Equity Dashboard Guidance Document

KENTUCKY'S EQUITY TOOLKIT

HQ ACADEMIC STANDARDS

HQ INSTRUCTIONAL RESOURCES

A4 MODULES

EQUITY DASHBOARD

EQUITY PLAYBOOK

DEI PROFESSIONAL LEARNING COMMUNITIES

KAET

MULTI-TIERED SYSTEM OF SUPPORTS

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Kentucky Department of
EDUCATION

Table of Contents

Contents

"Equity in education is fundamentally an effort to ensure that all of our students have the supports they need to meet our academic standards and to reach their full potential as students, citizens and human beings. An equity focus in education recognizes that public school students come to us with a variety of backgrounds, needs, supports and experiences, and that we must take those into account when we consider the education of each child."

- Jason E. Glass, Ed.D., 2021
Kentucky Commissioner of Education

Introduction

Dear esteemed colleagues,

The Kentucky Department of Education (KDE) created the Equity Dashboard suite of visualizations to support schools and districts as they consider data points through an equity lens. The dashboard will help teams identify groups of students who are at risk of being over- or under-represented in different areas, like chronic absenteeism and advanced coursework using an easy to understand color-coded system. The dashboard is designed to offer a "big picture" look that will help schools and districts identify areas needing further attention.

This guidance document provides: 1) information about the connection between the Equity Dashboard and other initiatives, 2) an explanation of how the Equity Dashboard determines risk, 3) suggestions for making the data actionable using the four-step problem-solving process and 4) important information about each of the indicators included in the dashboard.

KDE defines equity as the promotion of access, opportunity and advancement of all individuals, including those in underserved communities, in order to identify and eliminate conditions that prevent the ability of all students to reach their full potential. Assessing school and district equity is about more than just identifying challenges and offering recommendations – it is about creating an intentional, ambitious and urgent path forward for Kentucky districts to improve outcomes for all students.

When we say *all* students, it is with the understanding that: each student comes to the district with unique and valid needs for learning; there are students in often marginalized groups that require our attention and intervention in ways that address specific opportunity gaps; and the ways in which we seek equity for one student improves our ability to sustain equity for all students. Equity provides for students to be seen, and to see themselves and their lived experiences in the learning environment, inclusive of gender, gender identity, race, ethnicity and ability.
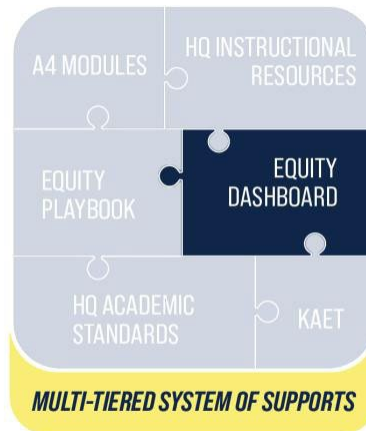
- Thomas Woods-Tucker, Ph.D.
Deputy Commissioner of Education and KDE Chief Equity Officer

Connections to Other Initiatives

Kentucky's Equity Toolkit

The Equity Dashboard is one of six components in Kentucky's Equity Toolkit. These six components work together to offer schools and districts support as they strive to bring equitable access and opportunity to all students in Kentucky. The Equity Dashboard provides quantitative, or numeric data, that allows schools and districts to consider different indicators through an equity lens. All components of the Equity Toolkit are supported by a multi-tiered system of supports.

Kentucky's Multi-Tiered System of Supports (KyMTSS)

KyMTSS is a multi-level prevention system to support student achievement and social-emotional behavioral competencies through an integration of differentiated core instruction, assessment and intervention. It is, first and foremost, a framework that organizes the systems, data and practices along a layered continuum of supports to build responsive, equitable and inclusive learning experiences for each and every student.

Equitable Access and Opportunity is one of the six essential elements of KyMTSS and is essential to improve outcomes for every learner. An intentional commitment to equity is embedded into all systems, data and practices of the framework. For all students to achieve at high levels, they must be able to access the full range of opportunities and resources that contribute to student success. Leadership teams intentionally address unacceptable outcomes for historically underrepresented populations through a strategic use of evidence-based practices, assessment, analysis of data and data-based problem solving. The Equity Dashboard provides a visual representation of disaggregated data that can be analyzed to ensure equitable access and opportunity exist in Kentucky schools.

KyMTSS.org provides more information to support the integration of systems-level approaches and state/district/school initiatives under one comprehensive framework to more efficiently use resources while focusing on improving outcomes for every student.

Connection to the KDE Strategic Dashboard

The KDE Strategic Dashboard was launched in Fall 2021 to promote transparency and accountability for Commissioner Glass' ambitious strategic goals. Several of the indicators on the Strategic Dashboard (academic proficiency gap on statewide end of year reading and math assessments, equitable enrollment in advanced placement courses, and equitable enrollment in dual enrollment courses) overlap with indicators on the Equity Dashboard. The Equity Dashboard can be used to help schools and districts monitor their contribution toward state goals.
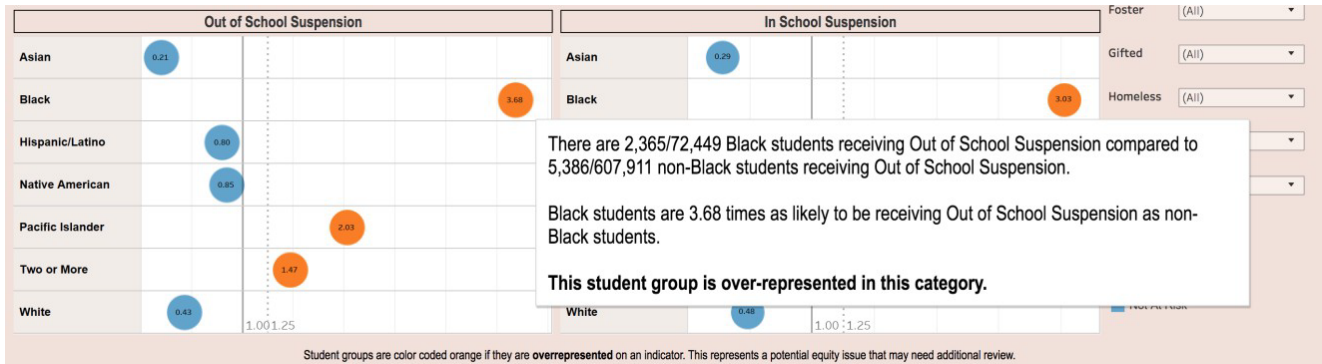
How Does the Equity Dashboard Determine Risk?

The Equity Dashboard utilizes risk ratios to examine the equity of outcomes between different student groups. When a group experiences inequity in outcomes, the Equity Dashboard identifies them as at-risk. The "How Does the Equity Dashboard Determine Risk?" video explains how these calculations are made in addition to the process being outlined here (note: video coming soon!).

What is a Risk Ratio?

A risk ratio compares the likelihood of an event occurring for one group to the likelihood of the same event occurring for another group. If disproportionality exists in the likelihoods of the two groups, a group may be considered "at risk" of an event occurring or not occurring. If a group is more likely to experience an undesirable event, like chronic absenteeism or in-school suspension, we say they are at risk of over-representation for that category. If a group is less likely to experience a desirable event, like participation in advanced coursework or meeting benchmark on state assessments, we say they are at risk of under-representation for that category.

In the Equity Dashboard, risk ratios are shown inside of circles that are color-coded blue if the group is not at risk, and orange if the group is at risk. Hovering over the individual circles that hold the risk ratios will bring up a text box which explains the numbers used to calculate the risk ratio, compares the two groups and summarizes whether or not the group is at risk.

	Out of School Suspension		In School Suspension		Foster	(All) ▼
Asian	0.21	Asian	0.29	Gifted	(All) ▼
Black		3.68	Black		3.03	Homeless	(All) ▼
Hispanic/Latino	0.80					▼
Native American	0.85					
Pacific Islander	2.03					▼
Two or More	1.47					
White	0.43	White	0.48			

There are 2,365/72,449 Black students receiving Out of School Suspension compared to 5,386/607,911 non-Black students receiving Out of School Suspension.

Black students are 3.68 times as likely to be receiving Out of School Suspension as non-Black students.

This student group is over-represented in this category.

Student groups are color coded orange if they are **overrepresented** on an indicator. This represents a potential equity issue that may need additional review.

What Groups are Compared?

For the Equity Dashboard, the two groups being compared are a variety of demographic groups (see the Demographic Groups section for a complete list) and their corresponding "non" group. For example, Hispanic students are compared to non-Hispanic students and homeless students are compared to non-homeless students.
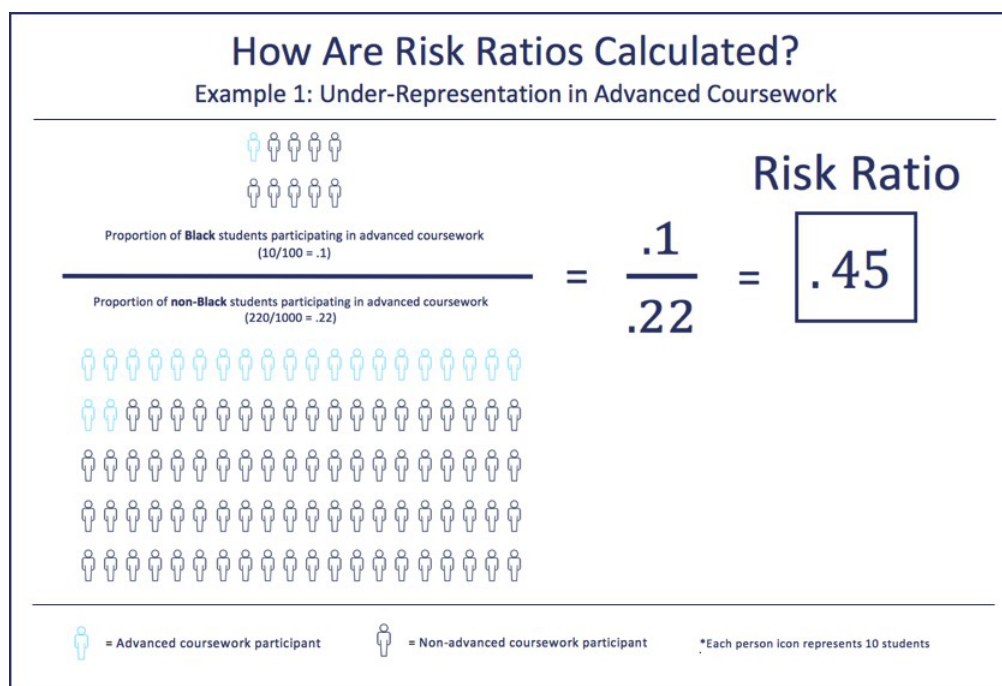
How are Risk Ratios Calculated?

To demonstrate how risk ratios are calculated, it's helpful to ground the math in examples. We'll take a look at two fictional schools in Anytown, Kentucky, to demonstrate how risk ratios are calculated.

We'll go all the way through one example first, explaining how the risk ratio is calculated and then how to interpret the risk ratio before moving on to the second example.

Example 1: Under-Representation in Advanced Coursework

First, let's take a look at the number of students participating in advanced coursework at the fictional Glass High School (GHS) in Anytown, Kentucky. We will look to see if their Black students are at risk of being under-represented in participation in advanced coursework.

There are 1,100 students at GHS. 100 are Black and 1,000 are non-Black. To see if Black students are at risk of under-representation for participation in advanced coursework, we need to compare the number of black students participating in advanced coursework to the number of non-black students participating in advanced coursework. Ten out of 100 (10/100) Black students are participating in advanced coursework at GHS, compared to 220 out of 1,000 non-Black students. The fractions are converted to decimals and divided to obtain the risk ratio.

How Are Risk Ratios Calculated?
Example 1: Under-Representation in Advanced Coursework

$$\frac{\text{Proportion of } \mathbf{Black} \text{ students participating in advanced coursework}}{\text{Proportion of } \mathbf{non\text{-}Black} \text{ students participating in advanced coursework}} = \frac{.1}{.22} = \boxed{.45}$$

(10/100 = .1) / (220/1000 = .22)

Risk Ratio

= Advanced coursework participant   = Non-advanced coursework participant   *Each person icon represents 10 students

How are Risk Ratios Interpreted for Under-Representation?

When two groups have around the same amount of risk, the risk ratio will be close to 1. The Equity Dashboard uses a risk ratio threshold of .25 lower than 1 (.75 and below) for under-representation based on the work of Boneshefski and Runge (2014).

Risk Ratios are color-coded orange on the Equity Dashboard if they are below this threshold, indicating a group is at risk for under-representation. Risk ratios appear blue if they do not fall below the threshold. This chart shows different risk ratio values and how their level of disproportionality is interpreted.

Interpreting Risk Ratios for Under-Representation

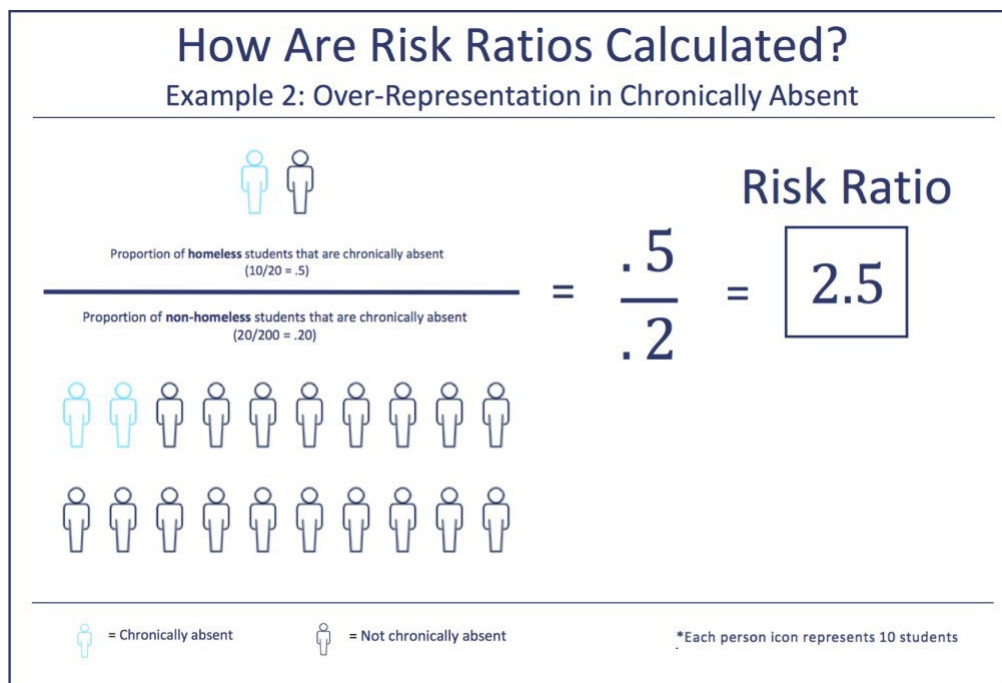| Risk Ratio Value	Level of Disproportionality
.25	.25 times as likely
.5	Half as likely or .5 times as likely
.75	.75 times as likely
>.75 <1.25	Equal
1.25	1.25 times as likely

Since the risk ratio in our example is less than .75, this group is considered to be at-risk of under-representation.
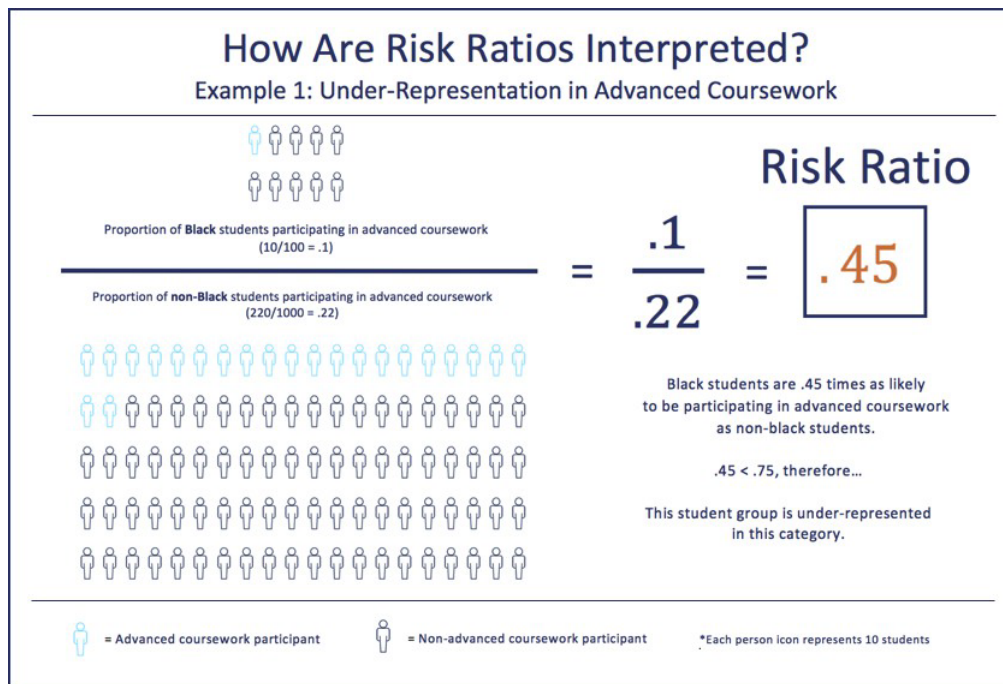
Example 2: Over-Representation in Chronically Absent

Now let's take a look at the number of students chronically absent at the fictional Woods-Tucker Elementary School (WTES) in Anytown, Kentucky. We will look to see if their students classified as homeless in Infinite Campus are at risk of being over-represented in the chronically absent indicator.

There are 220 students at WTES. 20 are classified as homeless and 200 are not classified as homeless (non-homeless). To see if homeless students are at risk of over-representation for chronically absent, we need to compare the number of homeless students that are chronically absent to the number of non-homeless students that are chronically absent. Ten out of 20 (10/20) homeless students are chronically absent at WTES, compared to 10 out of 200 (10/200) non-homeless students. The fractions are converted to decimals and divided to obtain the risk ratio.

How Are Risk Ratios Calculated?
Example 2: Over-Representation in Chronically Absent

Proportion of **homeless** students that are chronically absent (10/20 = .5) over Proportion of **non-homeless** students that are chronically absent (20/200 = .20) = $\frac{.5}{.2}$ = Risk Ratio = **2.5**

= Chronically absent   = Not chronically absent   *Each person icon represents 10 students

How are Risk Ratios Interpreted for Over-Representation?

When two groups have around the same amount of risk, the risk ratio will be close to 1. The Equity Dashboard uses a risk ratio threshold of .25 higher than 1 (1.25 and above) for over-representation based on the work of Boneshefski and Runge (2014).

Risk Ratios are color-coded orange on the Equity Dashboard if they are above this threshold, indicating a group is at risk for over-representation. Risk ratios appear blue if they do not fall above the thresholds. This chart shows different risk ratio values and how their level of disproportionality is interpreted.

Interpreting Risk Ratios for Over-Representation

Risk Ratio Value	Level of Disproportionality
<.75	Less likely
>.75 <1.25	Equal
1.25	25% Higher Risk or 1.25 times as likely
1.5	50% Higher Risk or 1.5 times as likely
2	Twice as likely
2.5	Two and a half times as likely

Since the risk ratio for the group in the second example is greater than 1.25, this group is considered to be at risk of over-representation.
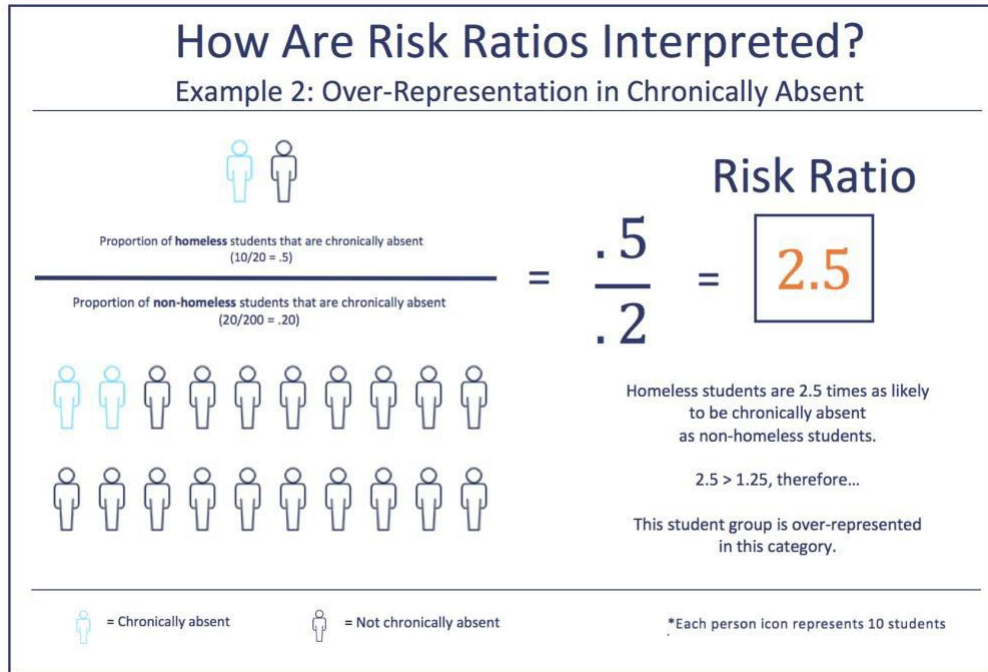
A Note About Small Group Sizes

Small group sizes may inflate risk ratios, however a risk ratio beyond the threshold still indicates risk for disproportionality and should still be considered.

Making the Data Actionable

Data-Based Decision-Making

To ensure that each and every student has the opportunity for a high-quality education, district and school teams analyze data from the Equity Dashboard using a systematic decision-making process to address critical questions related to equity, identify root causes, explore evidence-based solutions, set goals and develop a plan of action. This is an iterative process. Teams use data to evaluate outcomes and continue the cycle to address other root causes or identify and address new areas of concern.

There are a variety of problem-solving models with many common features that educators use to improve the quality of instructional programs and student outcomes. The Four-Step Problem Solving Process is a structured data-based decision-making process to guide teams through data analysis, problem identification, root cause analysis, and action planning and progress monitoring. More detailed information on the Four-Step process may be found in the Data-Based Decision-Making section of the KyMTSS Implementation Guide (p. 16-19). Tools and resources for district and school teams, including the Data Analysis Protocol, are located on the Resources for Data-Based Decision-

[Making with a Comprehensive Screening and Assessment System webpage](#) of the [KyMTSS.org](#) website.

Considerations for Data-Based Decision-Making

- Identify or create district and school leadership teams (e.g., MTSS leadership teams or other existing leadership team). Team members include leadership and key stakeholders that are representative of the staff, students and community they serve.
- Identify roles and responsibilities of the team members and designate a data coordinator.
- Utilize a standardized problem-solving or data inquiry process.
- Create a meeting schedule to review and analyze data (e.g., monthly or quarterly).

Orient Your Team to the Equity Dashboard

- Watch the ["How Does the Equity Dashboard Determine Risk?"](#) video
- Watch the ["Technical Orientation to the Equity Dashboard"](#) video
- Understand the data behind the indicators by reviewing the [Equity Dashboard Components Section](#) of this guidance document.

Context Matters

The data in the Equity Dashboard represent quantitative data, or numbers describing trends. It is important to remember that context matters and the anecdotal, or qualitative data, gained through speaking with students and their families can be just as valuable to build a more complete picture. Honoring, valuing and lifting up the voices of students and families can offer a great deal of information about how school and the educational process are going for local communities. Safir and Dugan (2021) call this data "street data." They explain, "street data emerges from human interaction, taking us down to the ground level to see, hear and engage with the children and adults in our school communities - particularly those at the margins" (p. 19). Asking school community members to participate in the Four-Step Problem-Solving Process can provide valuable insights and places the lived experience of students and their families as a priority.

Equity Dashboard Components

Overview

The Equity Dashboard primarily utilizes data readily available in Infinite Campus and is not considered to be an exhaustive picture of equity in schools. There are many other important factors schools and districts should consider when looking at data through an equity lens, including, but not limited to: access to effective teaching; high-quality curriculum and academic supports that are culturally relevant; the school climate; exposure to racial, ethnic and economic segregation; nonacademic supports for student success (emotional, behavioral, mental and physical health); performance in coursework; on-time graduation; postsecondary readiness (National Academies of Sciences, Engineering and Medicine, 2020); and student, family, community and educator voice. The Equity Dashboard does provide a great place to start and we hope to expand the available indicators over time.

Several videos are available that outline how to navigate and manipulate the different features of the dashboard on the [KSIS Data Visualization webpage](#).

Location of Equity Dashboard

The Student Equity Dashboard has been moved from the Tableau visualization link to a new aggregated-only link under Tableau visualization on the Infinite Campus Index tab. The new link limits access to aggregated visualizations that do not include student-level detail. Users who had access to the dashboard in the prior location will need to be added to the new Tableau Aggregated Only Infinite Campus security group for access to the equity dashboards in the new location. Users who need access only to the equity dashboards should have rights removed from the previous Tableau visualization link. The new link can be shared with district staff who need access to aggregated-only data. For more information, reference the Infinite Campus Data Analysis Portal User Guide (https://education.ky.gov/districts/tech/sis/Documents/KDETableauUserGuide.pdf)

User Access

Many district staff already have access to data visualizations in Tableau through Infinite Campus. To add someone, please follow the instructions in the Infinite Campus Data Analysis Portal User Guide found on the [KSIS Data Visualization webpage](#).

An unlimited number of district personnel may have access to the KDE Data Visualizations, however only 2,000 people can be logged in statewide at a time. At this time, the KDE believes it is unlikely that many people would log in at the same time.

Who Should Have Access

Ultimately, it is a local decision as to whom should have access to KDE Data Visualizations. *Please note that access should be limited to school and district leadership due to the sensitivity of data contained within some of the data visualizations. It is not possible to grant access to the Equity*

Dashboard without granting access to all the data visualizations. Although there is not personally identifiable information (PII) within the Equity Dashboard, there is PII in the other data visualizations.

The KDE recommends the following school and district leadership involved with data-based decision making have access to the Equity Dashboard:
- Advanced Placement, International Baccalaureate, Cambridge Assessment International Coordinators
- Behavior Interventionists
- Career and Technical Education Primary Points of Contact and Coordinators
- Chief Academic Officers
- Directors of Special Education

- Diversity, Equity and Inclusion Coordinators
- Dual Credit Coordinators
- Gifted/Talented Coordinators
- Instructional Coaches
- Principals and Assistant Principals
- School Counselors
- Superintendents and Assistant Superintendents
- Other members of leadership teams, including teacher leaders

Please note this list is not exhaustive.

Data from the Equity Dashboard may be shared with other stakeholders whom do not have direct access during meetings or through printed reports.

Finding the Equity Dashboard for the First Time

Navigate to the "Explore" tab within Tableau, then select "All Workbooks" from the dropdown menu next to the Explore heading, and finally select the "Student Equity Dashboard" workbook from the list of options.
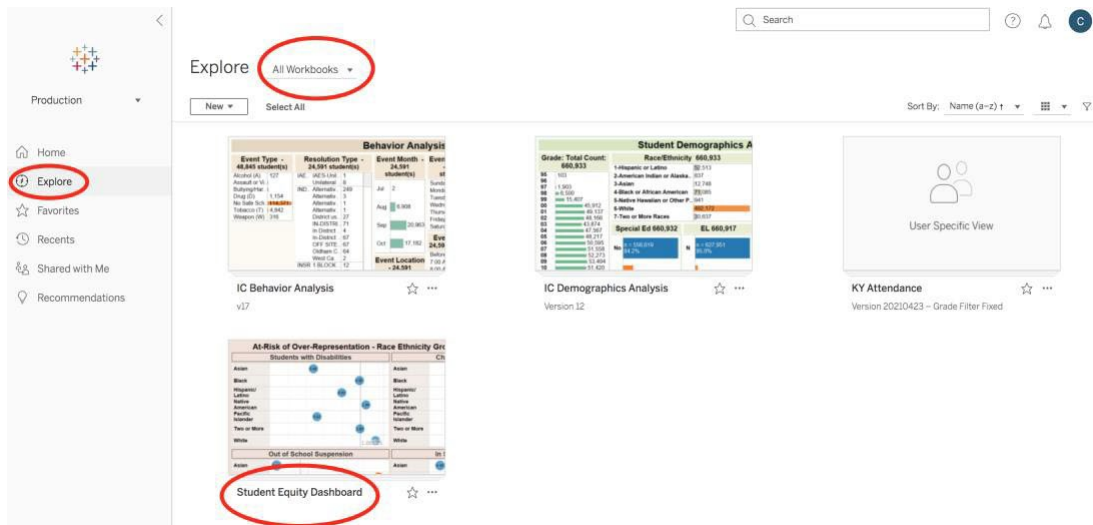

Real-Time Data

The data in the Equity Dashboard is predominately based on current year data, with the exception of the CTE Completers indicators. Therefore, the data represents the students currently in a school or district when the data is accessed. For example, if a student transferred into a school for the current school year, their benchmark status from the previous year will travel with them and will be included in the benchmark data visualization. Although we consider the data to be "real-time," the Equity Dashboard does not sync continuously with Infinite Campus. For most indicators, data is updated either weekly or daily. The frequency of updates is noted in the section for each indicator.

Demographic Groups

The Equity Dashboard has two demographic group views, "Race Ethnicity Groups," which is the default view, and "Other Student Groups." Users may toggle between the two different views while on each of the three tabs.
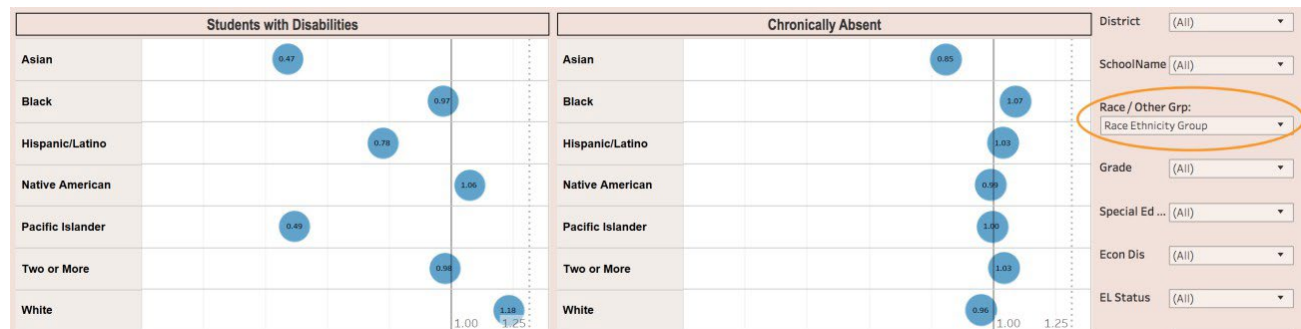
Student membership in a group is determined by their enrollment information in Infinite Campus. This information should be entered according to the Enrollment Data Standard to ensure accuracy.

The Race Ethnicity Groups view includes the following groups:

- Asian
- Black
- Hispanic/Latino
- Native American
- Pacific Islander
- Two or More
- White

The Other Students Groups view includes the following groups:

- Female
- Male
- Economically Disadvantaged
- English Learner
- Foster
- Homeless
- Migrant
- Military Connected
- Students with Disabilities

Additional Filters

Additional filters can be applied to further refine the view of the data. Filters are available for grade level, special education, economically disadvantaged, English learner, foster, gifted and talented, homeless, migrant and military connected. Districts also may filter by school.

Please be mindful when applying filters, as adding too many may make the data less meaningful. Use the "revert" button in the upper left corner of the dashboard to clear all filters.

Indicators

The Equity Dashboard includes three tabs: At-Risk of Over-Representation; Participation - At-Risk of Under-Representation; and Benchmarks - At-Risk of Under-Representation.

At-Risk of Over-Representation
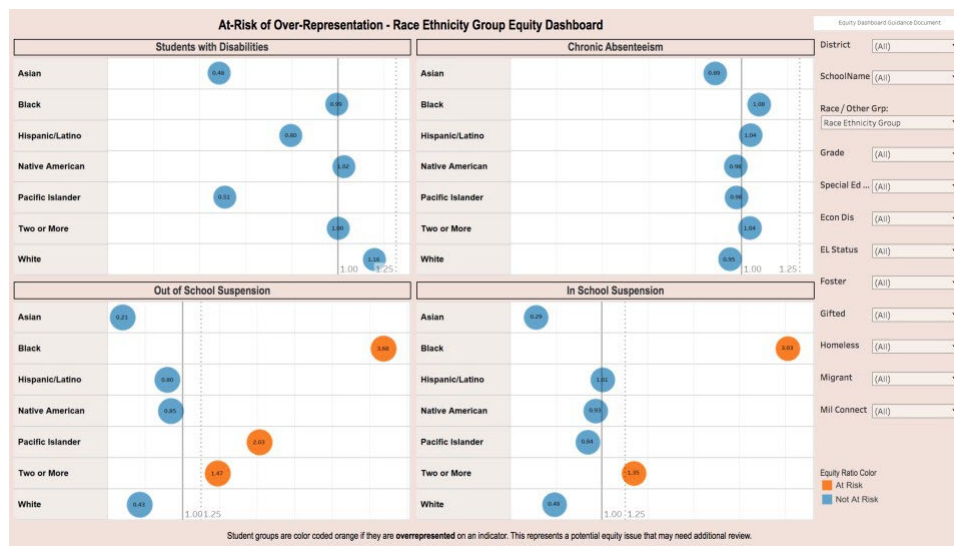
Note: Sample data pictured

Special Education: Students with an active Individual Education Program (IEP) will show for this indicator. Please note, this calculation is different from federally reported significant disproportionality, significant discrepancy and disproportionate representation. The Equity Dashboard uses real-time data and a much lower threshold than any of these federally reported indicators, which may help schools and districts identify areas of concern well before federally reported thresholds are reached. The QA SPED report provides student specific data for special education. Please note: While this dashboard does use student specific data, it does not conform to nor comply with the IDEA's requirements for calculating or determining significant disproportionality, disproportionate representation (indicators 9 and 10) or significant discrepancy (indicator 4).

Chronically Absent: Kentucky defines chronically absent as a student who is present 90% or less of full-time equivalency. The Kentucky Department of Education calculates chronic absenteeism by dividing student's full-time equivalent (FTE) present minutes by FTE instructional minutes and

rounding to the nearest whole percent. The Attendance Data Standard outlines how daily attendance should be taken and provides more information about chronic absenteeism. Data is updated daily and will be one day behind. For additional student specific data, run the Chronic Absenteeism Report (PATH: KY State Reporting | KDE Reports | Chronic Absenteeism). Please contact Jessica Carlton at jessica.carlton@education.ky.gov with any questions about this data.

Out-of-School Suspension: Students with a behavior record containing event type SSP3 Out-of-School Suspension per the Behavior Data Standard will show for this indicator. Students are counted once regardless of how many Out of School Suspension events they have. Data is updated daily, and will be one day behind. For additional student specific data, run the Safe Schools Report (PATH: KY State Reporting | Safe Schools | Aggregate School Level or Aggregate District Level Extract Type). Please contact Windy Newton at windy.newton@education.ky.gov if you have any questions about this data.

In-School Suspension: Students with a behavior record containing event type In-school Removal (INSR) and In-District Removal (INDR) per the Behavior Data Standard will show for this indicator. Students are counted once regardless of how many In-school Suspension events they have. Data is updated daily and will be one day behind. For additional student specific data, run the Safe Schools Report (PATH: KY State Reporting | Safe Schools | Aggregate School Level or Aggregate District Level Extract Type). Please contact Windy Newton at windy.newton@education.ky.gov if you have any questions about this data.

Participation – At-Risk of Under-Representation

Note: Sample data pictured

Gifted and Talented: Students with Gifted and Talented records set up according to the Gifted and Talented Data Standard for the current year will show in this indicator. Data is updated daily and will be one day behind. For additional student specific data, run the QA Gifted and Talented Report

(PATH: KY State Reporting | KDE Reports | QA Gifted and Talented). Please contact Kathie Anderson at kathie.anderson@education.ky.gov for any questions about this data.

Advanced Coursework/Dual Credit: Students enrolled in at least one Advanced Placement (AP), Cambridge Advanced International (CAI), International Baccalaureate (IB) or Dual Credit (DC) course during the current school year will be counted for this indicator. Proper course set-up according to the Course Data Standard must be adhered to for data to show correctly. Data is updated weekly over the weekend. For additional student specific data, run the QA Courses Report (PATH: KY State Reporting | KDE Reports | QA Courses). Please contact the course codes team at coursecodes@education.ky.gov with any questions about this data.

CTE Coursework: Students enrolled in a CTE course during the current school year will be counted for this indicator. Previous coursework is not considered. This data is pulled from the Technical Education Database System (TEDS) and is updated two times per year. Note that the first input of data does not occur until November and this indicator will not display anything until the data is loaded. For additional student specific data, contact your school's CTE and/or TEDS Coordinator. Please contact Scott U'Sellis at scott.usellis@education.ky.gov.

CTE Completers: CTE Completers are graduates that have completed four or more courses in any single career pathway. If a student completes any pathway they are considered a CTE completer, even if they start and do not complete additional pathways. This is the only indicator in the Equity Dashboard that is based on prior year data in order to show the completer status, therefore, there is not anything a school can do to change any inequities found for students whom have previously graduated. However, this data may be used to look for systemic inequities that could be addressed to get more students to completer status. This data is pulled from TEDS and is updated the fall after graduation. For additional student specific data, contact your school's CTE and/or TEDS Coordinator. Please contact Holly Tracy at holly.tracy@education.ky.gov.

Benchmarks – At-Risk of Under-Representation

Note: Sample data pictured

The Benchmarks – At-Risk of Under-Representation tab utilizes data from the Benchmarks Report, which is available to run as an ad hoc in Infinite Campus. The Reading, English, Science and Mathematics indicators show the number of students who have met benchmark for the subject area on the last test they took, whether their last test was the Kindergarten Readiness, a K-PREP or KSA assessment from several years ago, or the ACT or SAT from their Junior year. In the case of a student taking both the ACT and the SAT, the test with the higher score will be used. Data is updated daily and will be one day behind.

Benchmark assessments used are based on state assessment and can be found in the [QRC for the Benchmark Report](#). For additional student specific data, run the Benchmark Report (Path: KY State Reporting | KDE Reports | Benchmark Report).

Technical Assistance

Infinite Campus provides technical documentation for the Data Visualization suites on the [KSIS Data Visualization webpage](#).

A Troubleshooting Guide is available on the [KSIS Data Visualization webpage](#), and for all other questions please contact Kim Walters at kimberly.walters@education.ky.gov.

References

Boneshefski, M. J. & Runge, T. J. (2014). Addressing disproportionate discipline practices within a school-wide positive behavioral interventions and supports framework: A practical guide for calculating and using disproportionality rates. Journal of Positive Behavior Interventions, 16(3), 149-158. doi: 10.1177/1098300713484064

National Academies of Sciences, Engineering, and Medicine (2020). Building educational equity indicator systems: A guidebook for states and school districts. Washington, DC: The National Academies Press. doi: 10.17226/25833

Safir, S. & Dugan, J. (2021). *Street data: A next-generation model for equity, pedagogy, and school transformation*. Corwin and Learning Forward.