### What lexile is this text?

Beth Fawcett

#### **Business Case**

Teaching

☐ Is this resource on level?

Generating Content

Applicable to the target audience?

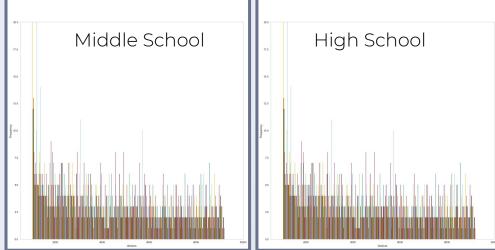
## Methodology

- Supervised learning techniques
- Text tiling
- Lemmatization
- 10000 words referenced
- Neural network

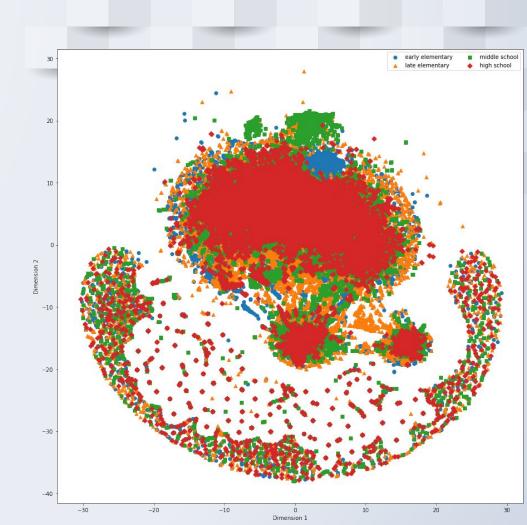
- Obtain Data
- Scrub Data
- Explore Data
- Modeling
- Interpret

Vector frequency looks similar between the groups

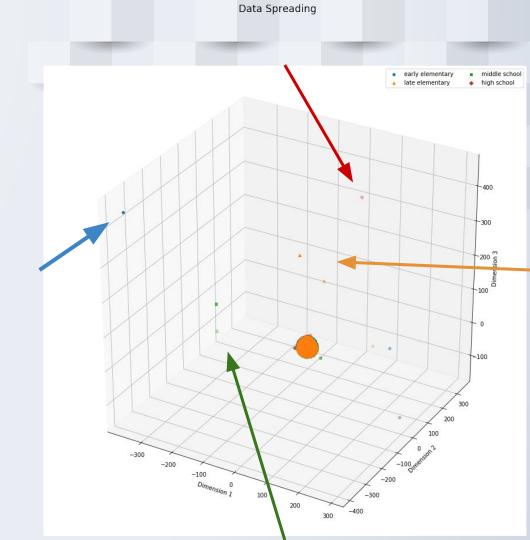




Clustered at 2 dimensions

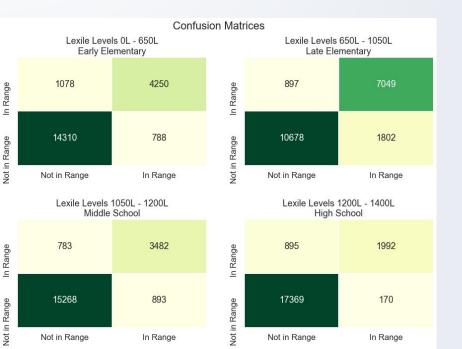


Spreading out

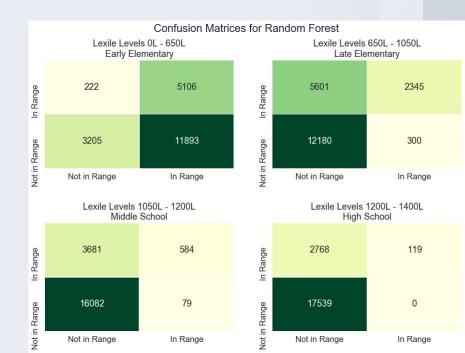


Neural Network Classification

Test Accuracy: 82%

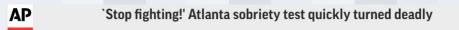


# Random Forest Classification Test Accuracy: 19% out of 25%



## App

What do I do with this?













ATLANTA (AP) - One minute, Rayshard Brooks was chatting cooperatively with Atlanta police, saving he'd had a couple of drinks to celebrate his daughter's birthday and agreeing to a breath test. The next, they were wrestling on the ground and grappling over a Taser before Brooks took the weapon and ran.

#### RELATED TOPICS

Seconds later, three gunshots sounded and Brooks fell mortally wounded.

AP Top News Police General News

Atlanta police video released Sunday showing a seemingly routine sobriety check outside a Wendy's restaurant that quickly spun out of control, ending in gunfire. The killing of the 27-year-

Death of George Floyd Shootings

old black man in an encounter with two white officers late Friday rekindled fiery protests in Atlanta and prompted the police chief's resignation.

#### Lexile Determination

Have you ever wondered if a particular text is at an appropriate reading level for your student or child to be reading?

This application will classify the lexile level of any text, and return whether the content is appropriate for early elementary, late elementary, middle or high school aged readers.

Paste in the plain text of whatever you'd like to classify. To do this, first copy the text you'd like to test, then right click in the box below and select 'Paste as plain text'.

ATLANTA (AP) - One minut

Submit

This text is most similar to texts suitable for middle school aged readers. The lexile match is closet to the range 1050L to 1200L.

#### **Future Work**

- Local app available online
- Regression Model
- Rewriting content to address a different level
- Unsupervised Model

### Thank you!

For more information:

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