Maximize Success for Students Living in Poverty
Summer Professional Learning Conference 2018

Phuong Lien Palafox, M.S., CCC-SLP
phuong.palafox@bilinguistics.com
http://bilinguistics.com/speech-therapy-blog/

Today's Goals

1. List statistical information related to children living in poverty in the United States and Alabama
2. List the effects of poverty on behavior and communicative performance
3. Identify effective strategies to use as a speech-language pathologist when working with children living in poverty

Statistical Information Related to Poverty

Data on child and family well-being: http://datacenter.kidscount.org/

- Economic Well-Being
- Education
- Health
- Family and Community

There is a gap between our Business Community and Human Community

- The unemployment rate, as of May of 2018, is at 3.8%.
- Unemployment is down by half from its peak of 10% in 2009.
- Americans saw their paychecks go up, too.

--and—

- Nationally, between 2000 and 2012, the percentage of people in poverty increased from 12.2 percent to 15.9 percent, while the number of people in poverty increased from 33.3 million to 48.8 million (U.S. Census Bureau, 2013)
- Both the number and percentage of people in poverty increased in 44 states between 2000 and 2012 (U.S. Census Bureau, 2013)
- Approximately 51 million households cannot afford a monthly budget (e.g., housing, food, child care, health care, transportation and a cell phone) (United Way ALICE Project).
Population Growth – U.S. Census Bureau

U.S. child pop grew by 2 million between 2000 and 2010

- Texas population grew by 1 million between 2000 (5.9 million) and 2010 (6.9 million)
- States with most growth within 10 years: Utah (21.3%), Texas (20.2%), Florida (13.9%), Nevada (19.7%), Colorado (17%), North Dakota (18.9%)
- Alabama’s growth grew by 7.48% (4.4 million → 4.7 million)

Poverty in United States

To be considered “officially poor,” a family of four makes no more than $25,100 annually.

<table>
<thead>
<tr>
<th>PERSONS IN FAMILY/HOUSEHOLD</th>
<th>POVERTY GUIDELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$12,140</td>
</tr>
<tr>
<td>2</td>
<td>$16,460</td>
</tr>
<tr>
<td>3</td>
<td>$20,780</td>
</tr>
<tr>
<td>4</td>
<td>$25,100</td>
</tr>
<tr>
<td>5</td>
<td>$29,420</td>
</tr>
<tr>
<td>6</td>
<td>$33,740</td>
</tr>
<tr>
<td>7</td>
<td>$38,060</td>
</tr>
<tr>
<td>8</td>
<td>$42,380</td>
</tr>
</tbody>
</table>

(U.S. Poverty Guidelines 2018)

Poorest States: Mississippi, New Mexico, **Alabama**, Louisiana, South Carolina, Kentucky, Georgia, North Carolina, West Virginia, Arkansas (U.S. Census Bureau)
How is the poverty measure calculated?
The “three-times-the-cost-of-the-food-plan” calculation was determined in the 1960’s using the Agriculture Department’s economy food plan. (U.S. Census Bureau)

- U.S. Department of Agriculture food budgets designed for families under economic stress.
- Data about what portion of their income families spent on food.

At this time, food is 1/7 of a family’s budget. Modern family expenses include housing, medical costs, childcare and transportation. Poverty does not account for differences in cost of living across the lower 48 states.

Poverty Rates
40.1 million Americans receive food stamps as of June, 2018
Approximately 43 million Americans live below the poverty line

Poverty Rates of Children in United States:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>17%</td>
<td>19%</td>
<td>22%</td>
<td>22%</td>
<td>19%</td>
</tr>
<tr>
<td>Count</td>
<td>12,209,000</td>
<td>13,360,000</td>
<td>15,749,000</td>
<td>15,686,000</td>
<td>14,116,000</td>
</tr>
</tbody>
</table>

One in every five children lives in poverty (National Kids COUNT Data)

Alabama Data

- Alabama is the sixth poorest state in the United States (U.S. Census Bureau)
- Over 18% of Alabamians live below the poverty line (U.S. Census Bureau)
- 14/67 counties have a poverty rate higher than 25 percent; 9/67 counties have a poverty rate higher than 30% (Alabama Civil Justice Foundation)
- Over 27% (approximately 300,000) children live in poverty in Alabama (Kids COUNT Data, 2017)
**Poverty Differs by Age**

![Bar chart showing poverty rates by age group.](chart)

US Census Bureau 2016

**Poverty Differs by Family Type**

Children in single-parent families are nearly 4x as likely to live in poverty as children in married-couple families.

<table>
<thead>
<tr>
<th>Type of Family</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-parent home</td>
<td>37% in Poverty</td>
</tr>
<tr>
<td>Married-couple home</td>
<td>9% in Poverty</td>
</tr>
</tbody>
</table>

**Poverty Differs by Race (Darker Columns = US, Lighter Columns = Alabama)**

![Bar chart showing poverty rates by race.](chart)

(U.S. Census Bureau, 2016)

Other includes Asians, Native Hawaiians and Pacific Islanders, American Indians, Aleutians, Eskimos and persons of “two or more Races.”
Poverty Differs by Region

![Map of the United States showing poverty distribution by region.

Poverty and Employment

- 30% of kids have parents who lack secure employment
- 5% of kids living in low-Income households where no adults work

Trends in Education

- Research shows that toddlers and preschoolers benefit when read to three or more nights per week. And children from low-income homes benefit the most.
- Children from low language resource backgrounds hear only the most commonly occurring words (Wietz, 2001).
- By age 5, the child of a professional family has heard 45 million words spoken as opposed to the 13 million words heard by a child in poverty (Hart and Risley, 1995).
- Children in poverty hear 75% fewer encouragements than children from a professional family. (Hart and Risley, 1995).
- Prior to kindergarten, a child in poverty averages a total of 25 home hours spent in reading experiences as opposed to high language resource background children who average 1,000 home hours (Whitehurst, 1997)
- Low-SES children also have fewer cognitive-enrichment opportunities. They have fewer books at home, visit the library less often, and spend considerably more time watching TV than their middle-income counterparts do (Kumanyika & Grier, 2006)
• Toddlers from middle and high income families speak MORE than parents from low SES environments when speaking to their own children (Bracy, 2006)
• 65% of children in the United States are below proficient reading levels. 33% are below basic proficient reading levels (Kids COUNT Data Center, 2017)
• For students attending schools receiving Title I funding, 74% are below proficient reading levels. For students not attending schools receiving Title I funding, 48% are below proficient reading levels (Kids COUNT Data Center, 2017)
• 91% of 4th Graders who are English Language Learners scored below proficient reading status. 61% of non-English Language learners scored below proficient reading status (Kids COUNT Data Center, 2017)

--and—

**We need to keep in mind that differences are not deficits.**

“I address this complex topic with great caution. It’s easy to stereotype, and not everyone living in poverty is equally affected. It is helpful for us as service providers to understand potentially harmful effects, so we can identify when poverty is influencing our evaluation results and intervention progress...We can use our knowledge of communication to give a massive boost to children from all walks of life.”

ASHA Leader March 2017 (Palafox)

**ASHA Roles and Responsibilities**

<table>
<thead>
<tr>
<th>Working Across All Levels</th>
<th>Serving a Range of Disorders</th>
<th>Ensuring Educational Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing Unique Contributions to Curriculum</td>
<td>Highlighting Language/Literacy</td>
<td>Providing Culturally Competent Services</td>
</tr>
</tbody>
</table>
Brain (and Heart) Talk

The brain needs socialization. Robin Dunbar, a British anthropologist, states that the ratio of a species’ neocortex to the rest of the brain is indicative of its social group size.

--and—
The brain needs to access background and prior knowledge. The medial prefrontal cortex supports our need to access prior knowledge. Robert Marzano, an educational researcher states, “What students already know about the content is one of the strongest indicators of how well they will learn new information relative to the content.” Dr. John Guthrie, a researcher in the arena of student motivation, states that comprehension is impossible without accessing prior knowledge.

**Jeff Duncan-Andrade, Associate Professor at San Francisco State University**

- Win the heart to get to the head
- Academic Rigor + Social Justice + Social-Emotional Connection
- I am relevant, and I have value

---

**Equality versus Equity**

Equality is symmetrical.

Equity addresses the individualized needs of multiple individuals.

**Blueprint for Educational Equity:**

- Invest in recruiting and training a diverse SLP cohort
- Give SLPs better resources
  - Financially
  - Growth & Professional Development
- Let’s talk about this
Social Determinants

In the United States:

1) we have the highest per capita health spending
2) we spend less than 9% toward disease prevention
3) we lag behind in many health indicators

Stacey Chang is the Executive Director of the Design Institute for Health, a collaboration between the Dell Medical School and the College of Fine Arts at the University of Texas at Austin. He discusses the 80/20 human breakdown. Typically, as medical professionals, we concentrate on the 20% that relates to illness/disorders when we should be concentrating on the 80% that keeps a human well. He speaks of the impact of the social determinants in healthcare, and it’s valuable.

We honor stories. We honor stories. We honor stories. We honor stories. We will. We will.

Why Use Storybook Interventions?

ASHA Says:

- Working Across All Levels
- Serving a Range of Disorders
- Ensuring Educational Relevance
- Providing Unique Contributions to Curriculum
- Highlighting Language/Literacy
- Providing Culturally Competent Services

The Law Says:

- IDEA 2004: Free and Appropriate Public Education
- IEP: Access to the General Curriculum
- SLP Services: Least Restrictive Environment

Language is our Superpower! (Ericson, 2009)

- “Language is the key” to later literacy development
- “Word knowledge” then helps develop their “world knowledge” and vice versa

Language and Reading


- Children with communication impairments often have difficulty learning to read and write.
- Almost half of preschool children with language impairments develop significant literacy learning difficulties (Aram & Nation, 1980) even if their delays appear to have been resolved by age 5 (Scarborough, 1990; 2002)
- Children with oral language impairment are at great risk for reading disabilities (Schuele, 2004)
• Proficient reading requires integrated skills across decoding and comprehension that draw on basic language tenets (semantics, syntax, and phonology) (Schuele, 2004)
• Children from lower socio-economic homes who succeeded as readers experienced (Dickenson & Tabors, 1991):
  1. Exposure to rich vocabulary
  2. Extended discourse
  3. Cognitively and linguistically stimulating home and school environments

Great Therapy Materials Should:
• provide repetitive structure
• be able to be used with all ages and cultures
• address goals across semantics, syntax, comprehension, pragmatics, and discourse
• decrease preparation time
• be fun and interesting for students
• make homework programs more relevant for parents
• allow for programmatic collection of intervention data
• **apply to academic needs**

Storybooks
• provide structure for addressing goals
• can be used with all ages and cultures
• can be used to address goals across semantics, syntax, comprehension, pragmatics, and discourse.
• can decrease preparation time are fun and interesting for students
• make homework programs more relevant for parents

Book Research: In order to be successful academically, children need to be able to read books, learn from books

• Increase development in multiple areas (Doyle & Bramwell, 2006; Debaryshe, 1993; Burner, 1978)
• Promote language development in children with typical development (Teale & Sulzby, 1986; Westby, 1985) and with language impairments (Gillam & Ukrainetz, 2006)
• Promote a greater desire to read (Mason & Blanton, 1971)
• Exposes student to printed materials and positive reading models (Teal, 1984)
Shared reading activities:

- Increase development in multiple areas (Doyle & Bramwell, 2006; Debaryshe, 1993; Burner, 1978)
- Promote language development in children with typical development (Teale & Sulzby, 1986; Westby, 1985) and with language impairments (Gillam & Ukrainetz, 2006)
- Promote greater desire to read (Mason & Blanton, 1971)
- Exposes student to printed materials and positive reading models (Teal, 1984)

Prelinguistic Pizazz

- Develop Pre-linguistic Skills
- Play
- Symbolic play predicts comprehension
- Gestures/Signs
- Bridge to producing language
- Joint Attention
- Gaze, pointing, showing, directing attention
- Vocalizations
- Diversity of sound types predicts expressive vocabulary and speech performance
- Comprehension
- Predicts grammatical complexity and vocabulary

Storybook Intervention

What Books Do I Choose? Building the narrative structure that is integral to communicating events and answering questions.

- Age-appropriate
- Interesting and relevant
- Related to goals
- Good illustrations
- Resources
- School librarians
- Classroom teachers
- Internet

Resources

- School librarians
- Classroom teachers
- Internet
Literacy-Based Interventions: Building the narrative structure that is integral to communicating events and answering questions.

- Pre-Reading Activities
- Reading Activities
- Post-Reading Activities

Pre-Reading Activities: Used to bridge any gaps between a student’s current skills and the targeted skills.

- **Music** – use songs semantically related to the material in the book. (Hoggan & Strong, 1994)
- **Semantic mapping/graphic organizers** – the adult and students develop a list of words and concepts related to the story and then develop a visual representation or map of how the words and concepts are related to one another (Gillam & Ukrainetz, 2006; Hoggan & Strong, 1994).
- **Illustration discussion** – The student creates a story using illustrations from the selected book. Scaffolding techniques may be used to facilitate higher semantic and syntactic complexity. Several templates that can be used during this activity are included.
- **Pre-reading discussion** – Pre-reading questions are designed to tie the students’ knowledge and ideas from the graphic organizer to the concepts in the book.

Reading Activities: While reading the book, use scaffolding techniques to engage the student and check understanding. Clinicians commonly use scaffolding techniques in order to help the student learn target skills.

Scaffolding techniques

- **Print reference** – The adult references a target from the book by pointing or commenting (e.g. The adult points to an illustration and asks, “What is happening in the picture?”)
- **Cloze procedures** – The adult provides the first part of an utterance and the student completes the thought (e.g. A: The mouse lost his balance and _____ S: fell off).
- **Syntactic and semantic expansions** – The adult expands on an utterance provided by the student using the grammar and vocabulary targets (e.g. S: The mouse walking. A: Yes, the little mouse is walking on the vine.).
- **Binary choice** – The adult offers the student two choices of responses (e.g. A: What happened to the mouse? Did he fall off or jump off the vine? S: He fell off the vine.).
- **Modeling** – The adult models the target structure for the student (e.g. What happened to the mouse when he was crossing the river? The mouse fell into the river.) (Liboiron & Soto, 2006).
**Post-Reading Activities:** Post-reading activities create a time when the student can review and reflect on what they have learned. For students with language impairments, post-reading activities are a powerful way to allow the student to experience success that they may not often feel in the classroom. Here are general post-reading activities.

- **Discussion questions** – The adult and student discuss the story. According to Gillam and Ukrainetz (2006), the clinician should respond to 40% to 60% of all questions with scaffolding techniques.
- **Syntactic activities** – Students create grammatical structures through a variety of art activities and games. *Suggested targets:* past tense and present progressive
- **Semantic activities** – Students add to their word books through art activities in the areas of object/function, part/whole, categories, antonyms, and synonyms. *Suggested targets:* comparison, categories, and action words.
- **Narrative retelling** – Use scaffolding techniques and visuals from the book to support the student while retelling the story.
- **Phonology/Articulation** – Use images from the book as well as general images in order to target specific phonological and articulation skills. See articulation chart in the following activities.

**Story Grammar Rap**

Characters are the people in a story.  
Setting is when and where.  
Problem, hey what’s wrong?  
Solution, let’s solve it!

Retention of skills improves 3x better with gestures. After three weeks, data demonstrates 90% versus 33% retention of skill (Cook, 2007).

**Take Away for Storybook Intervention**

- Language of intervention should mirror the child’s environment
- Initial therapy targets should be elements that exist in both language
- Let the child and the classroom guide the topics
- Use the same book across multiple groups to save planning time
Treatment Strategies - Recap

Use brain-based strategies to deliberately engage the brain and maximize learning. For example, use of gestures can increase memory threefold.

Use explicit step-by-step expectations: “First, we read. Then, we’ll act out the story!”

Children may not have access to technology, so use it in sessions. My students Skyped with an NFL football coach.

Make connections by basing lessons on topics familiar to your students.

Share speech, language and literacy goals with students.

Get parents involved through shared goal-setting and simple strategies they can try at home.

If caregivers struggle with literacy, send home wordless books so adults and children can discuss them together. My favorite wordless books include “Tuesday” and “The Arrival.”

Text parents short videos. Show how a session looks and sounds.

Building Student Self-Confidence

I’m smart.
I’ve got a kind heart.
I worked hard.
I had fun.
(Clap, clap!)

Think Outside the (Dyno)box!

- Stories about their day
- Students/Clients write their own story
- Poetry – Example of Annabel Lee by Edgar Allan Poe
It was many and many a year ago,
In a kingdom by the sea,
That a maiden there lived whom you may know
By the name of Annabel Lee;
And this maiden she lived with no other thought
Than to love and be loved by me.

I was a child and she was a child,
In this kingdom by the sea,
But we loved with a love that was more than love—
I and my Annabel Lee—
With a love that the winged seraphs of Heaven
Coveted her and me.

And this was the reason that, long ago,
In this kingdom by the sea,
A wind blew out of a cloud, chilling
My beautiful Annabel Lee;
So that her highborn kinsmen came
And bore her away from me,
To shut her up in a sepulchre
In this kingdom by the sea.

Narratives of Speech-Language Pathologists

Effect Size

.00 or less: Negative Effect
.00 -.20: Negligible, Unclear Effect
.20 -.40: Small-moderate Effects
.40 -.60: Very Strong Effects
.60 - 2.00: Extreme Effects

Student Expectations 1.44
Teacher Expectations 1.03
**Social and Behavioral strategies**

Create a positive, high-achieving environment. At the end of each session, for example, ask students to chant, “I’m smart. I’ve got a good heart. I worked hard. I had fun!”

Share decisions and give students a choice. “For this next month, would you like to read ‘A Chair for My Mother’ or ‘Henry’s Freedom Box’?”

Use inclusive words like “our”: “How should we decorate our bulletin board?”

Thank and praise students for big and small accomplishments: “I heard your beginning /r/ sound. You worked hard.”

Work on problem-solving skills in the classroom: “So, we read that Jeremy wants those shoes. How will he convince his grandma to buy them?”

**IEP Meetings** (per KIPP Public Charter Schools)

Before IEP Meeting: “Teachers, come prepared with student strengths.”

Beginning of IEP Meeting: “Teachers, tell us about the great things Michael has been doing this year.”

End of IEP Meeting: “Mom, tell us about how you feel about everything we discussed, “ and “Thank you for allowing us to be a part of his school experience.”