



Early Language Development Project

Intervention on 2 Fronts to Improve Academic Achievement

Jennifer Spencer-Iiams

Woodburn School District and the University of Oregon



Improvement Goal

*Students will improve scores on Oregon Assessment of Knowledge and Skills in both mathematics and English language arts by 10% overall.

Introduction

Early Language Development

Early oral language development is a key to future academic success. Yet many students enter kindergarten without the oral language proficiency to build skills in literacy and mathematics.

Woodburn School District's demographics reflect 75% Hispanic students, 72% of students entering kindergarten are English language learners, and all students in the district qualify for the federal free lunch program because of pervasive poverty. Woodburn schools are all dual language, either English/Spanish or English/Russian. Because all students in Woodburn are learning in 2 languages, it is especially critical that students come in strong in their home language.

In Woodburn, the School District is ready to stop looking for excuses and partner with the Community are to look for solutions. This is the basis for the Woodburn Early Language Development Project, affectionately known as "Woodburn Talks, Baby!" **By investing in students' oral language education in their first language, dual language education will be more effective in closing the achievement gap for all.**

Research & Theory

Recent developments in brain research confirmed that success in school begins in infancy (Kuhl, 2011). Proficiency in oral language concepts and vocabulary development are key to achievement in all areas of academic success, and most clearly related to the development of literacy. Risley and Hart (2011) conducted an intensive, longitudinal study that looked at the differences in parent-child interactions and found that the amount of words that parents spoke to their children from birth to 3 years old was radically different according to socioeconomic class, regardless of racial or cultural differences. The resulting differences in words heard puts a staggering 30 million word difference between children from professional families and welfare families by the time children are 4 years old.

Family Status	Words heard per hour	Words heard in a 100-hour week	Words heard in a 5,200 hour year	Words heard in 4 years
Welfare	616	62,000	3 million	13 million
Working Class	1,251	125,000	6 million	26 million
Professional	2,153	215,000	11 million	45 million

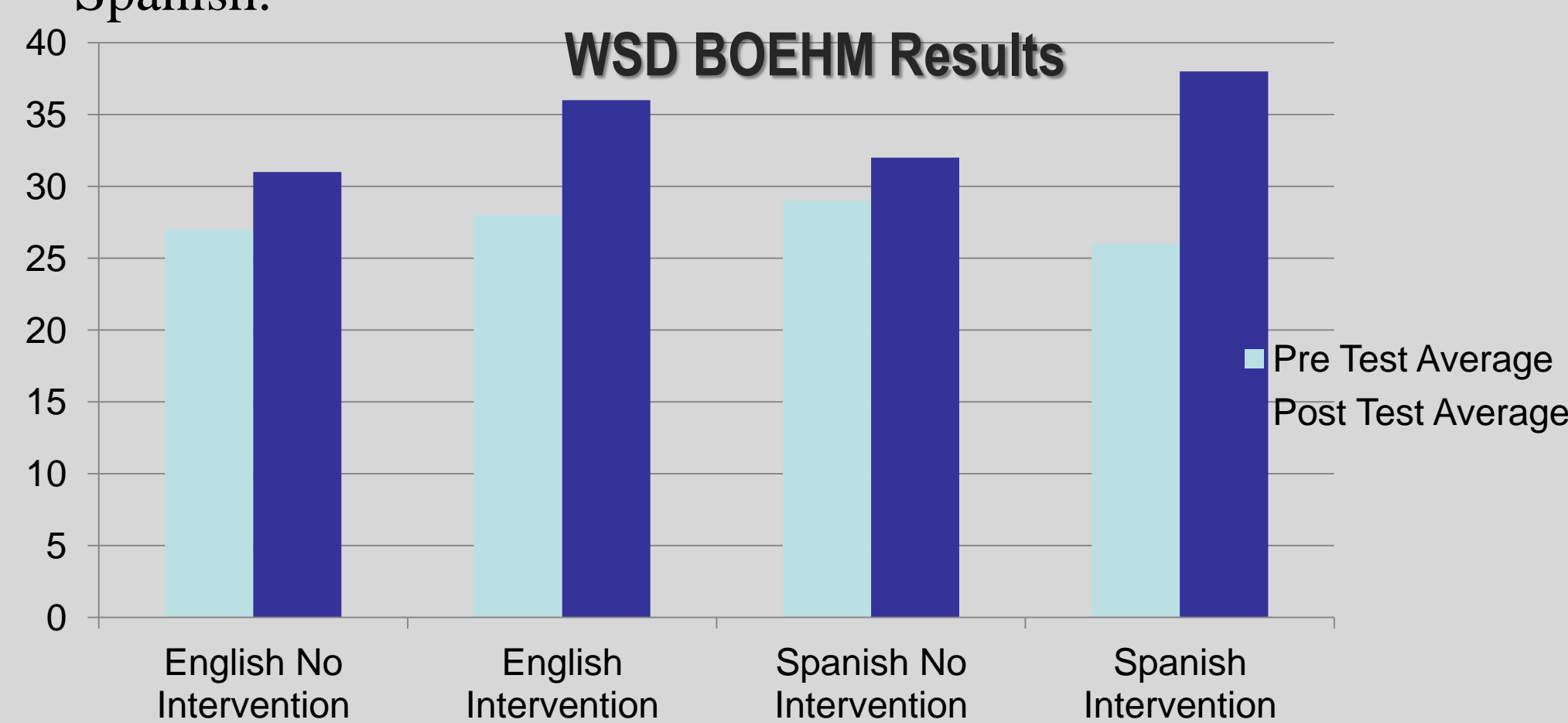
Figure A. Figure from Hart & Risely

Moreover, there is strong evidence that language and cognition are related, and if early intervention improves language development, cognition will also improve (Genesee, Paradis, & Crago, 2004). Finally, longitudinal studies conducted by Thomas and Collier (2002) show that students who develop literacy in 2 languages outperform same age peers on all academic peers, regardless of race or socioeconomic status.

Development of strong oral skills in students' first language, coupled with literacy instruction in 2 languages, will lead to a high academic achievement for all and a closing of the achievement gap for Hispanic students.

Action Research in Woodburn

Knowing the importance of early language development and the fact that more than 80% of students live in poverty, the Speech Pathologist team engaged in an action research project to determine if low language was an issue for kindergarten students in Woodburn. Eight kindergarten classrooms were selected for the research, with approximately 86% of students being English language learners. Each student was administered the BOEHM Test of the Basic Language Concepts in his or her primary language, either English or Spanish which has evidence as a technically adequate tool to assess acquisition of key vocabulary for early academic success (Boehm, 2001). The results showed that on average, students in Woodburn are significantly below their same age peers on language concepts, regardless of whether the language is English or Spanish.



The second phase of the action research project focused on intervention. Consultation was provided to half of the kindergarten teachers on ways to embed instruction on basic language concepts into their daily routines. Curriculum materials were also shared with these teachers, and the support continued on a weekly basis throughout the year. At the end of the year, the BOEHM was again administered to the students in all 8 classrooms. Though growth was seen across both the group that had the additional focus on basic language concepts and the non-intervention group, the group with the intervention scored higher.

Range of Options

In light of the research on the importance of early language development for success and what we learned from our action research project, we had considered a number of different options. First, we considered applying for an Even Start grant or other funding to start our own early intervention program. However, this was rejected because of the precarious nature of current federal grant funding, the concern of being spread too thinly, and the knowledge that this could only support a very limited number of families. Second, we considered running a summer preschool program focused on early language development. However, in light of the Hart & Risely research, it would be more effective to intervene with students at the birth to three age, and the most effective way to reach children this young is through their parents. Finally, consideration was given to only implementing one part of the project (either Baby Talk! or Into Kindergarten!). But as Into Kindergarten focuses on improving outcomes for current students, and Baby Talk! focuses on improving outcomes for future students, both were deemed necessary to implement.

Plan Specifics & Resources

Prong 1: Baby Talk!

Based on the parent empowerment model of Baby College from the Harlem Children's Zone (2002).



- Bring together key community members
 - Parks & Rec, Health Providers, Library, Headstart, Local newspaper
- Focus on empowering parents
- Create a 3 x 3 x 3 plan
 - Messaging
 - 3 short, meaningful understandable statements
 - High Profile Events
 - 3 events blanketing messages into the community
 - Creative & Meaningful Outreach
 - 3 new ways to educate & empower parents
- Implement the plan
- Plan for sustainability
 - Engage community groups for funding and publicity
 - Rotary, Kiwanis, PCUN, Chemeketa Community College



Prong 2: Into Kindergarten!

- Identify key vocabulary that crosses content
 - Using BOEHM concepts that are most closely related to achievement in mathematics and literacy
- Engage kindergarten teachers
 - Present action research data to staff at each elementary school, ask for input on ways to increase vocabulary development within current routines and content
- Create materials in English, Spanish, & Russian
 - Posters for teachers, brief lesson plan ideas, homework packets of activities
- Distribute materials to kindergarten teachers
 - Develop agreements for timelines, so the same language concepts are being emphasized across the 3 languages
- Implement instruction
 - Instruction within embedded routines (lining up, morning calendar, lunch)
 - Same concepts reinforced each week by specials teachers (music, P.E., library, guidance)
- Engage parents
 - Provide information at parent teacher conferences about the language concepts packets that will be coming and the importance of reinforcing these in everyday routines. Talk to and Read to Kids!!!
- Evaluate effectiveness
 - Annual pre/post tests with BOEHM

Contact Information

For further information, please contact Jennifer Spencer-Iiams, spencer3@uoregon.edu

Budget Implications

Baby Talk!

- Implemented by existing staff: \$0
- Printed Outreach materials: \$1200
- Translation to Spanish & Russian: \$350
- Incentives/Food for Parents: \$2000
- Extended Contract for planning: \$1000

Into Kindergarten!

- Implemented by existing staff: \$0
- Additional curriculum materials: \$850
- Translation to Spanish & Russian: \$350
- BOEHM Protocols: \$2500
- Extended Contract for planning: \$1000

Implementation Timeline

Baby Talk Action Item	Timeline	Into Kindergarten Action Item	Timeline
Create community steering committee for Baby Talk	March 2012	Identify Key Vocabulary Words	March 2012
Develop 3x3x3 Baby Talk Action Plan	April 2012	Create professional development package for kinder teachers	April 2012
Identify WHS Senior Project candidates to help with Baby Talk Implementation	May 2012	Create curriculum & agree on sequence of implementation	May 2012
Print Baby Talk Parent Education Cards in 3 languages	June 2012	Translate curriculum into 3 languages	June 2012
Implement outreach at 3 events/PR Plan	September 2012	Provide PD during start of year inservice to kinder & Specials teachers	September 2012
Train Senior Project Volunteers for On site Parent Education (Walmart, Laundromat, Carnicerias)	October 2012	Implement curriculum	October 2012
Implement Parent Education sites	November 2012	Engage in learning walks to gather data on implementation	November 2012
Steering Committee evaluates progress and plans for sustainability	January 2013	Plan for re-assessment using BOEHM	January 2013

Projected Results and Conclusions

The Early Language Development Project is ambitious in scope, especially in light of what is already happening in schools. The pressure to have students meet standards in language arts and mathematics continues to grow for teachers and administrators. This pressure could lead to a lack of follow-through on the Early Language Development Project. What is critical is developing a clear understanding of the connection between oral language development in young children and their future academic outcomes.

The Into Kindergarten! component will be led by the Speech Pathology team within the district. As they already have a deep professional commitment to early language development, it is likely to have strong sustainability. The key aspects of the project that may impact effectiveness are likely to be the buy-in that is built with other teachers and the extent to which job-embedded professional development is implemented.

The Baby Talk! prong of the project has the potential to lead the greatest results. The work of Hart and Risley (2011) shows that simple changes in how parents interact with their babies and toddlers can lead to profound improvements in school success. However, this project also has the potential to fall by the wayside in these difficult budget times. A strong committed steering committee must create a reliable infrastructure for sustainability or this project may just be one of those "neat ideas" that in does not impact students in any meaningful way.

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