

Addressing the Word Gap through Teacher Professional Development: Lessons from the ExCELL-e Model

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The Case for Teacher PD

Building child vocabulary involves intentional conversations with teachers about words. Yet:

- Conversations are challenging in busy classrooms
- Explicit focus on vocabulary is absent from many high-quality curricula
- English language learners are often neglected

Consequently, teachers need support through PD to bring vocabulary to life in classrooms.

Active Ingredients in High-Quality PD

Syntheses of research (e.g., Yoon et al., 2007) identify several key components:

- Ongoing support for several months to a year
- Trainings on new information, strategies
- Classroom materials supporting classroom implementation of new strategies
- Individualized observation and coaching from an expert on implementation
- Guided reflection on one's own practice

Making PD Available & Accessible

These supports can be labor- and cost-intensive, making distance-based PD more feasible.

- Web-based coaching has increased child literacy; see Hamre et al., 2010; Landry et al., 2006; Powell et al., 2008
- A focus on classroom vocabulary might support child word learning as well

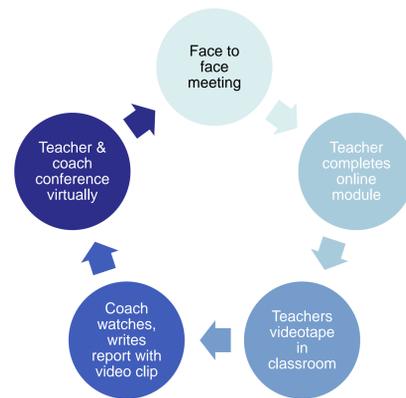
Aims of the Current Study

The current study offered PK, K, and G1 teachers web-based training and coaching in vocabulary instruction.

- Question 1: To what degree are teachers able to implement strategies with *fidelity*?
- Question 2: To what extent do teachers receiving training increase the *global quality* of their classroom instruction?
- Question 3: Does initial teacher skill *moderate* the effect of the intervention, such that teachers who enter the intervention with stronger skills gain more from the training?

Components of ExCELL-e Training

ExCELL-e involves 9 monthly cycles of training, observation, and feedback.



Online modules include evidence-based content, videos of exemplary practice, and assessments of understanding. Each required approx. 90 mins.

Participants

PK, K, and G1 teachers and children were drawn from two high-poverty urban districts in which at least 80% of children qualified for FRL.

Among teachers:

- 95% were female
- Approx. 60% held a master's degree

Among children:

- 50% were female
- 33% were dual language learners

Measures

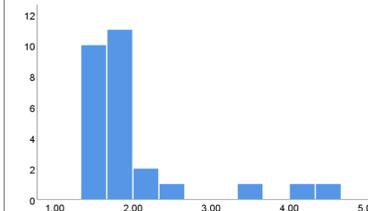
Classroom quality was measured with:

- CLASS Instructional Support domain
- Project-aligned fidelity measure

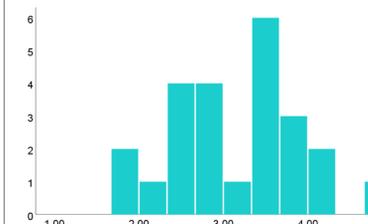
Results

Question 1: Teacher Fidelity

- $t(49) = 5.41, p < .001, d = 1.52$



Comparison teachers, spring
M = 2.00, SD = 0.75,
Range = 1.43 to 4.38



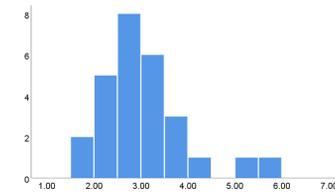
Intervention teachers, spring
M = 3.18, SD = 0.80,
Range = 1.76 to 4.92

Results, Con't

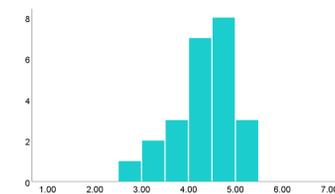
Question 2: Global Classroom Quality

- $t(49) = 5.05, p < .001, d = 1.42$
- $\beta = 0.62, p < .001$

Comparison teachers, spring
M = 3.08, SD = 0.96,
Range = 1.67 to 5.75



Intervention teachers, spring
M = 4.30, SD = 0.74,
Range = 2.67 to 5.44



Question 3: Moderation by Initial Quality

- No evidence of moderation; $p = .393$

Discussion & Conclusions

Main findings:

- ExCELL-e training produces significant gains in fidelity to project strategies.
- ExCELL-e training results in significant gains in global instructional quality (CLASS).
- Effects are similar whether teachers begin with weaker or stronger instructional skills.
- ExCELL-e represents a time-efficient modification of a face-to-face approach with previous evidence of effectiveness.

Remaining questions:

- Understanding child effects is needed.
- The translation of face-to-face coaching to a web-based context remains challenging.