<u>Chapter Six — The Education System Will Benefit Heavily</u> From Better Early Development Efforts

No segment of society has more to gain from having more children with strong neuron connectivity levels than our school system.

When children enter kindergarten with small vocabularies and when children can't learn to read by the third grade, those children present major problems for our schools. Those children with those challenges are much more likely to drop out of school. They are significantly more likely to drop out of school than the children who can read in the third grade. ^{7,13,61,62}

That makes perfect sense. It is extremely difficult for any student to stay in a reading dependent and reading focused school setting when the student personally cannot read. Dropping out of school can reduce stress, pain, and even embarrassment levels for non-readers.

The drop out problem for our schools is amplified by the fact that our children with significant reading issues are also much more likely to become pregnant while in school and the children who can't read are significantly more likely to be a behavior problem while they are still in school.

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It can be really hard for a child who can't read to sit through classes that are based on reading day after day without responding in some negative ways. Negative responses clearly happen. We now know that 85 percent of the children who are in our juvenile justice system today are either functionally illiterate or can't read at all.^{11,62}

Children who can't read are much more likely to go to jail. 9,10,65,66,67

Before they end up in jail, those children tend to have behavior patterns that disrupt schools, absorb the functional energy of their teachers in highly unproductive ways relative to the teacher's basic teaching functions, and take away teaching resources that are badly needed by the other students in each school who are ready and even eager to learn.

That makes the job of teaching in those classrooms extremely difficult and it makes learning for other students in those settings significantly more difficult as well.

Schools Start In A Deficit Position When Students Are Not "Reading Ready"

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Schools in too many settings start with a huge deficit relative to academic success when their classrooms have high numbers of children who have those problems and challenges when they enter school. Those children who have those challenges absorb many of the key situational and functional resources of the schools.

The schools with many students who are not reading ready can too often become caretaking settings for the other students in each classroom because significant teacher energy in each classroom is spent helping, supporting, or even constraining the children who have those personal learning challenges.

Behavioral issues can happen in schools both for the students who can't read and for the students who actually can read but who don't have teachers who have the time available to teach them and help them learn.

Some schools currently have very high levels of students being suspended, and that kind of situation involving many suspended students creates its own set of dysfunctional problems and issues for both the students and the schools.

That is particularly true for the students who suffer from Toxic Stress Syndrome. The children who had negative neurochemicals buildups in their brain because of early stress levels are significantly more likely to have behavior problems in school and in society.

Researchers tell us that the children who face emotional deprivation in those key time periods have their brains organized around fear conditioning and vigilance rather than around self-regulatory thought processes and complex thinking.

The Schools Would Be Better Off If All Students Were "Reading Ready"

So schools would be much better off and schools would clearly be better able to accomplish their educational missions if the students in the classrooms were all reading ready and not suffering from toxic stress when they got to the actual school.

The answer to making more children reading ready is not to improve kindergarten. Improving kindergarten is one of the most commonly mentioned and most frequently proposed strategies for improving reading readiness for children. The goal of improving kindergarten as the strategy to end the learning gap is proposed by good and well-meaning people in full good faith.

That strategy, however, cannot succeed alone as our primary approach for getting more children reading ready. Improving kindergarten is doomed to fail as a stand-alone approach for reducing those gaps because most of the problems occurred for the slow learning children who are in kindergarten several years before they arrived at the kindergarten doors.^{1,2,3}

Biology and the timing of the key brain infrastructure development in the first years of life for each child is the reason why that strategy of just improving kindergarten will not achieve the goals of having more children able to read and stay in school.

We need to be very honest with ourselves about the fact that kindergarten is too late to have the needed neuron connectivity impact that is needed for those challenged children. The pre-kindergarten year is too late to achieve full benefit for those children as well.

Pre-kindergarten is generally not the answer for the children who have fallen behind in those first years because pre-kindergarten usually starts at age four and the most important and relevant neuron connectivity opportunities actually happen for children before that very young age. We need to solve those learning problems for each child before that time.

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The time when the children who can't read most need our support to strengthen their learning capacity and their ability to learn to read is actually in those first three key months and years of their life before they even make any attempt to actually read.³

Kindergarten And Pre-Kindergarten Add Major Value For Learning Ready Children

That does not mean that kindergarten and pre-kindergarten do not add real value for children.

Both pre-kindergarten and kindergarten can be wonderful, life-enhancing, and highly beneficial growth and educational opportunities for children — but that is basically true for the children who are learning ready when they get to kindergarten. The right kindergarten and the right pre-kindergarten settings can do almost magical things to help learning-ready children into wonderful lifetime paths of learning... if the children are actually ready for those paths when they enter the pre-kindergarten settings.

The sad and painful reality, however, is that those kindergarten and pre-kindergarten years cannot change the trajectory and eliminate the learning issues for the vast majority of the children who are not learning

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ready by age four. For the children who are not ready or not able to learn by age four and five, the pre-kindergarten years for each child function more as a level and type of daycare and as a child maintenance setting rather than being a time and place of major educational growth and learning.

Brain plasticity does not disappear at 3 years old — and those children who fall behind in those first months and years can be helped with both learning and behavioral skills, but that is much harder work to do when it starts after that golden neuron connection time has passed.^{21,29,66}

Birth Through College (B through C) Is A More Useful Educational Continuum Than K to 12

People who talk about education issues often refer to the "K-12" years — kindergarten through twelfth grade — as the relevant times for learning and as the right years for public policy focus relative to our education systems. For a number of years, we have focused our schools and our thinking about education issues in that "K-12" context.

We need to stop thinking of our overarching education continuum for children as being built around a "K-12" time span and functionality level.

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That particular continuum is flawed and deficient at both ends. "K" is too late. Twelve is too soon.

If we really want the best lives for our children and if we really want our education processes to support best lives for each child, then we need to start thinking about our overarching education and learning continuum for children as actually being a birth through college continuum. We need to replace "K-12" with "B to C."

Birth through college makes sense as a way for our education planners and policy thinkers to think of the relevant functional learning continuum for each child. College should be included in that thinking because society does tend to provide college as a funded resource and because college is an important and highly relevant piece of the learning reality for large numbers of children.

College, for that thought process, includes any and all of the training programs that exist for students beyond their high school years. Professional schools, trade schools, and various technical training levels all should be part of our overall education policy thinking and planning. The students who are reading ready at kindergarten are also much more likely to do well in technical schools at age 19 than the students whose vocabularies in kindergarten only contain hundreds of words.

We need to think of parents as being the first teachers for each child and we need to think of day cares and various babysitting support systems as being the next set of teachers and as the first levels of institutionalized learning. Instead of thinking of our child care centers and day cares as separate babysitting processes that are irrelevant to the actual education process for our country, we need to recognize the reality that our day cares and child care settings interact in an educational context with each child in those key learning years and we need to take advantage of that reality.

We actually need to very intentionally build on that reality and we need to make each of those settings better learning tools for our very young children.

We need to include those settings as key pieces of our overall education strategic continuum — and we need to do a much more intentional and effective use of those settings as part of our child brain development strategy and approach.

We need to have parents very intentionally filling that first teacher role for their children and we need the various child care centers, day cares, and family support processes for child care to be very intentional next-step components of the education continuum for each child.

Focus On Education At Birth Leads To Grad School Success

We need both family cultures and group cultures to support that entire continuum and we need both families and groups to assign priorities to helping each child in those first key years.

Embedding those early child support behaviors and beliefs in group cultures has been shown to have positive outcomes for the groups who use them.

We know from a number of studies and from obvious observation that the cultures, families, and parents who provide the most focused support for their children in those first three years of life are also the groups who have the highest percentages of children graduating from college and also the highest percentages of children going into various kinds of graduate and post-graduate training.

The complete B to C continuum is clearly both relevant and real to those children from those settings and family cultures. Some cultures and settings emphasize high levels of interaction with their children in those first months and years. Those children from those families and settings benefit individually and those children each tend to do well as students at the very

back end of that education continuum because those children were each so well supported at the very front end.

We need the people who do our education planning for our educational systems, funding, and educational infrastructure to think in the context of the overall B to C continuum and we need our planners to figure out how to create equivalent success levels for all children from all groups at each stage of that total process.

Our school systems need to support that process and need to explicitly support a culture of continuous learning as well.

Whether we end the continuum and planning for our education experience for each child at college or at graduate school, birth is the obvious and uncontestable place that we need our planning about education and development for each child to start.

Education Leaders Need To Address The Full Continuum

Our schools in each community need to encourage, teach, preach, and, where possible, provide support for parents and for children in those first years of life. Our leaders in the education profession and education infrastructure need to become leaders for that entire learning and education process and continuum.

We need our school systems in each setting to be community teachers in lifetime learning. We need to have everyone understand the values and the virtues of early childhood development activities. We need our formal education processes to create and deliver a full continuum of education support and education approaches that can allow us to achieve the full potential for each child.

We need to have our school leaders reaching out to each community and to each community group to help make the B through C continuum a community understanding and a belief system for all groups and a shared goal for all families in each community and setting.

We need the education leaders in every setting to be thinking about they key role that day care, babysitting, and organized child care setting play in that educational process. We also need our regulators who regulate day cares in each setting to understand the key role those day cares play in the brain growth of each child and to put basic standards in place in each setting that support that process.

We don't need to mandate that day cares have only licensed staff for dealing with children in those key times, but we should mandate that day cares have books in them and we should mandate that day care settings both read regularly and interact regularly with the children in ways that create learning readiness results for the children.

Our education leaders in each community should extend their thinking from just the K to 12 context to figure out what best practices could be for those day care settings and for those children.

We Need To Help Students Who Give Birth Understand Those Issues

At a more mundane level, we also need to recognize the fact that a number of students in our schools become pregnant and become parents while they are still students. We need the teaching programs in the schools for those students who have babies — and for the fathers of those children — to have a clear message and a situational teaching focus that explains the neuron connectivity opportunities that exist for each child to each new mother.

We need to break some multi-generational cycles of not having children able to read by having those newborn children of the students given the support each child needs to be able to read.

That can be a high value goal. Very focused teaching and support opportunities for the children of children who are at major risk of not being

able to read can help influence a particular highly relevant set of people's lives in very beneficial ways.

We Also Need Our Day Cares To Support Those First Key Years

We very much need to think of our various daycare settings — and even our more structured and ongoing babysitting settings — to be part of the teaching and learning continuum for each child.

A very high percentage of parents use either formal group day care settings or various kinds of home-based day care settings to provide care for children while the parents are at work. Some parents hire individual babysitters — often family members — who care for children in their own home or in the child's home.

Some well-to-do parents even hire nannies to provide care in those early years.

Regardless of the type of day care that is used by parents, we need to make the day care process to be part of the brain growth and earliest education experience for each child. We need day care to be part of the education team.

To the extent possible, we need both daycares and babysitters to provide basic levels of read/talk/sing interactions with the children in their care. Regular reading time, for example, can be and should be built into those daycare and babysitting settings whenever possible for each child.

Very large numbers of children in America receive day care at one level or another. We need the people who provide day care to understand the key development needs of the children in those first key years.

We also need day cares to have children's books and to have talking and reading time with children whenever possible.

States tend to license day cares of various kinds in many settings now.

The licensing requirements often — a very appropriately — have safety components to them.

We need to take advantage of that licensing process to also require that the people who care for children in the settings have at least a basic understanding of the brain development biology and time frames that are relevant to all children. We also should expect day cares to have books and some levels of safe and educational toy elements in them.

It might be very useful to at least develop a kind of grading system and some kinds of measurement processes that can identify some key

activities and then tell us which day cares provide those key activities and how often those activities happen in each setting.

When we get to the point where all parents more clearly understand those child development opportunities and issues, the expectations for day cares as a key part of the learning tool kit for each child should increase.

It would be good for people who study and understand those issues to develop tools to help parents understand whether or not their daycare provider or their baby sitter is meeting those key needs.

In Home Support Resources Can Also Add Value

As part of our overall education agenda and infrastructure, we also need various kinds of support resources that can help parents in their homes with various levels of assistance for those key issues.

A number of communities are now building additional levels of direct parental support resources. In some settings, home aides exist who can visit the homes to help the mothers in various ways relative to their children.

Those home aide and in-home support resources that are available to help mothers in their homes vary significantly from place-to-place and site-to-site.

Where those in-home support resources do exist, we need to have those resources clearly focused as well on helping the mothers with the specific support processes that can help meet the neuron development needs of their children.

That support can involve having those in-home aides coaching mothers and it can involve those aides helping mothers to perform those functions.

It can even extend in some settings to having the aides, themselves, actually doing some reading and directly interacting in various ways with the children. That can be particularly useful in settings where the custodial parent for a child personally cannot read or has logistical issues that impede reading.

Each of those levels of support and approaches for that process can add value. Some very promising results for children in some settings have been achieved by having either volunteers or paid aides working directly on a regular basis to have the children in a setting get their regular daily stimulus and some level of regular direct interactions with an adult in ways that their baby brains need at that point for best growth.²⁹

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We Need Group Learning Sessions For Parents As Well

Those programs have been supplemented and enhanced in very effective ways in some settings by having mothers getting together in small groups to do group learning and to offer group reinforcement to each other for each other's efforts.

We need our various communities to expand those kinds of efforts as well — to have mothers supporting, reinforcing, and encouraging other mothers in their child support and learning efforts and processes.

Those group interaction approaches have been very popular and well received by mothers when they have been piloted in various settings.

We learn well by example. Seeing other people interacting in fun and effective ways with their infants can be a very powerful learning experience for a parent.

The learning by example process may be most effective in person, but various YouTube support examples and testimonials can also be good tools that add real value for parent education.

We need a rich array of YouTube types of examples that parents from all cultures, ethnicities, and economic levels can look at easily to see how

other parents who are very much like themselves are achieving their own parenting goals and interacting with their children.

The YouTube-linked teaching process may be the single best way of teaching some mothers and fathers good and effective ways of providing both brain exercise and emotional support for their children.

All Students Should Be School Ready When They Get To School

Many of the support programs that are being created in various settings have highly beneficial and extremely encouraging impacts for the children who benefit from them.

Both communities and families should look at the available learning tools and support tools in their settings and should use those programs that work best both as direct support and as models for helping each child in various situations and settings.

Our goal as an overall education system should be for all of our children, to be learning ready when they enter kindergarten and to be reading ready students when they get to that point in their education process. We need teachers to have classrooms full of reading ready students if teachers are going to add the most value to the students they teach.

People become teachers to change lives for the better. Teachers who can focus on changing lives and on helping learning ready and reading ready children can have a major impact on those lives. That collective positive impact can make us stronger, safer, and more successful as a country.

We Will Be Stronger And Safer By Succeeding In Those Developmental Efforts

Being safer as a country is actually a relevant issue for our education system. We will be safer and we will be more secure as a country when we can create a reality of having very real educational and school successes for more of our children and when we have our schools create alignment rather than division in our communities and our country.

Too many schools have significant levels of internal division today.

We need to look at the division that exists in our divided schools and we need to create alignment in each of those schools around the shared community goals of helping every child.

Division between groups of children is exacerbated in any educational setting when higher percentages of children in any group in that setting can't read or stay in school.

Those issues need to be addressed at the earliest point in the developmental process for children from every group — and we need to show clear evidence to all groups that there is goodwill and real efforts being aimed at those sets of problems and issues.

We Need Better Schools In Our Jails As Well

Looking at the full continuum of education opportunities that we can work with for our people, we also need to look at our prisons as teaching venues and as education support opportunities as well. Some of our illiterate prisoners don't have the capability of being ready to read, but some of our prisoners do have that capability to learn to read. We need to take advantage of that fact and that learning potential for those processes. We need to help those prisoners who can learn to read actually learn to read.

One study of prisoners showed that the overall recidivism rate for readmission to prison for illiterate prisoners exceeded 70 percent — but when illiterate prisoners were taught to read, the recidivism rate for the new readers dropped to under 30 percent. 62

The personal benefits to those specific prisoners of not being sent back to prison are immense. Those are life-changing and very real benefits.

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The benefits to society of not having to re-imprison those reading capable people are also extremely high.

We should not ignore or overlook that particular high leverage opportunity for our targeted education efforts as we look at the total continuum of education opportunities that can help all of the people we can help.

We Need A Culture Of Perpetual Learning

Schools will benefit significantly if we get early childhood development right for more children. If we created a massive campaign to have a culture of perpetual learning that helps each child from their moment of birth and if that campaign helped every child who can't read now to be able to read, that change in the student composition of our schools would transform our schools. It would also transform our society.

Schools Need Students Who Can Learn To Read

No segment of society will benefit more from getting the early childhood development issues right than our schools. The results will be almost immediate.

The benefit that schools will realize from helping those children in those years doesn't need to be realized in decades. Benefits can happen for

our schools in a very few years. The benefit to schools of helping very young children can start almost immediately — with the children born today who are directly helped by someone today each coming to their pre-kindergarten settings much more learning ready only four years from now.

Four years is possible as a time of significant change for individual children. That time frame can be highly relevant to both schools and students. We can change a lot of lives and we can modify a significant number of almost immediate school realities if communities decide now to make a difference for their children.

We can also have a major impact on individual lives in those same few years when parents, family, friends, communities, and our educational support resources all help create the needed brain exercise for individual children.

The cost of failure is huge. We are failing far too many children today. We need to recognize that cost and we need to do what needs to be done to put us as a country on a better path than the one we are on today.