

# Concurrent Session 1a

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Integrating data to improve education & youth wellbeing

Amy Hawn Nelson

Director of Training & Technical Assistance

*Moderator*



At any point, drop  
questions into the chat.

# Agenda

- Welcome
- Jessica Cunningham, KYStats
- Scott Gaul, CT Office of Policy & Management
- Regan Foust, Children's Data Network
- Maggie Reeves, GA Policy Lab
- Q&A

Jessica Cunningham  
KYSTATS



# Kentucky Center for Statistics



Uniting our data.  
Informing our Commonwealth.

# Kentucky Longitudinal Data System (KLDS) Powered by KYSTATS



## Kentucky Department of Education

- K12 Students
- K12 Teachers
- K12 Staff
- Career/Technical Education
- Teacher/Education Certification
- Governor's Scholar Program

## Council on Postsecondary Education

- Public & Independent Postsecondary

## Commission on Proprietary Education

- Proprietary Colleges

## Bureau of Labor Statistics

- Labor Market Information

## Labor Cabinet

- Unemployment Insurance (UI) Claims & Wages

## Department of Workforce Investment

- Workforce Training
- Office for the Blind & Vocational Rehab
- Job Seekers
- Focus
- Apprenticeships

## Education and Workforce Development Cabinet

- Skills U (Adult Education)

## Finance & Administration Cabinet

- Revenue Data
- Financial Aid - Kentucky Higher Education Assistance Authority

## Cabinet for Health and Family Services

- Early Learning - Child Care
- Supplemental Nutrition Assistance Program (SNAP)
- Temporary Assistance For Needy Families (TANF)
- SNAP Employment & Training Program (SNAP E&T)
- Medicaid Eligibility and Claims
- Vital Statistics
- TWIST Foster Care & Adoption
- HANDS

## Kentucky Board of Nursing Medical Licensure Board

- Nursing Licenses

## Justice and Public Safety Cabinet

- Corrections

## Industry Certification

- National Institute for Automotive Service Excellence (ASE)
- Computing Technology Industry Association (CompTIA)

## Other Data Sources

- Kentucky Chamber of Commerce - Talent Pipeline Management
- Governor's Office Of Early Childhood - Head Start
- Coleridge Initiative - Out of State Education and Employment and Wage Data

## Kentucky Transportation Cabinet

- Driver Licensing

## In-Progress Relationships

- Justice and Public Safety Cabinet - Department of Juvenile Justice

# Organization History

- Established as an independent state agency by the Kentucky General Assembly in 2013.
- Administratively attached to the Kentucky Education and Labor Cabinet.
- Board membership expanded in 2019 to include the Cabinet for Health and Family Services.



# KYSTATS Legislation

KYSTATS is charged with collecting accurate data in the Kentucky Longitudinal Data System in order to link the data and generate timely reports about student performance through employment to be used to guide decision makers in improving the Commonwealth of Kentucky's education system and training programs.

Kentucky Revised Statute 151B.132





# KYSTATS Board of Directors

**Education & Labor Cabinet Secretary (CHAIR)**

Kentucky  
Department  
of  
Education  
(KDE)  
Commissioner

Council on  
Postsecondary  
Education  
(CPE)  
President

Kentucky  
Higher  
Education  
Assistance  
Authority  
(KHEAA)  
Executive  
Director

Cabinet for  
Health and  
Family  
Services  
(CHFS)  
Secretary



# KYSTATS Research Agenda

## *2020-2022 Focus: Equity*

1. Expand data access and use to inform equity issues and barriers related to birth through workforce
2. Evaluate outcomes and barriers for education and workforce programs over time
3. Connect supply and demand of Kentucky future workforce
4. Measure impact of out-of-state education and workforce migration



# Proposed 2023-24 Research Agenda Themes

1. Access, Usage, & Usability
2. Applying an Equity Lens
3. Changes & Trends Since COVID
4. Expanded Modeling & Prediction



# Access, Usage & Usability

KYSTATS will focus on equitable access and wider use of its products by a broad and diverse audience.

- **ACCESS:** Compliant with all federal and state laws and guidelines related to fair and reasonable access.
- **USAGE:** Promoting greater awareness and use of KYSTATS research and data.
- **USABILITY:** Continually working to find a balance between inclusiveness of data and usability of information.



# Applying an Equity Lens

Incorporating KYSTATS' Equity Committee work, we will apply an equity lens to our products by analyzing and reporting data related to:

- Backgrounds
- Experiences
- Opportunities
- Access



# Changes & Trends Since COVID

Continual assessment of changes and trends in the state, **tracking these over the course of time**, and paying particular attention identifying differences for key populations in the state.



# Expanding the use of Modeling & Predictive Analytics

Leverage the KLDS to provide **predictive and explanatory analyses** to make connections between key transition points in the birth through workforce continuum and to assess their likely impact on outcomes across systems and over time.



# KENTUCKY & COVID-19

How does KYSTATS **add value** to this conversation?

1. **Connecting** data across systems to understand impacts in more than one area and their interactions.
2. Using the **longitudinal data** to understand how what we see differs from what would have been expected.
3. We can begin to **project potential long-term impacts**.





# KENTUCKY & COVID-19:

## Our Approach

1. What changes and trends are we able to observe in key metrics from birth through the workforce using the Kentucky Longitudinal Data System?
2. What differences are present when comparing these metrics amongst different populations in the state?
  - Race/Ethnicity
  - SES
  - Gender
  - Geography



# KENTUCKY & COVID-19: Our Approach (Continued)

3. Is what we observed different from what would have been expected?
4. What additional factors (policy, programmatic, environmental, etc.) were or are present?
5. What is the potential long-term impact of observed changes in these metrics (i.e., why do these metrics matter)?



# Ready to Learn More?

kystats.ky.gov  
@kystats

Jessica Cunningham, PhD  
Executive Director  
jessica.cunningham@ky.gov



Scott Gaul

Chief Data Officer, Connecticut





P20•WIN

CT SLDS TO IDS TRANSITION

# OVERVIEW

- [P20 WIN](#) is Connecticut's state longitudinal data system and is the mechanism by which data from multiple agencies are matched to address critical policy questions.
- P20 WIN informs sound policies and practice through secure sharing of longitudinal data across participating agencies to ensure that individuals successfully navigate supportive services and educational pathways into the workforce.
- P20 WIN is a federated data system that has been operational since 2014.
- P20 WIN is used to answer policy questions, fulfill federal and state reporting requirements; support program review; inform school districts of postsecondary outcomes; provide employment and wage outcome data; and support research and analysis on a variety of topics.



# MEMBERSHIP

- **Participating Agencies**
  - Department of Labor (DOL) – Also the Data Integration Hub
  - State Department of Education (SDE)
  - Office of Early Childhood (OEC)
  - CT State Colleges and Universities (CSCU)
  - University of Connecticut (Uconn)
  - Department of Social Services (DSS)
  - Department of Children and Families (DCF)
  - Office of Higher Education (OHE)
  - CT Conference of Independent Colleges (CCIC)
  - CT Coalition to End Homelessness (CCEH)

## 'IDS LEAD' ROLE IN CT



### Operating Group

P20 WIN is administered by the Office of Policy and Management (OPM) as the Operating Group, which provides program management to support the continued operation and improvement of P20 WIN as a resource for the participating agencies and the State.

P20 WIN staff are within Data and Policy Analytics unit, co-located with: open data, GIS office plus other analytics projects



### Data Integration Hub

The Data Integration Hub for P20 WIN is based at the Department of Labor Office of Research, where all matching for approved requests happens.







# LEARNING AGENDA

The **P20 WIN Learning Agenda** reflects the priority issues and burning questions of the State of Connecticut and P20 WIN Participating Agencies. The topics and questions in the Learning Agenda are used to prioritize and inform data requests to P20 WIN.

- **College and Career Success:** to support placement decisions at colleges and universities
- **Student Readiness:** to analyze transitions between early childhood and K-12 schools, to include social services, child welfare, housing, family life and adult education
- **Financial Aid:** the dynamics and outcomes for state financial aid grant recipients
- **Workforce Training:** measuring the net impact and return on investment for public workforce training programs
- **Overcoming Barriers to Success:** using data to help individuals who face barriers to success due to factors like homelessness or engagement with the child welfare system

# TECHNICAL ASSISTANCE

- Similar topics
  - Staffing
  - Legal
  - Technology
  - Governance
  - Matching / linking methods
  - Funding
  - Legislative / policy basis
  - Racial equity
- Separate systems
  - Most states?
  - SLDS and IDS together
    - KY and IN?

QUESTIONS?

Contact:

Scott Gaul, Chief Data Officer  
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Katie Breslin, Outreach and  
Engagement Coordinator  
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P20•WIN

# Regan Foust

Executive Director, Children's Data Network



# Integrating Data to Improve Education & Youth Wellbeing

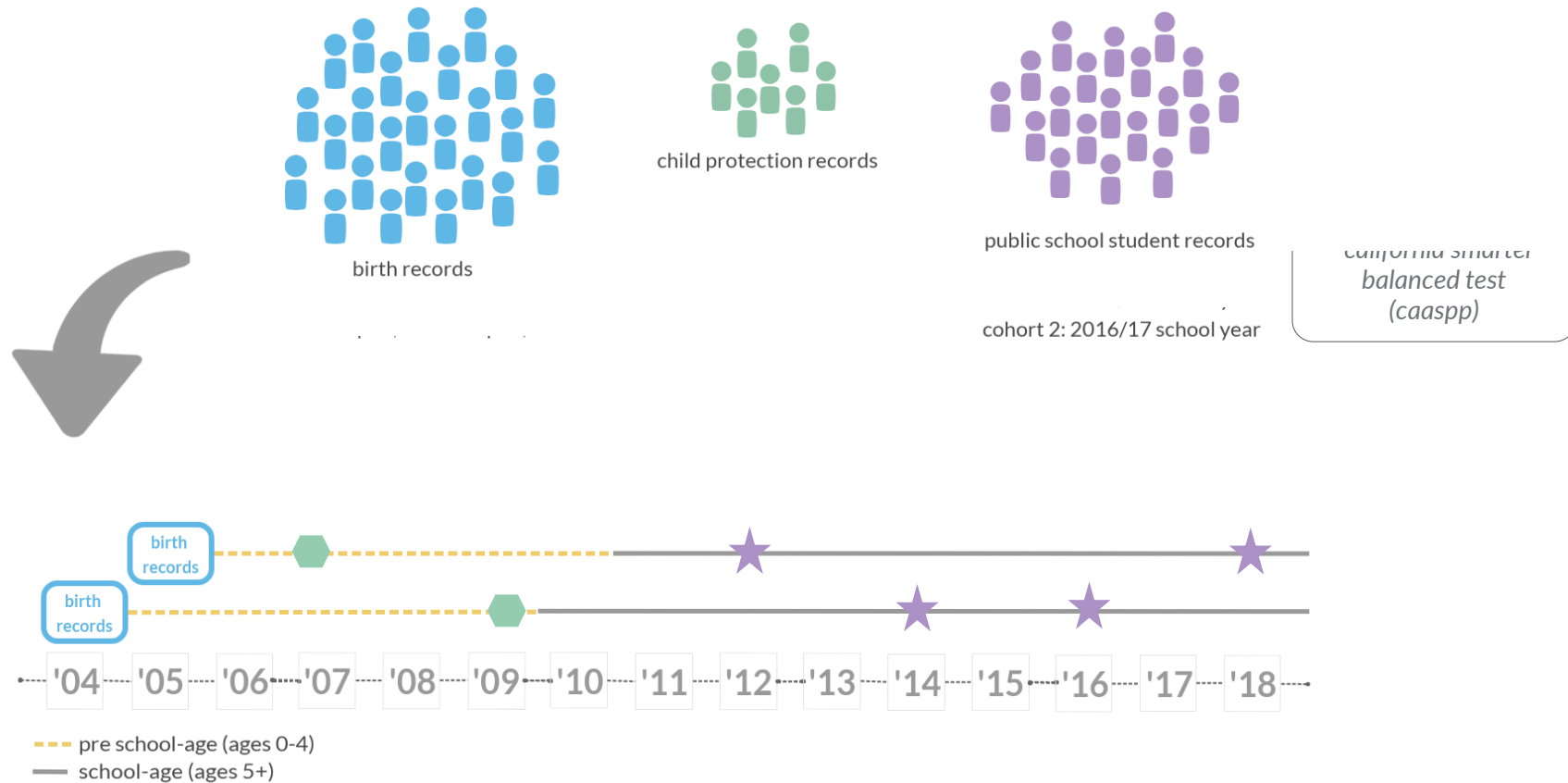


Exploring Resilience Among  
Vulnerable Students in California

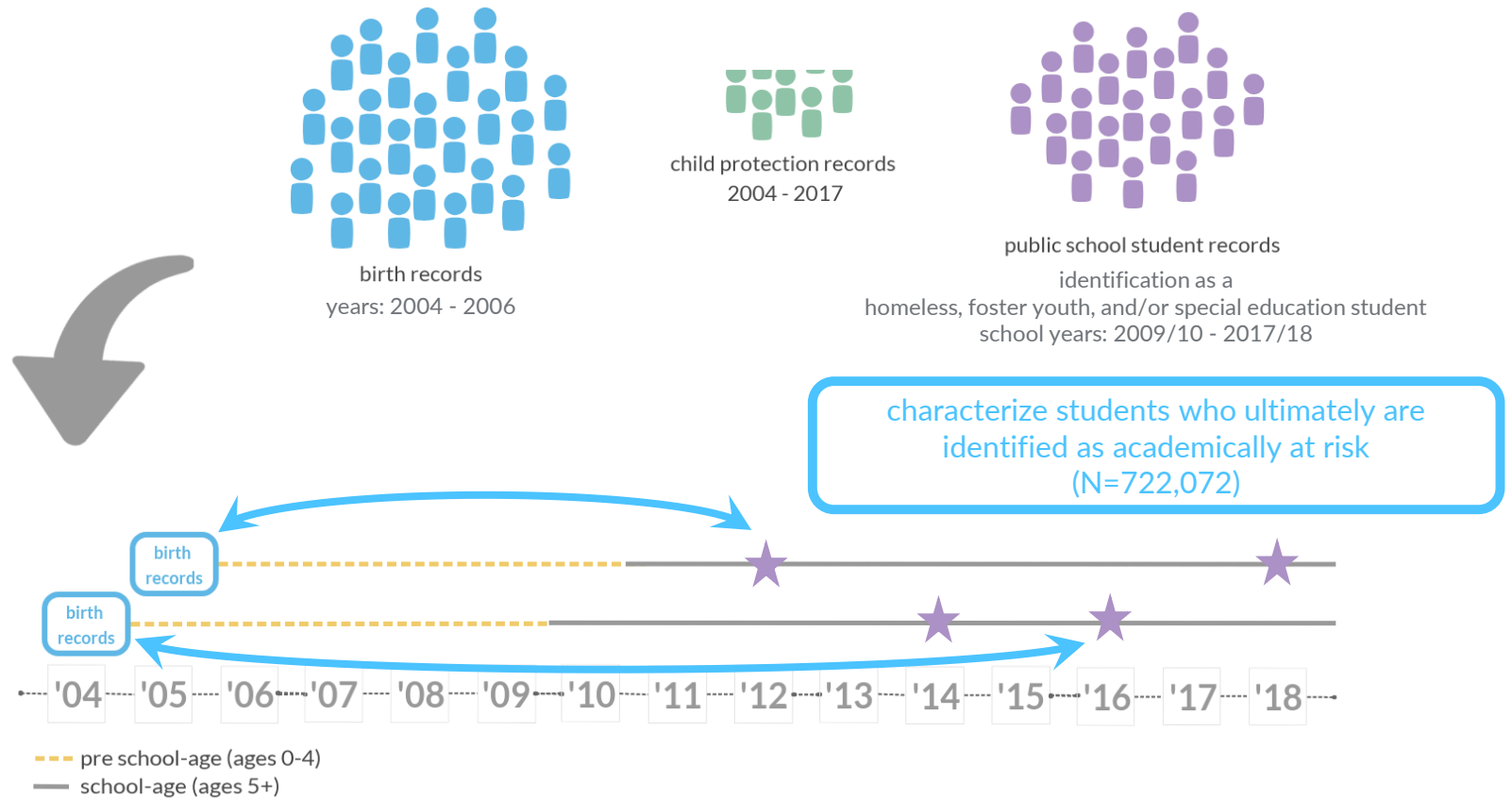
Regan Foust, PhD  
*Children's Data Network at the University of Southern California*  
June 22nd, 2022

Harnessing the scientific potential of  
linked, administrative data to inform  
children's programs and policies.

# longitudinal birth cohort project



# paper 1





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## paper 1



do students classified as academically at-risk during elementary school (i.e., identified as a *foster*, *homeless*, or *special education student*) differ in terms of sociodemographic characteristics at birth?

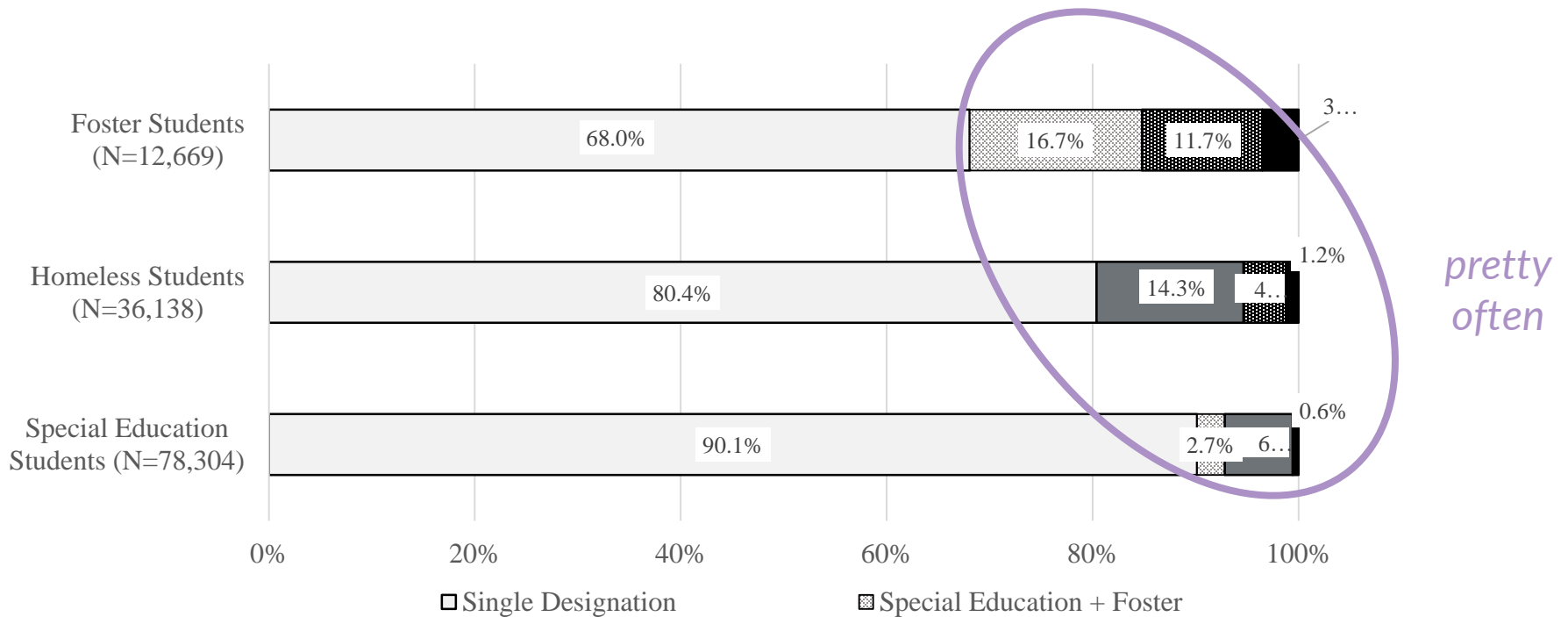
*yes*

- *1 in 6 students* were classified as *academically at-risk* at least once during elementary school
- likelihood of *foster and homeless classification* was higher for certain groups
- likelihood of *special education classification* was more *muted*

## paper 1



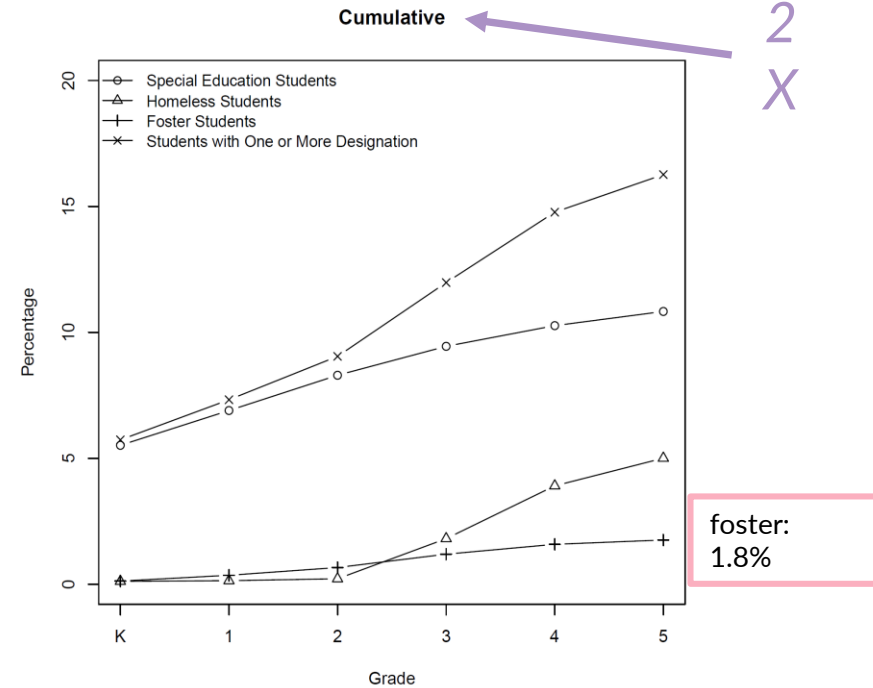
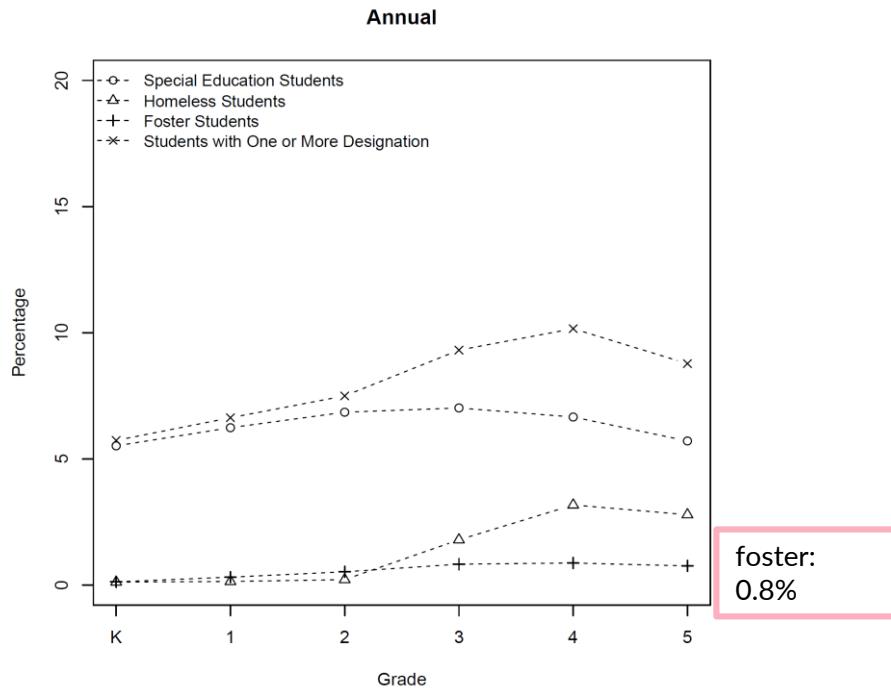
how often do students have *multiple risk classifications*?



# paper 1



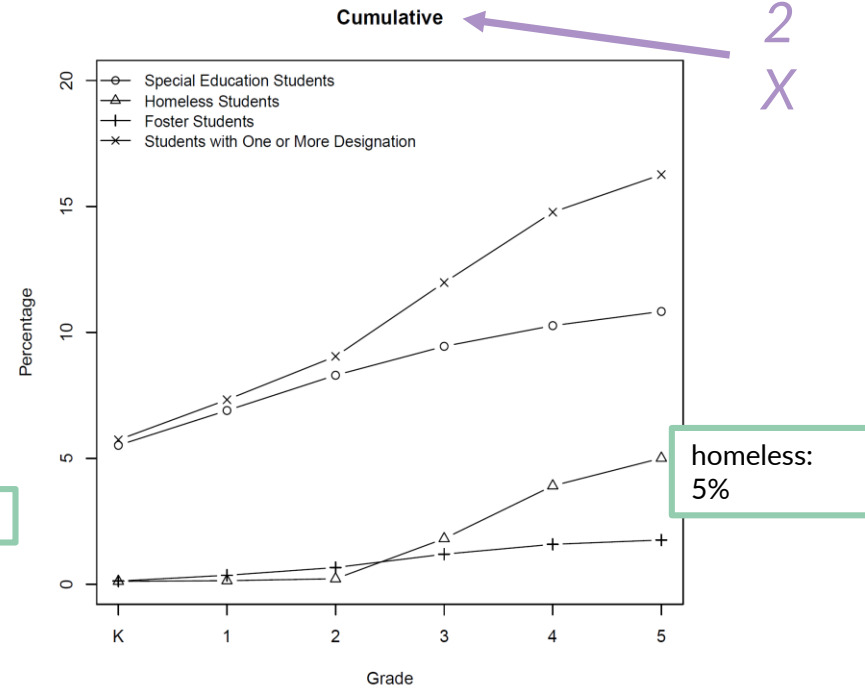
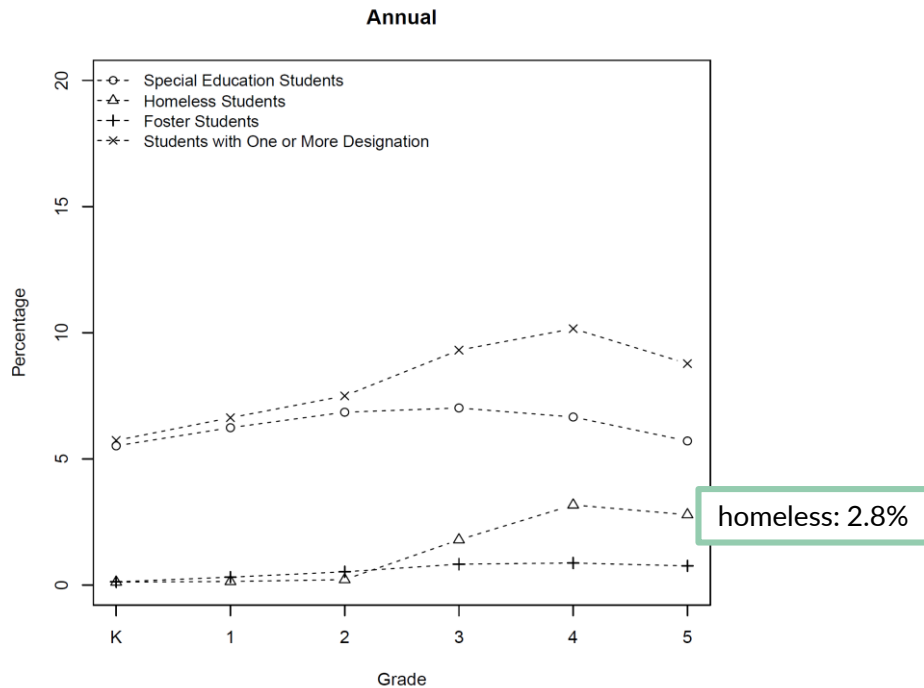
how does CDE's *annual snapshot approach* of calculating at risk students compare to a *prospective, cumulative, student-centered approach*?



# paper 1



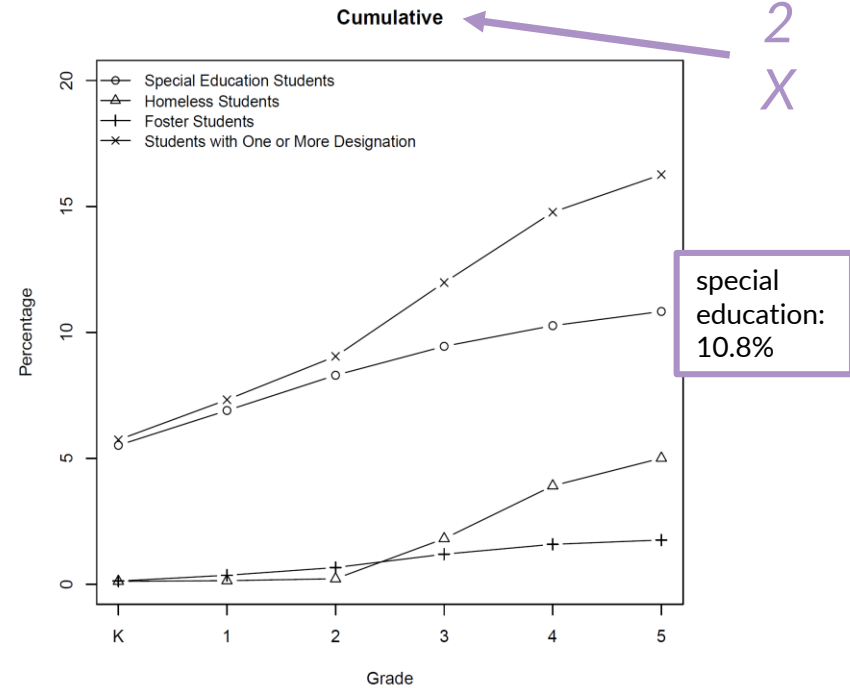
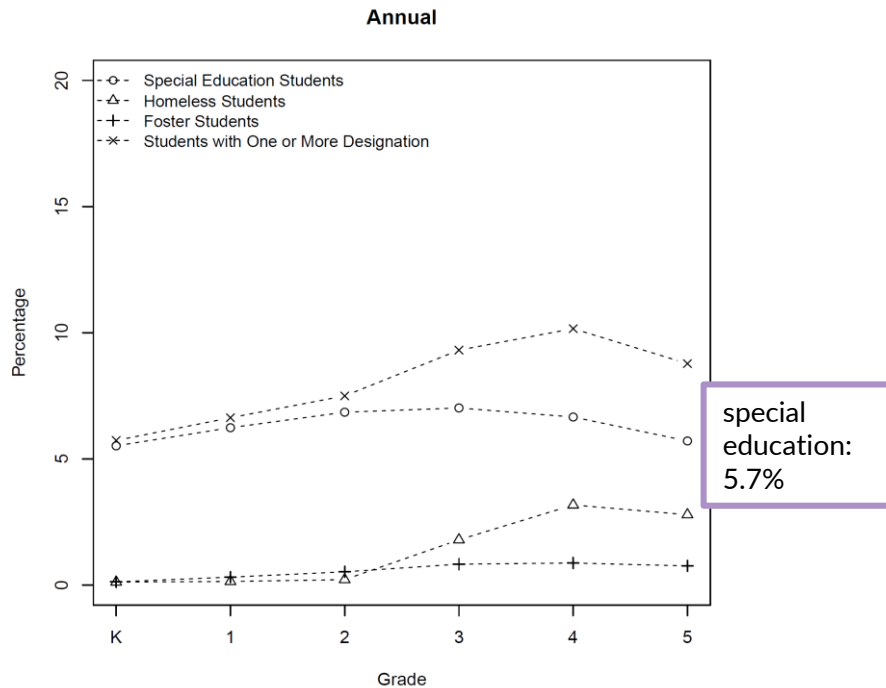
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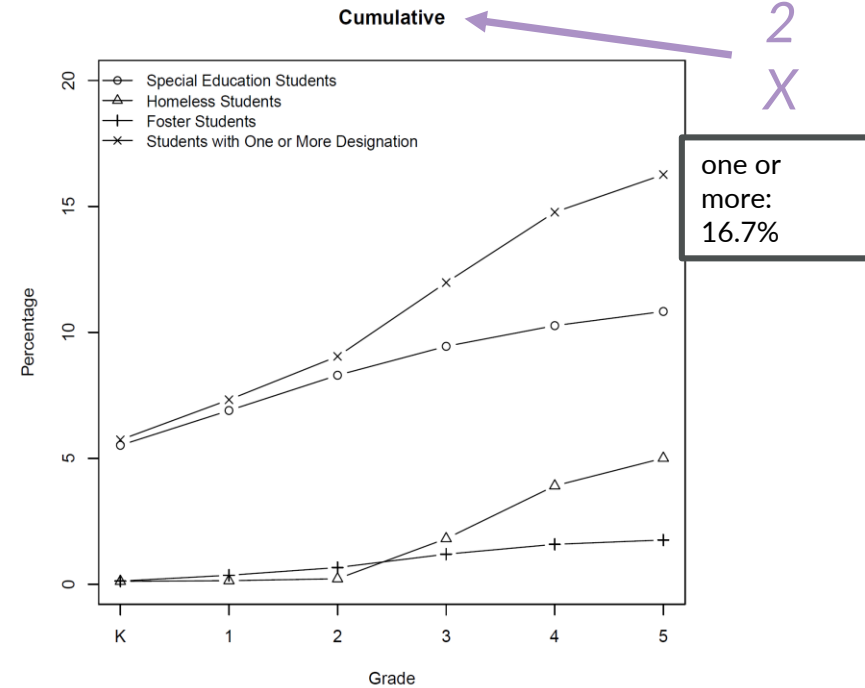
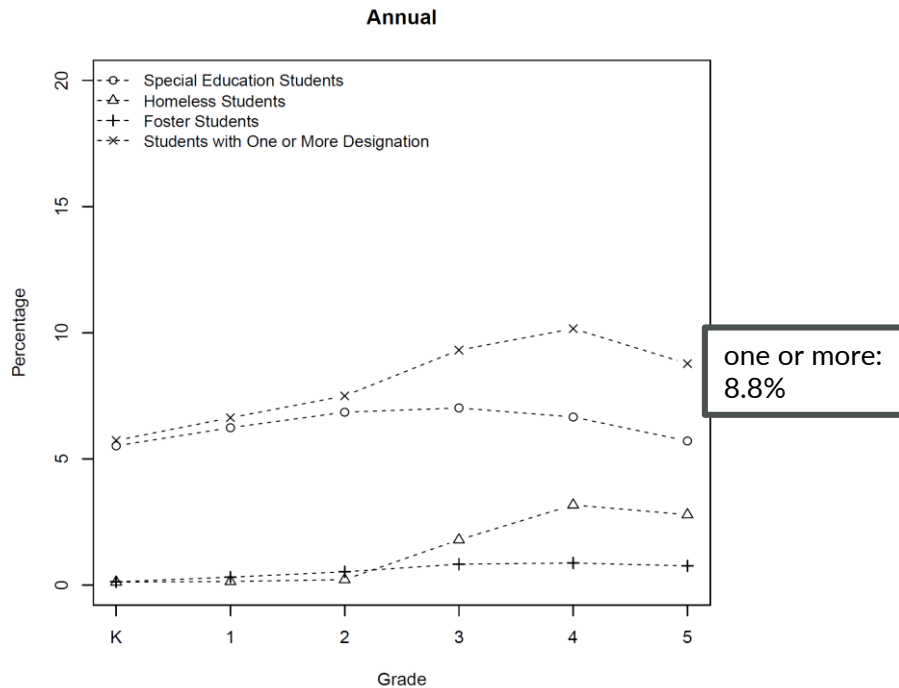
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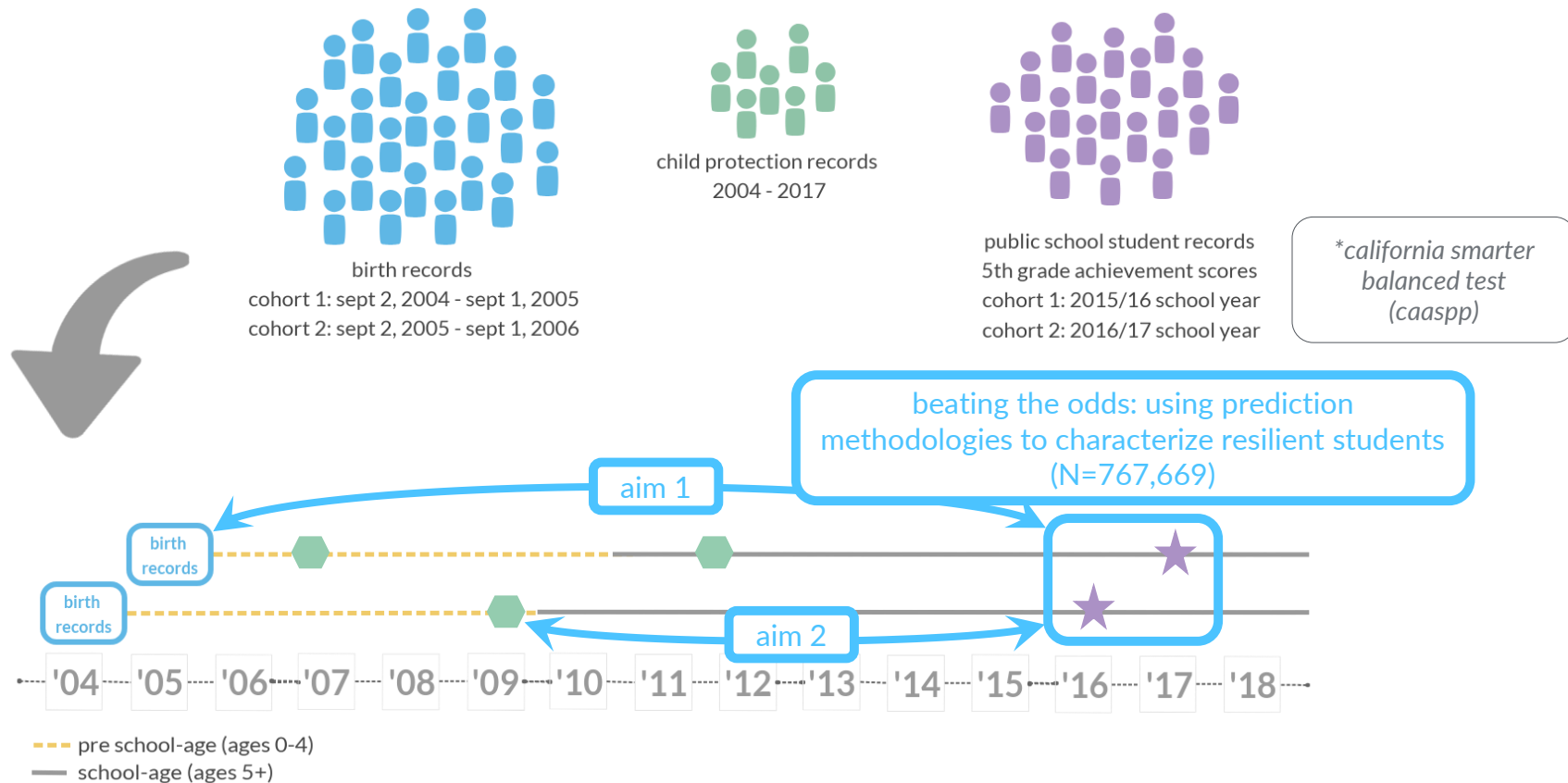
# paper 1



how does CDE's *annual snapshot approach* of calculating at risk students compare to a *prospective, cumulative, student-centered approach*?



## paper 2



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## paper 2

developed *multi-level glms* using *sociodemographic information* available on the birth record and *achievement scores* aggregated to the school/district level to *predict 5th grade achievement*

compared *predicted* to *observed achievement*

*underperforming* = predicted to meet or exceed standard, but did not  
*performing as predicted – below standard* = predicted to not meet the standard and did not  
*performing as predicted – meeting standard* = predicted to meet the standard and did  
*overperforming* = predicted to not meet the standard, but did

examined the unique *effect of child protection involvement* on  
*5th grade achievement*



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## paper 2



to what extent can *sociodemographic information* available on birth records *predict 5th grade achievement*?

*pretty well*

model *predicted 22% of student-level variance* and *49% of school-level variance*

*birth characteristics were correlated with performance* beyond similarities due to school

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## paper 2



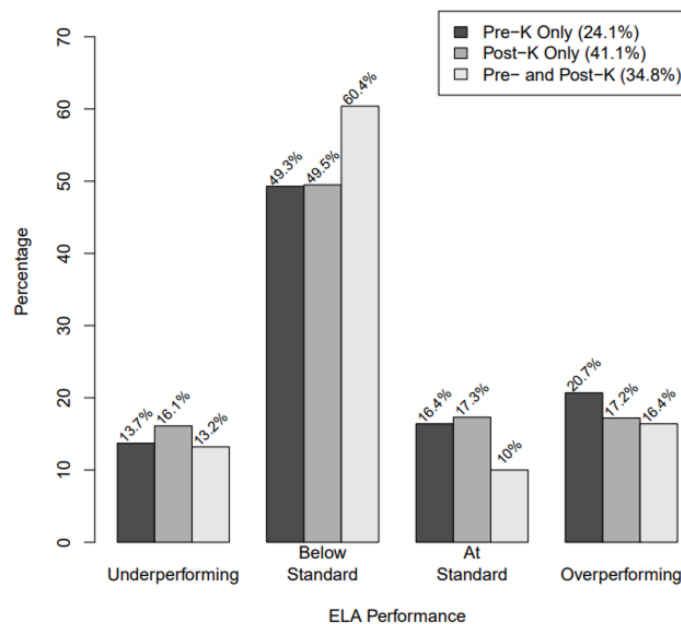
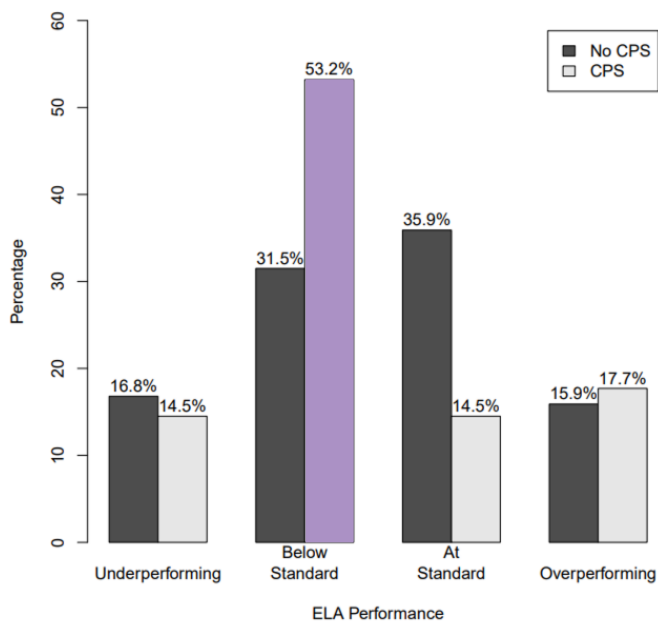
how does *predicted achievement compare to observed achievement?*

- observed: *47.5% met or exceeded* the ela 5th grade-level standard
- predicted vs. observed:
  - *most (67.4%) performed as predicted*
  - the remaining *one-third was evenly split between under- and over-performing*

## paper 2



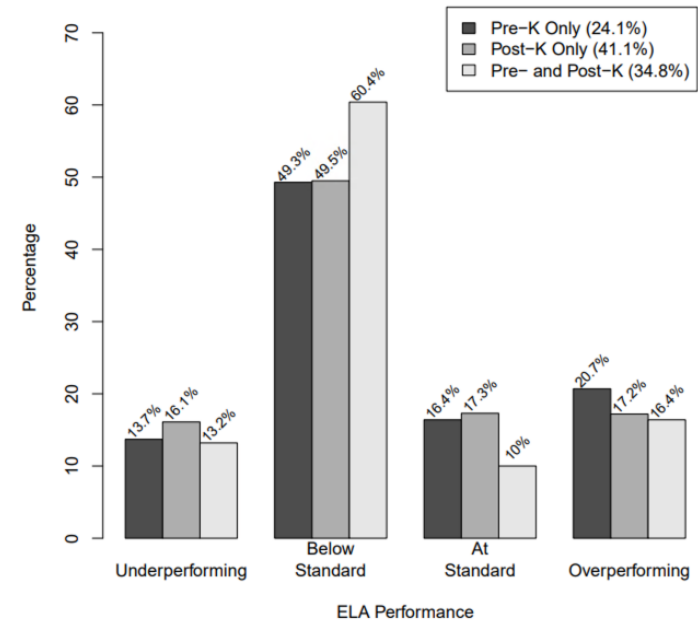
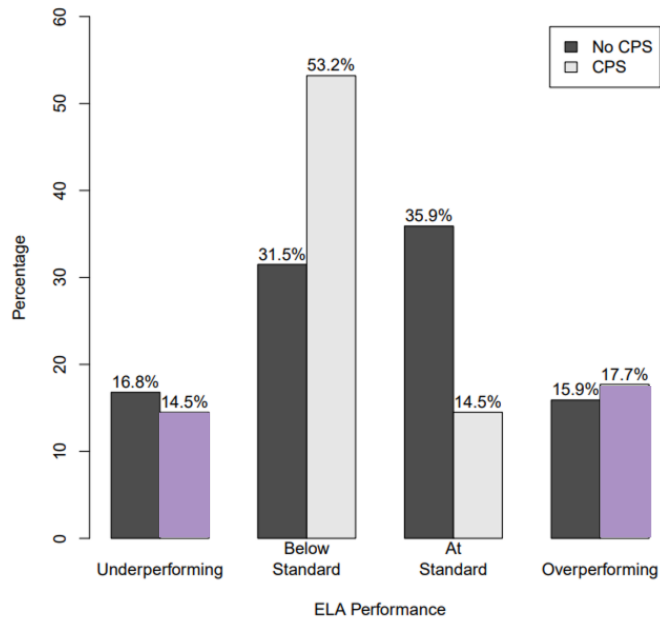
does *child protection involvement affect 5th grade achievement* over and above the influence of sociodemographic and school/district factors?



## paper 2



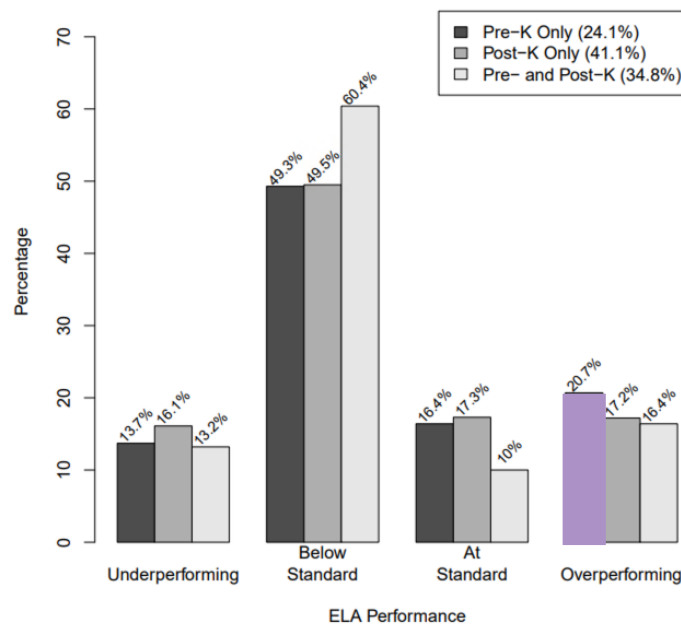
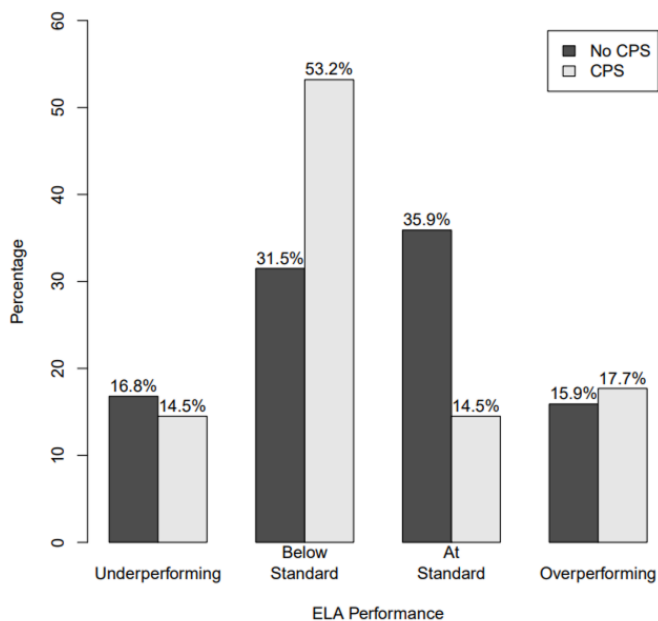
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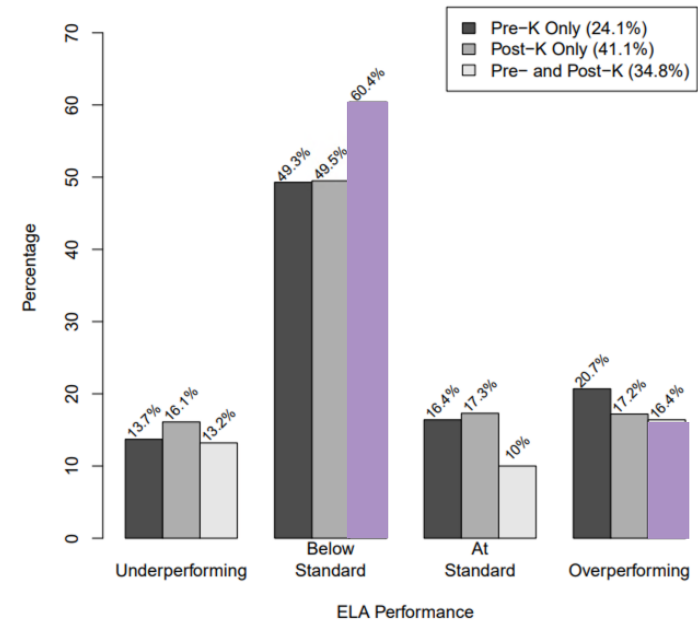
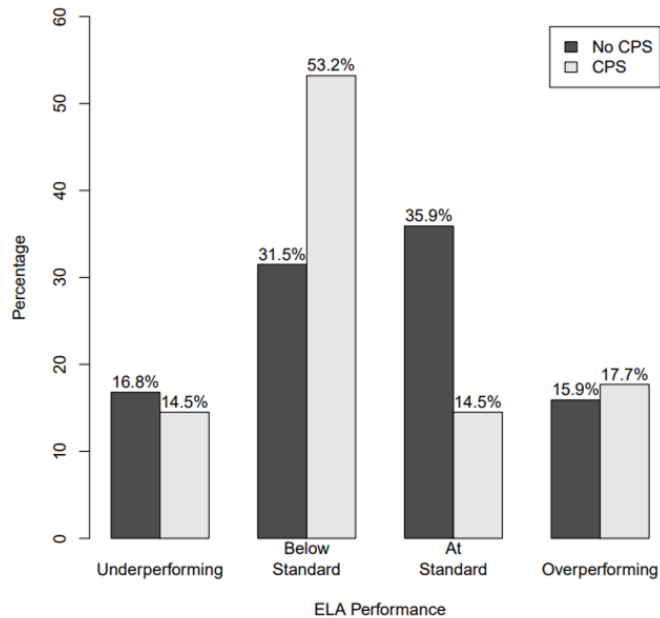
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## paper 2



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## learnings

- ✓ sociodemographic characteristics observable at birth, future childhood adversities, and academic performance are related
  - substantial overlap among children identified with vulnerabilities
- ✓ cps involvement was related to lower academic achievement, but timing and chronicity matters
  - opportunity for prevention
- ✓ taking a child-centered approach to calculating academic risk produces numbers that are double annual counts
- ✓ highlights the value of cross-program data linkage in helping to inform or impute information about historically highly mobile/difficult to track populations, answer important epidemiological and policy-related questions, and develop more data-informed approaches to service planning and provision

**questions?**

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# Maggie Reeves

Senior Director, Georgia Policy Labs



Penn  
Social Policy & Practice  
UNIVERSITY of PENNSYLVANIA

June 2022

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# Incorporating Community Voices

Georgia Policy Labs  
Andrew Young School of Policy Studies



# About Us

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- Evidence to realize the safety, capability, and economic security of every child, young adult, and family in Georgia
  - Actionable research
  - Engaged partnerships
  - Increased capacity
- Data infrastructure (admin. data) and partnerships for cross-system solutions
- Unapologetic commitment to the well-being of kids and families experiencing vulnerabilities

# Evolution of a Quant Shop—Community Voice

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Partners

# Evolution of a Quant Shop—Community Voice

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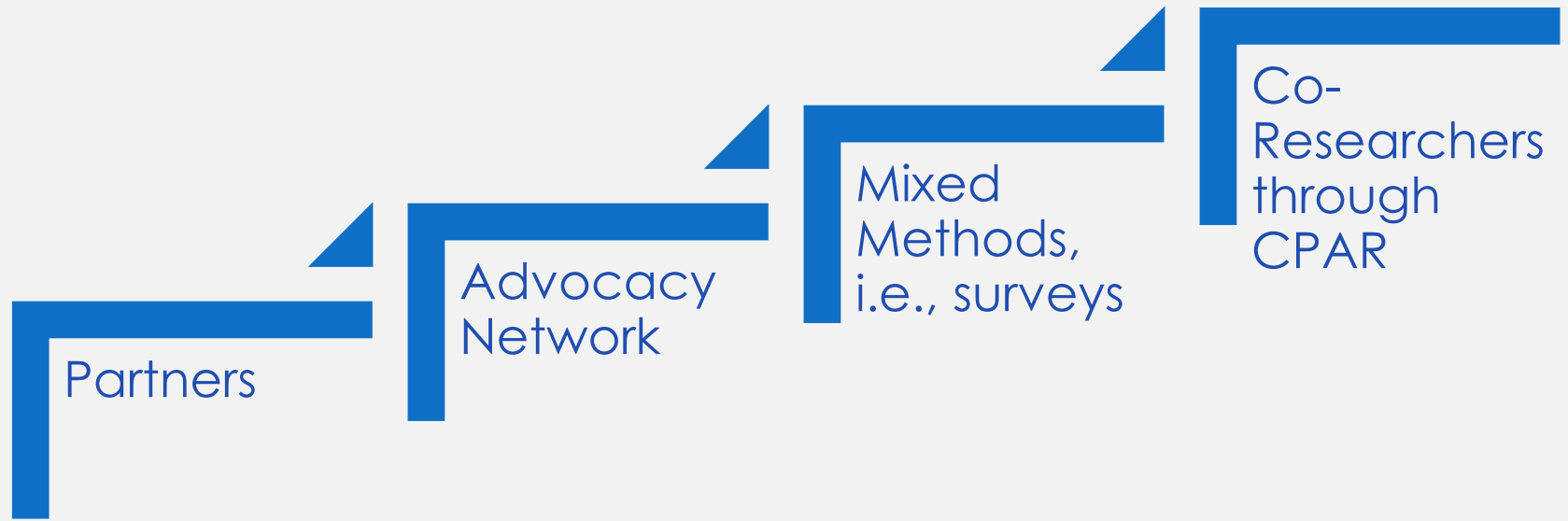
# Evolution of a Quant Shop—Community Voice

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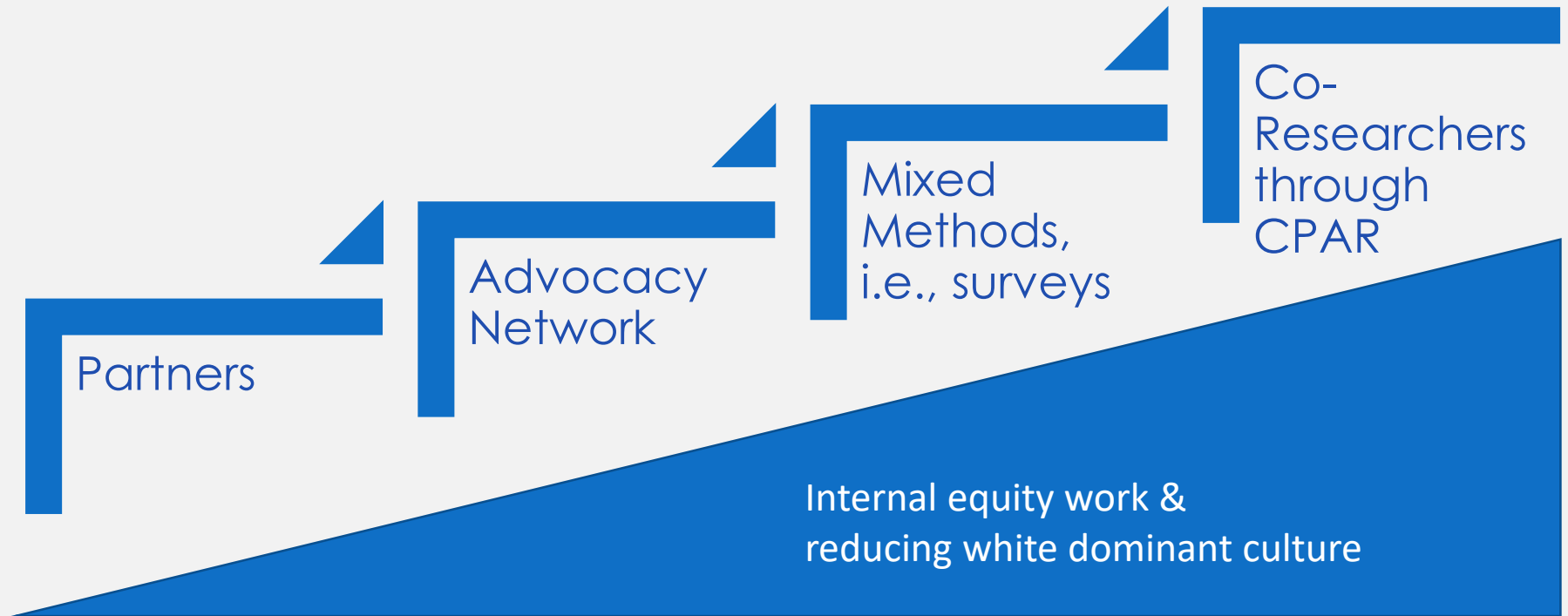
# Evolution of a Quant Shop—Community Voice

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# Sustainability

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# Connect With Us

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# Q&A

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# Thank You

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