



# CLASSROOM EDUCATION PLAN ESSA EVIDENCE PACKET

LXD RESEARCH QOREINSIGHTS



The Classroom Education Plan® (CEP) is a revolutionary platform designed to guide every teacher to the best instructional strategies for his/her students, track the impact of that strategy on each student's engagement and growth, and enable administrators and teachers to have real-time views into teachers' and students' progress.

The CEP is based on extensive research into peer-reviewed studies and is based on real-time teacher and student voices on both academic and non-academic factors. It delivers classroom-ready teaching strategies ingrained with social-emotional learning, cultural responsiveness, and differentiation.

The CEP uses AI to analyze the data and provide immediate recommendations to each teacher regarding the best strategies for meeting the needs of each classroom. It facilitates easy-to-use quick progress monitoring that provides teachers and administrators broad and focused views on classrooms, grades, schools, and districts.



# Classroom Analysis & Student Voice







**Choose & Implement High-impact Strategies** 

The result: teachers learn what matters to and for their students and have the tools to achieve meaningful engagement and growth. Teachers, instructional coaches, and administrators have the data they need to see what they are doing to drive student achievement and the success they are having.







# Understanding ESSA Evidence

The Every Student Succeed Act (ESSA) encourages education programs to provide evidence of effectiveness and impact in order to be federally supported. EvidenceforESSA.org provides standards to assess the varying levels of strength of research for education products.

The categories for ESSA Evidence are: strong, moderate, and promising evidence of effectiveness, or demonstrates a rationale to be effective.

- Level/Tier 3: Promising At least one correlational, well-conducted study with controls for inputs showing significant positive student outcomes, and no studies showing significant negative outcomes.
- Level/Tier 4: Demonstrates a Rationale Well defined logic model based on rigorous research, an effort to study intervention effects is planned or currently underway

# This product meets the requirements for Level 3: Promising

- In correlational design, students who used the program are compared to normed referenced samples or other group averages for comparison.
- Multiple studies with the proper design and implementation with at least two teachers and 30 students
- Study uses a form of a program that could be replicated
- At least one statistically significant, positive finding



"Educators and researchers continue to uncover important insights about how people learn. Digital Promise's Research-Based Design Product Certification recognizes the edtech products that incorporate research about learning into their design and development. Congratulations to Qorelnsights for demonstrating that research informs product design!"

- Christina Luke Luna, Chief Learning Officer, Digital Promise

# **CEP Foundational Research Summary**

The expert team of educators at QoreInsights has built their agile learning and teaching development system using impactful, research-based growth and instructional strategies such as multimodal instruction, data-driven decision-making, and student and teacher surveys.

Recognizing the value of meeting the needs of the "whole child," the CEP also integrates social-emotional learning, cultural responsiveness, and differentiation into both the input and output aspects of the product (Ee & Wong, 2014; Bui & Fagan, 2013).

# **Data Collection**

The CEP creates survey questions to gather data from students and teachers about students' sense of well-being and efficacy. Paired with real-time student assessment data and progress monitoring, the CEP creates a more accurate and nuanced picture of classroom needs (academic and non-academic) identifies the best research-based strategies to make progress on these needs. Wong, 2014).

We pride ourselves in simplifying the complex into a few easy steps that save teachers time and get them the evidence-based strategies that will have the biggest bang for their buck in terms of time and impact.

Toni Shub CEO Qoreinsights



# **Increasing Teacher Efficacy**

Acknowledging the research that supports the belief that teachers' efficacy is improved with opportunities to reflect on their practices, the CEP facilitates Professional Learning Communities to encourage teachers to actively engage with self-assessment strategies through progress monitoring and also talk with other teachers both informally and through professional development meetings (Capobianco & Ní Ríordáin, 2015).

QoreInsights also gives teachers more agency throughout the planning, implementation, and progress monitoring processes. In using the CEP with fidelity, teachers are provided with custom-ranked lists of classroom needs and evidence-based strategies, and they then choose one to implement. Through progress monitoring, they are trusted to periodically decide whether or not to keep, combine or discard strategies. Seeing the concrete results of their decisions, clarity and motivation increase, leading to continued, active engagement in their unique professional development cycle (Dikilitaş & Mumford, 2019).

# **Student Voice**

A QoreInsights research review revealed that student input is often not considered when improving teacher effectiveness (Riordan, Klein, & Gaynor, 2019). Based on those research findings and the overwhelming results of an early CEP teacher survey, in which over 70% asked for student voices to be included in the data collection, the CEP added a student survey that asked about students' sense of belonging, internalizing behaviors, and their overall perceptions in school, which the Al algorithm uses to inform professional development. This gets the right strategies to the right teachers, instantly.



# **CEP Foundational Research Summary**

# **Culturally-Relevant Pedagogy**

Research suggests that culturally relevant pedagogy is not often integrated into content such as language arts and social studies, even though it could increase motivation and deepen learning (Bui & Fagan, 2013). In response, Qorelnsights added a culturally relevant pedagogy team to integrate research-based strategies to ensure the power of cultural relevance is woven into every strategy.

# **Increasing Teacher Efficacy**

QoreInsight's CEP uses what Dr. Toni Shub calls "decision support technology" to leverage learning sciences and real-time classroom needs (both academic and non-academic) to guide teachers to the most effective evidence-based interventions and instructional strategies for each unique situation, at scale. Research findings determined the largest barriers to implementing instructional interventions are lack of time and leadership (Merle, et al., 2022; Ee & Wong, 2014). The CEP works to save time for teachers and administrators to access and integrate research-based strategies and practices into their instruction.

QoreInsights developed CEP to create equity for both teacher and student learning. CEP uses learning engineering and a decision support system to equitably guide every teacher to the most impactful evidence-based instructional methods to address wholechild student needs, including feelings of safety and internalizing behaviors.

The strategies and practices within the CEP are already vetted and prepared to be classroom-ready by a diverse team of educational experts who review the materials for academic alignment, research support, and the availability of resources to support the whole child's needs. The CEP also includes ongoing support and professional development for teachers and administrators to support the effective use of the program, eliminating the need for spending time on the managerial aspects of implementing the program and tracking students' performance (Merle, et al., 2022).

# **Evidence-Driven Learning Platform Amplified By AI**

The QoreInsights team has demonstrated a clear commitment to the science of learning and its application toward creating effective instructional strategies for developing the whole child. The continual review of the latest research and user feedback, paired with the exponential knowledge and speed of AI, ensures that the Classroom Education Program is always evolving to meet every student's everchanging needs. The results are students who are more confident and excited to continue learning new concepts and skills while being brave in their unwavering commitment to ensure their social-emotional health.

In addition, utilizing real-time data in instructional coaching enables immediate, targeted feedback that enhances teachers' pedagogical strategies, as evidenced by research like Glover, Reddy, & Crouse's 2023 study. This data-driven approach, coupled with evidence-based strategies, fosters more impactful and relevant teacher-coach conversations. Such an integrative method not only elevates teacher professional growth but also contributes significantly to holistic student development.



# CLASSROOM EDUCATION PLAN (CEP) CASE STUDY

JOB-EMBEDDED, PERSONALIZED PROFESSIONAL LEARNING QOREINSIGHTS, 2023



# STUDY SUMMARY

This study evaluated the teachers' use of the Classroom Education Plan (CEP) at one school to determine the efficacy of the implementation of the overall CEP tool, as well as review the impact of individual instructional strategies and the related professional development to support teachers' use of research-based strategies and understand data-based decision-making.

# SCHOOL DESCRIPTION

The school in this case study is located in the Midwest. It had an enrollment of 357 students, all in classrooms invited to participate in the study. 46% of the students faced socioeconomic barriers. 23% of students have IEPs and receive special education services; just under 5% were identified as gifted. The student demographics included 91% of the population identified as white, while the remaining students identified as multiracial. The school had no students who were English learners.

# PRODUCT DESCRIPTION

The Classroom Education Plan (CEP) helps teachers identify their classroom needs through student input, teacher observation, and current benchmark data to accurately and efficiently connect teachers to researched classroom-ready strategies. Based on the survey results, the CEP uses an algorithm to process the data from surveys and other inputs to determine each class's top 10 strengths and needs. These results are used to custom-rank classroom strategies tailored to meet their students' academic and non-academic needs. Teachers choose a need to address and a strategy to implement to address that need for the whole class.

Before building the CEP, QoreInsights engaged in a multi-year research review to identify the highest-impact instructional practices for elementary math and literacy, as well as the underlying factors that can impede or catalyze learning, such as social and emotional learning, executive functioning, cultural relevance, and foundational learning skills, and how to impact those factors. All of the strategies included in the CEP provide effective classroom practices as identified by educational research. The CEP team evaluated studies about effective classroom instruction in the fields of foundational learning, culturally-sustaining pedagogy, and practices for math, literacy, science, and other content areas and considered the implications of these findings within the framework for the whole child.

# IMPLEMENTATION DESCRIPTION

This study followed the implementation of the CEP at one school. The process began with an introduction to the CEP through to an analysis of students' progress, including:

- Onboarding
- Gathering background (demographic data, needs assessment)
- CEP Survey Results
- Professional Development
- Strategy Implementation
- Progress Monitoring
- Data Analysis





# CLASSROOM EDUCATION PLAN (CEP) CASE STUDY

### SURVEY RESULTS

Learning analytics allows the CEP to use this data to focus on the specific needs of the school and the individual classrooms. Continuous improvement cycles analyzes the data and refines the CEP tool and algorithms. The strengths and needs update in real-time as strategies are implemented and learning indicators are monitored. They also reset at the middle and end of year surveys. Here is a snapshot at the beginning of the year for this school.

Beginning of year top 10 needs (whole school - can also be viewed by class and grade):

- Handwriting and Written Expression: Proofreading and Revising
- Handwriting and Written Expression: Writing Fluency
- Handwriting and Written Expression: Planning and Organization
- Math: Algebraic Thinking
- Handwriting and Written Expression: Grammar and Sentence Structure
- Handwriting and Written Expression: Making and Recording Observations
- Handwriting and Written Expression: Vocabulary and Descriptive Words
- Handwriting and Written Expression: Mechanics
- Math: Problem Solving and Word Problems
- Math: Accuracy and Check Work

Beginning of year top 10 Strengths (whole school - can also be viewed by class and grade:

- Student Engagement: Attendance
- Foundational Learning Component: Working Posture
- Student Behavior: Transitions
- Student Behavior: Following Routines
- Social Emotional: Control Physically Aggressive Behavior
- Student Behavior: Following Rules
- Student Behavior: Personal and Communal Responsibility
- Social Emotional: Positive Relationships
- Social Emotional: Flexibility
- Student Behavior: Self-Regulation

# **RESULTS**

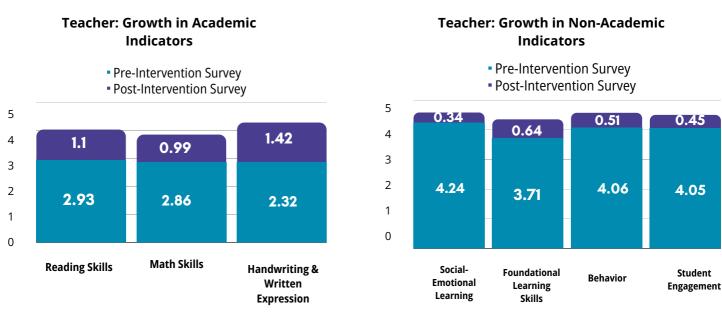
After 4 weeks for each continuous improvement cycle, teachers reported on students' performance on their chosen focus. Teachers chose to address one of the highest needs represented in their class. Teachers then chose one of 5 custom-ranked strategies, implemented this strategy and monitored progress one time a week for 4 weeks. Results were shared with teachers immediately on their dashboards to understand how effective strategies were and they were presented with decision options to Keep, Combine, or Discard the strategy. Teachers collaborated with other teachers, coaches and/or the school principal to make this decision. They then were able to choose another need or another strategy for the same need. This continued until they took another survey at the middle and end of year. Because each strategy is matched to each classroom's most pressing needs, strategies address multiple learning indicators for that class and impact for those other indicators will show up on the next whole class survey, while impact for the need chosen will be apparent after each continuous improvement cycle.

Teachers averaged spending about 18 minutes learning each strategy and just over three minutes (3 minutes and 23 seconds) completing the progress monitoring for each class. Each of the three whole-class surveys took approximately 3 minutes per student. Of the 12 teachers participating in the study, 12 participated in whole program, including surveys, choosing needs and strategies, implementing strategies, and progress monitoring within the study.





Overall, progress monitoring scores (1-5) showed an improvement in academic skills from the beginning to the end of the study in reading skills (2.93 to 4.03), math skills (2.86 to 3.85) and handwriting and written expression (2.32 to 3.74). Growth in non-academic indicators were positive, including social emotional learning (4.24 to 4.58), foundation learning skills (3.71 to 4.35), behavior (4.06 to 4.57), and student engagement (4.05 to 4.54). Students also reported gains in their surveys. Results for self-reported indicators included internalizing behaviors (3.67 to 3.91), peer relationships (3.73 to 4.06), classroom behaviors (4.32 to 4.51), accessibility to learning (4.13 to 4.30), sense of belonging (4.15 to 4.33), academic difficulty level (3.95 to 4.11), psychological environment (4.41 to 4.58), and perception of school and learning (4.07 to 4.19).

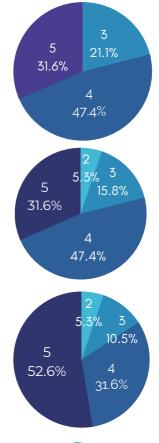


Other data collected within the CEP include teacher feedback on strategies. These strategy feedback surveys are completed voluntarily; however, in this school, the principal asked the teachers to complete them for her own information. The twelve teachers in the study completed 21 surveys. Questions were as follows and were answered on a 1-5 Likert scale, with 1 meaning "completely disagree" and 5 meaning "completely agree."

As a teacher, I implemented this strategy in its fullest form:

The strategy I used was helpful to my present and future classroom practices:

The strategy I used was easy to implement within my classroom practices.





# **INTERVIEWS**

All 12 teachers and the principal were present for two interviews. The following summarizes feedback given:

- principal recognition and testimonial of the CEP's transformational impact
- teacher-reported improvement in efficacy as a direct result of using the CEP in the areas of student motivation, student engagement, and differentiation and attributed this improvement to CEP strategies
- principal reported teachers' increased frequency and quality of data-informed conversation
- teachers' recognition of across-the-board improvement across all 8 academic and nonacademic areas
- kindergarten teachers reported that strategies did not address their needs as well as older grades due to not enough examples for their grade level
- principal and teachers wanted to be able to resolve needs as part of their strategy decision process
- coach reported that learning sciences strategies were difficult for teachers to implement (i.e., spacing)
- teachers reported that they were motivated by seeing student voice answers improving for their students
- teachers reported being motivated by seeing impact scores after each 4-week progress monitoring cycle



# **Logic Model for the CEP**

### **PROBLEM STATEMENT**

Traditional teacher development practices lack a connection with real-time, whole-child, and contextual data insights. Often, teacher training follows trends and/or a limited data story, which hinders impact on teacher effectiveness and, therefore, student growth and well being. The CEP leverages AI and comprehensive data to empower teachers with personalized support, data-driven decision-making, and agency in their continuous improvement of evidence-based instructional practices, ultimately enhancing student outcomes and creating a thriving learning environment.

# **RESOURCES**

What resources are or could be available?

- Decision-support algorithms to custom-rank needs and strategies
- Teacher and Student Survey Tool
- Evidence-based strategy library for customization
- Progress Monitoring Protocol
- Collaboration Modules
- Community of practice
- Interactive user dashboards for continuous improvement cycle and impact data

# **STRATEGIES & ACTIVITIES**

What will the activities, events, and such be?

- Participation in Onboarding and Check-In Meetings
- Survey completion by teachers and students 3x a year
- Learn and implement evidencebased strategies
- Progress monitoring by teachers for immediate feedback on impact
- Use data in grade-level or mentoring meetings
- Participate in community of practice as needed
- Teachers monthly review of dashboards to guide collaboration and instructional decisions
- Administrators and coaches review dashboards to guide mentoring and strategic plans

# **OUTPUTS**

What are the initial products of these activities?

- Current student needs guide elementary teachers' continuous learning/professional development through real-time, highimpact academic and non-academic data gathered from the teachers' and students' voices.
- Educators can link CEP's® personalized professional development (PD) to student outcomes by tracking instructional methods' impact on student growth.
- Uses cutting-edge, decision-support, and machine learning technology to advise teacher decision-making around best practices and improve understanding and prediction of what instructional methodology will work best for who, when, and where.
- Supports teachers and deepens learning through collaboration in ongoing professional learning communities (PLCs).
- Supports coaches in mentoring teachers' use of evidence-based instruction

# SHORT-TERM AND INTERMEDIATE OUTCOMES

- Students have an increased sense of belonging and improved well-being in the classroom.
- Students improve academic outcomes, behavior, and engagement.
- Teachers increase collaboration and self/collective efficacy
- Teachers develop their leadership skills and feel a greater sense of agency.
- Teachers generalize best practices and strategies to new content areas and classroom management.
- High-impact, need-driven data from teachers and students are visible at the class, school, and district levels to guide improvement planning.
- Bridge the gap between research and implementation by transforming research into classroom-ready, high-rigor strategies and matching those strategies to the most pressing needs within each classroom.
- Administrators and coaches gain system-wide, real-time insights into high-impact achievement factors and
  effective strategies that result in growth for all students.

# LONG-TERM OUTCOMES AND IMPACTS

- Teachers improve their practice and stay longer in the profession
- Coaches and administrators enhance relationships with teachers, supporting continuous improvement and improving capacity and impact.
- Students improve long-term academic achievement, strengthen relationships with peers and teachers, and leverage cognitive and learning skills for their future.

### **ASSUMPTIONS**

Dedicated time for surveying students' social and emotional learning needs, comfort with using Al-integrated tools in the classroom, and participation in training activities.





# **Teacher Quality & Agency**

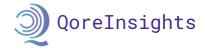
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# Culturally-Relevant Pedagogy

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LXD Research is an independent research firm that specializes in evaluating educational programs to support accelerated learning.

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