Differences between MO DVT and MSIP 6

Why can't I replicate the Missouri Growth Model's LEA/Building across-grades growth measure used in MSIP 6 Annual Performance Reports (APRs) based on the growth for individual subjects and grades or based on individual student-level data in MO DVT?

The LEA/building growth measures used in APRs and the growth data presented in MO DVT are both based on the same underlying model (the Missouri Growth Model); however, each tool is designed to serve a different purpose. The growth measures included in the APRs are used for accountability and are designed by DESE to meet specific policy goals. Alternatively, the purpose of MO DVT is to aid decision-making and put information into the hands of educators and administrators who can use it to improve instructional practice.

Because of these specific goals, different rules are applied to which data is included and how data is aggregated and displayed, and it should not be the expectation that these measures are an exact match. For example, data from students who have not been enrolled in an LEA/building for a full academic year is excluded from the APR growth measure. However, to provide as much data as possible to educators, the data from these students is included in MO DVT. For additional information about the business rules and statistical practices put into place for MSIP 6 APR growth measures, please consult this <u>technical</u> guidance.

Why can't I replicate the growth measures for individual subjects and grades using the measures on the Outcomes by Group Report?

The LEA/building growth measures presented in the MO DVT Growth Report can vary slightly from the measures reported on the Outcomes by Group Report primarily because of a statistical practice known as shrinkage, which is used in the MO DVT Growth Report but not the Outcomes by Group Report. Shrinkage is a protection put in place to prevent misclassification of schools based on small amounts of data, such that a school cannot be placed into a lower or higher category until there is enough evidence to support it. In general, smaller numbers of students included in a school's estimate leads to more shrinkage. By applying shrinkage, the overall growth measure for LEAs and buildings is more conservative, making it more appropriate for categorization of an LEA or building. The Outcomes by Groups Report is designed to be disaggregated for reflecting on and guiding instructional practice. For this reason, shrinkage is not applied to the measures presented in the Outcomes by Group Reports. To learn more about the MO DVT Growth Report and the Outcomes by Group Report, navigate to the report in MO DVT and click Help.

Why can't I use the Outcomes by Group Report with the Student Group to replicate the accountability Student Group measure?

The LEA/building growth measures used in APRs and the growth data presented in MO DVT are both based on the same underlying model (the Missouri Growth Model); however, each tool is designed to

¹ For more details about the shrinkage process, see https://dese.mo.gov/media/pdf/2023-growth-model-procedures-and-results

serve a different purpose. The growth measures included in the APRs are used for accountability and are designed by DESE to meet specific policy goals. Alternatively, the purpose of MO DVT is to aid decision-making and put information into the hands of educators and administrators who can use it to improve instructional practice.

Because of these specific goals, different rules are applied to which data is included and how data is aggregated and displayed, and it should not be the expectation that these measures are an exact match. One of the more significant reasons that the measures reported using the Student Group selection on the Outcomes by Group Report would differ from the measure reported in MSIP 6 APRs is due to a process called re-centering. The growth reported in MO DVT represents growth as compared to the *entire statewide population of students*. In other words, each student's expected score is based on their own prior testing history and the overall statewide average growth. However, for the Growth for Student Group measure used in MSIP 6 APRs, growth is compared against the statewide population of *students meeting the Student Group designation*. Therefore, the values reported in the APR represent how Student Group students at a specific building or LEA are performing compared to Student Group students across the state. For additional information about the business rules and statistical practices put into place for MSIP 6 APR growth measures, please consult this <u>technical guidance</u>.