The Viability of Remote Learning, as told by Covid-19 in Texas

W201 Fall 2020 Section
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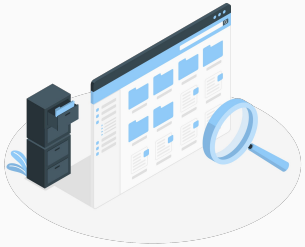
Prepared for: The Texas Education Agency

Is remote learning a viable option for high school students?

How do different demographics perform with remote learning?

Does hybrid learning make more of an impact?



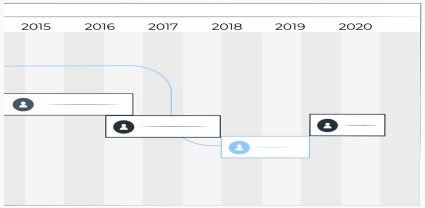
WHAT DO WE NEED TO ANSWER THE QUESTIONS?

DATA

Individual schools, each grade offered

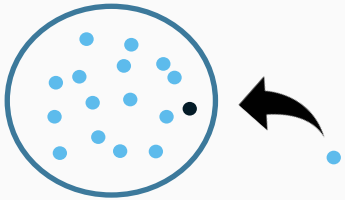
COVID regional level data

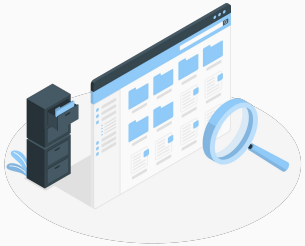
5 years of data and current calendar year



No cost in exchange for analysis results

Missing Data will not be replaced





WHAT DO WE NEED TO ANSWER THE QUESTIONS?

VARIABLES

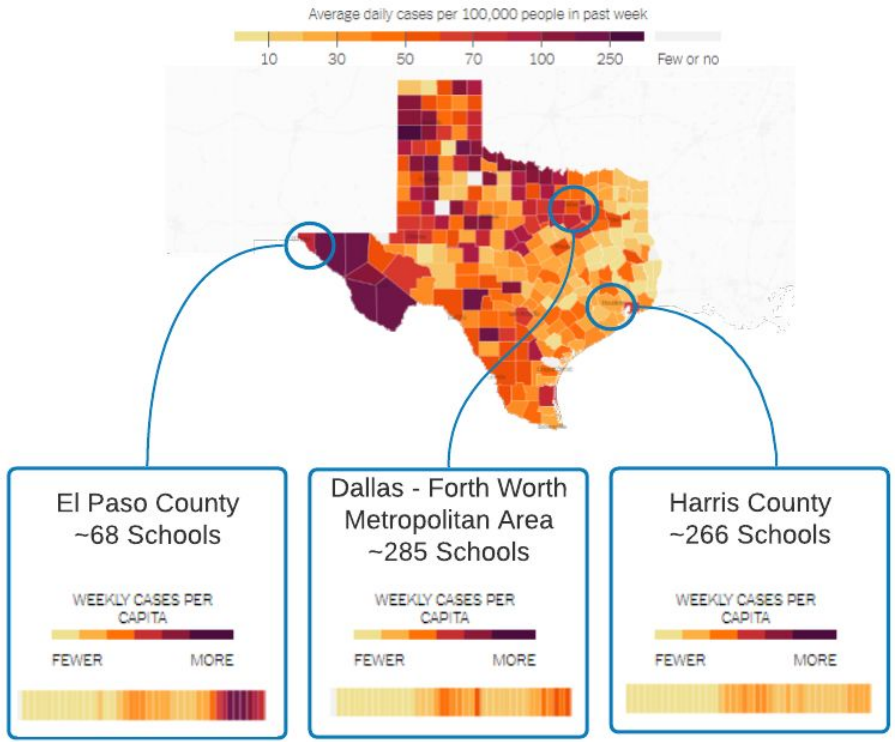
INTERVENTION

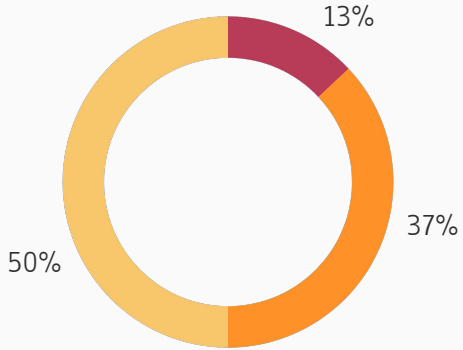
Remote learning

& Hybrid learning

SCHOOL LEVEL	• School name, calendar year, grading period, school classification (Public, Private, Charter), total enrollment, demographics (Age, Gender, Race, Household income), etc.
CLASS LEVEL	• # students failing 1+ courses by class/year per quarter broken down by demographics • # courses a student is failing by class/year per quarter • Etc.
COVID REGIONAL LEVEL	• # COVID cases, # COVID deaths, ICU headroom used, etc.

SAMPLING AT VARIOUS LEVELS OF COVID IMPACT





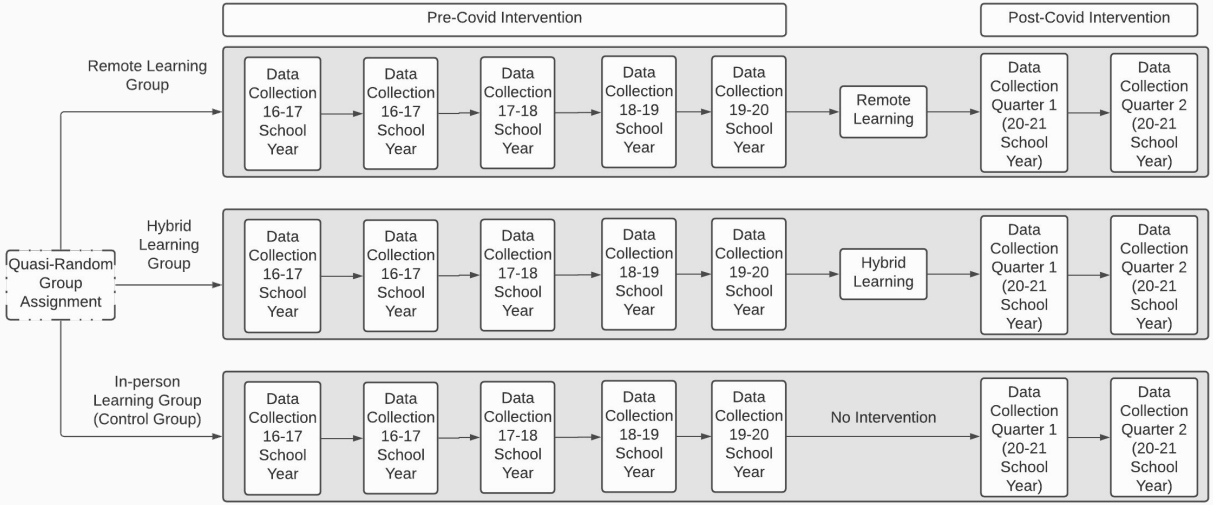
150

Sample size

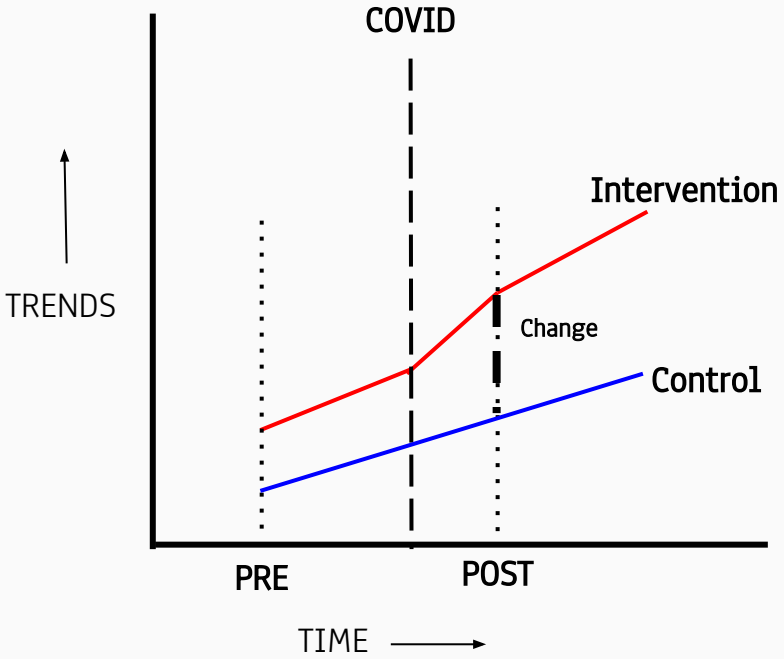
- **EL PASO COUNTY 21 SCHOOLS**
- **DALLAS COUNTY 57 SCHOOLS**
- **HARRIS COUNTY 75 SCHOOLS**

WHAT WILL WE DO WITH THE DATA?

Phase 1 — historical trends vs. 20-21 1st quarter data → **Phase 2** — phase one results and trends vs. 20-21 2nd quarter data

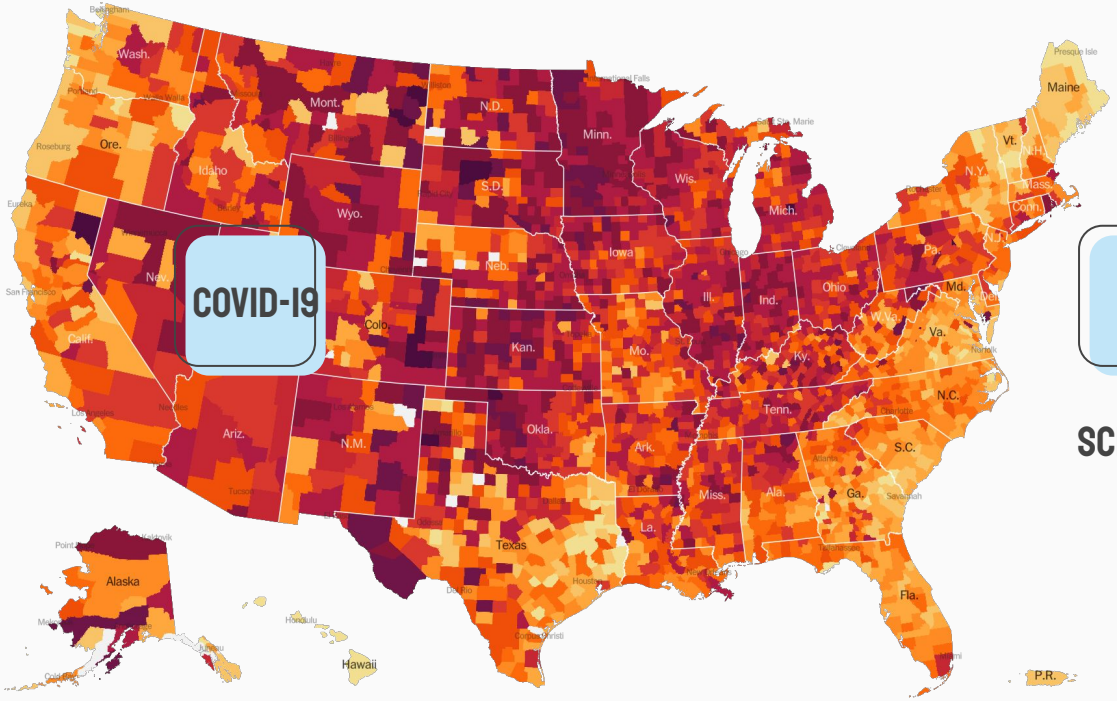


GET THE DATA TO SPEAK FOR US



- Longitudinal Time-Series Study
- Analyse trends in Control Group and Intervention Group.
- Difference in Differences Technique - Highlights change and evolution in trends.

POTENTIAL RISKS



SCHOOL DATA - VARIANCE

- Lack of different learning modes
- Missing historical data

SCHEDULE

DECEMBER 2020 - JANUARY 2021	Phase one Experiment
FEBRUARY 2021 - MARCH 2021	Phase two Experiment

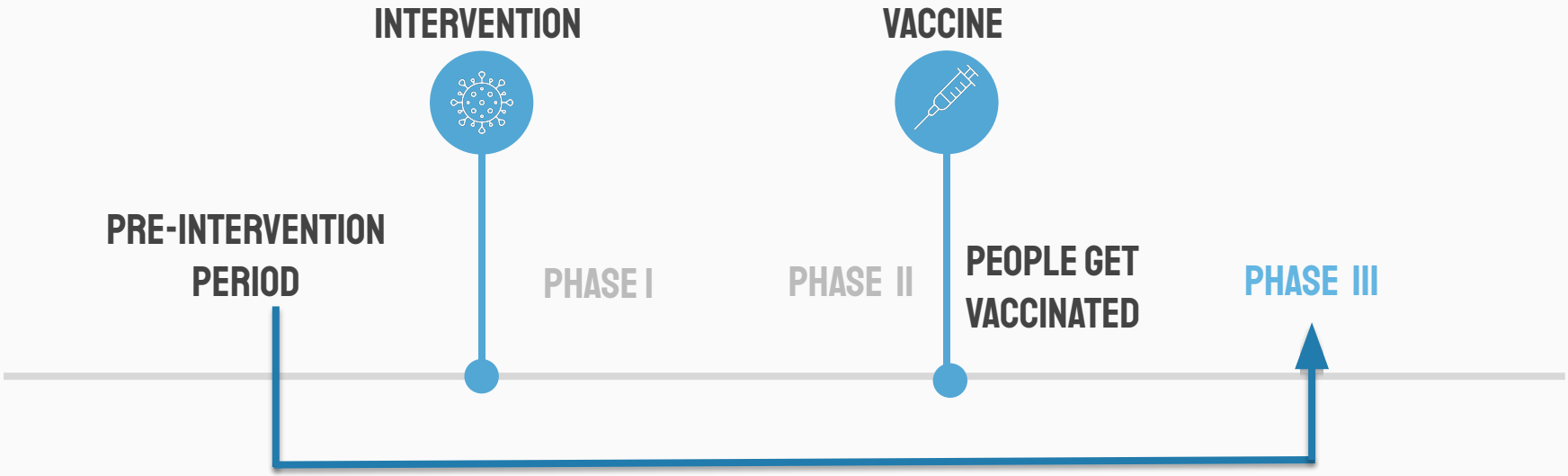
FINAL DELIVERABLE

ONE SCHOOL YEAR AFTER COVID-19

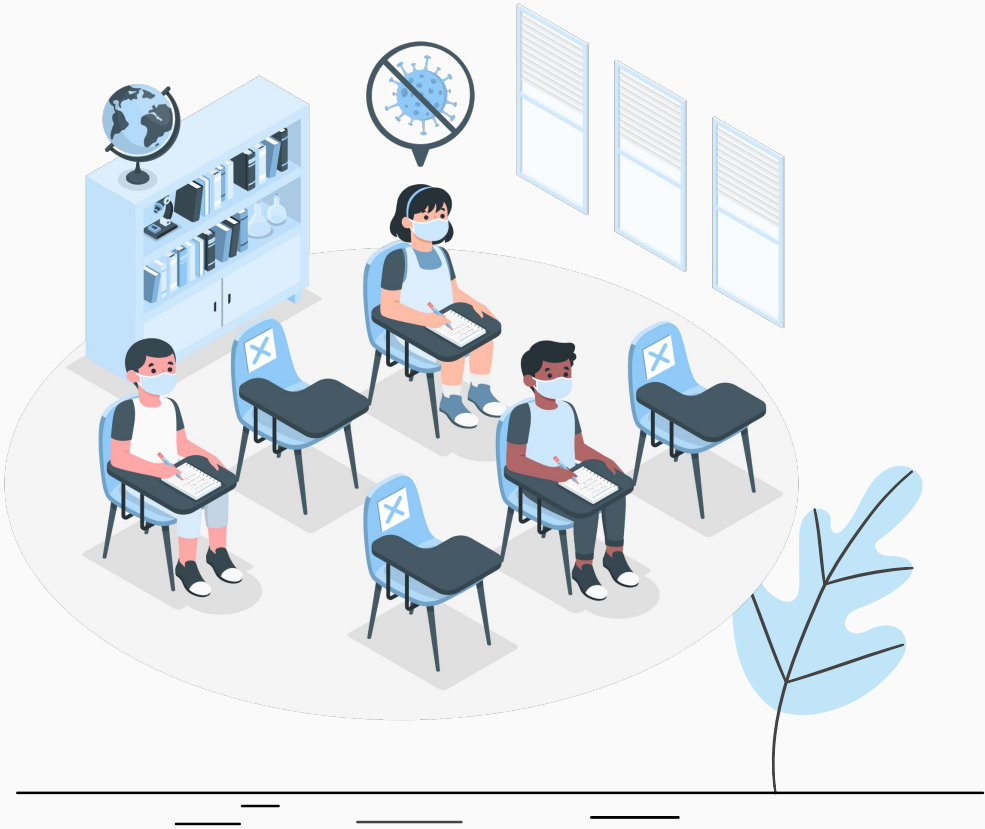
EXPANSION ON THE STUDY...

HOW CAN WE EXPAND ON THE STUDY?

Phase III: To reduce the noise and bias that pandemic could introduce to conclusions about student's performance with different instruction methods.



THANK YOU FOR LISTENING

Does anyone have any questions?

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