Background Briefing:

Understanding the COVID-19 Learning Loss Impact Analysis

Disclaimer: This briefing document is a precursor to the Office of Learning Recovery and Acceleration report presented to the State Board of Education on Wednesday, March 2nd. The information below is available for reporting purposes.

Q. What is the purpose of the report, otherwise called the Impact Analysis?

- NCDPI designed this study to help understand the overall impact of the pandemic on students in North Carolina's public school system, based on 2020-21 year-end state exams (End-of-Grade and End-of-Course)
- The report will assess student performance and learning loss by comparing students' pre-pandemic expected performance with their post-pandemic actual performance in the 2020-21 school year.
- We use the term *Impact of Lost Instruction Time* to denote the difference between where students were expected to score if the pandemic had not occurred and their actual outcomes on state exams at the end of the 2020-21 school year.

Q. What will DPI do as a result of the findings?

- Based on the preliminary findings, NCDPI will be able to better understand learning recovery and acceleration programs and interventions across the state, and set benchmarks to monitor progress over time.
- This report allows the department to better target resources and prioritize funding for students who were most affected and for areas of the state that are most in need.
- The Office of Learning Recovery is deeply committed to working with state and local leaders to make sure the data
 presented is useful and actionable; and that it provides guidance for strategic and targeted use of resources to
 address the most pressing issues caused by the pandemic.

O. What were the two research questions that guided the report?

- 1) To what extent did the pandemic impact learning for all students in the 2020-21 school year, and were there variations by student group and contextual factors?
- 2) How those differences compare to a typical school year, which, for the purposes of this analysis, NCDPI defined as the 2017-18 school year?

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O. Who conducted the report? What was the methodology?

- Recent legislation (<u>S.L. 2021-3 HB 196</u>) directed NCDPI to contract with a third-party entity to collect, analyze and report data related to the overall impacts of COVID-19 on public school units, students and families.
- NCDPI partnered with the EVAAS Team at SAS to assist the state and Public School Units (PSUs) in identifying the extent of the impact of COVID-19 on student learning and well-being.
 - Note: The model used to measure lost instructional time is not the same model used for district, school and teacher EVAAS growth measures in annual accountability reporting. (For more information, see the EVAAS section at the end of this document.)
 - The pre-pandemic expected performance is based on individual students' prior scores using every standardized assessment (EOG's and EOC's) available for that student.
- This analysis uses student predicted performance for 2020-21 compared to their actual performance for the same year.
- When viewing the report, a negative difference indicates that students did not perform as expected based on their
 pre-pandemic learning trajectories. This information has been disaggregated by subject, grade, and/or different
 student groups to ascertain whether certain student groups experienced larger gaps between predicted and actual
 performance than other student groups.
- NCDPI will provide the analysis in terms of statistical effect sizes for all students by tested subject and across student groups and will convert those effect sizes into months of learning loss.

• How does this report impact districts? How does this report impact schools?

- This partnership includes not only statewide summary data but also enhancements to the PSU-level EVAAS portals
 and supports for use and interpretation.
- Schools will get access to their own data at the district, school and student level. Districts and schools will have school-level summaries via the closed portal but those summaries will be excluded from the report.

$oldsymbol{\mathbb{Q}}_{oldsymbol{ iny}}$ Cautions to consider while reviewing the report and subsequent data findings:

- This data is unique to North Carolina as it is individual, student level data and not based on representative samples.
 This is one of the most comprehensive reports done to date on the effects of the pandemic as it pertains to individual students and should be the authoritative source within North Carolina on the issue of learning loss during the 2020-21 school year.
- This analysis is the first of its kind in the state and one of the first nationally. NCDPI is in a unique position because
 North Carolina has one of the only statewide student information systems, a cross-sector longitudinal data system,
 custom-designed standard accountability models, and a longtime partnership with the EVAAS team at SAS.
- Though student achievement for the 2020-21 school year was presented to the State Board of Education in September, this report goes beyond how many students met grade level proficiency and presents the difference between where we expected students to perform and how they actually performed. Using both pieces of information provides local educators a more complete picture of the impact of the pandemic on student performance and how to move forward.
- NCDPI and SAS did not include early grades math because of a concern about the validity of the projecting 3rd and 4th grade math scores based on a limited set of prior testing history.

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$oldsymbol{Q}_{oldsymbol{s}}$ What are the next steps as a result of the findings of this report?

- The Office of Learning Recovery will gather input from state and local leaders on interpretation of the preliminary findings from the March report to assist with decisions about next level of analysis and interactions. Then the final technical report will be submitted to the General Assembly's Joint Ed Oversight in December of this year.
- This standardized assessment data is once piece of the puzzle it's important but it's not the only data needed to
 guide state and local policy and budgetary decisions. As a result, NCDPI is partnering on several new research
 studies focused on elevating teacher and student voices, resilience, mental health and wellness, and local funding
 to help round out our understanding and go beyond the numbers.

• What is EVAAS? Is it used differently to measure lost instructional time than how it is used to measure for district, school and teacher growth measures?

- EVAAS is a program developed by SAS to measure the growth of students across the state.
- The model used to measure lost instructional time is not the same model used for district, school and teacher EVAAS growth measures.
- For the Learning Loss Impact Analysis, this EVAAS model measures growth relative to the observed growth between
 the 2018-19 and 2020-21 school years. Expected growth means that students maintained their relative position among
 the statewide population of test-takers for a given subject/grade or that students met their expected scores based
 on the average schooling experience. In other words, results are relative to the average growth observed in the state
 over a period of time.
- The NC model for measuring lost instructional time measures the extent to which students under-performed their
 expected trajectories, which were based on pre-pandemic expectations. In other words, results are relative to the
 average growth observed in the state in a pre-pandemic year.



