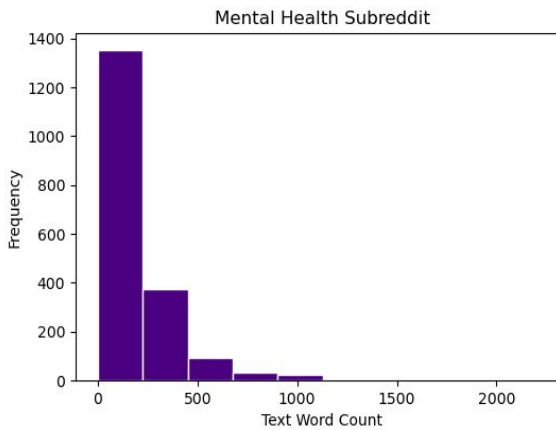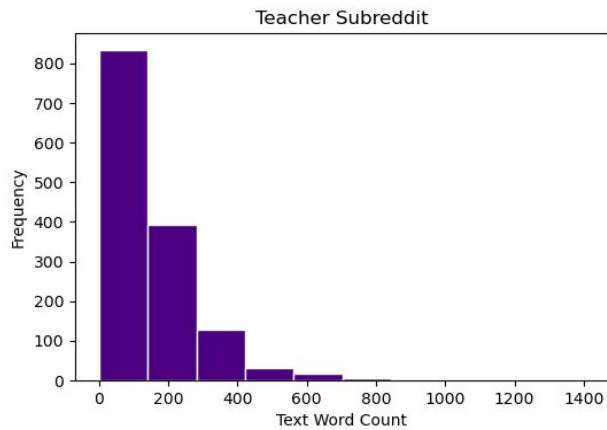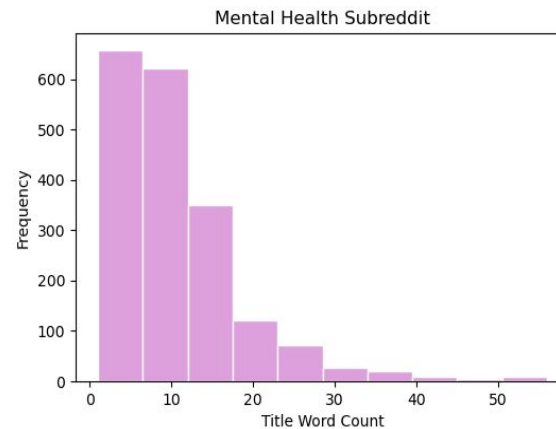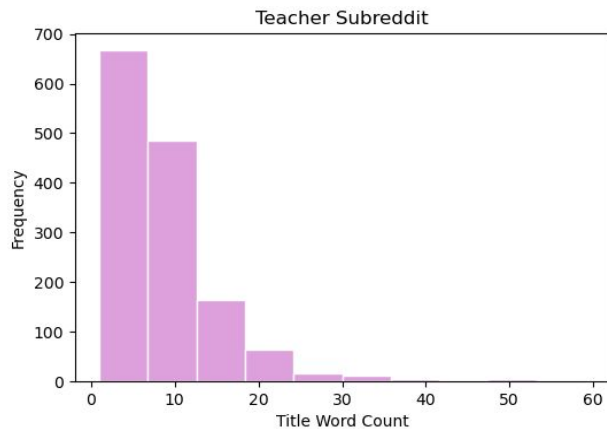
EDA

r/teaching

- Community for educators
- Over 120k members.

r/mentalhealth

- Forum to discuss, vent, support and share information about mental health, illness and wellness,
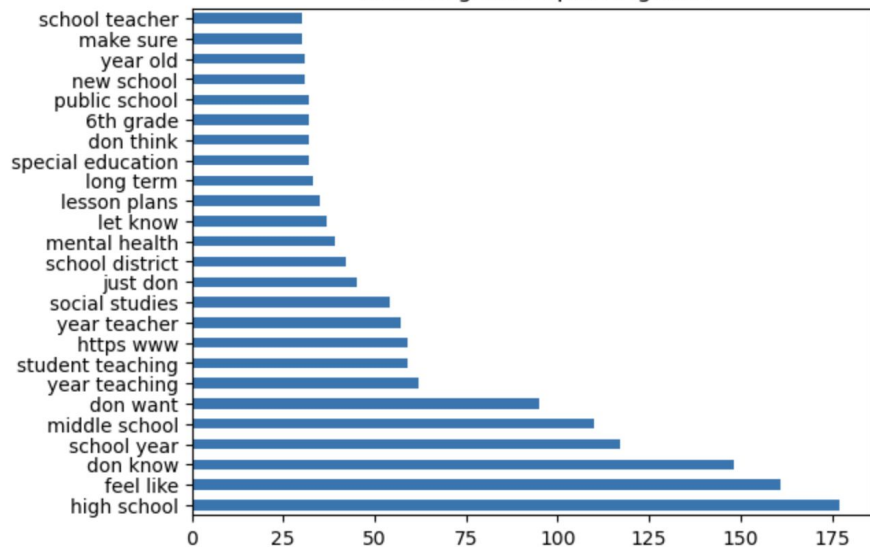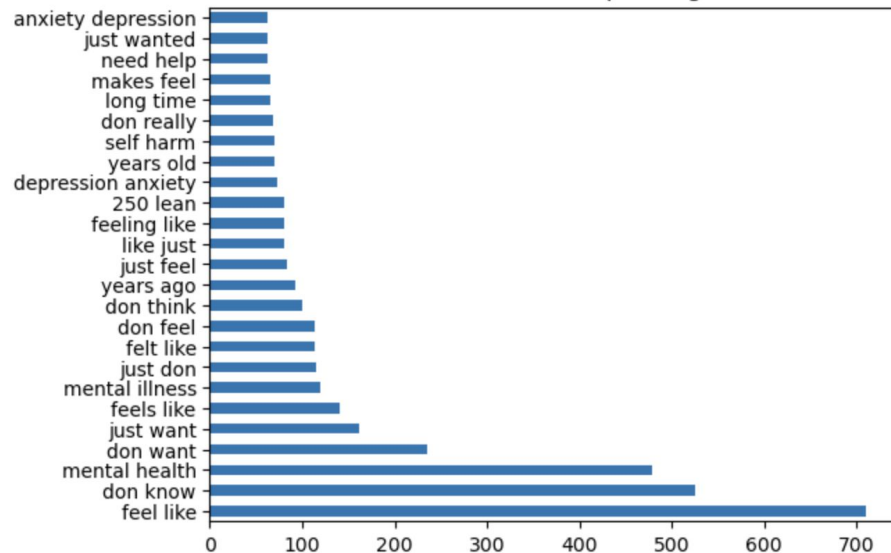- Over 417k members.

EDA

EDA

r/teaching Text Top 25 Bigrams

r/mentalhealth Text Top 25 Bigrams

EDA

Teaching Title	Teaching Text
0.009155	0.313248

Mentalhealth Title	Mentalhealth Text
-0.082864	-0.029222

Modeling Process

- Titles Only Models:
  - CV, MNB
  - CV, LR
  - TV, MNB
  - TV, LR
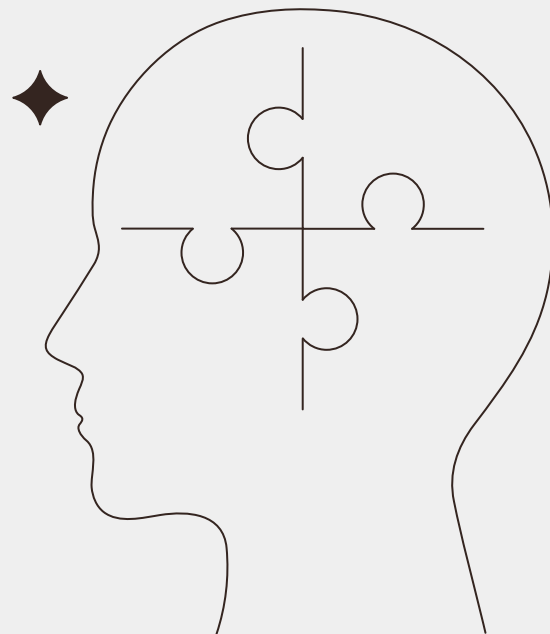 - Best score: 0.872

- Title & Text Models:
  - CV, MNB
  - CV, LR
  - TV, MNB
  - TV, LR
  - Best score: 0.976

- Text Only Models:
  - CV, MNB
  - CV, LR
  - TV, MNB
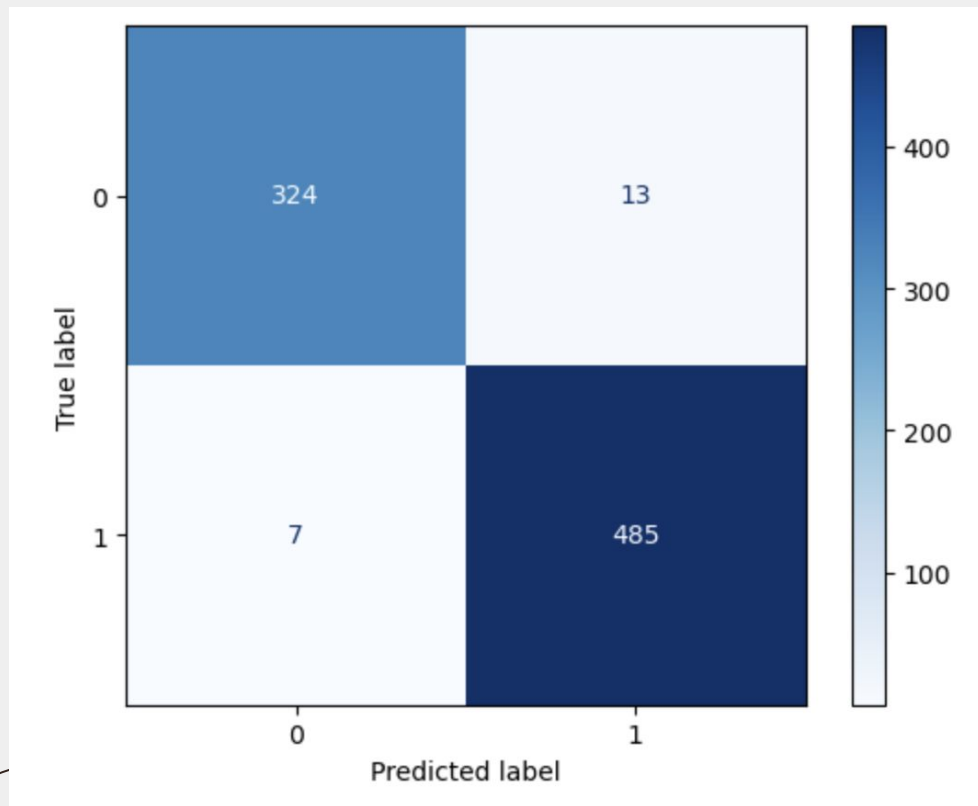 - TV, LR
  - Best score: 0.967

The Winning Model

Parameters

|	
Pre-Processor	TfidVectorizer
Model	MultinomialNB
Dataframe	Title & Text combo
n_gram range	(1,2)
stopwords	english

Scores

|	
Training Score	0.9762
Testing Score	0.9759

Prediction Confusion Matrix

Human Error?

"Giving up. I quit my position and I don't know what's next. The pressure of this job is tolerable, if I was working towards something. As it is now, I feel like I am joining a game of Monopoly 20 turns after everyone else. Just roll the dice and pay rent, that's my only option. I just want to stop. I want to say it's a mental health crisis, but the reality is, my poor mental health comes from social and financial poverty. I love Teaching. I love the job, really. But it's hard to keep rolling the dice, knowing I can't buy shit. I just work and work and pay for other people's shit. The only rent free spot on the board is jail. I've been thinking about how I could save for retirement and my conclusion is I will not be able to retire. No matter how much personal wealth I accumulate, without a house I will be relying on the generosity of others when I am too old to work. There is not future in this and I hat being told to roll the dice by people who own everything on the board. Just roll the dice, that's how you win! They say unsarcasticly. I want to give up. So I gave up. Now I am depressed."
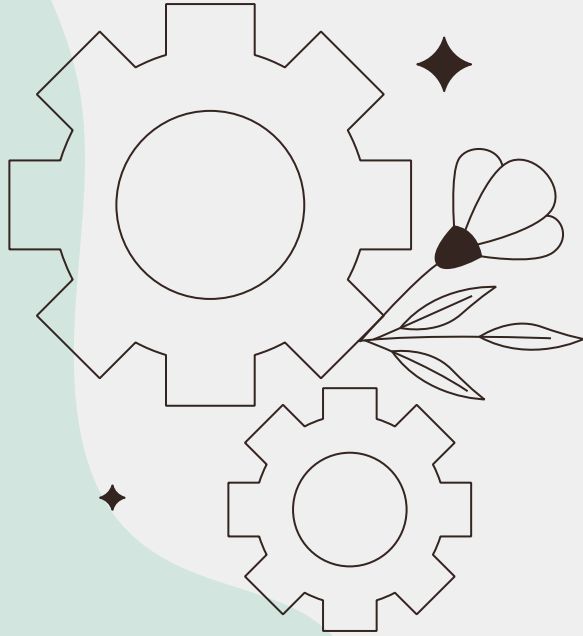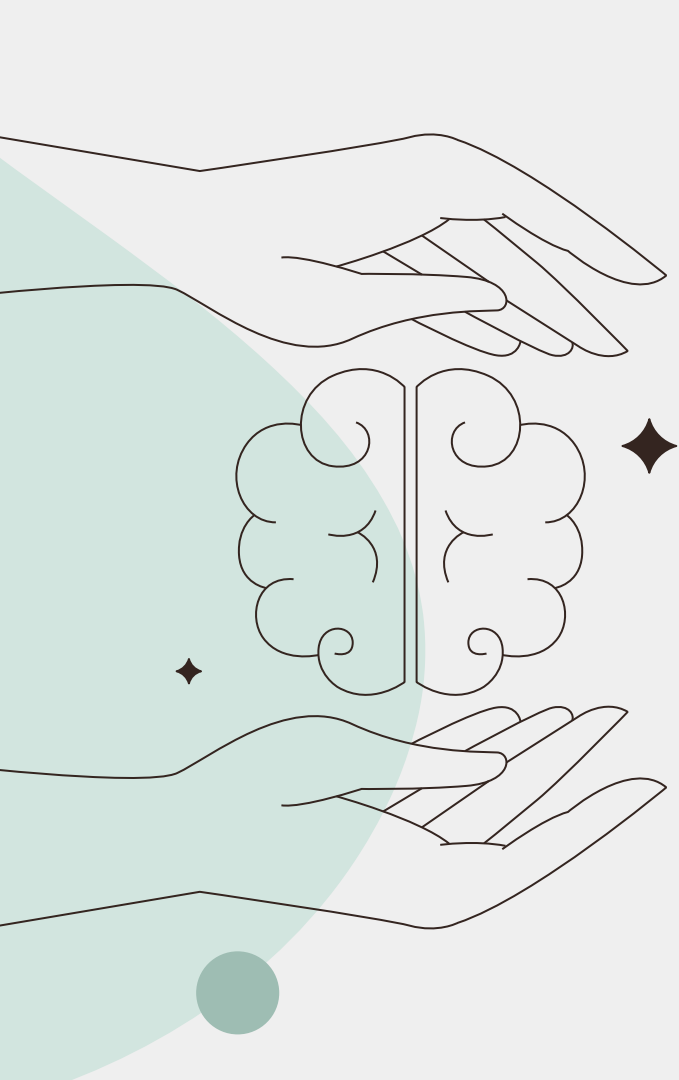
Thank You!

Do you have any questions?