Some Assembly Required
Piecing Together the Preparation Preschool Teachers Need

Hannah Putman, Amber Moorer & Kate Walsh

National Council on Teacher Quality
Today’s discussion

• Overview of preschool and the preschool teacher prep landscape
• Turning over the puzzle pieces: Looking at findings
• Policy recommendations and teaching resources
• Response from NIEER
• Questions
Does preschool offer lasting benefits?

Some studies say yes, that children who attended preschool need special education services at lower rates; have higher test scores; attend and complete college at higher rates; and even have fewer health problems.

Other studies say the costs outweigh the benefits, because those benefits fade within a few years, with some who attended preschool performing even worse than their peers who did not.
What have people overlooked in discussions of preschool’s fleeting benefits?

Teachers.

Teachers are the most significant in-school factor that affects children’s academic outcomes. We expect preschool teachers to not only teach children for a year, but to impart learning that lasts for decades.

Are preschool teachers getting the training they need to deliver a high-quality and enduring preschool experience?
NCTQ’s work on teacher quality
Bachelor’s and master’s degrees are held up as the “gold standard” for preschool teacher prep. Do they deliver?

Many paths lead to teaching preschool...

...but even the “gold standard” offers no guarantee that aspiring preschool teachers will learn essential skills.
Certifications to teach preschool take many forms
A peek behind the curtain at the components of this study

What we look at
- Course requirements and descriptions
- Course syllabi
- Required textbooks, textbook descriptions and chapter listings
- Student teaching observation & evaluation forms
- Student teaching handbooks

How we decide what to look for
- Expert panel
- High-quality research

We focus on 100 prep programs in 29 states, primarily bachelor’s and master’s programs.
A great preschool teacher has many skills.

<table>
<thead>
<tr>
<th>Looks to health, safety &amp; nutrition</th>
<th>Nurtures the whole child</th>
<th>Understands the role of play in learning</th>
<th>Helps children explore science around them</th>
<th>Helps ELL bilingual students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engages families</td>
<td>Builds a literacy foundation</td>
<td>Develops language</td>
<td>Introduces early math concepts</td>
<td>Monitors and assesses student progress</td>
</tr>
<tr>
<td>Creates a warm, inviting classroom</td>
<td>Understands how children develop</td>
<td>Has experience working with children</td>
<td>Opens children up to the world</td>
<td>Infuses art &amp; music into classroom</td>
</tr>
</tbody>
</table>
While all skills are important, those in dark blue are the objects of this study.
Most prep programs fall short on too many fronts

Bottom line problem? Most programs focus too much training on how to teach older kids.
Turning over the puzzle pieces

WHAT TRAINING DO TEACHER PREP PROGRAMS PROVIDE IN EACH FOCUS AREA?
Do prep programs give teachers the tools to help young children learn to read and build language skills?
Here’s what experts say about building children’s language skills

A great preschool teacher should:

• Expose children to lots of words, building their vocabulary
• Engage children in frequent conversations with lots of back-and-forth exchanges
• Persistently talk about what they’re doing as well as what children in the class are doing
• Ask lots of questions that challenge children to think!
• Read books aloud

An average child from a low-income background enters preschool having heard 30 million fewer words than his higher-income peer. Any delay in closing this gap makes it an almost impossible task.
While many programs in this study require a course covering how to build children’s language skills, quite a few miss the mark.

- 59% require a course that includes teaching preschool content.
- 21% require a course, but the grade span is unclear or omits preschool.
- 20% do not require a course.
Bottom line problem? These courses treat language as a sideline topic

The average program spends only ¼ of one course’s lectures on this topic
The difference is clear: Programs that spend more time on language can go much deeper

Lectures from sample course clearly devoted to building language

- “Factors that contribute to language acquisition”
- “Explicit vocabulary instruction”
- “Assessing young children’s language and early literacy”
- “What are Childhood Language Disorders?”
- “The science and theory of language development”
- “Supporting the speaking of the very young”
- “What is a positive talk environment?”

Lectures from sample course giving short shrift to language

- “Vocabulary development”
- “Emergent learners & preliterate stage”
What gets measured gets taught – student teaching evaluations offer insight into what programs value

Do programs evaluate teacher candidates on these essential skills for building language:

Does the candidate know how to ask questions?

Does the candidate build critical thinking in her students?

Does the candidate provide children with lots of opportunity to talk, particularly back and forth conversations?

Does the candidate model the uses of language (e.g., describing what self or a student is doing)?

Does the candidate build vocabulary, both explicitly and through context?
But many programs fail to look for their candidates’ skills in these key areas

- Building vocabulary: 8%
- Modeling language: 16%
- Providing opportunities to talk: 28%
- Developing critical thinking: 56%
- Asking questions: 60%

Percent of programs evaluating student teachers in each area
Here’s what experts say about building children’s foundational reading skills

A great preschool teacher should:

• Build children’s ability to detect or manipulate the sounds in words (phonological awareness)

• Build children’s understanding of the sounds represented by letters (phonemic awareness, a subset of phonological awareness)

• Teach the letters of the alphabet

• Teach concepts of print like the idea of title, author, and illustrator; which direction text goes; and how and which way to turn pages in a book

• Read lots of great books to children while using those books to teach vocabulary, discuss events and characters’ emotions, and introduce content

Children with low levels of literacy in preschool have trouble catching up in elementary school.
Most programs have a course on early literacy—but why not all?

- 73%: Program requires a course that includes teaching literacy to preschool children
- 25%: Program requires a course, but grade span is unclear or omits preschool
- 2%: Program does not require a course that addresses teaching literacy
Other topics distract from main business of building the “reading” brain

What’s being taught instead?
Topics appropriate for teaching older children: phonics, fluency, intermediate and advanced readers, and running records
Big chunks of critical literacy topics are overlooked in most coursework

62% Teach about building understanding of the sounds of words or letters (phonological and/or phonemic awareness)

44% Teach about developing alphabetic knowledge

36% Teach about building children’s understanding of print and books

20% Teach about and expect candidates to practice reading aloud to children
Do prep programs give teachers the tools to introduce young children to math and science?
Here’s what experts say about building children’s mathematical and science thinking

**A great preschool teacher should:**
- Build children’s number sense and understanding of where numbers fall on a number line
- Teach about patterns, including how to identify a pattern or continue one
- Introduce measurement and how to measure objects in different ways
- Help children explore what shapes are and how to compare them
- Know how to foster children’s interest in and exploration of science concepts

Some research finds that the relationship between early and later math skills is even stronger than the relationship between early and later reading skills.
Too few programs require a course that explores either math or science in preschool.

**Math**
- 46% Program requires a course that includes teaching preschool
- 14% Program requires a course, but grade span is unclear or omits preschool
- 40% Program does not require a course

**Science**
- 35% Program requires a course that includes teaching preschool
- 33% Program requires a course, but grade span is unclear or omits preschool
- 32% Program does not require a course
Do prep programs give teachers the tools to create a learning-friendly environment?
Here’s what experts say about establishing a warm and inviting classroom

A great preschool teacher should:

• Understand how children develop from birth to age eight
• Set, teach, and reinforce rules and routines
• Know how to direct or redirect children's behavior
• Manage centers, play, and other features of preschool classrooms
• Help children learn how to regulate their own behaviors and emotions

Well-run classrooms help children develop self-regulation and build academic skills. Teachers benefit from a deep understanding of child development from infancy to early elementary school.
Child development courses should focus on birth through age 8 – but most don’t

- 35% Requires a course, focuses on recommended birth – age 8
- 14% Requires a course, covers too broad an age range
- 29% Requires a course, does not address up to age 8
- 10% Requires a course, omits birth/infancy
- 10% Requires a course, unclear age range
- 2% Does not require a course
When evaluating student teachers, many programs don’t pay attention to whether the candidate can...

- Address disruptive behavior: 19%
- Use praise & positive reinforcement: 26%
- Manage materials: 48%
- Establish & reinforce rules & routines: 68%
- Maintain student engagement: 74%

Percent of programs evaluating student teachers in each area
Less than half of programs evaluate several essential preschool management skills, like whether the student teacher can...

- Manage centers or play: 36%
- Build students’ executive functioning: 48%
- Establish a warm or positive class climate: 71%

Percent of programs evaluating student teachers in each area.
Do prep programs provide enough practice?
Here’s what experts say about student teaching

A high-quality student teaching experience should:

• Provide practice in an actual preschool
• Pair student teachers with effective teachers who are also good at mentoring adults
• Provide a lot of feedback opportunities from both the classroom teacher and the university supervisor
Most programs do encourage aspiring preschool teachers to student teach in an actual preschool.
But, as in K-12 prep, too few programs attend to the quality of the experience.
Does the program’s gradespan affect the quality of training?
Does the grade span of the prep program matter? Yes.

In this study sample:
Programs that expand to older grades are much more likely to overlook essential preschool skills.

<table>
<thead>
<tr>
<th>Subject</th>
<th>No higher than K</th>
<th>Up to 3rd grade</th>
<th>Up to 4th grade or beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>78%</td>
<td>70%</td>
<td>42%</td>
</tr>
<tr>
<td>Literacy</td>
<td>100%</td>
<td>82%</td>
<td>55%</td>
</tr>
<tr>
<td>Math</td>
<td>53%</td>
<td>22%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Legend:
- No higher than K
- Up to 3rd grade
- Up to 4th grade or beyond
Resources & Recommendations
Resources for teachers: Developing language

Take free online training on building language skills through Cox Campus’s Read Right from the Start

Transforming Story Time
Learn the START strategy, a way of reading books with children that builds comprehension, language, and vocabulary.

Building World Knowledge
Understand how world knowledge is necessary for comprehension and how to incorporate informational text in the classroom.

Foundations of Learning to Read
Learn how phonological awareness, alphabet knowledge and concepts of print are necessary skills in preparing children to learn to read.

Read Right from the Start
by the Rollins Center for Language & Literacy
Resources for teachers: Teaching math

Free practice guide

• Includes suggested games, activities, and tips on how to assess children.
Resources for teachers: Observation instruments

Ask a colleague to observe and give you feedback with one of these instruments

AppleTree Institute: Quality Indicators Rubric
Core Knowledge Foundation: Preschool Snapshots
Classroom Assessment Scoring System (CLASS)
Policy Recommendations

Amidst push for expanding access to preschool, give serious consideration to quality of preschool teachers.

- Create centralized information about the different pathways available to teach preschool
- Encourage teacher prep programs to offer preschool endorsement
- Require that programs certifying preschool teachers provide relevant coursework and high-quality student teaching experiences
Want to learn more?

- Resource for policymakers
- Resource for aspiring teachers
- Resource for teachers and providers
- Detailed look at the research

Visit www.nctq.org/dmsStage/Preschool
Response to NCTQ findings

Hear from Allison Friedman-Krauss, Ph.D.
National Institute for Early Education Research

• NIEER conducts and communicates research to support high-quality, effective early childhood education for all young children.
• Since 2003, NIEER has published annual state preschool yearbooks that track the funding, access, and policies of state-funded preschool programs – available here.
Our thanks for:

Funding from: W. K. Kellogg Foundation

Research analysis by: Patricia Vane

Project direction: Barbara Davidson and Julie Greenberg

Support from graduate fellow: Jack Powers

Insight from our expert panelists: Marilyn Jager Adams, Sue Bredekamp, Sherry Davidson, Vicki Gibson, Susan Gunnewig, Bridget K. Hamre, Ruth Kaminski, Deborah Leong, Craig Ramey, Sharon Ritchie, Katharine B. Stevens

Helpful critiques and feedback from: Lisa Hansel, Lydia Carlis, Alan Cohen, Lori Connors-Tadros, Rebecca Gomez, and Katina Kearney

An opportunity to see quality preschool in action, hosted by: East Lake Early Learning Academy, Drew Charter School, The Cox Campus, and the Cox Foundation
<table>
<thead>
<tr>
<th>Helps children explore science around them</th>
<th>Helps ELL bilingual students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develops language</td>
<td>Monitors and assesses student progress</td>
</tr>
<tr>
<td>Introduces early math concepts</td>
<td>Creates a warm, inviting classroom</td>
</tr>
<tr>
<td>Opens children up to the world</td>
<td>Understands how children develop</td>
</tr>
<tr>
<td>Has experience working with children</td>
<td>Builds a literacy foundation</td>
</tr>
<tr>
<td>Understands the role of play in learning</td>
<td>Nurtures the whole child</td>
</tr>
<tr>
<td>Engages families</td>
<td>Looks to health, safety &amp; nutrition</td>
</tr>
</tbody>
</table>

Questions?
Hannah Putman
*Director of Research*
National Council on Teacher Quality

hputman@nctq.org
202-393-0020 x108

http://www.nctq.org/dmsStage/Preschool