



Addressing the Impact of the Pandemic on Student Achievement

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Presentation to the Tennessee State Board of Education
July 22, 2021

National Center for the Improvement of Educational Assessment (Center for Assessment)

- The Center for Assessment is a Dover, NH based not-for-profit (501(c)(3)) organization that seeks to improve the educational achievement of students by promoting enhanced practices in educational assessment and accountability
- 13 professional associates; 35 current state engagements; 50+ projects
- Primary focus is to provide support for design, implementation, and validation of assessment and accountability systems
- We are committed to *open access* of ideas and innovation

Dr. Chris Domaleski

- At the Center since 2008, currently Associate Director
- Previously Associate Superintendent at the Georgia Department of Education
- Coordinates the Accountability Systems and Reporting (ASR) State Collaborative for the Council of Chief State School Officers (CCSSO)
- Serves on multiple state Technical Advisory Committees
- Produced many publications on issues related to development and validation of state assessment and school accountability systems

Dr. Will Lorié

- At the Center since 2019; Senior Associate
- Held senior- and director-level research positions at Pearson, Questar, ETS, and McGraw-Hill
- Serves on ELPA-21 and CAAELP (Alternate ELPA-21) Technical Advisory Committees
- Works with states, charter management organizations, and other organizations on assessment innovations and theories of action

Today's Presentation

- *What are some promising practices for communicating assessment results in 2021?*
- *What are some analyses that may be useful to better understand the impact of learning disruptions on student achievement?*

What are the challenges this year?



- Modified Test Content
- Deviation from Standard Administration Conditions



- Changes in OTL
- Changes in Test-Related Motivation



- Reduced Participation
- Group Differences in Participation Rates or any Test/Individual-level Conditions

Individual Score Interpretation and Use

Implications for Reporting

- Using assessments for high-stakes purposes at the individual or summary level is not advised*
- Summary results based on non-representative tested cannot be applied to the full population of students
- Longitudinal comparisons (trend and growth) are influenced by the degree to which data are complete and comparable
- Within-year comparability at multiple levels such as school, district, or student group are also influenced by the degree to which data are complete and comparable

Public Reporting Recommendations (1)

- Review current public reporting initiatives. If conditions do not support a given comparison, ***remove problematic features*** such as:
 - Data displays or tables that encourage longitudinal comparisons
 - Explicit comparisons within and across reporting levels (school, district, state)
- ***Add context and/or caveats*** to reports such as:
 - Presenting participation rates with achievement results
 - Include explanations or notes about limits to interpretation (e.g., “not comparable to prior years”)

Public Reporting Recommendations (2)

- Consider *supplemental initiatives* to support appropriate interpretation and use, such as:
 - Support to accompany media release (e.g., media briefing)
 - User-specific guidance on appropriate interpretation and use
 - Parent/caregiver resources
 - Educator webinars
 - Reports of special studies

Analyzing Assessment Data

Some Guiding Principles

- Higher-level analyses are more trustworthy than lower level
- Clarify who is missing and (when possible) provide insights about the likely implications
- Context matters – explore comparisons and interactions when conditions support (adequate participation/representation)
- Whenever possible, validate potential findings with multiple sources of evidence

Key Questions

Who?

- Which student groups (e.g. SWD, ED, EL)?
- Which academic groups (e.g. lower versus higher achieving)?
- Which schools and districts?

What?

- What content areas?
- What domains?
- What conditions?

How much?

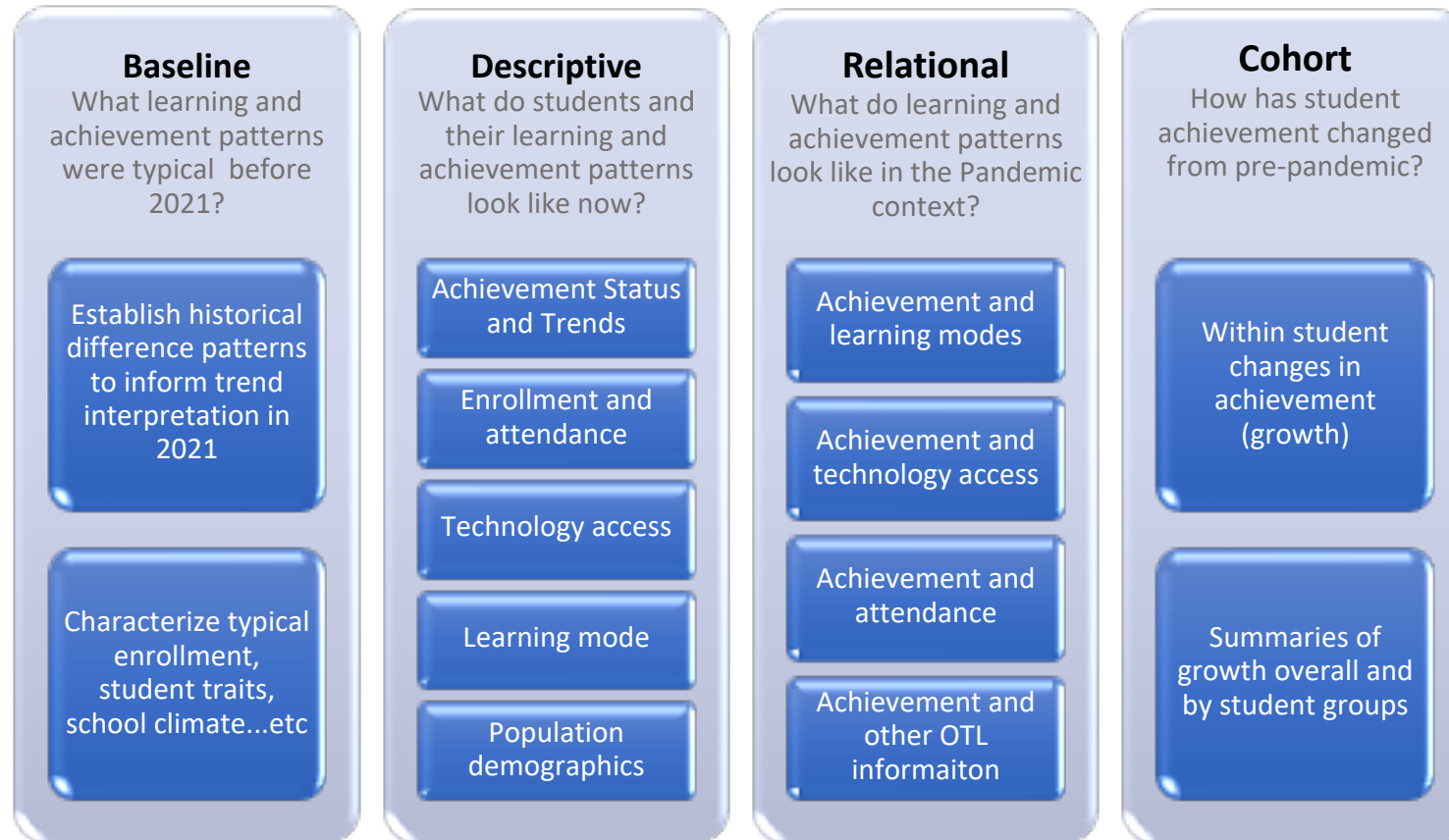
- What was the degree of impact (e.g. changes in percent proficient, mean scores, growth estimates)?
- To what degree do achievement patterns resemble past trends?

What are implications for support?

- What supports are necessary?
- What are the highest priority areas to address?
- How can we monitor recovery?

Betebenner, B. & Wenning, R. (2021). *Understanding pandemic learning loss and learning recovery*. National Center for the Improvement of Educational Assessment.

Potential Analyses



Boyer, M. & Domaleski, D. (2021). *Sensible Evaluation of the Pandemic's Impact on Learning and Achievement*. Council of Chief State School Officers.

Sample Analyses: Status

Status	
Essential Questions	<p>Which students participated in the state assessments in 2021 as a proportion of the underlying population? Did this proportion differ for select groups and conditions?</p> <p>How did students perform on state measures of academic achievement in 2021?</p> <p>How did performance differ for selected groups and conditions?</p>
Potential analyses	<ul style="list-style-type: none"> • Descriptive statistics showing performance (e.g., means and proficiency rates) and participation on state tests by district, school, and student groups. • Selected comparisons of performance by available variables such as learning model. • When rates of missing data are high, estimate range of performance (e.g., confidence intervals to reflect the range of plausible values).

Sample Analyses: Progress

Progress	
Essential Questions	<p>For participating examinees, how did students progress on measures of academic achievement?</p> <p>How does student progress differ for selected groups and conditions?</p> <p>What is the estimated impact of missing data?</p>
Potential analyses	<ul style="list-style-type: none"> • ‘Skip-year’ growth estimates: calculate growth in 2021 using 2019 priors • Compare growth rates pre and post pandemic by student group, district, school etc. • Account for missing data using methods such as Andrew Ho’s (2021) “Fair Trend” and “Equity Check”

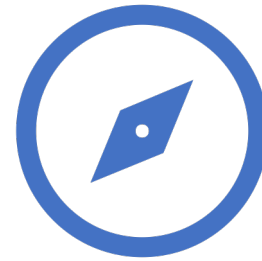
Ho, A. (2021). *Three test-score metrics that all states should report in the COVID-19 affected spring of 2021.*

Interpretation and Use



Focus on what not why

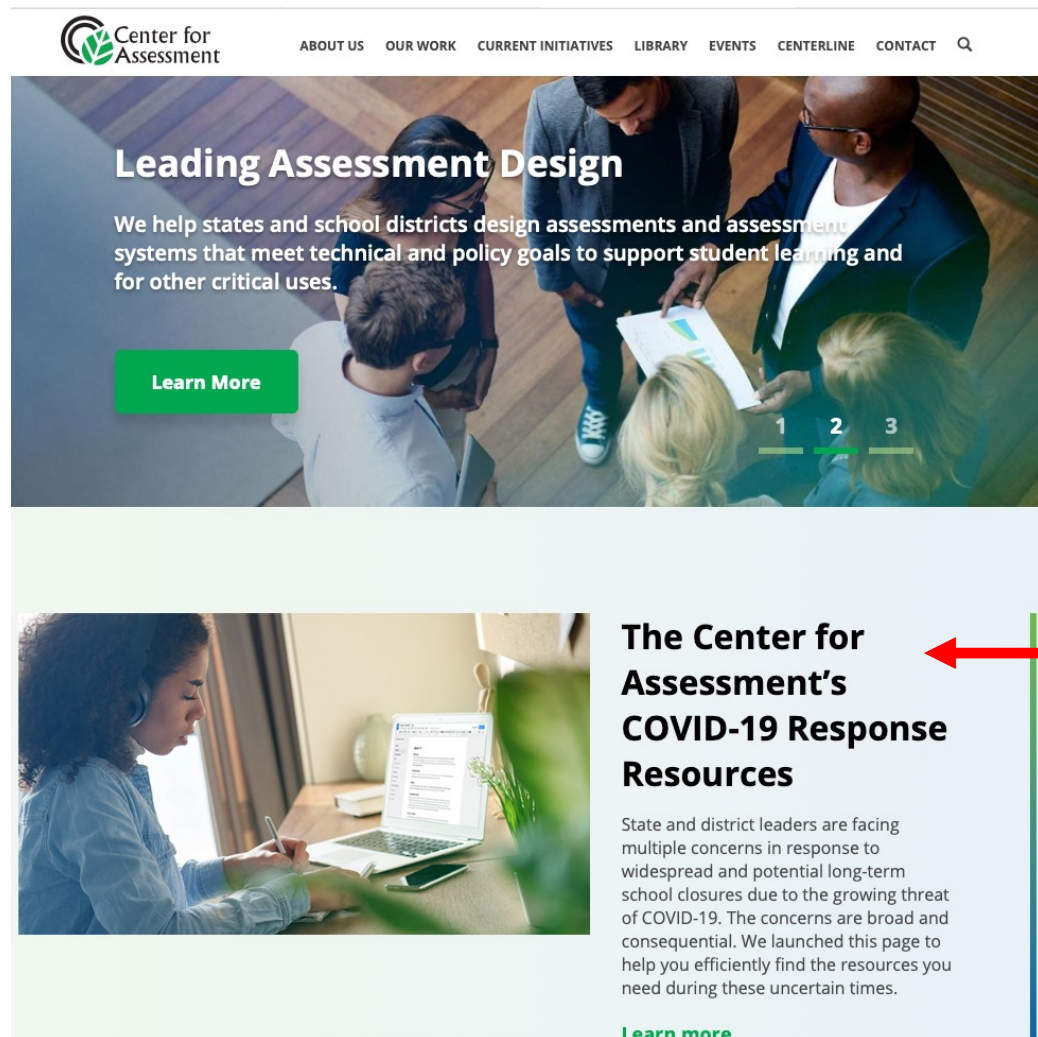
None of the analyses reviewed today are suitable to support causal claims



Prioritize prospective over retrospective

Consider how the information can be used to inform supports moving forward

Center Resources



The screenshot shows the top navigation bar with the Center for Assessment logo and links for ABOUT US, OUR WORK, CURRENT INITIATIVES, LIBRARY, EVENTS, CENTERLINE, CONTACT, and a search icon. Below the navigation is a hero section titled "Leading Assessment Design" with a sub-headline: "We help states and school districts design assessments and assessment systems that meet technical and policy goals to support student learning and for other critical uses." A green "Learn More" button is present. Below this is a section titled "The Center for Assessment's COVID-19 Response Resources" with a sub-headline: "State and district leaders are facing multiple concerns in response to widespread and potential long-term school closures due to the growing threat of COVID-19. The concerns are broad and consequential. We launched this page to help you efficiently find the resources you need during these uncertain times." A green "Learn more" button is at the bottom. A red arrow points from the text on the right to the "The Center for Assessment's COVID-19 Response Resources" section.

Numerous papers, blogs, and toolkits available on our website. www.nciea.org

‘COVID-19 Response Resources’ Page



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