CCNETWORK
Comprehensive Center Network
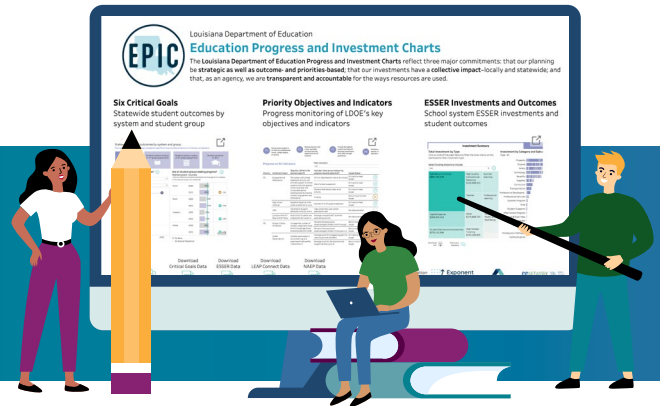
REGION 14
Arkansas
Louisiana
Texas

Launching an EPIC Dashboard for Louisiana

Billions in federal COVID-19 relief funds poured into Louisiana schools between 2021 and 2024. But how were systems using the funds? Beginning in 2022, the Louisiana Department of Education partnered with the Region 14 Comprehensive Center to design a groundbreaking fiscal data visualization solution—EPIC (Education Progress and Investment Charts). EPIC uses artificial intelligence to make data on Louisiana's ESSER investments and outcomes clear and accessible.

ESSER Investments and Outcomes Dashboard

Effectively tracking Elementary and Secondary School Emergency Relief (ESSER) spending requires a novel approach to data visualization. The Region 14 Comprehensive Center (R14CC) team, led by **Boris Granovskiy, PhD**, joined forces with web development experts from **Attuned** and **Exponent Education**. Together, they created the **ESSER Investments + Outcomes Dashboard** using an intricate data visualization process through effective communication and collaboration.

The LDOE presents the EPIC Dashboard Portal at a Louisiana State Board of Elementary and Secondary Education meeting.

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"Knowing how school systems are spending their ESSER dollars and what resources they are prioritizing provides a better understanding of how to allocate existing and new education funds. It is a pivotal insight into ensuring schools and students receive precisely what they need the most."

– Boris Granovskiy, PhD, Region 14 Comprehensive Center

Data Visualization Powered by Machine Learning

The Louisiana Department of Education (LDOE) was already collecting data in narrative form to understand how schools planned to spend ESSER funds. To reduce the burden on the LDOE and its school systems, the R14CC team created a solution to organize the existing data collection for integration into the dashboard.

Granovskiy collaborated with data management, data visualization, and data analytics experts from the R14CC team to develop an automated algorithm fueled by machine learning, a specific artificial intelligence (AI) branch. Training this algorithm to classify the local education agencies' ESSER investments according to pre-defined categories eliminates manual coding and enables:

Reduced Workload
Automates most of the classification process, leveraging the existing qualitative data. This eliminates the need for schools to spend time categorizing data, minimizes burdens, and frees up valuable time for the LDOE team.

Increased Efficiency
Regular updates to the dashboard become effortless, ensuring the data reflects the latest spending trends.
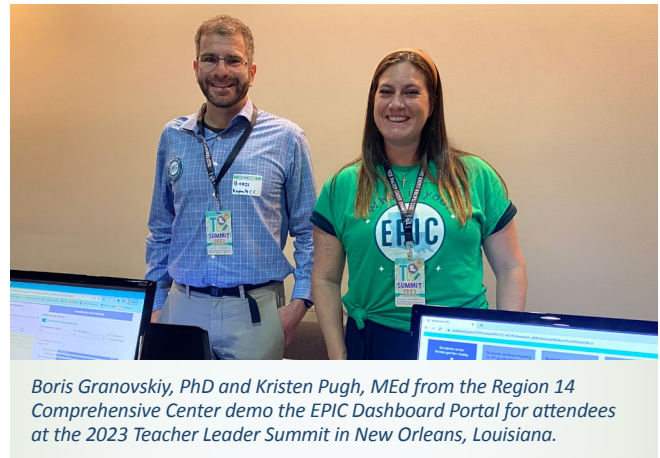
Improved Accuracy
Machine learning improves classification accuracy over time, leading to more reliable data analysis.

Educator Feedback and Iterative Improvement

Following initial development, the R14CC team prioritized educators' and administrators' user feedback. This input directly shaped the dashboard's design and functionality, ensuring it effectively addressed user needs. The insights gained were turned into tangible dashboard improvements. Superintendents and educators shared with the R14CC team the value of readily available system-wide data, noting its potential for performance comparison and identifying areas for improvement.

Granovskiy also underscored the significance of this iterative process, emphasizing, "A profound understanding of user needs empowered the LDOE team to intricately tailor the dashboard design, effectively addressing those needs."

Boris Granovskiy, PhD and Kristen Pugh, MEd from the Region 14 Comprehensive Center demo the EPIC Dashboard Portal for attendees at the 2023 Teacher Leader Summit in New Orleans, Louisiana.

"Transparency Builds Trust"

Easy access to this valuable data has allowed researchers and policymakers to examine the relationship between specific ESSER-funded investments school systems have made during the pandemic and the academic outcomes of their students. The LDOE ensures continuous transparency of current ESSER spending data by focusing on long-term usability. This effort is complemented by two additional EPIC dashboards that display student achievement and LDOE initiatives:

The **Critical Goals Dashboard** focuses on Louisiana students' academic outcomes on various assessments at all K–12 education levels and for all student subgroups. Each assessment is tied to one of the six critical goals defined in LDOE's most recent strategic plan.[1]

The **Priority Indicators Dashboard** is LDOE's public accountability tool. It provides visibility into the progress and direction of department efforts aligned with the key priorities guiding LDOE's vision for success.

Source: **Education Progress and Investments Chart**

EPIC serves as more than a collection of data points—it shines a light on school spending, student achievement, and statewide progress toward educational goals. At its core, EPIC empowers every Louisianan to see firsthand how their tax dollars are invested in education and how effectively those investments support student success.

> "Transparency builds trust and this new tool shines light on education outcomes and funding."
> – **Dr. Cade Brumley, Louisiana's State Superintendent of Education**

[1] LDOE's six critical goals: (1) Students enter kindergarten ready, (2) Students achieve mastery on 3rd grade assessments, (3) Students achieve mastery on 8th grade assessments, (4) Students graduate on time, (5) Students graduate with a college and/or career credential, and (6) Students graduate eligible for a TOPS award. See **https://www.louisianabelieves.com/docs/default-source/funding/fy24---fy28-strategic-plan.pdf** for more details.