



Indiana Department of Education

Dr. Katie Jenner, Secretary of Education

To: Indiana School Superintendents, Indiana Corporation Test Coordinators

From: Lynn Schemel, Director of Assessment

Date: February 18, 2022

Subject: Data Forensics Analysis Spring 2022

The Indiana Department of Education (IDOE) receives data forensics information from each testing vendor following each assessment window.

To summarize key process steps for data forensics:

- IDOE reviews the data analysis provided by each vendor.
- IDOE requires identified corporations to evaluate their data for test administration and/or test security concerns following this internal review based on defined flagging criteria.
- These corporations are required to complete documentation and conduct interviews to gather all relevant details regarding any test sessions identified as concerns.
- IDOE reviews corporation documentation and notifies the corporation if additional action steps are necessary.
- Action steps may be required due to data integrity concerns (e.g., validity and/or reliability) of the assessment administration.

Table 1 provides an overview of the data forensics analyses that will be reviewed for test administrations during the 2021-2022 school year.

Table 1. Data Forensics and Analysis

Analysis/Report Name	Description
Response Change	Response change analysis computes the number of wrong-to-right, wrong-to-wrong, and right-to-wrong response changes for each student. Individual students or aggregate units with large deviations in the number of changes are flagged.
Test Administration Time	Test administration time analysis compares individual student total test administration time to the state average. Students or aggregate units with large deviations in testing time are flagged.



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Person Fit	The person fit analysis compares student response patterns to the overall theoretical model used to analyze students and items. Students with irregular response patterns are flagged.
Performance Change	Performance change analysis compares the performance change of a testing group at a grade level and content area within a school between the past year and current year. Students or aggregate units with large deviations in testing time are flagged.

Please contact the Office of Student Assessment via email at INassessments@doe.in.gov or via phone at 317-232-9050 with any questions.