## DataFest 2022

Team 2- Abnormal Distributions
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## Data Analysis

Comparision Density plot
The uncropped data


Comparision Density plot
The cropped data



## Data Displays

## Distribution Graph

Grouped by Age and Race


Distribution Graph
Grouped by Age and Race


- Hispanic demographic heavily skewed towards the right for all age groups
- Highest density in $3 / 4$ age groups
- Bimodal distribution
- No caucasian 11 y.o.

Density plot
Time in game grouped by gender and race



- Hispanic males playing time
- African American males are closest to a normal distribution
- Female density of play was higher than male density

Box plot
Time played grouped by School of Participant


Box plot
Time played grouped by School of Participant

$\triangleright$ School 647
$\triangleright$ School 1531
$\triangleright$ Wide range in IQR
$\triangleright$ p-value $=0.10$

Box plot
Time played grouped by Wave of Participant


$\triangleright \mathrm{p}=.02$
$\triangleright$ The most significant factor affecting time played
$\triangleright$ Teacher familiarity and student outcomes

## Looking to the Future

$\triangleright$ Greater Information on School

- Socio-Economic Class
- Effect of greater school funding on preliminary education
$\triangleright$ Greater Racial Representation
- Caucasian, African American or Hispanic
- Asian, American Indian, Multi-Racial etc.
$\triangleright$ Waves
o Teachers on student outcomes


## Final Thoughts

