The Abecedarian Approach in the Early Years: Benefits for Life

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a·be·ce·dar·i·an  (a’ bē · cē · dâr’ ē · ēn)
noun, adjective

one learning the rudiments of something (as the alphabet)  *Etymology: Middle English abecedary, from Medieval Latin abecedarium, alphabet, from Late Latin, neuter of abecedarius of the alphabet, from the letters  \( a + b + c + d \)
Abecedarian research studies (RCT’s)

<table>
<thead>
<tr>
<th>Randomized Samples</th>
<th>Location</th>
<th>N</th>
<th>Duration of Program</th>
<th>Type of Program</th>
<th>Oldest age of follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abecedarian 1</td>
<td>Chapel Hill, NC</td>
<td>111 children</td>
<td>Birth to age 5 years</td>
<td>Center + social work + home visits + health care</td>
<td>age 35</td>
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<tr>
<td>(The Abecedarian Project)</td>
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<tr>
<td>Abecedarian 2</td>
<td>Chapel Hill, NC</td>
<td>64 children</td>
<td>Birth to age 5 years</td>
<td>Center + social work + educational home visits + health care</td>
<td>age 21</td>
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<td>(Project CARE)</td>
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<td>Abecedarian 3</td>
<td>Boston, MA</td>
<td>138 children</td>
<td>Birth to age 3 years</td>
<td>Center + educational home visits</td>
<td>age 18</td>
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<tr>
<td>Abecedarian 4</td>
<td>New Haven, CT</td>
<td>112 children</td>
<td>Birth to age 3 years</td>
<td>Center + educational home visits</td>
<td>age 18</td>
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<td>Abecedarian 5</td>
<td>Bronx, NY</td>
<td>138 children</td>
<td>Birth to age 3 years</td>
<td>Center + educational home visits</td>
<td>age 18</td>
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<td>Abecedarian 6</td>
<td>Philadelphia, PA</td>
<td>101 children</td>
<td>Birth to age 3 years</td>
<td>Center + educational home visits</td>
<td>age 18</td>
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<td>Abecedarian 7</td>
<td>Miami, FL</td>
<td>100 children</td>
<td>Birth to age 3 years</td>
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<td>Abecedarian 8</td>
<td>Little Rock, AK</td>
<td>128 children</td>
<td>Birth to age 3 years</td>
<td>Center + educational home visits</td>
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<td>Abecedarian 9</td>
<td>Dallas, TX</td>
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<td>Birth to age 3 years</td>
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<td>age 18</td>
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<td>Abecedarian 10</td>
<td>Seattle, WA</td>
<td>131 children</td>
<td>Birth to age 3 years</td>
<td>Center + educational home visits</td>
<td>age 18</td>
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<td>Abecedarian 11</td>
<td>Baltimore, MD</td>
<td>48 children</td>
<td>Age 1 to 2 years</td>
<td>Parent training for home intervention</td>
<td>age 2</td>
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<td>(Cerebral Palsy Study)</td>
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<td>Abecedarian 12</td>
<td>Iasi, Romania</td>
<td>65 children</td>
<td>Age 1 to 2 years</td>
<td>Home (small group in orphanage)</td>
<td>age 2</td>
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<tr>
<td>(Orphanage Study 1)</td>
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<tr>
<td>Abecedarian 13</td>
<td>Iasi, Romania</td>
<td>104 children</td>
<td>Age 2 to 3 years</td>
<td>Home (small group in orphanage)</td>
<td>age 3</td>
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<tr>
<td>(Orphanage Study 2)</td>
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<td>Abecedarian 14</td>
<td>USA, national</td>
<td>2,430 parents</td>
<td>Age 3 to 4 years</td>
<td>Preschool + daily parent education groups</td>
<td>age 5</td>
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<td>(CLIO Study)</td>
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<td>Abecedarian 15</td>
<td>Massachusetts, state-wide</td>
<td>150 family childcare providers</td>
<td>2 years (between Birth to 5 yrs)</td>
<td>Family child care homes</td>
<td>caregiver data only</td>
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<tr>
<td>(Massachusetts Family Child Care Study)</td>
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<td>Abecedarian 16</td>
<td>Winnipeg, Manitoba, Canada</td>
<td>64 children</td>
<td>Birth to 5 years</td>
<td>Center + educational home visits</td>
<td>(began Feb. 2012)</td>
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<td>(Healthy Child Manitoba Evaluation)</td>
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Plus a newly funded ARC research study in remote towns in NT, Australia
Child cognitive development across the first 4 years in the normal range, (IQ > 84)

Important and rapid cognitive growth happens very early in life.
Educational attainment:
percent university graduation by age 30

Campbell et al., (2012). Developmental Psychology.
Abecedarian Long-term health outcomes for vulnerable children

- **At 18 years of age:** fewer risky behaviors \((p<.05)\)

- **At 21 years of age:**
  - Fewer symptoms of depression \((p<.03)\) at age 21
  - Healthier life styles. The odds of reporting an active lifestyle in young adulthood were 3.92 times greater compared to the control group
  - A significant reduction in teen parenthood (26% compared with 45% of controls, \(p<.05\))

- **At about 35 years of age:**
  - Better blood pressure and less metabolic syndrome

McLaughlin et al. (2007). *Child Development.*
Campbell et al. (2014). *Science.*
Long-term health outcomes for Abecedarian treatment and control children

WHAT WE REALLY HADN’T APPRECIATED BEFORE WAS HOW SUBSTANTIAL THE HEALTH IMPACTS WOULD BE.

James Heckman
Nobel Laureate in Economics

On his recent study examining the health effects of quality early childhood development
Benefits of investing in early education…

“The argument is not just an appeal to the poor. We’re saving money for everyone, including the taxpaying middle class and upper class. Right now they’re supporting prisons, health, special education in schools. The benefit is broadly shared. … It’s something that would actually accrue to the whole country.”

James Heckman, Nobel Laureate in Economics
A Research validated program delivered in the first 5 years of life could create a future where previously vulnerable children succeed and thrive in school.
In Australia, it is called…

ABECEDARIAN APPROACH AUSTRALIA
Elements of 3a

- Learning Games
- Conversational Reading
- Language Priority
- Enriched Caregiving
Component 1

Language Priority
Language Priority – 3N Strategy

notice
nudge
narrate
Video: 3N Strategy

Adult enters into child’s independent play & scaffolds with language.
Look for the Notice, Nudge, & Narrate labels.
Component 2

Conversational Reading
- It goes back-and-forth, like a conversation

- It goes up steps
Joint attention:  
At first follow the child’s lead – match your attention to his 

Later, see if the child will follow your lead and match his attention to yours
Conversational Reading
Galiwinku, NT

In language
Component 3

LearningGames®
ASG LearningGames® - http://www.marcom.com.au

NT LearningGames® - earlychild.det@nt.gov.au
Ride a Horsie

What the adult might say (the “Talk”)

Picture showing appropriate position for adult and child

1 sentence explaining the activity

1 sentence telling why it is important

Do a special action on the same one or two words in a rhyme and see if your baby notices.

Your baby will learn to look forward to certain words and their matching actions.
Why this is important

Babies enjoy all kinds of rhythm games. By moving your baby in a special way when you say a specific word in a song, your baby will learn to look forward to the particular word that signals the special event. This helps your baby learn that words can tell her what is happening to her. Hearing a rhyme repeated and moving to it in the same fun way gives her confidence in her ability to predict what will happen next.

What you do

- Hold your baby on your lap as you say the rhyme: Ride-a-horse, ride-a-horse, ride him into town. Ride-a-horse, ride-a-horse, up and down. Gently bounce her to the rhythm of the rhyme.
- Bounce your baby high when you say up; when you say down, bounce her low.
- Make eye contact with your baby so that she can see your smiling face and you can see what she is feeling during the game.
- Repeat the rhyme and movements several times, then try pausing before saying up and down. She may show you she knows what will happen next by laughing, kicking her feet, or trying to move her body high and low.

Another idea

Try the game using other songs and rhymes such as “This is the Way the Farmer Rides,” which uses changing rhythms and motions. Choose a special word or words and move your baby in a different way when you sing those words in the song.

Let’s read together!

Up!
by Kristine O’Connell George

Fuller explanation of why the activity is important and what later skills it is building toward

A book that relates to this game

Example of a variation or more advanced version of the game
What the adult might say (the “Talk”)

Pictures showing appropriate position for adult and child

Short sentence explaining the activity

GAME 16  Kanga Hopping

Hold baby on your lap looking at you.

Sing a song and bounce.
“Kanga hopping all around. Kanga hopping up and down!”

Bounce high when you say, “up.”

Bounce low when you say, “down.” Smile.
Explanation of why the activity is important and what later skills it is building toward

Variations on the game or more advanced version of the game

A sentence about family strengths
Game 94. What’s Gone?
Age 30 mos.

How does this game use Language Priority?

How does it prepare children to succeed in school?
Game 94. What’s Gone?

What did the little girl not know how to do at the beginning of the game?
Component 4

Enriched Caregiving
Each routine or activity has a **CARE** component, an **EMOTIONAL** component, and an **EDUCATIONAL** component.

Enriched Caregiving

CARE + EMOTION + EDUCATION = Enriched Caregiving
Enriched Caregiving – Mealtimes

See if the adult:

- Describes what is happening
- Names things
- Asks questions
- Teaches words such as “more”
Where is it being used?
The TRADITIONAL LANDS of The INNAWONGA BANYJIMA and NYIYAPARLI PEOPLE.
3A in the NORTHERN TERRITORY

Arnhem Land, NT
• Supported by the Department of Education and Early Childhood Development (DEECD), Victoria government:
  – Professional Learning in Child Care and Preschool
  – Professional Learning in Family Day Care Schemes
Winnipeg, Manitoba, CANADA
Winnipeg, Manitoba, CANADA
Family Booklets
Family Booklets

- Could these be useful to MCH nurses?

Each booklet is 20 pages with large pictures and brief text