

## **THREE KEY YEARS: Talk – Read – Play – Sing – (Count)\***

George Halvorson, Chair, First Five Commission for Children & Families

- Each Child We Save is a Child We Save: Brains need exercise in those first three years to develop at the best and highest levels; mental exercises make our brains grow bigger and stronger.
- Learning in those first three years strengthens brains in ways that create life-long impact.
- The interactions that help children are not complicated. We need to talk, read, play, interact, and sing to our children at that time of high opportunity learning.
- The best predictor for which children from all groups will end up in prison by age 18 is the number of words in each child's vocabulary at kindergarten.
- We can predict with a very high level of accuracy by age three which children are going to be unable to read – and we know that the children who are reading impaired by the third grade are 40% more likely to get pregnant in their teens, 60% more likely to drop out of school, and more than 70% more likely to end up in jail.
- The U.S. has more people in our prisons/jails than any country in the world, and we know that more than 60% of our prisoners either read poorly or can't read at all.
- We also know that 85% of the school age children who are currently in our juvenile justice system either read poorly or can't read at all.
- Brain development starts at birth; year one is extremely important. Measurements show us that children who do not get their brains exercised in the first year of life tend to fall behind other children in important ways by the time they are only 18 months old.

- If we exercise baby brains, then neuron connectivity levels in the exercised brains are high. If we don't exercise brains at that point, a natural pruning process happens and we end up with fewer connections in the unexercised brains.
- In essence, brains that are exercised in those initial three years of life tend to be both bigger and stronger brains. Neuron connections are the key; it's about getting neurons to connect with one another in each child and the tools to strengthen those connections in the first three years.
- People used to believe that education for each child starts at kindergarten. Those people were wrong. The brain of each child begins a frantic growth and education process as soon as each child is born.
- Significant numbers of our children do not receive extensive and consistent brain connectivity exercise levels on a daily basis, and too many of our children do not have the daily interactions with adults that build stronger brains. As such, those children find themselves at a significant disadvantage, at a very early age.
- The reality is that children with very small vocabularies at age three tend not to be learning ready at age six.
- The new science of brain development teaches now why these problems exist and what we need to do to keep them from happening.
- Keeping children from falling behind is not complex or difficult; the tools that build brains in babies and infants are basic and easy to understand and use.
- We now know that baby brains grow stronger when adults TALK, READ, SING, PLAY, COUNT, and **INTERACT** directly with each baby. Children's brains are strengthened and billions of neuron

connections happen when adults TALK, READ, SING, PLAY, COUNT, and INTERACT with their children.

- The children who do not have those direct and personal interactions in those first years tend to have very small vocabularies when they get to kindergarten, and they tend to have major problems learning to read. The interactions help make children both “reading ready” and “learning ready” BEFORE they get to school.
- The vast majority of parents and caregivers in this country have not been taught about the brain science and the interacting opportunities. Part of that stems from the fact that some of the very best science about brain development is relatively new.
- The causality linking difference between the high performers and the people from all groups that face challenges is the early brain exercise and the early brain connection support levels that happened in those first three years for each child – NOT the ethnicity or race of the child.
- All children from all groups, who do not get that direct brain growth exercise in those first three years, have a negative and unfortunate biological consequence in their brains of not getting the exercise.
- Far too many parents in this country do not know the basic biological realities for brain building in the first three years of life; they do not know that they can strengthen their child’s brain and those same parents are less likely to do specific things in intentional ways to strengthen their brains.
- Almost all people understand now that doing physical activity creates physical strength . . . but most parents don’t know that exercising the brains of children, in those key growth areas, actually creates and enhances brain strength in their children.

- Toxic stress damages baby and young child brains. When children feel isolated and when very small children feel threatened or unprotected, there is a measurable buildup of damaging neurochemicals in each child's brain that can result in what medical scientists and physicians call "toxic stress syndrome" for children.
- Children who suffer from toxic stress syndrome are significantly more likely to drop out of school and are more likely to have violence issues while in school. Girls with toxic stress are more likely to become pregnant at an earlier age.
- In one survey of low-income families, more than 60% of the homes did not have one single children's home.
- This year, across the entire country, for the first time ever, we will now have a majority –51% of our total births –born to Medicaid mothers.
- Given the "knowns," we need various evidence-based support programs – like home visiting nurse programs – that teach mothers useful sets of parenting skills in the home and can even model those skills by helping the actual child.
- We also need programs that help by reading to children and by getting books and educational support sources into homes; toys are critical as well.
- We need day cares for low-income mothers that very intentionally and deliberately help to meet the brain-strengthening process for each child.

\*In a recent webinar put on by the American Economic Institute, George Havlorson stated that he wished he has added "count" to the list of interactions listed in his title.

## Chapter 12: Science, Public Policy, and Early Childhood Programs

- The science of brain development in the first years of a child's life is increasingly visible, especially on the Internet through websites and UTube videos.
- Highly recommended subject matter experts include: Dr. James Heckman (University of Chicago), Dr. Nadine Burke Harris (Center for Youth Wellness), Dr. Patricia Kuhl (Institute for Learning and Brain Science), National Geographic magazine and their special on brain development (Secrets of the Brain), Dr. Ross Thompson and his ACE research, Jack Schonkoff (Harvard Center for the Developing Mind), Dr. Beatrice Bebee (Columbia University), and Dr. Vince Feliti Kaiser Permanente).
- Also cited were organizations like ZerotoThree, the American Academy of Pediatrics and their Early Brain and Child Development efforts.
- As a result of a number of successful pilot programs and recent research, we now understand more clearly and explicitly the value that is created for each child by various direct interactions with each child.
- We need educators, parents, caregivers, elected officials, and for-profit leaders to understand these issues; to know the value and benefit of TALKING, READING, SINGING, PLAYING, AND COUNTING directly and consistently with each child.
- This chapter ends with the several key Sub-Headings: **Low Income Children Tend to Have Fewer Books Read to Them; Income Does Not Build Brain Cells; Half an Hour Reading Time Has a Positive Impact; Thirty, Thirty, Twenty Can Make a Difference** (30 minutes of "serve and return" interaction, 30 minutes of reading time, and 20 minutes for questions asked and answered); **Learning Does Not Begin at Kindergarten; A Growing**

**Number of Programs Are Providing Significant Benefit to Children in Those Key Years** (Nurse Family Practitioner, Early Head Start, The Center for Youth Wellness, Thirty Million Words, and the Harlem Children’s Zone); **Cities Can Be Catalysts for Improving Early Learning Affiliates** (The Providence Talks Project); **We Need to Prevent the Gap Rather Than Just Closing Them**; and **A Growing Number of Important and Influential Foundations Are Also Now Supporting and Guiding This Work.**

- The book is well sourced (ENDNOTES) and at 319 pages is an easy read . . . and a good resource for those who plan to deliver presentations on this topic.

**Craig Knutson, 4.7.16**