Teacher Professional Development

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Housed in the *Nebraska Center for Research on Children, Youth, Families and Schools (CYFS)* at UNL


Research contributes to data-based understandings of *what works, for whom, and under what conditions* in the rural context, in the areas of instruction/education, professional development of teachers, and related issues (e.g., family-school partnerships)
R²Ed Research Studies

Variations in existing teacher professional development (PD) experiences in rural and non-rural settings

Differential effects of various PD approaches on teachers’ reading and science knowledge and practice and student outcomes

Effects of family-school connections on rural students’ behaviors and academic performance
Theory of Change for Professional Development

Context Variables: Content Domain (math, science, reading); Grade Level (elementary, middle, high); School Climate/Administrative Support

Teacher Variables: years teaching, prior training, content knowledge, certification

Medium of Support
(e.g., on-site, technology-delivered)

Professional Development:
- Instructional Content
- Discipline-based Pedagogy
- Approach
  - Didactic instruction
  - Modeling
  - Practice
  - Feedback
  - Coaching

Teacher knowledge, skills, attitudes and perceptions

Transfer of knowledge and skill to classroom practice

Distal Outcome:
Student Learning (acquisition of knowledge, skills, and competencies in content areas)
## Professional Development Framework

<table>
<thead>
<tr>
<th>Process</th>
<th>Approach</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Assessment (identification of student needs)</td>
<td>Self-report</td>
<td>Teacher appraisal of student knowledge, skills, needs, and/or capabilities</td>
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<td>Direct observations</td>
<td>Direct, objective assessment of student performance</td>
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<td>Progress monitoring</td>
<td>Teacher-administered probes document students’ performance</td>
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<td>Promotion of knowledge/skills</td>
<td>Content instruction</td>
<td>Evidence-based, domain-specific information presented by content experts</td>
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<td>Modeling</td>
<td>Demonstration of effective instructional strategies by coaches</td>
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<td>Practice</td>
<td>Enactment of newly learned skills by teachers</td>
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<td>Feedback</td>
<td>Written and/or verbal evaluations of teacher practice</td>
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<td>Skill transfer (classroom implementation)</td>
<td>Coaching/consultation</td>
<td>Individualized coordination and oversight by coaches, from training through classroom implementation</td>
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Professional Development and Rural Teachers’ Knowledge and Practice

Survey with a national sample of 595 K-5 teachers in rural and non-rural settings

Examined characteristics of PD experiences: frequency, instructional support, level of collaboration, opportunities for practice with feedback, leader characteristics

Content areas: reading, science inquiry, math, and data-based decision making
National Survey Findings

More similarities than differences in format, leader, and training method.

More single workshops in rural

Led by regional or state staff more in rural.

Led by colleague more in non-rural.

More interaction or collaboration with colleagues in rural, especially independent of PD experience.
Project READERS (Response to Effective Assessment-Driven Early Reading Support: Rural Professional Development with Coaching)

Two variations of teacher PD with coaching in the use of student data to inform differentiation of K-3 reading instruction

360 K-3 teachers in rural schools

On-site training with on-site coaching

On-site training with distance

No training or coaching
CSI: Coaching Science Inquiry in Rural Schools

Teacher professional development in a guided scientific inquiry approach to science instruction (including coaching via distance technology) compared to no PD

162 middle and high school science teachers in rural schools
Thank You

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