Profiles of Children's Kindergarten Readiness in Oregon

Elizabeth Tremaine, Andy Mashburn, & Rita Yelverton
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THE KINDERGARTEN TRANSITION

- Moving into kindergarten is a qualitative shift for children
  - Goals, demands, and nature of evaluation change
- Some children are more “ready” than others to meet the new goals of kindergarten
- Assessing children’s readiness for kindergarten is a new goal at the state and national level
Oregon Kindergarten Assessment (Oregon Department of Education, 2015)

- Early Academic Skills
  - Early literacy
  - Early math

- Approaches to Learning Skills
  - Self-regulation
  - Interpersonal skills
GOALS OF TODAY'S STUDY

1) Use the OKA data to describe entering kindergarteners
   - Determine profiles that are intuitive and practical to researchers, practitioners, and policy makers alike

2) Explore the developmental implications of these profiles
   - Compare the academic and social development of students in these profiles across the kindergarten year
Goal 1

Approaches to Learning Composite Score

Early Academics Composite Score

+ ATL/ - ACADEMICS

+ ATL/ + ACADEMICS

- ATL/ - ACADEMICS

- ATL/ + ACADEMICS
Goal 1: OKA Profiles

Approaches to Learning Composite Score

-1 SD
Mean
+1 SD

Early Academics Composite Score

Mean -1 SD +1 SD

-1 SD
Mean
+1 SD

[Graph showing data points and standard deviations]
GOAL 1: OKA PROFILES

School readiness profiles of entering kindergarteners and their implications for early classroom success.

Mean -1 SD + 1 SD

Early Academics Composite Score

Approaches to Learning Composite Score

+ ATL/+ ACADEMICS 10,051 25%
Goal 1: OKA Profiles

School readiness profiles of entering kindergarteners and their implications for early classroom success

Mean - 1 SD

Early Academics Composite Score

Approaches to Learning Composite Score

<table>
<thead>
<tr>
<th>ATL/ ACADEMICS</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>+/+ ACADEMICS</td>
<td>10,051</td>
<td>25%</td>
</tr>
<tr>
<td>-/- ACADEMICS</td>
<td>10,197</td>
<td>25.5%</td>
</tr>
</tbody>
</table>
Goal 1: OKA Profiles

School readiness profiles of entering kindergarteners and their implications for early classroom success

<table>
<thead>
<tr>
<th>Approaches to Learning Composite Score</th>
<th>+ATL/+ACADEMICS</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>10,051</td>
<td>10,197</td>
<td>7,381</td>
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<tr>
<td>%</td>
<td>25%</td>
<td>25.5%</td>
<td>18%</td>
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</tbody>
</table>

Early Academics Composite Score
School readiness profiles of entering kindergarteners and their implications for early classroom success

| Approaches to Learning Composite Score | Early Academics Composite Score | Data
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>+ ATL/+ ACADEMICS</td>
<td>10,051</td>
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<td>- ATL/+ ACADEMICS</td>
<td>7,381</td>
<td>18%</td>
</tr>
<tr>
<td>+ ATL/- ACADEMICS</td>
<td>6,724</td>
<td>17%</td>
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Goal 1: OKA Profiles

School readiness profiles of entering kindergarteners and their implications for early classroom success.

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<tr>
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<th>- ATL/- ACADEMICS</th>
<th>- ATL/+ ACADEMICS</th>
<th>+ ATL/- ACADEMICS</th>
<th>Very Lows</th>
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<tbody>
<tr>
<td>+ 1 SD</td>
<td>10,051</td>
<td>10,197</td>
<td>7,381</td>
<td>6,724</td>
<td>1,796</td>
</tr>
<tr>
<td>Mean</td>
<td>25%</td>
<td>25.5%</td>
<td>18%</td>
<td>17%</td>
<td>4.5%</td>
</tr>
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Early Academic Composite Score

Graph showing the distribution of early academic composite scores with mean, +1 SD, and -1 SD levels.
**Goal 1: OKA Profiles**

School readiness profiles of entering kindergarteners and their implications for early classroom success

### Early Academic Composite Score

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<th>Score</th>
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<td>+ ATL/+ ACADEMICS</td>
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<td>Very Lows</td>
<td>1,796</td>
<td>4.5%</td>
</tr>
<tr>
<td>Super Regulators</td>
<td>3,918</td>
<td>10%</td>
</tr>
<tr>
<td>Profile Name</td>
<td>N</td>
<td>Percent of entering kindergarteners</td>
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<td>-------------------------------------</td>
</tr>
<tr>
<td>+<em>ATL</em>/+_ACADEMICS</td>
<td>10,051</td>
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GOAL 2: EXPLORING DEVELOPMENT

- Caveat: Early Childhood Longitudinal Study (Kindergarten Class of 2011)
Goal 2: Academic Development

Math Rank at Beginning of Kindergarten

+ATL/+ACADEMICS

Super Regulators

-ATL/+ACADEMICS

+ATL/-ACADEMICS

Very Lows

Math Change Scores

-ATL/+ACADEMICS

Very Lows

Super Regulators

+ATL/-ACADEMICS

+ATL/+ACADEMICS
GOAL 2: ACADEMIC DEVELOPMENT

Reading Rank at Beginning of Kindergarten

- ATL/+ ACADEMICS

Super Regulators

- ATL/+ ACADEMICS

+ ATL/- ACADEMICS

Very Lows

Reading Change Score

-ATL/+ ACADEMICS
Very Lows
Super Regulators
+ATL/- ACADEMICS
+ATL/+ ACADEMICS
Goal 2: Social Development

End of Year Closeness with Teacher

- ATL/+ACADEMICS
- Very Lows
- Super Regulators
- +ATL/-ACADEMICS
- +ATL/+ACADEMICS
Goal 2: Social Development

End of Year Conflict with Teacher

- ATL/+ACADEMICS
- Very Lows
- Super Regulators
- +ATL/-ACADEMICS
- +ATL/+ACADEMICS
# Takeaways

1) 6 profiles of entering kindergarteners in Oregon

<table>
<thead>
<tr>
<th>Profile</th>
<th>ATL/+ Academics</th>
<th>ATL/- Academics</th>
<th>ATL/+ Academics 2</th>
<th>ATL/- Academics 2</th>
<th>ATL/- Academics</th>
<th>Very Lows</th>
<th>Super Regulators</th>
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<td></td>
<td></td>
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<td>25%</td>
<td>25.5%</td>
<td>25.5%</td>
<td>4.5%</td>
<td>10%</td>
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<td>35% Economically Disadvantaged*; 6% English Language Learners*</td>
<td>72% Economically Disadvantaged**; 33% English Language Learners**</td>
<td>38% Female; 10% English Language Learners</td>
<td>71% Economically Disadvantaged; 37% Special Education Referrals**; 26% Females*</td>
<td>67% Female**; 3% Special Education Referrals</td>
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<td>18%</td>
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<td>57% Female; 25% English Language Learners</td>
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2) There are suggestions of differential academic and social development within these readiness profiles

- The Very Lows are starting behind academically and developing more slowly across the kindergarten year.

- The $+_\text{ATL/-ACADEMICS}$ and Very Lows start at similar places academically, but the $+_\text{ATL/-ACADEMICS}$ develop more across the year than the Very Lows.

- $-_\text{ATL/+ACADEMICS}$ and Very Lows show the lowest levels of closeness and highest levels of conflict with their teachers at the end of the year.
**NEXT STEPS**

1) Continue developmental analysis of these clusters using OKA pilot data
   - Project to 3rd grade outcomes
   - Explore how classroom experiences may differentially facilitate development of children in certain profiles

2) Aggregate profiles to the school level
   - Characterize schools by their composition of these kindergarten entry profiles
   - Use community level factors to predict school-level composition of kindergarten entry profiles
   - Target relevant resources to schools and communities with certain needs
SPECIAL THANKS TO...

CEEDR LAB: Andy Mashburn, Rita Yelverton, Price Johnson, Amy Cordier, Jessica Robbeloth, Emily Weiss

OREGON SCHOOL READINESS RESEARCH CONSORTIUM
THANK YOU