

# EVALUATING EARLY LITERACY INITIATIVES IN THE STATE OF TEXAS

State of Texas | Texas Education Agency (TEA)

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## Keywords:

Early literacy initiatives, program evaluation, early childhood education

## Summary:

The State of Texas has implemented several **early literacy initiatives** during the past 5 years. Lizett Aguilar contributed to the early stages of a **program evaluation** of the following early literacy initiatives: **Reading Academies** and **High Quality Instructional Materials** (HQIM). Lizett contributed to the project by performing statistical research, participating in the feedback gathering process, and refining the early stages of the data cleaning and matching process. Lizett's contributions expanded her host office's research capacity, and technical knowledge and contributed to the creation of a strong foundation and framework for future agency program evaluations.

# Evaluating Early Literacy Initiatives in the State of Texas

Digital Strategy and Analytics

State of Texas – Texas Education Agency (TEA)

Jonathan Armstrong – Senior Data Analyst

coding it forward >



**Lizett Aguilar**  
University of Michigan  
Dual Masters of Public Policy and Information Science  
Candidate

# ABOUT ME



- Prior to and during graduate school, I have gained knowledge on various US social policy areas through my work experience.
- I'm interested in the intersection of data science and US social policy and enjoy being outdoors on my free time.



My fellowship experience  
included participating in a  
**program evaluation of early  
literacy initiatives** in the State of  
Texas

# KEY TERMS

- **Early literacy initiatives** are programs and resources aimed at improving reading instruction and student reading outcomes at the elementary school level.
- **Program Evaluation** is the process of evaluating the effectiveness and efficiency of projects, policies, and programs. Program evaluation can include any combination of qualitative and quantitative methods.

# PROJECT OVERVIEW

**The early literacy initiatives my project evaluates are:**

- **Reading Academies:** a required “teacher literacy achievement academy” for all K-3 teachers and principals <sup>1</sup>.
- **High Quality Instructional Materials (HQIMs):** state-provided instructional materials that cover Texas Essential Knowledge and Skills (TEKS) and use research-based strategies <sup>2</sup>.

# PROJECT OVERVIEW

## **Reasons these early literacy initiatives were implemented include:**

- A drop in reading scores after the COVID-19 pandemic.
- Facilitating state-wide implementation of research-backed reading instruction techniques, such as the Science of Reading.



# PROJECT OVERVIEW

- **Does the use of early literacy initiatives affect student literacy outcomes (student test scores)?**
- **Does the model-type of one of these early literacy initiatives affect student literacy outcomes?**
- The project focuses on K-3rd grades.





# 1,550,007

The number of K-3 students in Texas public schools today

# PROJECT OVERVIEW, CONTINUED

**I contributed to the early stages of the Program Evaluation through:**

- Researching statistical methodology.
- Thought partnering and gathering feedback from subject matter experts.
- Refining the data matching and cleaning process.



# RESEARCH OVERVIEW

**Identifying Research Gaps**

**Finding Published Works**

**Expanding Agency Knowledge**

- Statistic methods
- Additional methodological approaches

# RESEARCH OVERVIEW

## Identifying Research Gaps

- Statistic methods
- Additional methodological approaches

## Finding Published Works

- Similar program evaluations
- Summarizing the most common evaluation methods

## Expanding Agency Knowledge

# RESEARCH OVERVIEW

## Identifying Research Gaps

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- Additional methodological approaches

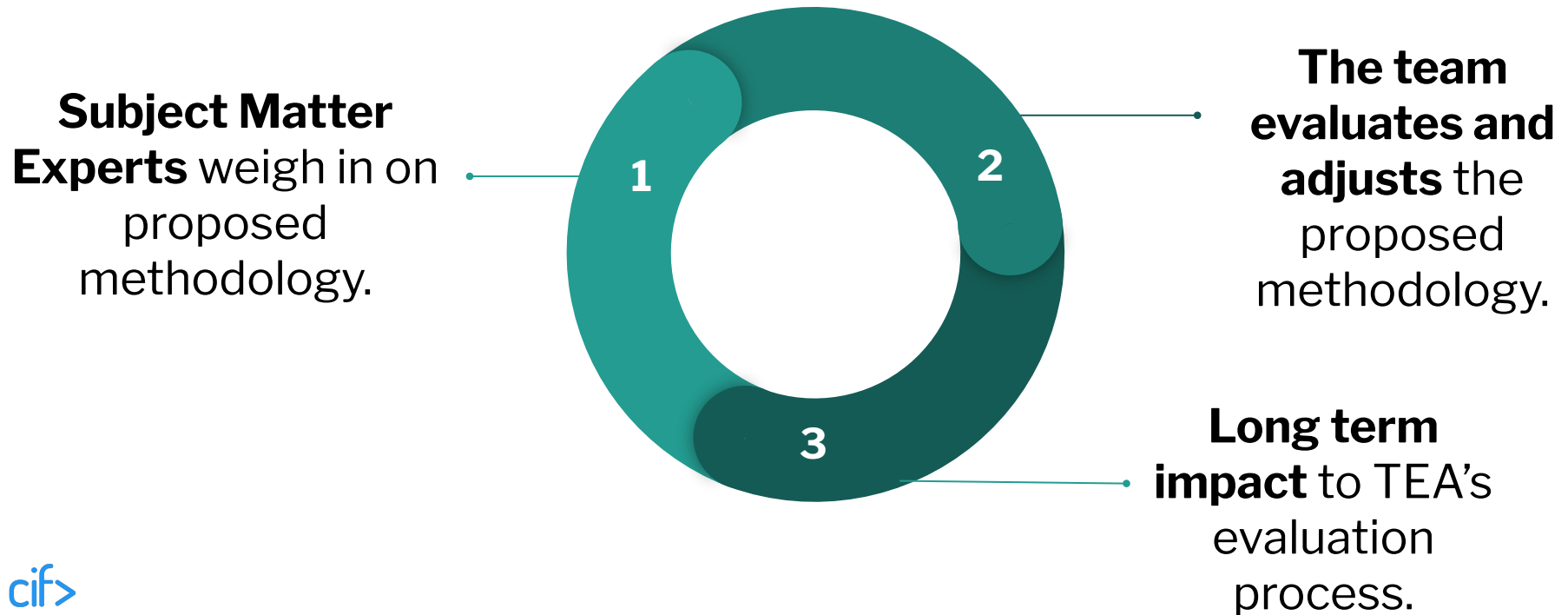
## Finding Published Works

- Similar program evaluations
- Summarizing the most common evaluation methods

## Expanding Agency Knowledge

- Refined methodological approach.
- Expanded literature review.
- Expanded knowledge for future TEA program evaluations.

# GATHERING FEEDBACK



# DATA CLEANING

## Familiarity w/the Data

## Practice w/ Test Data

## Merging the Data

- What data is collected.
- Which data is relevant to the project.
- Important considerations about the raw data.

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- Joining test tables using Python.
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## Merging the Data

- Using SQL to merge and obtain the final dataset

# TAKEAWAYS AND IMPACT

## The long term-impact of my fellowship contributions is:

- Additional research capacity contributes to expanded agency knowledge
- Gathering feedback and creating a data cleaning and matching process create a strong foundation and framework for future program evaluations
- This work can be scaled up and replicated in future program evaluations



# THANK YOU!

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