



CFCAA
**The Centre for Family,
Child and Adolescent
Advancement**

Supporting Parents in Early Child Development: Research and Resources

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PART I
RESEARCH

PART I – RESEARCH

A. Early Intervention Makes a Difference

The implications of waiting until children fail are costly to individual people and communities (Barnett, 1993; Karoly et. al, 1998). Numerous studies have been conducted reviewing the long-term effects of early childhood prevention and early intervention programs on young children at risk and their families (Barnett, 1995; Benasich, Brooks-Gunn, & Chu Clewell, 1992; Bryant & Maxwell 1997; Durlak & Wells, 1997; Hertzman & Wiens, 1996; Institute for Research on Poverty, 1997a, 1997b; Karoly et al., 1998; Lazar & Darlington, 1982; Mrazek & Brown, 1999; Olds & Kitzman, 1993; St. Pierre, Layzer, & Barnes, 1995; Yoshikawa, 1994). Results of these studies provide compelling evidence that early intervention programs can make a difference.

This paper will first summarize the research literature supporting the crucial need for intervention programs, especially for children at risk, and especially at a young age. Then a rationale will be provided regarding the need for programs that focus on helping parents build skills and gain competence with regard to their child's development. Next, major target areas will be outlined that are fundamental to early intervention programs for parents. These areas include school readiness, language enhancement and early literacy skills, and social competence. The mid section of the paper introduces some of the measures available for use in early identification of developmental and adjustment difficulties in children.

While many of these sophisticated tools are useful for professionals involved in large projects, research, or assessment, much has been learned about the usefulness of more informal measures, especially for younger children. The next section then focuses on behavioural markers as early identifiers. Using behavioral markers to detect problems opens the possibility for parents to become an integral part of helping children with problems early. If parents are informed they can recognize their child may need help and learn ways to intervene early, with assistance if needed, to help their child meet developmental tasks. Next guidelines will be reviewed which are offered by several researchers and that are useful in developing intervention programs geared to parents and young children. Finally, an informal section lists some very useful websites offering information and resources for parents, as well as activities they can do with their children to enhance school readiness, and language development and early literacy.

B. Promoting Early Intervention

Seminal work in the area of neuroscience and child development has substantiated the critical importance of early childhood experience on brain development. Promoting healthy child development, particularly during the period from conception to age six, has potential long-term value to children and society (Cynader, 1994; Keating & Mustard, 1996; McCain & Mustard, 1999; Purves, 1994; Schore, 1997). However, research indicates that 15 to 20 percent of children between the ages of 4 and 16 suffer from one or more serious adjustment difficulties (Bradenberg, Friedman, & Silver 1990; Costello, 1989; Offord et al. 1987). Children with adjustment difficulties are at further risk for

displaying a wide range of adolescent and adult dysfunction including school failure/dropout, unemployment, social welfare dependence, antisocial behaviour (Hawkins, 1995; Thornberry, 1994), criminal behaviour (Coie 1996; Campbell 1995; Lynam 1996; Loeber and Dishion 1983; Moffitt, Caspi, Dickson, Silva, & Stanton, 1996; Reid 1993; Tremblay et al. 1992; Yoshikawa 1994), and health problems (Hertzman, 1998).

Researchers have identified a myriad of individual, family, community, societal, and school-related factors placing children at risk of developing adjustment difficulties (Sroufe, 1997). These factors apply across race, culture, and class, and many of these factors interact compounding children's difficulties. The effects are cumulative (Hawkins, 1995; Thornberry, 1994).

Papp, Goeke-Morey, and Cummings (2004) call attention to the need to consider multiple family influences in studies of child development. They found that parents with more psychological symptoms reported lower marital satisfaction. Mothers and fathers with either greater psychological symptoms or poorer marital functioning had a negative impact on children's adjustment. However, for mothers but not fathers, these effects were exacerbated by the combination of both variables.

A number of studies support the extensive implications of the psychological well-being of parents on all family members (Connell & Goodman, 2002; Cox & Paley, 1997; Cummings, Davies, & Campbell, 2000; Fendrich, Warner, & Weissman, 1990; Hans, Bernstein, & Henson, 1999; Kandel, 1990; Lizardi, & Klein, 2000; Weinberg & Tronick, 1998). While mothers' functioning has received more consistent support as a predictor of child emotional and behavioral problems (Foley et al., 2001), fathers' functioning appears

to have a substantial impact as well on child development (Phares, 1996). A recent meta-analysis documented stronger associations between parental mental health problems and child internalizing problems for mothers than fathers, but there were no parent gender differences in predicting externalizing problems (Connell & Goodman, 2002). The risk to children is compounded when both parents suffer from a disorder (Carter, Garrity-Rokous, Chazan-Cohen, Little, & Briggs-Gowan, 2001).

By examining data from a community-based longitudinal study, Johnson, Cohen, Kasen, and Brook, (2004) reported that paternal anxiety, mood, personality, substance use, and disruptive disorders were independently associated with specific types of maladaptive paternal behavior in the home during the child-rearing years after paternal age, education, income, co-occurring paternal psychiatric symptoms, offspring age, sex, intelligence, temperament, and psychiatric symptoms were controlled statistically. **These findings suggest that paternal psychiatric disorder may be an important determinant of maladaptive paternal behavior in the home during the child-rearing years and highlight the need for parental support and education for both mothers and fathers during the early development of their children.**

In addition to family factors there are individual and community factors that may have an impact on child development. Researchers such as Barkley (1995), Coleman (1995) and Kinoshita (1996) put forth that children with existing learning disabilities are particularly vulnerable because impaired performance in cognitive, social, and/or emotional domains can lead to academic and social failure (Hallowell & Ratey, 1994; Landau & Moore, 1991), antisocial or delinquent behavior (Garnett, 1994; Hawkins, 1995; Keilitz & Dunivant, 1986; Thornberry, 1994), and/or psychological problems

(Dykman, Ackerman, & Raney, 1993; McKinney, Montague, & Hocutt, 1993). Twenty to thirty percent of children with Attention Deficit Hyperactive Disorder (ADHD) experience anxiety disorders and up to 75 percent experience depression (Dykman et al., 1993; McKinney et al., 1993). Emotional difficulties are likely a combination of academic frustration, chronic stress at school and home, and difficulties in peer relationships.

Children with learning disabilities, due to their differences, are set apart from their peers which places them at increased risk of being bullied (Espelage, Bosworth, & Simon, 2000; Hawker & Boulton, 2000; Smith & Brain, 2000). Children who are bullied are more likely to suffer long-term significant negative psychological problems (Kaltiala-Heino, Rimpelae, Rantanen, & Rimpelae, 2000) such as anxiety, loneliness, lower-self esteem, depression, and possible suicidal ideation (Ridby & Slee, 1999; Salmon, James, & Smith, 1998). It may also lead to poor school attendance and academic performance (Sharp, 1995) and increased psychosomatic complaints (Sanborn, 2001; Williams, Chambers, Logan, & Robinson, 1996). Thus exposure to multiple and interacting risk factors exponentially increases a child's overall risk (Hawkins, 1995; Thornberry, 1994) and for children with disabilities, these early years become even more critical (Lerner, Lowenthal, & Egan, 2003).

C. Building Competency in Parents

A large number of child development and early intervention programs have been implemented in the US and Canada over the past 35 years. McCain and Mustard (1999)

reviewed of some of the Canadian projects, including Better Beginnings, Better Futures; Brighter Futures; Parenting and Family Literacy Centers; Community Action Program for Children; Aboriginal Health Start; Child Care Resource Programs; Public Health Units; Pre-Postnatal Information and Support Programs; Canada Prenatal Nutrition Program; Best Start: Community Action for Healthy Babies; Healthy Babies, Healthy Children; Pre-school Speech and Language Program; The Infant and Family Development Program; Children's Mental Health Centers, and Children's Aid Societies.

A key element lacking in these programs is the opportunity for parents to become educated and competent with respect to child development and their parenting skills (Crill Russel, 2003). Educating parents may enable parents to enhance the social and emotional development of their children in the early years when parents have the most influence on their child's development (Crill Russel, 2003, McCain & Mustard, 1999). Approximately 25% of Ontario's children from birth to age 11 are experiencing learning and/or behavioural difficulties (McCain & Mustard, 1999). Much of these difficulties experienced by children can be linked to poor early brain development.

High quality experiences providing brain stimulation are crucial for healthy brain development. Families with young children are in urgent need of our attention. McCain and Mustard (1999) emphasize that support initiatives for parents should begin as early as possible from the time of conception. Most of the studies to date have looked at mothers' involvement in prevention and intervention programs and virtually no data available regarding the implications of fathers' involvement (Barnett, 1993; Karoly et al., 1998). More attention and research is needed regarding the involvement of fathers and noncustodial parents in the lives of children.

D. School Readiness, Language Enhancement and Early Literacy Skills, and Social Competence

Major target areas that are fundamental to early intervention programs for parents include school readiness, language enhancement and early literacy skills, and social competence.

In terms of school readiness, children from economically poor and undereducated families are at elevated risk due to less knowledge and skill (Ramey & Ramey, 2004). Ramey and Ramey (2004) reported that children who do not receive positive learning experiences in the first five years are likely to start kindergarten approximately two or more years behind their peers reared in more typical environments and are likely to be even further behind peers reared in learning-enriched environments.

Early intervention is also critical for developing language and literary skills in children. Research indicates that children who begin school with major delays in language and basic academic skills, in spite of the provision of remedial support and special education programs, do not achieve at grade level. In fact, children who experience early academic failure are more likely to become inattentive, disruptive, or withdrawn; drop out of school; engage in irresponsible, dangerous, or illegal behaviour; to become teen parents; and become dependent on welfare and numerous public assistance programs for survival (Ramey & Ramey, 2004; Shonkoff & Phillips, 2000). These findings further emphasize the bi-directional relationship between early learning difficulties and child maladjustment.

Ramey and Ramey (2004) postulate that a commitment to academic achievement in children must begin in the “pre-K-years” with a rich array of effective learning opportunities. Results from several randomized controlled trials indicated that preschool education could be efficacious in improving readiness for school and subsequent academic achievement in reading and mathematics in elementary and secondary school, as well as a reduction in special education placement and grade retention.

The ability to read is a major foundational skill for all school-based learning. Dr. Reid Lyon in his testimony before the Committee of Education and Workforce in the U.S. House of Representatives (July 10, 1997) reported that approximately half of all school children experience learning to read as a formidable challenge. Nonnative speakers of English and children from poor families are at the highest risk of reading difficulty. Poor reading skills can negatively impact children’s general knowledge base, spelling and writing abilities, and vocabulary development (Lyon, 1997). Difficulties reading can be embarrassing and devastating to young children, diminishing their self-esteem, eroding their self-concept and causing their motivation to wane.

Lyon (1997) stated, “The development of phoneme awareness, the development of an understanding of the alphabetical principle, and the translation of these skills to the application of phonics in reading and spelling words are non-negotiable beginning reading skills that all children must master in order to understand what they read and learn from their reading sessions”. “Phoneme awareness” refers to the skill in recognizing and segmenting the phoneme structure underlying spoken language; this skill is a component in learning to read and write an alphabetic script (Byrne & Fielding-Barnsley, 1989; Vandervelden & Siegel, 1995; Wagner & Torgesen, 1987). Phonological

processing, which refers to the use of the sounds of language, likely plays a critical role in learning to read and write an alphabetic script (Liberman, 1983; Rack, Snowling, & Olson, 1992; Siegel, 1985, 1993; Stanovich, 1982, 1986; Vandervelden & Siegel, 1995; Wagner & Torgesen, 1987). Inefficient phonological skills in young children are highly predictive of future reading difficulties (Torgesen & Davis, 1996). Fluency and automaticity in decoding and word recognition are also essential in learning to read. Difficulty identifying words and problems with fluency overload working memory and undermine comprehension (Jenkins & O'Connor, 2001).

Efforts to remediate reading difficulties in the older child, however, have proven to be disappointing in that some children never achieve grade level and the most intensive interventions improve only a subset of critical reading skills (Lyon, 1997; Moody, Vaughn, Hughes, & Fisher, 2000; Torgesen, 1997). Seventy-five percent of these children will continue to have difficulties in learning to read throughout high school and their adult lives (Lyon, 1997). The point of failure is too late to intervene. Children begin to build the foundation skills for developing literacy long before entering the formal education system. Thus activities with children to enhance language development and literacy skills need to begin much earlier.

Engaging in literacy activities with children, at a young age such as reading to them and play language games exposes them to various sounds of language, helps them develop phoneme awareness, letter knowledge, print awareness, general verbal skills and vocabulary, as well as understand the purpose of reading (Lyon, 1997). Prevention and early intervention approaches identifying children in kindergarten and first grade at risk of reading failure have shown the potential to reduce the number of children failing to

learn to read (Lyon et. al, 2001; Torgesen, 2000). A number of studies reported that early intervention is effective in developing children's phonological processing skills (Ball & Blachman, 1991; Bradley & Bryant, 1988; Byrne & Fielding-Barnsley, 1990; Cunningham, 1990; Elkonin, 1973; Fox & Routh, 1976, 1984; Lie, 1991; Lundberg, Frost, & Peterson, 1980; Rosner, 1973, 1974; Skelfjord, 1976, 1986; Wallach & Wallach, 1979).

In their review of the literature, Jenkins and O'Connor (2001) found evidence that targeted phonemic awareness instruction with pre-reading children leads to significant gains in phonological awareness and in word-level reading skills. In addition, phonetic decoding instruction combined with phonetic awareness proves to be most effective, as compared to either alone. Further, more explicit approaches to teaching phonics lead to more positive decoding outcomes. Lyon (1997) summarized the literature on prevention and early intervention programs and reported that 85 to 90 percent of poor readers given combined instruction of phoneme awareness, phonics, spelling, reading fluency, and reading comprehension strategies, provided by well-trained teachers, can increase reading skills to average reading levels.

Early intervention is also critical for developing social competence in children at risk for adjustment difficulties. For example, antisocial behavior evolves over the course of childhood, often beginning in the preschool and elementary years and peaking in late adolescence/early adulthood. Early intervention beginning in preschool is essential because antisocial patterns become more difficult to change over time and can persist into adulthood (Thornberry, 1994). Early noncompliance and antisocial behaviour patterns are among the best predictors of later disruptive and aggressive behaviour problems

(Hinshaw, Han, Erhardt, & Huber, 1992; Loeber, Green, Lahey, Frick, & McBurnett, 2000).

Although, most children do well in life despite adversity and exposure to multiple risks (Hawkins, 1995) and although the resiliency of children is encouraging (Bernard, 1993, 1995; Brooks, 1994; Hawkins, 1995), much can be done to foster healthy development and diminish painful experiences for children, especially children with difficulties. Promoting resilience and preventing negative outcomes involves helping children learn strategies for improving social competence and emotion regulation (Clement-Heist, Siegel, & Gaylord-Roth, 1992; Coleman, 1995; Fiore, & Becker, 1994; Hawkins, 1995).

Multi-disciplinary and multi-modal interventions are needed, especially with regard to children with learning difficulties in order to address the pervasive effects of ADHD and Learning Disabilities (LD) on cognitive, social and emotional performance (Satterfield, Satterfield, & Schell, 1987). Research (Struck, 1994) indicates that early intervention programs targeted at improving social competence and meeting the physical and emotional needs of children increase academic achievement and prevent later delinquent behavior. Literature on preventing emotional and behavioural problems has been integrated, and promising programs have been developed and evaluated (McMahon et. al., 1999; Walker et. al., 1998).

E. Early Identification

Several measures are available for use in early identification of developmental and adjustment difficulties in children. These include population bases measures, individual assessment tools, teacher's ratings, and parent checklists. The Administration for Children and Families list approximately 40 measures used in the National Early Head Start Research and Evaluation Project funded by the U. S. department of Health and Services. Their website is <http://ehsnrc.org/> and details regarding the measures used in this project can be found at http://www.acf.hhs.gov/programs/opre/ehs/perf_measures/reports/resources_measuring/res_meas_cdi.html.

In general, researchers of the Head Start project found that parents and children from low socio-economic backgrounds are indeed at high risk for health problems and experiencing greater need for health care than those in high-income families. Parent reports indicated that some of these children may have had sight, hearing, or mobility problems, and some might have been experiencing developmental delays or behaviour problems. The Head Start program focuses on providing regular health care to families promoting greater implementation of important safety practices, reducing household smoking, offering asthma education, improving access to mental health services, and promoting more developmental screening and referrals. For an overview of the Head Start Project refer to Karoly et al. (1998).

The Centre for Studies of Children at Risk at McMaster University and the Hamilton Health Science Corporation are currently piloting a population-based readiness to learn measure called the **Early Development Instrument (EDI)** in North York and some

Toronto Schools (Janus & Offord, 2000). Communities in each province across Canada are participating, and as of the year 2000, data on close to 50,000 children is available. The EDI provides results on the population level and is not interpretable for individuals. This is a developmentally based measure as opposed to a curriculum-based tool. The measure will provide researchers with the opportunity to monitor children's development initiatives and assess child readiness to learn as it is reflected in a child's preparedness for school. Specifically, researchers are assessing children's ability to meet the task demands of school, such as being co-operative and sitting quietly and listening to the teacher, and to benefit from the educational activities that are provided by the school. The instrument consists of five domains: physical health and well-being; social knowledge and competence; emotional maturity; language and cognitive development; and general knowledge and communication skills, as well as two indicators: special skills and special problems.

The **Early Screening Project (ESP)**; Walker, Severson, & Feil, 1994) is a behavioural measure used in assessing externalizing and internalizing behaviour problems in structured and unstructured settings. The ESP can be used to identify children at risk of internalizing and externalizing behaviour problems, monitoring progress, evaluating intervention effectiveness. The ESP is group administered, nationally normed, criterion-referenced scored, and appropriate for children at the pre-kindergarten to kindergarten level.

The Dynamic Indicators of Basic Early Literacy skills measure (DIBELS; Kaminsky & Good, 1996) assesses fluency of phonological awareness, knowledge of letter name, and word attack. **This measure can be used to identify students at risk of**

learning to read, monitoring progress, and evaluating intervention effectiveness. It is individually administered, criterion-referenced scored, and appropriate for children in pre-kindergarten to second grade. The ESP and the DIBELS, in conjunction with two measures for older children provide the framework for implementing a school-wide system of early identification and intervention (O'Shaughnessy, Lane, Gersham, & Beebe-Frankenberger, 2003).

Haager and Windmueller (2001) employed the DIBELS measure to identify English Language Learners (ELLs) at risk of reading related learning disabilities. English Language Learners are students, whose primary language is other than English and are learning English as a second language. This population appears to be particularly vulnerable for reading difficulties. Haager and Windmueller (2001) found a disproportionately large percentage of students falling in the risk range. However, results of an early reading intervention project designed to improve literacy outcomes indicated positive steady growth for ELLs at risk and LD students.

A "rapid screening measure" for identifying children with visuospatial learning disabilities in schools has also been developed (Cornoldi, Venneri, Marconato, Molin, & Montinari, 2003). The Shortened Visuospatial Questionnaire (SVS) is an 18-item screening tool that can be used by teachers in primary schools to identify children who need to be referred for clinical services because they have a visuospatial disability (VSLD). One advantage of this tool is that it is adaptable to cross-cultural use. Items in the measure assess core critical features of VSLD such as use of the available space on paper while drawing, visuomotor coordination, comprehension of visuospatial relations on verbal description, coordination of complex movements, handling of the spatial

components of calculation, spatial orientation, drawing, visuospatial learning, skills in observing the surrounding environment, and ability to deal with novel objects. The questionnaire also includes items assessing interpersonal, mathematical learning, comorbidity with attention-deficit/hyperactivity disorder, child's verbal abilities, and child's overall cognitive potential, as well as sociocultural level in general.

Cornoldi and colleagues (2003) provide confirmation by psychometric testing, which children rated by the SVS questionnaire as having VSLD showed a visuospatial deficit when individually tested for these abilities. Examples of items in this questionnaire include “Is the child able to make use of the available space when drawing?” and “Can the child use tools, such as scissors, set square, or ruler, that require independent and coordinated use of both hands?” and “Does the child understand spoken commands or texts that involve space relationships?”

F. Behavioural Markers as Early Identifiers

While there is some concern about reliability and validity regarding LD testing of younger children (Snyder, Bailey, & Auer, 1994), informal assessment procedures appear to be a viable option during the early years (Steele, 2004). Steele (2004) offers that it is not necessary to use the term LD with young children, as is needed with older students for special education placements, thus the potential stigma can be avoided (Snyder et al., 1994; Taylor, Anselmo, Foreman, Schatschneider, & Angelopoulos, 2000). Steele (2004) puts forth that in incidents where children’s difficulties are merely a lag or delay in

development, services enhancing learning can easily be discontinued once no longer needed and no harm is done (Lowenthal, 1998).

Steele (2004) suggests that systemic observation of behaviours and search of patterns can be useful in determining potential learning problems. Studies investigating kindergarten teacher judgments in identifying early learning problems indicated that behavioural observations are a valid alternative to discrepancy determination (Taylor, et al., 2000). Mantzicopoulos and Morrison (1994) studied various prediction tools and concluded that teacher predictions were an accurate part of the process of identification.

The fact that early language problems are often indicative of later reading problems provides further support for the use of developmental tasks diagnostically (Catts, 1997).

High levels of classification accuracy associated with the individual measures suggests that it may be possible to identify a much higher percentage of three-year-old children with, or at risk for, mild learning problems than is currently practiced (Scott, Fletcher, Jean-Francois, Urbano, & Sanchez, 1998). Scott and colleagues (1998) developed a cognitive screening tool for children at the pre-kindergarten and kindergarten levels (Scott, Deuel, Claussen, & Sanchez, 1993; Scott et al., 1996). Tasks in their screening test included five identification tasks: 1) picture pointing, 2) picture sequence, 3) picture rhyme, 4) standard oddity, and 5) relative size; as well as, three generating tasks: 1) taxonomic generation, 2) semantic verbal information, and 3) semantic visual information. The inter-rater reliability of these tasks was very high (88 - 100%) reflecting few inconsistencies between scorers. In this study, preliminary evidence was found for the ability of simple cognitive tasks to effectively differentiate very young children with, and without, mild learning problems.

Many of the skills necessary for reading can be observed prior to formal reading instruction. Catts (1997) found that difficulties with morphology, syntax, understanding words and sentences orally, awareness of speech sounds, word retrieval, verbal memory, and speech production correlate with later problems in word recognition and phonics. These findings reiterate the importance of early literacy intervention in prevention of later reading deficits (Catts, 1996). Catts (1997) lists behaviours that are useful to observe in the identification of language deficits: 1) trouble with rhyming, 2) difficulty remembering the alphabet, 3) difficulty following directions, 4) frequently mispronunciations, 5) trouble understanding stories, 6) small vocabulary, and 7) short and disorganized sentences when talking. Noteworthy, is the fact that an informed parent would be able to detect many of these difficulties. Further, there are many activities that parents could do at home with their children to address these difficulties and enhance their child's development.

Other studies have also produced lists of behavioural indicators of problem areas. Lowenthal (1998) identified the follow areas: 1) hyperactivity, 2) incoordination, 3) perseveration, 4) impulsivity, 5) processing deficits, 6) distractibility, and 7) memory problems (Lowenthal, 1998; Peltzman, 1992). Readiness behaviours include the following skills: 1) listening, 2) following directions, 3) dressing, 4) appropriate attentions span, 5) alphabet skills, 6) rhyming, 7) colours, 8) counting and 9) copying (Lowenthal, 1998).

Steele (2004) states that difficulties with the following behaviours could indicate risk of LD if the behaviours are noticeably different from that of most of the child's peers:

Behavioural Indicators of Problem Areas (Steele, 2004)

1. Talking with words in the correct order
2. Understanding words said aloud
3. Understanding sentences said aloud
4. Remembering specific words when talking
5. Remembering what they heard
6. Participating in rhyming games and activities
7. Remembering the alphabet
8. Following directions
9. Pronouncing many words correctly when speaking spontaneously
10. Understanding stories read aloud
11. Using words properly when speaking
12. Talking with organized sentences and thoughts
13. Sitting still for appropriate periods of time
14. Changing from one activity to another
15. Attending to tasks
16. Remembering what they see
17. Thinking before talking or acting
18. Staying focused on topic
19. Listening to stories or songs for extended periods of time
20. Dressing
21. Identifying colours
22. Counting

G. Program Development: Key Skills

Several authors offer guidelines that are useful in developing intervention programs for young children (Klein, Cook, & Richardson-Gibbs, 2001; Lowenthal, 1998; Peltzman, 1992; Ramey & Ramey, 2004; Steele 2004). As part of the “Invest in Kids” initiative funding by the Lawson Foundation, Carol Crill-Russel has produced a paper entitled, “Parent Education: What is Required to Build the Skills Parents Need to Raise Healthy Children”. She conducted a wide review of the research literature and spoke with key

leading informants on parenting and child development. This paper outlines key parameters for a parent education program geared for children during the first two years of life. Many of the concepts outlined in this paper are also applicable for preschoolers.

Crill- Russel (2003) states that an education program for parents needs to aim at increasing parents' knowledge, skills and confidence and focus on building parent-child relationships that involve comforting, playing, and teaching their children. She delineates and summarizes key skills parents need to promote language, emotional and social development; a secure attachment; compliance and internalization; and strengths of their child's temperament. She includes a section on fathers and emphasizes the importance of involvement of both parents in children's lives.

Drawing on the characteristics of resilient children (Bernard, 1995; Brooks, 1994; Hawkins, 1995; Thornberry, 1994), and the deficits observed in children experiencing difficulties, intervention programs promoting the following are most likely to be successful:

Areas of Focus for Intervention Programs

1. Opportunities for bonding
2. A willingness to try and ability to deal with failure and mistakes
3. Good problem-solving skills
4. A sense of purpose and personal control
5. Future orientation
6. High self-esteem
7. Recognition of children's strengths and talents
8. Emphasize social interaction
9. Increase self-awareness
10. Opportunities to develop responsibility
11. Opportunities to contribute to school, family, and community life
12. Opportunities to make decisions and choices
13. Build feelings of self- competence

Most importantly, without question, attachment to at least one pro-social adult who believes in the child and provides unconditional acceptance and support is by far the most critical factor influencing healthy development and building resiliency in children (Bernard, 1995; Brooks, 1994; Hawkins, 1995). Young children spend most of their time with their parents and need developmentally attuned interactions with primary caregivers in order to develop many of the characteristics found in resilient children. Play-based, problem solving activities are needed beginning at very early ages (McCain & Mustard, 1999). McCain and Mustard (1999) underscore the importance of educating parents, and state that this is one of the best means of raising awareness and increasing public understanding because parents share what they learn with other parents.

The focus of an early intervention program should also build a strong foundation rather than remediate a problem (Peltzman, 1992). Building a strong foundation for children involves providing opportunities that enhance development, emphasize practice and repetition, cover all developmental areas, and offer guidance and success, in a consistent manner with regular routines (Steele, 2004). Allen and Schwartz (2001) recommend short tasks with familiar materials, individual workspaces, choice of activities, clear organization and preparation, and clear transition. Klein et al. (2001) reiterate the importance of breaking down tasks into small segments, especially for children with special needs.

A young child's brain develops through stimulation of the sensing pathways: seeing, hearing, touching, smelling and tasting. Stimulation of neural cross-connections of the brain influences arousal, emotional regulation and behaviour and are important in

the development of core capabilities in literacy and language, numeracy, behaviour, emotional control and social skills (Shore, 1997).

Based on this scientific evidence, Ramey and Ramey (2004) highlight seven types of experiences essential to ensure normal brain development, behavioural development and school readiness: 1) encourage exploration, 2) mentor basic skills, 3) celebrate developmental advances, 4) rehearse and extend new skills, protect from inappropriate disapproval, 5) teasing and punishment, 6) communicate richly and responsively, and 7) guide and limit behaviour. Jones (1994) emphasizes the importance of providing children with immediate, salient reinforcement and feedback, including lots of praise for appropriate behavior; and using simulations, role-playing, and other hands-on, experiential methods to rehearse real-life experiences.

Practicing cognitive skills can be done in a variety of interesting ways such as through 1) directions, 2) listening activities, 3) games, 4) multi-sensory activities, 5) finger plays, 6) songs, 7) stories, 8) puzzles, 8) blocks, 9) pegboards, and 10) matching games (Lowenthal, 1998). Similarly, Allen and Schwartz (2001) offer the following list of activities useful in enhancing appropriate processing and pre-academic practice: 1) use of colorful manipulatives, 2) imitation with models and mirrors, 3) water play, 4) arts and crafts, 5) housekeeping, 6) copying patterns, 7) memory games, 8) following directions, 9) coloring, 10) cutting, 11) counting, and 12) grouping objects.

Key skill areas have also been identified as important for a strong foundation for learning. For example, Lowenthal (1998) states that teachers enhance language development with young children using the following strategies: 1) expanding children's own words into complete sentences, 2) describing to the children their own activities, and

3) providing models of language that describe what children are doing. Writing down what children say and then reading it back to them and writing children's questions down and then helping them find answers can also be beneficial (Allen & Schwartz, 2001).

Literacy preparation strategies outlined in the document titled, "Early Reading Strategy: The Report of the Expert Panel on Early Reading in Ontario" (2003) include helping children: 1) develop a good understanding of the forms and formats of books, 2) be able to identify and write the letters of the alphabet, 3) develop basic phonics awareness, 4) be interested in reading and stories, and 5) see themselves as successful learners. These experts emphasize the need for children to have opportunities to listen to stories, poems and non-fiction material for enjoyment and information, to respond to a variety of materials that are read aloud to them, and to retell stories in their own words.

It is important to provide practice in prerequisitional skills in a motivating and enjoyable way. Key skills areas that benefit from practice and repetition include: labeling, 2) syllable clapping, 3) children's dictation of words, 4) rhyming activities, and 5) letter games (O'Connor et al, 1996). Skill practice and repetition may involve: practice in sounds and words, 2) oral reading, 3) discussion, 4) vocabulary activities, and/or 5) phonics practice (Catts, 1996).

Steele (2004) puts forth a comprehensive list of activities that would be helpful when teaching children who are at risk for LD:

Helpful Activities for Children (Steele, 2004)

1. Use materials that are familiar to the children
2. Have individual workspaces
3. Allow some choice in activities
4. Organize and prepare task
5. Plan for clear transition between activities
6. Expand children's words into sentences
7. Provide good language models
8. Teach beginning phonics skills
9. Label objects around the classroom
10. Clap out syllables
11. Use rhyming activities
12. Play alphabet and vocabulary games
13. Use topics of particular interest to children
14. Have children dictate stories and ideas
15. Practice with sounds
16. Read aloud from books suited to their levels and interests
17. Use finger plays
18. Incorporate songs in lessons
19. Use puzzles, blocks, and pegboard activities
20. Incorporate arts and crafts
21. Play memory games
22. Have children count objects
23. Develop behaviour plan
24. Be consistent with routines and rules
25. Incorporate group activities
26. Break down tasks into small steps
27. Repeat new learning frequently

PART II
RESOURCES

PART II – RESOURCES

Information, Resources, and Activities Online

Several very good websites have been developed offering information and resources to parents regarding how they can interact with their children to enhance their child's development.

A. Reiner Foundation: <http://iamyourchild.org>

The Reiner Foundation, as part of a public awareness and engagement campaign, has created a booklet for parents titled "The First Years Last Forever: I Am Your Child: The New Brain Research and Your Child's Healthy Development. This booklet is available online, and is printed and distributed by the Canadian Institute of Child Health. The purpose of the booklet is to help people understand the importance of new brain research and its implications for our children's lifelong healthy development.

In the Reiner Foundation booklet ten guidelines are offered for parents and caregivers promoting young children's healthy development and school readiness: 1) Be warm, loving, and responsive, 2) Respond to the child's cues and clues, 3) Talk, read, and sing to your child, 4) Establish routines and rituals, 5) Encourage safe exploration and play, 6) Make TV watching selective, 7) Use discipline as an opportunity to teach, 8) Recognize that each child is unique, 9) Choose quality childcare and stay involved, and 10) Take care of yourself.

B. Speech, Hearing & Learning Centre: <http://www.shlcgreenville.org/>

The Speech, Hearing & Learning Centre, Inc. of Greenville, South Carolina displays a checklist for learning disabilities on their website. Aside from the item about reading, parents of preschoolers could use this list as markers of school readiness. Below is the list of behaviours they ask parents to observe suggesting that trouble in these areas may indicate delayed development: learning the alphabet; rhyming words; connecting sounds and letters; counting and learning numbers; using scissors, crayons, and paints; reacting too much or too little to touch; using words or stringing words together into phrases; pronouncing words; walking forward or up and down stairs; remembering the names of colors; and dressing self without assistance.

C. The LD Association of Ontario (LDAO): <http://www.ldao.ca>

The Learning Disabilities Association of Ontario (LDAO) report on their website that children entering kindergarten arrive with highly diverse experiences and various degrees of readiness. They pinpoint the need to differentiate between children with organic learning problems and children who require extra support to catch up to their peers. Here is a quote from their website about a Web Based Teaching Tool (WBTT) for teachers they offer on their site. “It provides teachers with empirically validated screening tools to identify students, kindergarten to 3rd grade, at risk of future school failure. Screens to date include measures of school readiness, phonological awareness, and numeracy skill level.

Other features of WBTT include a comprehensive list of teaching materials, an extensive database of appropriate interventions, curriculum-based checklists, behaviour management techniques, a tracking framework, ongoing support for teachers, and strategies for parents.” They also include a power point presentation on the website providing details about this tool.

D. National Centre for LD (NCLD): <http://www.getreadytoread.org>

The National Centre for Learning Disabilities (NCLD) presents the *Get Ready to Read! (GRTR) initiative*. Their hope is that all preschool children will have the skills they need to be ready to learn to read when they enter kindergarten. This project was a combined effort between Grover J. Whitehurst, Ph.D., Christopher Lonigan, Ph.D., the Applied Research Partners, Inc. and The State University of New York at Stony Brook and involved the development of pre-literacy Screening Tool. They wanted to address the need for an empirically-based set of developmental milestones or parent/teacher-oriented screening measures that could be available in a usable form for implementation by parents, preschool teachers, librarians, child care providers, and other early childhood professionals. The underlying premises of this initiative is based on the National Research Council’s report (Snow, Burns, & Griffin, 1998) concluding that the majority of reading problems could be prevented, primarily by reducing the number of children who enter school inadequately prepared and with weak literacy skills, particularly in the domains of linguistic awareness and knowledge about print.

This website offers information, good links to other sites, online skill building activities, a literacy checklist, and an online screening tool. The **Get Ready to Read! Screening Tool** is intended to be administered to children in the pre-kindergarten year, age 4, by parents or early-childhood professionals in order to ascertain a child's reading readiness and literacy skill development. The GRTR website provides easy access to activities and information that will allow caregivers to meet a child's needs within the home or within a developmentally appropriate early childhood setting. **This screening tool is structured around three domains of early literacy development: linguistic awareness, emergent writing and print knowledge.**

Details found on the website regarding skills addressed within each of the domains are as follows:

Linguistic Awareness

Linguistic awareness is an important listening skill that refers to a child's understanding of how language works. Four-year-olds who are developing linguistic awareness will begin to:

1. Recognize rhymes,
2. Learn to match words that rhyme or begin with the same letter,
3. Become aware that sentences that they hear are made up of separate words,
4. Develop a varied vocabulary based on real-life experiences and discussions with caring adults,
5. Understand that the words they hear are made up of syllables and distinct sounds.

Emergent Writing

Developing readers and writers need many opportunities to express themselves on paper. Emergent writing refers to the child's ability to:

1. Distinguish between drawing and writing;
2. Progression from random scribbling, to purposeful scribbling and drawing, to early attempts at copying and making letters that convey meaning;
3. Developing the ability to print his or her name;
4. Early attempts at spelling and message writing.

Print Knowledge

Print knowledge refers to a child's understanding of books, printed letters and words. In order to become a successful reader, a child must develop the understanding that print carries a message and that people read the text rather than the pictures. A child must grasp the nature and purposes of books and other printed material and be aware of the conventions of how to read a book. Specifically, print awareness includes these skills:

1. Understanding the nature and purposes of books, printed words and letters;
2. The ability to distinguish letters and words from other printed material;
3. Understanding left-to-right progression of text;
4. Recognizing environmental print, or the print that children see in their neighborhoods, home and school;
5. Understanding that there is a one-to-one correspondence between the words on a page and what the reader says;
6. Accurately naming the letters of the alphabet, beginning with the child's own name and progressing to the entire alphabet.”

Preliminary studies regarding the use of the *Get Ready to Read!* Screening Tool

demonstrate that this measure is easy to use. And although many children make

significant progress over the pre-kindergarten year acquiring the pre-reading skills they

need, children attending programs using the *Get Ready to Read!* Screening Tool and

related resources make significantly greater progress over the pre-kindergarten year than

other children. This site offers a number of [useful links](#) to other sites and information on

early literacy. These links can be found at

http://www.getreadytoread.org/grtr_useful_website.php

E. Learning Disabilities Association of America: <http://www.ollda.org>

On the Learning Disabilities Association of America's website there is an excellent

article on “[Helping Young Children with Learning Disabilities at Home](#)” by Doris J.

Johnson (1999). This article discusses how parents can be involved in helping their

disabled child at home. She talks about encouraging parents to understand the child's difficulties and focus on the child's strengths in order to build self-esteem and to help the child become an integral part of the family. She explains that most parents teach their children informally as they encourage them to notice things in the environment, as they label objects, and as they guide certain social skills, appropriate behaviors, and manners. And many parents provide the basis for early reading, writing, and mathematics skills by reading stories, reciting the alphabet, coloring, copying letters, writing simple messages, and playing counting games. **She offers guidelines for helping children at home:**

Guidelines for Helping Children at Home:

1. Focus on the child's strengths, not the weaknesses.
2. Set reasonable expectations.
3. Provide the guidance needed for independence.
4. Maintain consistent discipline.
5. Foster intellectual curiosity.
6. Help children classify and categorize objects.
7. Provide good language models and stimulation.
8. Guide the child's language comprehension.
9. Help the child comprehend and remember longer units of language.
10. Do not call attention to expressive language weaknesses.
11. Engage the child in early literacy activities.
12. Encourage early mathematics and number activities.
13. Help the child learn to play.
14. Encourage children to listen to music and to develop a sense of rhythm.
15. Teach simple time concepts.
16. Provide structure for children with attention problems.

F. Toronto Preschool Speech and Language (TPSLS): <http://www.tpsls.on.ca>

Toronto Preschool Speech and Language Services' (TPSLS) goal is to make sure all preschool children reach their full speech, language, and communication potential. **These services are free and available to children from birth until they enter Senior Kindergarten.**

Services offered include Parent/Caregiver Training, Consultation, Home Programming, Mediated Therapy, Direct Therapy, Monitoring, and Transition Planning. They also have chat sessions for parents with a speech-language pathologist and communication checklists for various languages.

G. The Hanen Centre: <http://www.hanen.org/>

The Hanen Centre, a Canadian charitable organization, located in Toronto, helps young children with or at risk for language delays communicate to the best of their abilities. The Hanen Centre's activities and services currently include: Training and resources for speech-language pathologists, educators and childcare providers, community professionals and parents. Hanen Programs recognize the need for a child with a language delay to receive support as soon as possible (early intervention) and the importance of parents' involvement.

They offer three programs for parent:

1. It Takes Two To Talk – The Hanen Program® for Parents
2. More Than Words – The Hanen Program® for Parents of Children with Autism Spectrum Disorder
3. Target Word® – The Hanen Program® for Parents of Children Who Are Late Talkers

Parents attending the Hanen Programs learn:

1. The different ways their child communicates
2. The next steps to take to foster their child's language learning
3. How to turn everyday activities into opportunities for their child to learn to communicate
4. The most effective strategies that will help their child learn to communicate
5. How to talk so their child can understand
6. How to respond to their child in ways that enhance language learning

Their programs include videotapes and guidebooks. Hanen also provides a communication checklist on their website for a general outline of milestones from birth to age five, activity tips, links to other sites and organizations and research information.

H. The American Speech-Language-Hearing (ASHA): <http://www.asha.org>

The American Speech-Language-Hearing Association (ASHA) is the professional, scientific, and credentialing association for audiologists, speech-language pathologists, and speech, language, and hearing scientists in the U.S. They wrote an article titled “Early Identification of Speech-Language Delays and Disorders”, which provides information for parents on early identification. There is a section on the ASHA site called **Language Based Learning Disabilities, which has information on characteristics of children with speech-language or learning problems, speech-language pathologists, prevention, assessment, treatment, and related web links.**

I. Help Me 2 Learn: <http://www.helpme2learn.com/>

The Help Me 2 Learn website is home of the Phonics Superstar Reading System. This site has a products and pricing section for computer software, but there is also a section with **over 25 free games and activities for children with respect to phonics and letters.** **This site also offers testimonials, support, a newsletter, and great recipes for things like playdoh and finger paint.**

J. NC Regional Educational Lab: <http://www.ncrel.org/sdrs/areas/at0cont.htm>

The North Central Regional Educational Laboratory (NCREL) is a wholly owned subsidiary of Learning Point Associates. As a member of the Regional Educational Laboratory Network, NCREL is dedicated to providing high-quality, research-based resources to educators and policymakers in the states of Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin. One aspect of their website provides information on “Critical Issues in At-Risk Students”.

K. Early On Michigan: <http://www.EarlyOnMichigan.org>

The Early On Michigan website is a supplemental source of information for parents, professionals and providers who desire to order publications, make a referral, locate their local *Early On* Coordinator, find out more about early childhood, parenting concerns, special needs, disabilities and how to help/identify children who are at-risk. Their site includes sections addressing early literacy, disabilities and disorders, and developmental screening tools. Their comprehensive list of screening tools includes extensive details on each measure. See <http://www.earlyonmichigan.org/articles/7-03/DevScrTools7-03.htm>.

L. Kid Source Online: <http://www.kidsource.com>

Kid Source Online provides information on virtually all areas of interest regarding children. They have a section on preschoolers that offers articles, safety tips, forums, and websites on preschoolers. Within that section of the site they have information on learning and other disabilities in preschoolers, which has a large number of links to various articles pertaining to this topic. See

<http://www.kidsource.com/kidsource/pages/preschoolers.disabilities.html>.

M. Florida State Research Foundation: <http://firstwords.fsu.edu/index.html>

The FIRST WORDS project is a model early identification and intervention project based in the Department of Communication and Disorders, Florida State University Research Foundation. This site offers information about early intervention and links to related websites.

N. Succeed to Read: <http://www.succeedtoread.com>

The “Succeed to Read” website was developed by Peggy Wilber, author of “**Reading Rescue 1-2-3**” (2000). Reading Rescue 1-2-3 is a **complete manual** for teachers, parents, and home schooling parents who want to teach children how to read. It contains **research-based information, phonic sheets, auditory training techniques, and cartoon stories for children to read.** Her website contains free information for parents and teachers on how to

teach a child to read including fun auditory training techniques, and phonics and whole language games. See [kinderstart.com](http://www.kinderstart.com) for an article posted by Peggy Wilber

<http://www.kinderstart.com:8080/kindertoday/997995914/index.html>

In her article, Peggy Wilber lists several at-risk pre-literacy symptoms that parents can identify and work on with their children:

At-Risk Pre-literacy Symptoms:

1. Can your child rhyme, quickly and automatically? (You say, “tree,” and he might say, “me, see, we, or free.”)
2. Is your child able to remember and repeat 3-5 words that you say, in the correct order? (You say, “cat, ice, bag, up, blue.”)
3. Can she repeat 3-5 words when her back is turned to you? She is using only her ears, and her eyes aren’t watching you say the words. (Auditory cues only.)
4. Can your child remember and do 3-4 commands in the correct order? (“Close the door, get a spoon from the drawer, and jump twice on your right foot.”)
5. When you read a simple story to your child, can he retell the major events in the story?
6. Does your child know all the sounds of the letters in the alphabet – especially the short vowels? (a-apple, e-end, i-igloo, o-octopus, u-umbrella)

She also suggests activities that parents can do with their children to help get their child ready and willing to read:

Getting Children Ready to Read:

1. Play rhyming games
2. Read books that rhyme - Dr. Seuss is king of rhyming books!
3. Reread the same books over and over until your child has practically memorized them
4. Play "command" games - give your child two or three funny commands. Then, let her give you several commands. (Can mom remember them?)
5. Play, "My Aunt Went to Kalamazoo" game and see if you both can remember items that Auntie packed in her suitcase
6. Review the alphabet letter sounds twice daily - look at an alphabet chart and say each letter and sound
7. Tell short stories and have your child retell them - remember the time Dad's car keys fell in the lake and he had to go "fishing" for them?

O. Kinder Start: www.kinderstart.com

Kinder Start is a popular indexed directory and search engine focused on children zero to seven. The purpose of this site is to help individuals find information about children on the Internet more easily. They have a great page with numerous links to learning games and activities for children.

See <http://www.kinderstart.com/learningactivitiesandcrafts>.

P. LDOonline: <http://www.ldonline.org>

LDOonline is one of the leading websites with a wealth of information on learning disabilities for parents, teachers, and other professionals. One of the features is a great article with 10 tips for developing organization skills in children. There is also an excellent paper on “Preventing Antisocial Behaviour in Disabled and At-risk Students” from the Appalachia Educational Laboratory. This site offers online support and an extensive list of related organizations.

Q. Speech Teach UK: <http://www.speechteach.co.uk/>

Speech Teach UK is a website providing speech therapy resources for parents and professionals supporting children with speech difficulties. They provide a forum, links and reviews for other websites, clipart, worksheets, flashcards, speech therapy games and

general educational resources and other teaching aids. Much of these resources can be downloaded for free. See http://www.speechteach.co.uk/p_general/downloads.htm.

R. Cognitive Concepts: www.earobic.com

This website is produced by a company called Cognitive Concepts that develops and markets educational software, teaching materials and online resources. This company integrates technology with scientific principles and research-proven instructional methods that offer educators, specialists and families products that build foundational reading skills. They also provide customized staff development to teachers and language and learning professionals. Parent resources on this site include an online reading risk screen and a phonetic alphabet chart.

S. ZeroToThree: www.zerotothree.org

ZeroToThree is a parenting website with information on everything from A to Z. In their section called “BrainWonders” they have a great page on early literacy providing information about early literacy to parents and answers to many of the questions parents frequently ask about their children.

T. KidSpeech: www.kidspeech.com

KidSpeech is the website for the Kaufman Children's Center for Speech, Language, Sensory-Motor and Learning Potential, Inc. in West Bloomfield, MI. In addition to information about their services and products they have a page on “Signs and Symptoms of Speech Apraxia. Below is their list:

Signs and Symptoms of Speech Apraxia:

1. Limited or little babbling as an infant (void of many consonants). First words may not appear at all, pointing and “grunting” may be all that is heard.
2. The child is able to open and close mouth, lick lips, protrude, retract and lateralize tongue while eating, but not when directed to do so.
3. First word approximations occurring beyond the age of 18 months, without developing into understandable simple vocabulary words by age 2.
4. Oral scanning or groping may occur with attempts at speaking.
5. Continuous grunting and pointing beyond age 2.
6. Lack of a significant consonant repertoire: child may only use / b, m, p, t, d, h /.
7. All phonemes (consonants and vowels) may be imitated well in isolation, but any attempts to combine phonemes are unsuccessful.
8. Words may be simplified by deleting consonants or vowels, and/or replacing difficult phonemes (consonants and vowels) with easier ones.
9. Single words may be articulated well, but attempts at further sentence length becomes unintelligible.
10. Receptive language (comprehension) appears to be better than attempts at expressive language (verbal output).
11. One syllable or word is favored and used to convey all or many words beyond age 2.
12. A word (may be a real word or a nonsensical utterance) is used to convey other words beyond age 2.
13. The child speaks mostly in vowels.
14. Verbal perseveration: getting “stuck” on a previously uttered word, or bringing oral motor elements from a previous word into the next word uttered.
15. The child has difficulty moving the tongue where they want it to go.
16. “Pop-outs” or automatic words and phrases are spoken clearly, but they cannot be imitated when directed or may not be heard again.
17. Other fine motor problems may be present.

They also have a page on what parents/family/friends can do to help a child with apraxia of speech. Below are their suggestions:

Helping a Child with Apraxia of Speech:

1. Engage the child in familiar rhymes or songs, by humming or using a favorite syllable such as "dah".
2. Have the child "fill-in-the-blanks" while reading familiar books or singing familiar songs.
3. Help the child with best word approximations to ask for needs/desires, even if it is only the main vowel(s) of a word.
4. While in play, encourage imitation of different consonants and vowel patterns.
5. Help the child with word-retrieval through sign language or gestures along with imitation.
6. Reinforce verbal attempts with smiles, clapping, positive attention, and toys.

U. Kidneeds: <http://www.kidneeds.com>

Kidneeds is a resource and information website for families and other caregivers of children with special needs. On this website there is an article by Susan Bergert titled, "The Warning Signs of Learning Disabilities".

V. NCELA: <http://www.ncela.gwu.edu/oela/>

Taking right from this website, here is an overview: "Authorized under Title III of the *No Child Left Behind Act of 2001* (NCLB), the National Clearinghouse for English Language Acquisition & Language Instruction Educational Programs (NCELA) supports the Office of English Language Acquisition, Language Enhancement, and Academic Achievement

for Limited English Proficient Students (OELA) in its mission to respond to Title III educational needs, and implement NCLB as it applies to English language learners.

OELA's National Clearinghouse is authorized to collect, analyze, synthesize, and disseminate information about language instruction educational programs for limited English proficient children, and related programs. Priority is given to information on academic content and English proficiency assessments and accountability systems”.

W. Centre for Development and Learning: <http://www.cdl.org/index.html>

The Centre for Development and Learning is a nonprofit organization dedicated to increasing school success for all children. This site offers information and resources for parents and teachers. They have colour posters for sale. One, “The 7 Essentials: Guiding Principles to Help Your Child Every Day” is from the book “Right From Birth: Building Your Child’s Foundation for Life: Birth to 18 Months” (Ramey & Ramey, 1999) and “**Going to School: How to Help Your Child Succeed: A Handbook for Parents of Children 3-8**” (Ramey & Ramey, 1999).

X. Council for Exception Children: <http://ericec.org/>

This website is developed by the Council for Exception Children and provides facts, reports, and legal information, as well as discussion groups.

Y. ReadyWeb: University of Illinois: <http://readyweb.crc.uiuc.edu/>

ReadyWeb is a project of the Early Childhood and Parenting (ECAP) Collaborative, College of Education, at the University of Illinois. This site provides a virtual library of the full text for documents and articles, and hyperlinks to documents and articles, on various topics related to school readiness. ReadyWeb also provides bibliographies of documents and journal articles from the ERIC database. In the virtual library for parents, <http://readyweb.crc.uiuc.edu/parents.html>, there are several links to pages providing tips and information for parents regarding ways they can help their child. For example, there is information about school readiness and a reading checklist.

Z. Ladders to Literacy: <http://www.wri-edu.org/ladders/about.htm>

Ladders to Literacy is website geared to professionals offering training programs designed to facilitate the early literacy and language development of preschool and kindergarten children in inclusive settings. They include information about a preschool activity book available for purchase, “Ladders to Literacy: A Preschool Activity Book” by Notari-Syverson, O'Connor, and Vadasy (1998).

AA. SpeakingofSpeech: <http://www.speakingofspeech.com/>

The SpeakingofSpeech website has a great page called Online Language Tools which has a number of links to games, activities, worksheets, CD's for sale, and online interactive

storybooks.

[http://www.speakingofspeech.com/generic.html;\\$sessionid\\$GHPYOFQAAACHBTZENUGZPQWPERWRJPX0?pid=8](http://www.speakingofspeech.com/generic.html;$sessionid$GHPYOFQAAACHBTZENUGZPQWPERWRJPX0?pid=8)

AA. Speechville: <http://www.speechville.com>

The Speechville website was developed to provide parents with knowledge about available resources to help children who have a communication impairment or disorder. This site provides information, connections, resources, support, and information about children's books that play with language.

Summary and Conclusion

To summarize, researchers have indicated that a substantial number of children experience learning and/or behavioural difficulties (McCain & Mustard, 1999). Much of these difficulties experienced by children can be linked to poor early brain development and the quality of the parent-child interaction. High quality experiences providing brain stimulation are crucial for healthy brain development. Families with young children are in urgent need of our attention, specifically families where one or both parents are experiencing psychological difficulties.

In terms of school readiness, children from economically poor and undereducated families are at elevated risk (Ramey & Ramey, 2004). Considering the bi-directional relationship between early learning difficulties and child maladjustment, promoting

consistent, active and healthy parental involvement is imperative (Ramey & Ramey, 2004; Shonkoff & Phillips, 2000). Attachment to at least one pro-social adult who believes in the child and provides unconditional acceptance and support is by far the most critical factor influencing healthy development and building resiliency in children (Bernard, 1995; Brooks, 1994; Hawkins, 1995).

Early intervention programs should focus on stimulation of neural cross-connections of the brain. Brain stimulation influences arousal, emotional regulation and behaviour and are important in the development of core capabilities in literacy and language, numeracy, behaviour, emotional control and social skills (Shore, 1997).

In conclusion, it is clear that early intervention for children at risk is not only essential, but also realistic. There are numerous activities that parents can learn about to do with their children to enhance key aspects of early development. Helping children build a strong foundation, as early as possible, is likely to be preventative and increase the quality of the child's life.

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