Evidence in Action
A K20 Center Research Brief

Data-Driven Coaching That Boosts Praise, Instructional Quality, and Student Engagement

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Introduction

The authors situate the problem in a well-documented gap: districts invest heavily in professional development (PD), yet traditional, workshop-style PD rarely changes classroom practice or student outcomes. In contrast, job-embedded instructional coaching that includes practice, feedback, and formative assessment shows stronger effects on teacher skills and student engagement—needs that are especially acute in high-poverty, urban schools where teachers navigate heightened behavioral challenges and stressors. The Classroom Strategies Coaching (CSC) Model responds to this context by using data-driven, classroom observation feedback to help teachers set goals, practice strategies, and receive ongoing, visual performance feedback tied to evidence-based instruction and behavior management.

Methodology

Research Design

Research involved a randomized controlled trial using a three-cohort, waitlist-controlled, randomized block design across 14 high-poverty, urban elementary schools. Teachers within schools were randomly assigned to the CSC Model or the waitlist control. Coaching fidelity was high (≈99% of required components implemented).

Sample

- Teachers: 106 (53 CSC; 53 control); general and special education, K–5; average experience ≈14 years
- Students: 2,195 in participating classrooms
- Schools served neighborhoods with high poverty (≈80% free/reduced-price lunch)

Data Analysis

Independent, trained observers (blind to condition) collected pre/post data using validated observation tools. Multilevel models (accounting for teachers nested in schools) tested condition effects on observed teacher practice, student engagement, and teacher-reported outcomes. Effect sizes are reported as standardized mean differences.

Results

Teachers who participated in the CSC Model demonstrated meaningful improvements across multiple areas of practice and classroom functioning. Compared to teachers in the waitlist control group, CSC teachers increased their use of key instructional and behavior management strategies—most notably academic praise, which they used nearly twice as often, and behavior-specific praise, which more than doubled during the intervention. They also showed higher-quality implementation of instructional practices and behavior management routines, reflecting more consistent, effective use of evidence-based techniques. These improvements were mirrored in classrooms, where student academic engagement rose by about seven percentage points, a significant gain in time spent actively or passively attending to instruction. Teachers' own perceptions aligned with these observed changes: CSC teachers reported greater improvements in students' academic and behavioral functioning, as well as increases in the amount of instructional and emotional support they felt within their school environment. Notably, although the intervention strengthened feelings of support, it did not produce measurable reductions in teacher stress. Overall, the findings show that brief, targeted, data-driven coaching can produce meaningful improvements in teacher practice, student engagement, and perceived professional support within high-poverty school contexts.

Application Into Practice

Core Components

1. Formative assessment of practice using a validated observation tool (e.g., CSAS) to identify strengths and needs in instruction and behavior management
2. Setting 2–3 goals that are specific (e.g., increase behavior praise to a 5:1 ratio relative to corrections)
3. Modeling and rehearsal of target strategies with ongoing performance feedback, including visual graphs of progress
4. Iterative review of data to adjust plans and support generalization

Dosage & Timeline

- 8 coaching sessions × ≈30 minutes each (≈4 hours total of face-to-face coaching)
- Sessions scheduled weekly over ≈12–13 weeks
- Between-session observations: two 30-minute classroom observations per interval to collect data and generate feedback reports
- Total cycle length: ≈12.5 weeks per teacher (SD ≈3.5 weeks)

Session Flow (what each session does)

- Session 1: Review baseline observation data; identify priority needs; build alliance.

- Session 2: Set concrete practice goals with success criteria (e.g., specific counts/quality targets).
- Session 3: Co-design implementation plans; anticipate barriers; coach models strategies.
- Sessions 4-7: Teach-observe-feedback cycle; provide verbal and visual feedback; use memory prompts (e.g., tally counters, posted notes) to cue strategy use.
- Session 8: Evaluate goal attainment; plan for spread and sustainment across lessons and classes.

People & Roles

- Coach qualifications: School psychologists, instructional leaders, or trained teacher-leaders who can (a) observe with reliability, (b) model practices, and (c) provide data-based feedback
- Training: ~3 days on the model + reliability certification on the observation tool; ongoing supervision and fidelity checks recommended

What to Target First (high-yield, feasible goals)

- Behavior-specific praise (increase rate and specificity)
- Academic praise after response opportunities
- Clear, 1-2 step directives; reduce vague directives
- Concept summaries and academic performance feedback to close lessons and clarify success criteria

Implementation Tips

- Start with a pilot cohort (e.g., 6-10 teachers) to build local exemplars.
- Use simple tools (clipboards, clickers, or tally apps) to track counts; generate brief graphs after each observation.
- Protect a weekly 45-60 minute block (observation + 30-minute coaching) to maintain momentum.
- Track teacher-selected outcomes (e.g., praise ratios, quality ratings, engagement) and celebrate gains.

Add optional stress-management supports (e.g., brief mindfulness or workload triage) since perceived stress did not improve automatically.

Work Cited

Reddy, L. A., Shernoff, E., & Lekwa, A. (2021). A randomized controlled trial of instructional coaching in high-poverty urban schools: Examining teacher practices and student outcomes. *Journal of School Psychology, 86*, 151–168. https://doi.org/10.1016/j.jsp.2021.04.001