Using Data to Understand Implementation & Outcomes From Oregon’s Prenatal-Grade 3 (P3) Investments
Portland State University P-3
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Overview

1. Background: What are P3 Initiatives?
2. Evaluation Challenges
3. P3 Data Project Goal
4. What Have We Learned?
5. What Next?
Why P3?
Long Term Shared Goals for P3 Work -

1. Improve Children’s School Readiness
2. Ensure Children are meeting 3rd Grade academic benchmarks
3. Reduce Racial, Social, and other Disparities in School Readiness & Success
What is a P3 System?
(Prenatal – 3rd Grade)

- Ready & Supportive Communities
- Ready & Successful Children
- Ready & Supportive Families
- Ready & Supportive Schools
Elements of Effective P3 Systems

Engaged Families, Communities & Schools

Ready & Supportive Families
Ready & Supportive Schools
Ready & Supportive Communities
Ready & Successful Children

Effective Services, Supports, & Staff
Committed, Cross Sector Leadership
Major P3 Investments in Oregon

• **Early Works**
  - Demonstration sites (Earl Boyles, Yoncalla Elementary)
  - Public-private partnership, multiple braided/blended funding streams

• **Kindergarten Partnership & Innovation Funds**
  - State funding, HUBS allocate, all counties

• **Oregon Community Foundation P3 Systems Grants**
  - 11 grants to school districts & community partners
P3 Investments: What Do They Support?

1. Cross sector planning and governance

2. Cross sector (EL-K12) professional development

3. Family & child focused programs
   - Kindergarten transition
   - Family engagement activities:
     - Parenting and programs supporting early learning at home
     - Family-provider-school partnerships
Evaluation Challenges

1. Many different strategies and programs related to P3
2. Many different short term outcomes
3. Varying implementation across communities
4. No cohesive data system of interventions or outcomes
Our Idea – The School Level P3 Implementation & Outcomes Database

- **Explore** how P3 programs and strategies (P3 initiatives)
- **Working together** (collective impact)
- **Within a geographic area** (schools)
- **May be associated** (not causal)
- **Over time** (longitudinal)
- **With school readiness** (OKA)
What We Did

- Compiled P3 implementation data at the school level from:
  - KRPI, OCF & Early Works evaluations
  - Interviews & data from HUB staff and local P3 coordinators
- Focused on implementation of ongoing, multi-session family engagement, kindergarten transition, and professional development programs
- Linked this to OKA data
  - Child level data within school
  - Early literacy, numeracy, self-regulation, interpersonal skills
School Level P3 Indicators

**Dosage**
- How many ongoing FE programs?
- How many sessions?
- How many hours?

**Focus**
- Kindergarten Transition specific
- “Other” P3
- Professional Development focus

**Evidence**
- Use of structured curriculum
- Use of evidence-informed model

**Who**
- Direct parent, child, staff component
- Estimated number of children, parents participating
Exploratory Questions

1. What does P3 implementation look like at the school level?
2. Are schools serving more vulnerable children doing more P3 work?
3. Is the level of P3 work associated with indicators of school readiness?
What’s Happening at the School Level?

✓ **244** schools (28% of Oregon elementary schools) identified as implementing P3-activities through KRPI, OCF P3, or EW

✓ **203 (83%)** had ongoing FE or KT programs

✓ **123 (51%)** offered P3-related professional development

✓ **71 (30%)** offered some other kind of P3 activities

Of those with ongoing FE/KT # of years of implementation:

- 54% 1 year
- 24% 2 years
- 10% 3 years
- 11% 4+ years
What do we know about program content?

Of those with ongoing FE/KT programs......

✓ Median # FE/KT sessions offered was 5 (range 1-57)
✓ Median hours offered was 12 (range 5-240)

- 61% % w/structured curriculum
- 55% % Using Evidence Informed Programming
- 93% % w/Kinder Transition
- 57% % with Child Component
- 79% % with Parent component

Median # FE/KT sessions offered was 5 (range 1-57)
Median hours offered was 12 (range 5-240)
Are P3 Programs Focused in Schools with Highest Need?

<table>
<thead>
<tr>
<th>School Demographics</th>
<th>P3 Implementing School (n=244)</th>
<th>Non P3 School (n=616)</th>
<th>Statistically Significant Difference?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average % Economically Disadvantaged</td>
<td>55.7%*</td>
<td>45.7%</td>
<td>P3 &gt; non P3</td>
</tr>
<tr>
<td>% Special Education</td>
<td>10.1%</td>
<td>12.7%*</td>
<td>P3 &lt; non P3</td>
</tr>
<tr>
<td>% ELL</td>
<td>17.5%*</td>
<td>10.8%</td>
<td>P3 &gt; non P3</td>
</tr>
<tr>
<td>% Hispanic/Latino students</td>
<td>25.8%*</td>
<td>17.2%</td>
<td>P3 &gt; non P3</td>
</tr>
<tr>
<td>% White/Caucasian</td>
<td>63.1%</td>
<td>70.1%*</td>
<td>P3 &gt; non P3</td>
</tr>
<tr>
<td>% Asian</td>
<td>2.2%</td>
<td>3.1%*</td>
<td>P3 &lt; non P3</td>
</tr>
<tr>
<td>% African American</td>
<td>1.6%</td>
<td>2.3%*</td>
<td>P3 &lt; non P3</td>
</tr>
<tr>
<td>% Native Amer/Alaska Natv.</td>
<td>1.6%</td>
<td>1.5%</td>
<td>No difference</td>
</tr>
<tr>
<td>% Hawaiian/Pacific Islander</td>
<td>.68%</td>
<td>.56%</td>
<td>No difference</td>
</tr>
</tbody>
</table>
Is There More P3 Programming in Schools with Higher Need?

**Mixed Evidence**

- Schools with **more economically disadvantaged** students have **more**:
  - Total FE programs
  - FE with structured curriculum
  - “Other” P3 strategies happening
  - Programs with student, parent, and staff involvement

- Schools with **more ELL and Hispanic** students have:
  - Fewer total FE programs
  - Fewer Kindergarten Transition programs
  - MORE Professional Development programs

- Most other school demographic characteristics not related to P3 implementation variables
Predicting OKA Scores

- Multi-level models account for children being “clustered” within schools, **controlling for**:
  - School location (rural/urban/town)
  - % students in special education
  - School-level average scores for letter names, letter sounds, early numeracy, social-emotional OKA prior 2 years
  - Child gender & race ethnicity

- Two sets of P3 predictors:
  - **“Content”**: # of KT specific programs & Average Evidence Level for programs at the school
  - **“Dosage”**: Total # FE/KT programs, # Hours of programming

- Predicting OKA scores for **all children** in each P3 school
Preliminary Results: Associations of P3 Implementation with OKA Scores

**TRENDS**

- **Schools implementing:**
  - More hours of FE activities
  - More ongoing activities focused specifically on Kindergarten Transition

- **Tended to have children with higher OKA scores for:**
  - Letter sounds
  - Lower case letter recognition
  - Early numeracy
Takeaways & Caveats

• **Stronger association** of P3 implementation with OKA outcomes without controlling for child, school level demographics

• **Implementation may not be intense enough** to detect changes in school “population” of kinders (yet)
  • # of children participating varies (mostly small % of incoming kindergartners)
  • Expected intervention outcomes vary

• **Measures of** P3 implementation is not precise

• **Unmeasured** programs/activities likely influence OKA scores

• **Collective impact models take time!**
What Next & What’s Needed

Next Steps

• **Examine n=50 schools** with parent survey data on home learning environment
• **Conduct matched comparisons** of P3 vs. non P3 schools
• **Examine** influence of other P3 variables
• **Dig deeper:** Child, Community, School Factors
• **Model** changes in OKA over time

What’s Needed

• **Better data** tracking system for P3 implementation data at school and community levels
  • Frequency
  • Attendance
  • Program quality
• **Your input** – on additional questions, data sources, etc.