

MISSION STATEMENTS

THE TOTAL LEARNING INSTITUTETM MISSION STATEMENT

The mission of Total Learning is to forge a public/private partnership that develops and delivers a birth-to-nine year old, research-based instructional design that incorporates successful elements of the Head Start, Music Together, and Total Literacy models, in order to reduce the achievement gap.

ABCD's HEAD START/EARLY START MISSION STATEMENT

The mission of A.B.C.D's Head Start/Early Head Start program is to empower families so that they may overcome the impact of poverty and improve the quality of life for all family members. To that end, A.B.C.D. Head Start is committed to a comprehensive program consisting of:

1. Family & Child Services for all family members,
2. Inclusion of parents in the implementation and development of program and policies,
3. Advocacy and support for families and children,
4. An enhanced collaboration between and among family and child service agencies, to improve the knowledge and responsiveness of these agencies to the needs of the children and their families.

The fulfillment of this mission will create a collaborative consisting of parent, agency, and community whose mission is to reduce the incidence of poverty and create a community of opportunity for all families and their children.

ABSTRACT

“For all students to excel academically and thrive as individuals, we must raise the bar and close the achievement gap. Educators, policymakers, and the public must understand the grave consequences of persistent gaps in student achievement and demand that addressing these gaps becomes a policy and funding priority.” – ASCD Adopted Positions, 2004

The Total Learning Institute™, comprised of a collaboration of Action for Bridgeport Community Development, Inc. (A.B.C.D.), arts education IDEAS, the Bridgeport Board of Education, Music Together, Child First, and the Michael Cohen Group proposes to develop a Total Learning model that incorporates research on brain development and learning. Unlike other educational projects, Total Learning is a public-private partnership that will reform education not only in Bridgeport, but throughout Connecticut and across the country.

Today’s traditional education approaches have not succeeded in meeting the needs of low-income children and children of color. Across the country, half of eighth-grade African American and Latino students function below the fourth grade.¹ In 2004, more than 15,000 Bridgeport children attended schools that were making insufficient annual yearly progress, as determined by State Mastery tests.

The Association for Supervision and Curriculum Development (ASCD) has developed a position on The Whole Child, and Whole Child Schools that acknowledges the shortcomings of current educational practices and identifies characteristics and policy implications of their Whole Child Commission’s findings. “ASCD believes that all underserved populations—high-poverty students, students with special learning needs,

¹ [need citation]

students of different cultural backgrounds, nonnative speakers, and urban and rural students—must have access to

- Innovative, engaging, and challenging coursework (with academic support) that builds on the strengths of each learner and enables students to develop to their full potential;
- High-quality teachers supported by ongoing professional development; and
- Additional resources for strengthening schools, families, and communities.”²

Whole Child recommendations for a comprehensive approach to education include a range of issues: student choice, safe and community centered schools, engaging and developmentally appropriate curriculum, formative assessment that is designed to make a child feel successful, holistic educators committed to social justice, school report cards that consider a range of whole child indicators, widened opportunities for teacher credentialing, flexibility to change the structure of the school day and year, personalized learning for each child.³

Boys’ Issues

While middle class and suburban children appear to be achieving state and national standards, boys in all socioeconomic groups are falling further and further behind and now make up only 44 percent of college students. Nation-wide, boys make up two-thirds of special education students. They are 30% more likely to drop out of school, 200% more likely to attempt suicide before the age of 14 and are five times more likely to be expelled from pre-school than girls.

²

<http://www.ascd.org/portal/site/ascd/menuitem.1f07a81af3aa4bb6dd1b2110d3108a0c/;jsessionid=FCT0fRAfP3osTlmeVEBUxJY39t5PfOGmhy79h4odywfaTyPFf25Y!1670446158>

³ Education Update, Volume 48, Number 11, November 2006, ASCD.

The widening achievement gap between boys and girls, white and minority children, low-income and middle-income children says Margaret Spellings, U.S. Secretary of Education, "...has profound implications for the economy, society, families and democracy." Simply put, today's approaches to education are not working for these, and many other children.

A.B.C.D. in partnership with arts education IDEAS, the Bridgeport Board of Education, Music Together, Child FIRST and the Michael Cohen Group propose to revolutionize the way children are taught. The model will incorporate a Total Learning approach in which the emphasis will be on learning how to learn. Based on scientific research cited by Howard Gardner, Robert Greenleaf, Eric Jensen, David Sousa, Merilee Sprenger and others, the model utilizes a multi-sensory integration approach that incorporates kinesthetic, aural, visual, linguistic, and proprioceptive hands-on, brains-on strategies. Highly motivating activities and projects provide opportunities for developing problem solving and critical thinking skills such as brainstorming and hypothesis building. Through these thinking processes facts are learned in a broad and meaningful context that engages the mind and emotional interest. While creating, demonstrating, discussing, reflecting, and responding the student gains generalizing skills, which are necessary for flexible transfer and metacognition. The Total Learning approach affords all learners the tools and opportunity for successful, developmentally appropriate learning.

ELEMENTS OF TOTAL LEARNING

Overview

The key elements of Total Learning involves a **1. Multi-Sensory approach to Curriculum Delivery; 2. Enhanced Learning Environment** (small class sizes, an extended day and year); **3. Embedded extensive Professional Development; 4. Family Support** services; **5. Parent Involvement; 6. Parent and Infant/Toddler** classes; **7. an Independent Evaluation** that meets the “gold standard” of research.

1. Multi-Sensory Approach to Curriculum Delivery

In 1983, Howard Gardner proposed that there are at least seven forms of intelligence: linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, intrapersonal (e.g., insight, metacognition), and interpersonal (e.g., social skills). At the core of this theory is the recognition that people think and learn differently and that intelligence can be expressed in a multitude of ways.

The foundation of Total Learning is the belief that these seven forms of intelligence are equally essential, unique and inform one another. The research on teaching and learning suggests that active, hands-on strategies that engage the ears, eyes, bodies, and minds of children lead to a myriad of outcomes including increased achievement, engagement, attendance, interest, and motivation.

In Total Learning, curriculum is delivered through the lens of these multiple intelligences, providing a variety of hooks for children to grasp hold of and learn. Multifaceted activities require students to think critically, solve problems, research solutions and perform meaningful tasks. The vehicle for curriculum delivery includes

music, movement, visual arts, drama, and creates a highly interactive and engaging environment for children, their teachers and their parents.

2. Enhanced Learning Environment – Kindergarten through Grade 4

The Total Learning school age – (K through grade 4) class environment includes a smaller child-staff ratio. The class size (number of children) is the same as the district’s typical classroom, but is staffed by the regular classroom teacher, the school district’s para-professional and an additional paraprofessional thereby reducing the child-staff ratio. Hence, there are more adults available to support children’s learning.

The Total Learning school age classrooms operate 9-1/2 hours a day, and eleven months a year – 2-1/2 hours beyond the typical school day and a full month longer than the typical year. Hence, children are afforded more time in learning experiences to close the achievement gap.

3. Professional Development

Professional Development (PD) is at the heart of Total Learning at all levels. The recipient of the PD in grades Kindergarten through four, provided by arts education IDEAS, are the instructional staff – teachers and classroom para-professionals. In the Pre-School years, the Pre-School instructional staff – teachers, assistant teachers and teacher aides -- are the recipients of instruction provided by Music Together. All PD is delivered through job embedded coaching.

Kindergarten Through Grade Four – The initial professional development for Total Learning Kindergarten requires approximately 45 hours, delivered over the school year through orientation, classroom modeling, team teaching, coaching, and planning sessions. The goal is to train teachers to independently create and deliver the curriculum through

use of powerful, multi-modal, developmentally appropriate strategies. The training is divided into a two-hour initiation, followed by three overlapping training segments.

Initiation -- The Initiation provides participants with an overview of the training, and opportunity to discuss what is expected, determine the calendar, identify specific classroom practices and expectations, and answer questions.

Segment 1: During the first twenty weeks of P.D., teachers and paraprofessionals experience two lessons per week. During the first lesson, a multi-modal lesson models a specific strategy. Lesson plans include teacher-to-teacher information, as well as supporting research, theory and best practice data.

Segment 2: During the second lesson occurring these same twenty weeks, teachers apply the newly learned strategies to the concepts and skills in their curriculum. After a teacher-trainer conference, the teachers and trainer team-teach adapted lessons, allowing the teacher to practice the strategies with as much support as necessary. Skills evaluations are conducted after each four week series of lessons.

Segment 3: With thoughtful lesson planning now being practiced, attention turns to developing sequences of lessons that deliver previously isolated curriculum concepts and skills, embedded in a broader thematic context through an integrated unit of study. Using a science, social studies, mathematics or language arts concept, multi-modal strategies are now combined into a larger, project-based unit that is designed to develop student independence and transfer of knowledge, patterning the brain for learning. Teachers and trainers plan together, with increasing responsibility for delivery of instruction falling to the teacher, with the trainer assuming a coaching and mentorship role.

Professional Development – Pre-School -- Professional Development in the pre-school years incorporates many of the strategies described above for the Kindergarten through Grade 4 years, but places greater emphasis on use of music and movement for the purpose of building language and literacy skills.

- 4. Family Support Services** -- School Age and Pre-School -- Total Learning utilizes a Head Start model for the delivery of Family Support services. All families are assigned a Family Advocate, who provides case management and care coordination for family and child needs and partners with parents to improve children's school attendance. Through the establishment of trusting and open relationships, Family Advocates identify families with substance abuse problems, domestic violence, and other sensitive barriers. Family Advocates are trained to make appropriate referrals and to provide care coordination.

Children and families demonstrating stronger needs for mental health intervention will receive care coordination services from Bridgeport Hospital's Child FIRST program. The Child FIRST worker will provide intensive home visiting that will include a comprehensive assessment of the needs of all members of the household, home-based mental health services providing parent and child dyadic intervention, with care coordination for services requiring additional referrals. On-site classroom consultation will be provided to classroom teachers when children's mental health impairs their ability to benefit from an academic experience.

- 5. Parent Involvement** -- School Age and Pre-School -- Workshops, activities and family service plans are developed in response to parent surveys and interviews. Family Advocates offer all families home visits. Monthly parent workshops are held to connect the home to classroom activities. Parents are asked to contribute to classroom activities

and are recruited to volunteer in their child's classroom. Family Advocates facilitate parents' participation in all school-home events and activities. Assistance with transportation and child care is provided to eliminate barriers from parents' involvement in their children's school.

6. Parent Infant and Toddler -- Through Music Together – Weekly Parent-Child dyadic workshops take place using music and movement as the vehicle for parent development. Children and their parents, participate in weekly forty-five minute classes. Highly qualified trainers deliver the Music Together curriculum that reinforces cognitive, language, literacy, and social skills development. Parents receive on-going coaching throughout the fun-filled workshops. Additionally, each family receives a full set of materials (which includes music tapes or CD's, music books, and age appropriate musical instruments) to extend the activities to the home for additional practice.

7. Independent Evaluation:

An independent evaluation by the Michael Cohen Group will assess the success of the initiative in improving children's achievement, acquisition of speech and language skills, literacy skills, social-emotional development, and in general, success in reducing the achievement gap. The study involves a controlled random assignment of school age and pre-school children to classrooms. Classrooms are randomly assigned to the Total Learning model or the standard classroom model. Standardized measures will determine outcomes for children, parents, staff, and the learning community.

The evaluation will also determine the success of the model in improving the cognitive, language, pre-literacy, and social emotional skills of infants and toddlers, thereby reducing the “word gap” experienced by very young low-income children.

Children will be followed longitudinally for a period of three to five years, which will determine the lasting impact of the initiative.

Need for Assistance and Geographic Area

The following needs were identified through a comprehensive Community Assessment, completed in the Spring of 2005 and updated in the Spring of 2006 and 2007

Economic Need:

Bridgeport, Connecticut with a population of approximately 144,000 residents is the state’s poorest and largest city. While surrounded by communities with some of the highest per capita incomes in the country, many of Bridgeport’s residents live in poverty. Once a thriving, industrial, middle class city in the decade of the 1960's, Bridgeport ranks lowest in per capita income in the region, (\$16,306) and ranks number one in population density of the 169 Connecticut municipalities. Thirty-eight percent of Bridgeport’s children (10,867) live in poverty. 5,012 Bridgeport children receive welfare benefits. Of these children, 1,961 or almost 40% are under the age of six. Eighty-eight percent of Bridgeport's public school children are economically disadvantaged compared to 24% statewide. Forty percent of Bridgeport's homeless population is children. More than 5,000 families live in poverty.

Income and Poverty, 2000

Source: 2000 Census

	Median Household Income	Median Family Income	Per Capita Income	Income Below Poverty Level	Percentage Below Poverty Level
Bridgeport	34,568	39,571	16,306	24,920	18.36
Easton	125,557	135,055	53,885	175	2.41
Fairfield	83,512	100,920	43,670	1,525	2.87

Monroe	85,000	100,920	43,670	509	2.65
Stratford	53,494	64,364	26,501	2,473	4.99
Trumbull	79,507	88,290	34,931	763	2.27

In April, 2006 Connecticut's unemployment rate was 3.9% while Bridgeport had an unemployment rate of 6.0%. These findings are consistent with the Spring 2005 survey of Head Start families who ranked employment and financial challenges as the community's "greatest challenge" (49.6%) and who identified the "unemployed" as the most vulnerable population in their community (70%). From 1987 to 1996 the Bridgeport region lost more than 26,000 positions, most of which were high paying manufacturing jobs. While some of these jobs have been recovered, more than half of the total job increases in the Bridgeport region have been in the service sector, paying 30 to 50% less than manufacturing jobs and often providing no health benefits.

In 1996 the Connecticut Department of Social Services implemented the Jobs First Program to move families from Temporary Family Assistance (TFA) to financial independence. The program's main goal is to break the cycle of poverty while promoting work and personal responsibility. There is a 21-month limit for cash and employment services with a "safety net" component for those in special situations. Today only 1,200 individuals in Bridgeport receive TFA assistance (8.7%). A Spring 2005 survey of ABCD Head Start families found that 17.9% of the respondents were receiving TFA assistance. Yet according to the 2000 Census, 25,000 people in Bridgeport live below poverty. Results from the 2005 Community Assessment found the following:

- 55% of two-parent households with children under the age of 6 had both parents in the workforce.

- The median household income in Bridgeport was \$34,568 – the lowest in the region.
- The Per Capital Income in Bridgeport was \$16,306 – the lowest in the region.
- The self-sufficiency standard for a Bridgeport family, with two parents working and two children was \$51,290.
- The average household income of ABCD Survey respondents was \$22,219, well below the self-sufficiency standard.

Education Needs:

“Today, education is perhaps the most important function of state and local governments. ... It is required in the performance of our most basic public responsibilities, even service in the armed forces. It is the very foundation of good citizenship. Today it is a principal instrument in awakening the child to cultural values, in preparing him for later professional training, and in helping him to adjust normally to his environment. In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity ... is a right which must be made available to all on equal terms.” Chief Justice Warren Supreme Court of the United States, 1954; Brown v. Board of Education.

Yet more than a half-century after Brown vs. Board of Ed., the high cost of housing in the affluent suburbs of Connecticut has resulted in the segregation of large numbers of poor black and Hispanic children.

Ethnicity and Class Size

Town/City	% of White Students	% of Black and Latino Students	Avg. Class Size
Bridgeport	11%	85%	24.3
Fairfield	91%	5%	19.7
Trumbull	90%	6%	21.2

Easton	94%	2%	20.5
Monroe	92%	5%	22.6
Stratford	63%	33%	20.9

Source: State Department of Education 2003-04 School Profiles

The Bridgeport School District serves more than 23,000 school age children. Of these only 70.6% graduated in 2006.

2006 High School Graduation Rates:

Bridgeport	70.6%
Fairfield	96.9%
Monroe	99.1%
Stratford	93.3%
Trumbull	96.7%

Source: Ct. State Department of Education

Educational Attainment for the Population 18 years and over

Source: 2000 U.S. Census

	Bridgeport	Easton	Fairfield	Monroe	Stratford	Trumbull
Less than 9th Grade	13.49%	2.83%	2.68%	2.74%	5.36%	4.69%
9-12 with no diploma	19.44%	3.83%	5.28%	6.31%	11.39%	5.56%
High School Diploma & GED	30.86%	13.5%	18.29%	22.93%	33.66%	22.67%
Some college, no degree	18.39%	15.85%	20.58%	20.60%	19.02%	17.34%
Associate Degree	4.44%	6.09%	5.51%	7.48%	5.77%	7.06%

Bachelor's Degree	7.48%	30.36%	27.04%	24.35%	14.93%	23.77%
Graduate or professional degree	3.94%	27.32%	20.09%	15.34%	9.40%	18.2%

In all academic areas, Bridgeport children are being left behind.

According to the Bridgeport Board of Education, in 2004 and 2005 more than 15,000 Bridgeport children attended schools that were found to be making insufficient progress, as determined by performance on State Mastery tests.

Percent of Children Achieving State Goal 2006 10th Grade Mastery Results and Graduation Rates

Town	Reading	Writing	Math	Science	2006 Graduation Rate
Bridgeport	14.9	20.0	11.7	8.6	70.6
Fairfield	72.4	76.9	72.7	72.5	96.9
Monroe	69.8	84.2	61.5	65.6	99.1
Stratford	36.7	52.8	35.9	35.0	93.3
Trumbull	60.6	65.3	59.1	52.3	96.7

Percent of Children Achieving State Goal 2006 8th Grade Mastery Test Results

Town	Math	Reading	Writing
Bridgeport	19.2	33.8	35.5
Easton	85.8	87.5	90.0
Fairfield	78.9	87.6	81.9
Monroe	69.3	80.3	69.9
Stratford	52.0	59.9	54.4
Trumbull	78.4	86.9	91.0

Percent of Children Achieving State Goal 2006 4th Grade Mastery Test Results

Town	Math	Reading	Writing
Bridgeport	22.7	23.6	33.9
Easton	86.7	82.8	89.1
Fairfield	71.7	79.1	78.6
Monroe	76.9	74.1	74.1
Trumbull	81.3	79.5	82.1

Stratford	48.9	48.9	57.1
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Despite rising graduation rates, Bridgeport’s graduates are not leaving school with the necessary skills to continue their education or to enter into a workforce that demands increasing levels of skills and knowledge.

Results from multiple studies and research efforts have demonstrated that Pre-School experiences are important for success at school and can help close the achievement gaps between urban and suburban school systems. Despite the increasing households with two parents working (55.2%) and the large number of single-parent working households (64%), Bridgeport lags far behind the suburban towns in number of children with Pre-School experience.

% of Children with Pre-School Experience

Source: State Department of Education, 2002

Bridgeport	66.8%
Fairfield	95.5%
Monroe	89.6%
Stratford	72.0%
Trumbull	84.9%

Data derived from A.B.C.D.’s most recent National Reporting System (N.R.S.) assessment found that four year old Head Start children on average are delayed in their speech and language skills by nearly two years. The work of Hart and Risley found a 30 million-word gap between upper and lower socioeconomic status three year old children.

They found, “...86 percent to 98 percent of the words recorded in each child’s vocabulary consisted of words also recorded in their parents’ vocabularies.”

Families’ Language and Use Differ Across Income Groups						
Measures & Scores	<u>13 Professional</u>		<u>23 Working-class</u>		<u>6 Welfare</u>	
	Parent	Child	Parent	Child	Parent	Child
Recorded vocabulary size	2,176	1,116	1,498	749	974	525
Average utterances per hour	487	310	301	223	176	168
Average different words per hour	382	297	251	216	167	149

Hart and Risly found that, “*By the time the children were 3 years old, trends in amount of talk, vocabulary growth, and style of interaction were well established and clearly suggested widening gaps to come.*” (2003) Additional research and analysis found that “*the three year old children from families on welfare not only had smaller vocabularies than did children of the same age in professional families, but they were also adding words more slowly...*” predicting an ever-widening language gap. The average child on welfare was exposed to half as many words per hour (616 words) as the average working-class child (1,251 words per hour) and less than one-third of the words heard by children in a professional family (2,153 words per hour).

Hart and Risly also found differences in the proportion of affirmative words (encouraging words) and prohibitive words (discouraging words) children were exposed to. The average child in a professional family heard, on average 32 affirmatives and five

prohibitions per hour, a ratio of 6 encouragements to 1 discouragement. The average child in a working-class family heard 12 affirmatives and seven prohibitions per hour, a ratio of 2 encouragements to 1 discouragement. The average child in a welfare family, however, was hearing five affirmatives and 11 prohibitions per hour, a ratio of 1 encouragement to 2 discouragements. In a 5,200-hour year, that would be 166,000 encouragements to 26,000 discouragements in a professional family and 26,000 encouragements to 57,000 discouragements in a welfare family.

In the words of Hart and Risly,

“Estimating the hours of intervention needed to equalize children’s early experience makes clear the enormity of the effort that would be required to change children’s lives. And the longer the effort is put off, the less possible the change becomes. We see why our brief, intense efforts during the War on Poverty did not succeed. But we also see the risk to our nation and its children that makes intervention more urgent than ever.” 2003

There are more than 5,000 children ages birth to three in Bridgeport. Yet there is only one Early Head Start program serving 32 infants and toddlers. There are a total of 680 licensed slots for 5,000 infants and toddlers in Bridgeport. Early intervention is out of reach and unavailable to the vast majority of parents of children birth to three in Bridgeport.

Health

A 2004 report by the Bridgeport Child Advocacy Coalition gave Bridgeport failing grades in 15 of 19 indicators of child well-being. Included in these indicators were infant mortality, low birth weight, teen pregnancy, air pollution, and lead poisoning. According to the 2005 Bridgeport Town Profile, the City’s infant mortality is nearly twice that of the State -- 7.5 per 1,000 births compared to 4.5 for the State. In the year

2000, 10.3% of all children were born with low birth weight. Bridgeport's African American children had the highest rate of low birth weight, at 13% of all births. The 2002 rate of low births for Connecticut was 7.8%. 22.8% of Bridgeport's pregnant moms had no prenatal care during their first tri-mester. 4.3% of all babies born had no pre-natal care. In Bridgeport 6.4% of African American babies had no pre-natal care.

According to a recent Environmental Defense report, there are 9,564 children in Bridgeport living with asthma. On average, the air quality of 12% of the summer days was determined to be detrimental to persons with asthma. The federal Environmental Protection Agency has cited Fairfield County as an "extreme non attainment area" due to its current inability to meet air quality standards. Diesel-powered trucks from I-95, a major interstate highway that runs through the city, are significant contributors to the poor quality of Fairfield County's air.

In 2000, Fairfield University's lead exposure program found 16% of Bridgeport children under the age of six were affected by lead poisoning. Obesity has been identified nationwide as an epidemic among children in America. Bridgeport is no exception. According to a recent study, nearly 8% of children ages 4 and 5 are overweight; double that of twenty years ago. Out of 571 ABCD children, ages three and four, in 2004, 151 (26% of enrolled children) were found to have a body mass index (BMI) that was greater than or equal to 95% and categorized as overweight. An additional 9 % (54 children) were found to be at risk of being overweight with a BMI of 85-94 %.

Race, Ethnicity, Culture, and Languages

Ethnic diversity is strongly present in Bridgeport, where more than 65 languages are spoken in the public schools. Of the 17,926 “Linguistically Isolated” households in Eastern Fairfield County, 16,052 or 84.8% are in Bridgeport. Likewise, 86.8% of African Americans and 88% of Hispanics in Eastern Fairfield County live in Bridgeport. 82.5% of Bi-racial and “other” ethnic groups live in Bridgeport. Source: April 2005, State and Assets Policy Agenda.

<p>Connecticut Net Worth of White Headed Households = \$153,900 Connecticut Net Worth of Minority Headed Households = \$5,446</p>

Children with Disabilities:

The percentage of children statewide diagnosed with a disability is 4.2% -- considerably lower than the 14% of ABCD children diagnosed with disabilities in 2005 and the 12% in the Bridgeport Schools. Comparisons among communities is difficult to do in the area of disabilities as each community use a different threshold for determining access to special education services. In general the trend has been increasing over the past several years, with children having more severe disabilities in need of Head Start and Early Head Start services, including children diagnosed with Autism, Cerebral Palsy, Hearing and Visual impairments, Down’s Syndrome, Spinobifida, children diagnosed as Microcephalic, and so on.

APPLIED RESEARCH

Curriculum Delivery

In 1983, Howard Gardner proposed that there are at least seven forms of intelligence: linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, intrapersonal (e.g., insight, metacognition), and interpersonal (e.g., social skills). At the core of this theory is the recognition that people think and learn differently and that intelligence can be expressed in a multitude of ways.

Seven* Ways of Being Smart, The Gardner School, Vancouver, Wa.

Intelligence Area:	Is Strong In:	Likes to:	Learns Best Through:	Famous Examples:
Verbal-Linguistic (Word Smart)	reading, writing, telling stories, memorizing dates, thinking words	read, write, tell stories, talk, memorize, work at puzzles	reading, hearing and seeing words, speaking, writing, discussing and debating	T.S. Eliot, Maya Angelou, Virginia Woolf, Abraham Lincoln
Math-Logic (Number Smart)	math, reasoning, logic, problem-solving, patterns	solve problems, question, work with numbers, experiment	working with patterns and relationships, classifying, categorizing, working with the abstract	Albert Einstein, John Dewey, Susanne Langer
Spatial (Picture Smart)	reading, maps, charts, drawing, mazes, puzzles, making images, visualization	design, draw, build, create, daydream, look at pictures	working with pictures and colors, visualizing, using the minds eye, drawing	Pablo Picasso, Frank Lloyd Wright, Georgia O'Keeffe, Bobby Fischer
Bodily-Kinesthetic (Body Smart)	athletics, dancing, acting, crafts, using tools	move around, touch and talk, use body language	touching, moving, processing knowledge through bodily sensations	Charlie Chaplin, Martina Navratilova, Magic Johnson
Musical (Music Smart)	singing, picking up sounds, remembering melodies, rhythms	sing, hum, play an instrument, listen to music	rhythm, melody, singing, listening to music and melodies	Leonard Bernstein, Wolfgang Amadeus Mozart, Ella

				Fitzgerald
Interpersonal (People Smart)	understanding people, leading, organizing, communicating, resolving conflicts, selling	have friends, talk to people, join groups	sharing, comparing, relating, interviewing, cooperating	Mahandas Gandhi, Ronald Reagan, Mother Theresa
Intrapersonal (Self Smart)	understanding self, recognizing strengths and weaknesses, setting goals	work alone, reflect, pursue interests	working alone, doing self-paced projects, having space, reflecting	Eleanor Roosevelt, Sigmund Freud, Thomas Merton

Gardner has since added two more potential intelligences: naturalistic and existential. Many educational organizations embrace the naturalistic, and fewer have embraced the existential.

Traditional education, however, tends to emphasize two of "the ways of knowing": logical/mathematical and verbal/linguistic. The most successful students in traditional schools, therefore, are those who are inclined to these two intelligences. For whole segments of the learning population, however, those strongest in visual, auditory, personal and kinesthetic intelligences; the school curriculum is not delivered through accessible strategies.

Goleman reports that the greatest predictors of success in life, and at least equal in importance to IQ, are the emotional intelligences, inter- and intra-personal. And yet these are not addressed in the traditional curriculum, either as content or in the delivery of that content.⁴ The results of narrowing the curriculum to focus on reading and math in recent years paired with the emphasis on high-stakes testing for 'right' has led to an abundance of direct teaching, a 'one size fits all' approach that has not sufficiently addressed multiple learning styles, and has left many as far or farther behind than under prior circumstances.

⁴ Goleman, Daniel Emotional Intelligence. Bantam Books, 1995.

There is a growing body of evidence that multi-sensory instruction can significantly strengthen students' academic performance. Research, involving first and second graders at two Pawtucket, RI public elementary schools, produced strong evidence that instruction in arts and music, integrated with the rest of the curriculum, can greatly improve children's performance in reading and math. (Gardiner, Fox, Knowles, and Jeffrey, 1996.) The work of Rauscher and Shaw, 1997 supports the use of music in the development of spatial reasoning and math, with emphasis on hands-on involvement in music making. James S. Catterall, Richard Chapleu and John Iwanaga of the UCLA Graduate School of Education and Information Studies in their study concluded, *"Performance in a wide range of academic subjects and on standardized tests was significantly higher for students involved in sustained arts education."*

The Chicago Arts Partnership in Education (CAPE) was begun in 1992. Major target subjects were reading, social studies, science and math. One of their findings was that sixth grade students in CAPE programs exhibited higher math accomplishments than students in other schools. A second finding was that the levels of reading proficiency were higher in sixth graders in CAPE vs. non-CAPE schools. A third effect on academic performance was that ninth grade students in CAPE programs achieved a full grade level of reading above non-CAPE schools.

An extensive study performed by Judith Burton, Robert Horowitz and Hal Abeles, of the Center for Arts Education Research at Columbia University involved 2046 children in grades 4, 5, 7, and 8 in 12 public schools in New York, Connecticut, Virginia and South Carolina. Instead of focusing on academic test performances and arts involvement, these researchers dug into the basic intellectual processes and personal attributes that are

at the foundation of cognitive development and resultant enhanced test performance. They also studied the school situation, the effects of arts curricula on teachers and on their interactions with students. Beneficial effects were seen in all areas: students' thinking abilities, their approaches to problems, their attitudes toward learning and their perception of themselves as active learners. Importantly, these benefits were not limited to a particular subject matter or classroom situation, but rather were evident in most if not all of the learning situations that students encountered. Additionally, school climates were better and teachers were more involved in their work. Finally, the results were due to the school programs themselves, not to differences in background or socioeconomic status. In fact, some of the most striking findings were seen in low socio-economic situations.

In Total Learning teachers apply the work of Gardner and others to develop a multi-sensory, multiple intelligence approach to education that is designed to reach children through all of the senses, building on children's strengths and abilities, providing multiple hooks to knowledge and skill acquisition. Teachers help students understand and use strengths to acquire new information and work on more fully developing skills in challenging areas. The delivery system is equally considered along with the content, making certain that the emotional challenge and support build motivation and a safe environment for learning how to learn. Parents are helped to understand children's strengths and how children learn.

The emphasis is on the teachers and support staff within the school and district itself, with visiting professionals providing enrichment to the core group of providers. In

this way the initiative should eventually build leadership cadres within the teaching ranks who will represent a new and vital approach.

AN ARTICULATED BIRTH – TO – NINE VISION

Early Start with Music Together

The anticipated benefits include :

1. Young poor children (infants and toddlers) will develop age appropriate speech and language skills.
2. The word gap between suburban children and the participants will be reduced.
3. Parents will learn and utilize new skills to help their children develop age-appropriate speech and language skills.
4. Children and parents will have access to resources and materials that were previously unavailable to them due to cost.
5. Reciprocal relationships between parent and young child will be strengthened, supporting the parent-child bond.

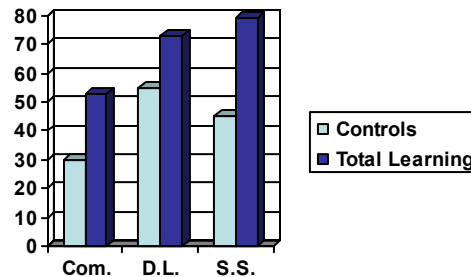
Head Start with Music Together

A.B.C.D., Inc. will partner with Music Together to provide a music and movement-based early intervention program for low-income and poor infants/toddlers and their parents. The program brings families together by providing a rich musical environment in the classroom and by facilitating family participation in spontaneous musical activities at home within the context of daily life.

Music Together has successfully supported the growth and development of infants and toddlers living in homeless shelters in Frankford, Kentucky and is working with young children in Trenton, New Jersey. Data from these two initiatives are not yet

available for dissemination; however, the projects are a result of twenty years of research and development. A pilot study, however, conducted in 2006-07 resulted in substantial gains as follows:

**Infant/Toddler Total Learning Pilot Project
2006-2007
Comparative Percentile Rankings**



Com: = Communication Skills: D.L. = Daily Living Skills: S.S. = Social Skills

Kindergarten – 4th Grade with Total Learning K-4

Professional Development -- Embedded Coaching

Job-embedded professional development with ongoing classroom modeling, coaching and on-site support, is an integral part of Total Learning.

In order for teachers to implement new strategies, they must successfully learn new roles and ways of teaching, entailing a long-term developmental process – i.e. Professional Development. To be effective, however, professional development can no longer be viewed as an event that occurs on a particular day of the school year; rather, it must become part of the daily work life of educators. Teaching staff must gain information about how to provide rich conceptual experiences, knowledge of effective teaching strategies, the ability to assess children and to interpret information to guide instruction; knowledge of ways to modify instruction to accommodate all children

(including those with limited English proficiency or identified disabilities) and partner with parents and other staff.

Research has shown that workshops alone are not enough. Professional development has traditionally been provided to teachers through school in-service workshops. Experts variously say that this approach lacks continuity and coherence; that it misconceives the way adults learn best, and that it fails to appreciate the complexity of teachers' work (Little, 1994; Miles, 1995). When presented with new information/strategies, teachers need support for appropriate implementation to occur.

The problem is, "where do teachers find the time for change in their already busy schedules? ...the demands posed by daily teaching and other aspects of reform continue to absorb a bulk of teachers' energy, thought, and attention" (McDiarmid, 1995). A fundamental lesson learned in past school reform efforts is that far more time is required for professional development and cooperative work than has been available (Fullan & Miles, 1992). Former American Federation of Teachers President, Al Shanker, (1993) pointed out,

"If it takes 600 courses and 92 hours a year per employee to make a better automobile, it will take that and more to make better schools. And if we're not willing to commit ourselves to that kind of effort, we are not going to get what we want."

Linda Darling-Hammond (1999), Joyce and Showers (1995), Dufour and Eaker (1998), defined high quality professional development as activities that are sustained over time, embedded in educators' every day work, that incorporate the best available research and practice in teaching and learning, and foster collaboration and reflective practice among participants. The value of coaching to deliver sustained embedded professional development in education has been well documented. The empirical work of Bruce and

Ross, in 2006, found peer coaching to be an effective method of professional development for school teachers while Deborah Ireland, in 2003, found coaching offered the necessary support to a teacher, enabling the teacher to bring a new knowledge under “executive control”, having it become part of her teaching repertoire. In Asia and Europe, teachers often are provided with more opportunities for job-embedded forms of staff development and collaborative work than their American counterparts.

Researchers Bruce Joyce and Beverly Showers (1985; 1988) pioneered work in this area by demonstrating that coaching is a positive and essential component of effective professional development. Joyce et al. (1989) demonstrated that student achievement increased when coaching was part of a professional development program. In addition, Joyce and Showers (1982) found that coaching helps schools staff members to build community and develop a shared language.

Length of Day/Year

Children in Total Learning classrooms will attend school 9 hours a day, eleven months a year.

Paul Reville of the Rennie Center for Education Research and Policy, said, in 2005, that students in other countries tend to spend far more time in school than students do in the United States.

“We spend about 40-45 percent of the time that other countries are spending on core academic subjects,” Reville said. “It’s not surprising that we aren’t seeing the level of achievement [they’re] seeing in those areas.”

Reville, who chaired a 1995 state commission on school schedules, said lengthening instruction time could be especially beneficial to city schools. Reville said.

"It stands to reason that if you have some kids who have a long way to go to close the achievement gap and you give all students the same amount of instruction time, you're not likely to close that gap."

As far back as 1983, the report "A Nation at Risk" recommended that school districts consider a longer day as well as a 200- to 220-day school year. In 1994 the National Education Commission on Time and Learning in its report "Prisoners of Time" reached the same conclusion: The United States should significantly expand its conventional school calendar to accommodate the demands of education reform efforts.

In 1995 the Massachusetts Time and Learning Commission concluded that, "Our state would never reach the high academic standards we set for all children unless and until our schools included more time." In 2004, Massachusetts Governor Romney called for a longer school day. In response, the Massachusetts Legislature provided \$500,000 in the 2006 budget for planning grants to school districts to help them significantly expand learning time in some or all of their schools.

The Center for American Progress examines high schools that implement extra learning time as part of their program. "Expanding learning time may be the only way to catch kids up and get them on a pathway to productive adulthood," says Cindy Brown, Director of Education Policy for the Center for American Progress. The Center concluded that when combined with strong academic offerings, high expectations, and extra support, longer school days can help prepare students not just for college, but also for life.

In the United States, the typical school day lasts six hours and the school year numbers 180 days. In contrast, other industrialized countries, such as England, provide up to eight hours of schooling a day, 220 days a year.

The National Commission on Excellence in Education was concerned that the average school in the United States provides only 22 hours of academic instruction per week. These findings prompted the commission to recommend "more effective use of the existing school day, a longer school day, or a longer school year."

A 1982 study found that an additional 60 minutes a day allocated to reading comprehension alone would be required to raise test scores by a quarter of a standard deviation, that is, 25 points on a SAT-style test scored from 200-800 points (Karweit 1982). According to Rossmiller, a typical school year of 1,080 hours may result in as few as 364 hours of time on task, after deducting time for non-instructional activities, process activity (distributing material, keeping discipline), absenteeism, and other time not on task.

There are other arguments for lengthening the school day or year other than the correlation between time in school and student achievement. Thomson (1983), executive director of the National Association of Secondary School Principals, claims a longer school year is needed to accommodate the requirements of the information age. Many teachers argue that they need more time to cover the necessary material. Others cite nonacademic reasons; the increasing number of working mothers would welcome a program allowing students to stay in school until the end of the work day. Such time

could be used for activities ranging from remedial labs and gymnastics to computer electives.

Class Size

Compelling evidence demonstrates that reducing class size, particularly for younger children, has a positive effect on student achievement overall and an especially significant impact on the education of disadvantaged children. In 1985, the state of Tennessee implemented a major class-size reduction initiative in grades K-3. The study (STAR Study) has been described as one of the best-designed studies in the history of education. The result: Lowering class size substantially improved student achievement and was especially effective for poor children, with the following findings:

- Graduated on time — 72 percent of students, versus 66 percent from regular classes and 65 percent from classes with a paraprofessional
- Completed more advanced math and English courses
- Completed high school — 19 percent dropped out, versus 23 percent from regular classes and 26 percent from classes with a paraprofessional
- More students graduated with honors

Rouse, in 1997, compared the achievement of Milwaukee voucher students and students in three types of Milwaukee Public Schools (MPS): regular schools, magnet schools, and schools participating in the Preschool to Grade 5 Grant Program (P-5 schools). P-5 schools, which enroll about 25 percent of all MPS elementary students, served “predominantly minority and extremely disadvantaged” children and received supplemental state funds that enabled them to cut their pupil-teacher ratio, on average, to 17 to 1. Rouse found that students in the P-5 schools (small class size) made

“substantially faster gains in reading” than those in the regular public schools, the public magnet schools, and the voucher schools.

In his 1998 comprehensive review of class size and voucher research, Alex Molnar draws the following conclusion: “There is no longer any argument about whether or not reducing class size in the primary grades increases student achievement. The research evidence is quite clear: It does.”

Parent Involvement and Family Support Services

Parent Involvement and Family Support Services are a fully integrated component of Total Learning.

According to a December, 2004 analysis featured in the Los Angeles Times the incomes of low-income households have become more unstable in recent years, According to Times: "During the early 1970s, the inflation adjusted incomes of most families in the bottom fifth of the economy bounced up and down no more than 25 percent a year. By the beginning of this decade, those annual fluctuations had doubled to as much as 50 percent. For a family with an income at the 20th percentile--or roughly \$23,000 a year in inflation-adjusted terms--that has meant recent annual swings of as much as \$12,000. Twenty-five years ago, those swings tended to be no more than \$4,300." The analysis further showed that families are also more likely to see their household income plummet by 50 percent or more when there is a family crisis or "shock to the system." As an example, between 1970 and 1980, 13 % of families in which the head of household became unemployed saw their income drop by 50 percent or more.

Between 1990 and 2000, 27% of such families saw their income drop by 50 percent or more.

In 2003 the Workplace, Inc., the Regional Workforce Development Board for all of southwestern Connecticut (including Bridgeport) completed a Community Audit to assess the regional economy, its foundations, and implications for both employers and job seekers. The audit concluded that ***it would be unlikely for persons with three or more barriers to employment to succeed in the workplace in the absence of intensive case management and comprehensive services.*** Barriers to employment included:

Lack of education; Housing; Language Difficulties; Childcare; Learning Disability; Substance Abuse; Domestic Violence; Mental Health Issues; Transportation; Health

The above suggests that Bridgeport families are in need of substantial support (family support services) in order to obtain and maintain employment. Further, even when Bridgeport parents are able to find employment, they are mostly employed in low wage jobs that do not provide economic stability for their families and are more vulnerable to financial set-backs than their upper income suburban counterparts. Low incomes, low level of education, unstable employment, unstable housing, high crime neighborhoods characterize the family demographics of Bridgeport's school children.

In 1997, the Administration for Children and Families launched the Head Start Family and Child Experiences Survey (FACES), a study with a nationally representative sample of 3,200 children and their families in 40 Head Start programs. FACES provided

longitudinal information on a periodic basis on the characteristics, experiences, and outcomes for children and families served by Head Start.

Head Start is an anti-poverty program that incorporates strong parent involvement and case management into an early learning environment. "Strengthening families as the primary nurturers of their children" is the second of Head Start's performance objectives. Thus, the educational and interactive activities that family members do at home with their children, as well as strong family support services, are critical to supporting children's school readiness.

The results from the FACES data indicate that as a result of their participation in Head Start, low-income parents increased the variety of educational and recreational activities that they did with their children at home. Further findings suggested that participation in Head Start played a role in protecting children from the negative outcomes associated with family risk factors, including maternal depression, exposure to violence, alcohol use, and involvement in the criminal justice system. Parents cited Head Start as an important source of support in rearing their children. Importantly, they reported a greater sense of control over their own lives and a reduction of risk for their children at the end of Head Start than at the beginning. Head Start parents demonstrated higher levels of mental well-being. More parents obtained a license, certificate or degree (a 9 percent increase from fall to spring); more were employed and fewer received welfare assistance. The change in receipt of welfare assistance represented a 14 percent decline among Head Start parents.

Overall, Head Start families made several positive changes in their lives that impacted their children's school readiness. Sixty-five percent of parents reported specific

long-term educational attainment goals for their children. Children in Head Start showed significant expansion of their vocabularies between the beginning and end of the program year. Larger gains were seen among children who came to Head Start with less developed skills with greater gains among children who had less knowledge initially on measures of vocabulary, early writing and math tasks.

Child FIRST, a system of care model provided early intervention for more than 150 high risk families of young children in Bridgeport, Ct. The model received one of five national Starting Early / Starting Smart – Prototype grants from the Substance Abuse and Mental Health Services Administration (SAMHSA), in 2001. The grant funded a randomized trial to look at the effectiveness of the Child FIRST early childhood system of care. The essential components consisted of:

- 1) Early identification through screening in Pediatric Primary Care and WIC,
- 2) Comprehensive, home-based assessment of the priorities, strengths, and needs of the child and family,
- 3) Targeted psychosocial intervention for the child and parents,
- 4) Development of a family-driven plan of wrap-around supports and services for all members of the family, and
- 5) Care coordination to help the family access needed services and supports.

Evidence from preliminary analysis of six month follow-up demonstrates that this system of care can make major differences in the development of high risk children. Children and families served by the Child FIRST intervention showed statistically significant positive changes as compared to Usual Care controls in the following areas:

- 1) Child FIRST parents showed marked decrease in parenting stress. (Child FIRST mothers were 4.24 times less likely to have Parenting Stress Index scores above the significant stress cut-points than Usual Care mothers, with similar results with Parent Distress and Difficult Child scales.)
- 2) Child FIRST families had a decrease incidence of child abuse. (Child FIRST families were 3.5 times less likely to have protective service involvement than Usual Care families.)
- 4) Child FIRST mothers reported statistically significant improvement in their children's feelings or behavior, their understanding of their children's development, and in feelings of depression and sadness.
- 5) Families served by Child FIRST accessed 77% of needed services, as opposed to 30% accessed by Usual Care families.
- 6) Child FIRST children showed an increase in language development. (Child FIRST children were 3.1 times less likely to have language problems than Usual Care children.)

Both the FACES and the Child FIRST studies demonstrate the effectiveness and importance of case management and care coordination for child outcomes.

Birth to Three

We have already discussed the word gap between poor children and children of professional families. Rather than wait for children to enter a pre-school classroom, already disadvantaged in speech and language skills, Total Learning will reach into the community with comprehensive family services and a parent and music program for infants and toddlers and their parents.

Multiple studies have demonstrated the importance of music on early childhood and cognitive skills. Music has been shown to enhance spatial-temporal reasoning, which has been shown to have a positive impact on reading development (Bilhartz, Bruhn, Olson, 2000 and Rauscher, 1993, 1997). Hetland (2000) found “cognitive processes normally associated with music share neural networks with other kinds of mental activity.” Weikert, et al (1987) stressed the importance of gross motor development and language interaction around rhythm and movement in young children. Wolfe, D. E. and Hom, C. 1993 found that listening to songs may enhance quick incidental word learning in young children. Susan Black in her 1997 review cited studies that demonstrate the positive effects of early and ongoing musical training to organize and develop children's brains. In 1997, a research project conducted with three-year-olds in a Los Angeles preschool tested children's spatial reasoning after eight months of music and singing lessons. The children who had received the music training increased their spatial-temporal reasoning by 46 percent as compared to a 6 percent increase in the control group that received no training. (Rauscher, Shaw, Levine, et al, February 1997.) Sandra Treub, in 1997 found that, “Music - - specifically song - - is one of the best training grounds for babies learning to recognize the tones that add up to spoken language.”

Harp, B., (1988). Wrote in "The Reading Teacher," “A most effective way to teach children to learn and to value language is to provide them with a variety of meaningful experiences that fine-tune their ability to hear rhythm, sounds, and melodies. The skill children gain in listening will then provide a solid framework for successfully attending to language in print. The singing-reading connection not only helps children learn to read but also fosters a love for reading.”

Norman M. Weinberger wrote in Scientific America of the innate musical abilities of babies. “In fact, to find someone with a “musical brain,” we need only look at any infant. Even before babies have acquired language, they exhibit a marked capacity for reacting to music.”

THE APPROACH

Overview

The key elements of Total Learning will involve a **Multi-Sensory approach to Curriculum Approach**, an enhanced **Learning Environment** (small class sizes, an extended day and year), embedded extensive **Professional Development, Family Support** services, **Parent Involvement, Parent and Infant/Toddler** and Early Childhood music and movement classes, and an independent **Evaluation** that meets the “gold standard” of research.

Curriculum Approach

Total Learning is a multi-sensory, interactive approach that serves children, ages birth to nine, their parents, teachers, and classroom aides. The research on teaching and learning suggests that active, hands-on strategies that engage the ears, eyes, bodies, and minds of children lead to a myriad of outcomes including increased achievement, engagement, attendance, interest, and motivation. At the same time, decreases in behavior issues and diminished labeling of special learners are experienced.

The foundation of Total Learning is the belief that sounds, movement, images, and words -- are equally essential forms of communication that are both unique and inform one another. They are acquired early, and literacy in all forms is necessary for

education to succeed. Many different types of learners are served within any given classroom. In the complexity of a multi-media world, many children do not gain the skills required to focus on details required to communicate effectively.

The power of a multi-modal, sensory, arts-based curriculum is well documented, as is its impact on teaching and learning in primary literacy and language acquisition. Furthermore, the processes of creating, performing, and responding provide meaning-making opportunities while affording necessary opportunities for community building within the classroom, school and home. Total Learning theory is deeply rooted in both research and practice. The success is documented through an array of “scores,” ranging from standardized and teacher-made tests to measures of teacher, student and parent engagement.

Differentiated instruction and discovery learning are at the heart of Total Learning. The incorporation of multiple intelligences in the context of a multi-sensory approach to curriculum delivery builds confidence and excitement about learning and teaching. Emphasis on building deep understanding of concepts and skills, in contrast to rote instruction, results in deep learning, which is essential for mastery and transfer of information. Multifaceted activities require students to think critically, solve problems, research solutions and perform meaningful tasks.

The Learning Environment:

Total Learning is comprised of four distinct components that combine to provide seamless cognitive, social/emotional and physical development.

A. Early Start and Music Together

Five parent/child birth-3 year old Music Together classes, comprised of no more than 12 children and their parents, will participate in three twelve-week semesters, with two forty-five minute classes per week. Highly qualified trainers will deliver the Music Together curriculum that reinforces Early Start curriculum goals. Parents will receive on-going coaching through classroom parent education moments, in addition to parent workshops. Each family will receive one set of materials per twelve-week semester. The Music Together curriculum will be augmented to include visual/spatial activities and strategies. Two teacher/provider workshops per semester are provided for on-going professional development.

B Total Learning and Pre-School –

Instructional staff in ten Pre-School classrooms (serving 200 Head Start children) will participate in weekly embedded coaching utilizing music and movement for curriculum delivery.

C. Total Learning Kindergarten-Grade 4

Sixteen Kindergarten classrooms are participating in Total Learning for the 2007-08 school year totaling 360 kindergarten children and their parents. Half of the 16 classrooms, (eight) will be staffed by one teacher and two paraprofessionals (instructional staff) who are employees of the Bridgeport Board of Education. The other eight classrooms are staffed according to the typical classroom staffing of the Bridgeport School System, with one teacher and one paraprofessional. Eight of the classrooms operate 9 hours a day, eleven months a year. The other eight classrooms operate the typical number of hours and months of the Bridgeport School System. The instructional

staff in all 16 classrooms receives year-long, embedded professional development, through which they learn to deliver the Bridgeport Board of Education Kindergarten curriculum through Total Learning strategies.

The Kindergarten classrooms are randomly assigned. An additional sixteen kindergarten classrooms, matched as closely as possible, serve as controls and participate in the traditional Bridgeport Kindergarten classroom schedule, staffing pattern and curricula delivery.

C. Grade 1 Development

During the 2007-08 school year, one (1) model Grade One classroom serves as a pilot to develop the Grade One training materials, adapted to the Bridgeport Board of Education's Grade One curriculum. Using as much of the training design as possible from Kindergarten, and making developmentally appropriate adaptations for Grade One children who have had the Total Learning Kindergarten experience, materials and process will be prepared for a broader implementation the following year. Formative evaluation informs this process.

Kindergarten Professional Development

The initial professional development for Total Learning Kindergarten is delivered throughout the year through orientation, workshops, classroom modeling, team teaching, coaching, and planning sessions. The goal is to train teachers to independently deliver the curriculum through use of powerful, multi-modal, developmentally appropriate strategies. The training is divided into a three day initiation workshop, followed by year long in-classroom professional development.

Initiation

The Initiation provides participants with an overview of the training, builds teacher skills and understandings, and an opportunity to discuss what is expected, determine the calendar, identify specific classroom practices and expectations, and answer questions. The instructional staff helps to design the schedule and share their classroom expectations, thereby contributing to the implementation design. This initiation occurs before the school year begins, and has been shown to substantially increase teacher buy-in.

In-Classroom Professional Development

Throughout the year, trainers are in each participating classroom approximately twice a week, plus facilitate one weekly teacher/trainer conference per teacher.

- A 45 minute model lesson introduces the teacher, students and paraprofessionals to the multi-modal strategy. The lessons are sequentially presented in sets of four modalities: auditory, kinesthetic, visual, and linguistic. There are five sets of four model lessons, encompassing 20 strategies. In addition, each set of four lessons incorporates an overarching social/emotional goal which establishes classroom expectations and goals, and builds student confidence. Lesson plans include teacher-to-teacher information, as well as supporting research, theory and best practice data.
- A weekly conference, just after the model lesson, provides time for the teacher to share observations about the strategy, classroom management, and student response; then the teacher informs the trainer about curriculum goals for language and mathematics. They discuss ways to adapt the model lesson so it delivers the

curriculum content. The second 45 minute lesson, held later in the week, is team taught by the trainer and teacher.

- A review and skills assessment is conducted after each set of four lessons.
- After the 20 weeks of training, the trainer becomes a coach, team planning lessons in which the strategies are used to deliver classroom content. As the teacher becomes increasingly confident, the trainer assumes the role of coach or mentor, deepening the teacher's ability to match strategy to both curriculum concepts and student learning styles. Teacher skill levels are assessed, and appropriate levels of support are provided.
- Attention turns to developing sequences of lessons that deliver previously isolated curriculum concepts and skills embedded in a broader thematic context through an integrated unit of study. Using a science, social studies, mathematics or language arts concept, multi-modal strategies are now combined into larger, project-based units that are designed to develop student independence and transfer of knowledge, patterning the brain for learning. Teachers and trainers plan together, with increasing responsibility for delivery of instruction falling to the teacher, with the trainer assuming a coaching and mentorship role.

After School and Parent Support

- Paraprofessionals participate throughout the process; and in the full model classrooms, facilitate after-school centers where students have more opportunity to explore the materials, activities, concepts and skills. A monthly meeting is scheduled for paraprofessionals and after-school providers to introduce classroom-related, multi-modal center activities.

- Parent workshops that build parent skills and prepare parents to volunteer in the classroom are planned in collaboration with the family worker, teacher and school family coordinator.

Assessment

- Formative and summative evaluation by the evaluation team is on-going.
- In addition, student skills are monitored by the trainers and teachers at several points during the year.
- Teacher growth is monitored through journals, conferences, and trainer observation and report. Teachers participate in decision-making whenever possible.
- Teachers and trainers reflect at the end of the year to determine the scope of their future work and construct an action plan.

The initial training provides a solid foundation for most participants, and they are able to utilize the strategies with intermittent support. Support is available through print literature, a video training suite, and e-mail/phone conferencing.

Some teachers may desire additional support as they plan for the next units, and will be encouraged to form support teams with other teachers who have been trained. Some may wish additional training, and may move on to the next level, gaining more strategies and advanced expertise in multi-modal curriculum delivery through Total Learning. In this way Total Learning becomes a continuous source of growth for teachers as well as students, building a network of life-long teachers and learners.

Grade One Professional Development

Grade One professional development will utilize the Kindergarten design with developmentally appropriate materials, activities and strategies for First Grade.

Family Support

Total Learning will utilize a Head Start model for the delivery of Family Support services. All families in eight of the classrooms will be assigned a Family Advocate, who will be employed by A.B.C.D. or Child FIRST, and who will work with all members of the family to develop a Family Partnership Agreement (FPA). The FPA will be family driven, and will include goals for all members of the family including non-custodial parents when appropriate. Referrals and Case Management services will then be provided to assist families in identified areas such as continuing education – e.g. programs that lead to a high school diploma. In addition, the Family Advocate will provide care coordination for any chronic or serious health concern that threatens the child’s ability to benefit from an academic experience.

Children demonstrating stronger needs for mental health intervention will receive care coordination services from Child FIRST. The Child FIRST worker will provide intensive home visiting that will include a comprehensive assessment of the needs of all members of the household, home-based mental health services providing parent and child dyadic intervention, with care coordination for services requiring additional referrals.

Children’s school attendance will be tracked daily. When a child is absent for more than one day, the family advocate will contact the family to ascertain the nature of the child’s absence. In some circumstances, this will involve a home-visit. If the absence

is due to a chronic health concern of any member of the family, an Individual Health Plan is developed for that child.

Through the establishment of trusting and open relationships, Family Advocates will identify families with substance abuse problems, domestic violence, and other sensitive barriers. Family Advocates are trained to make appropriate referrals. In addition, parent workshops on such topics as Stress Management, Depression, Substance Abuse Issues, Domestic Violence and other topics as requested by parents will be made available. Working relationships with local treatment programs will provide avenues for referrals for substance abuse issues. The Greater Bridgeport Mental Health Center is utilized for adult referrals for depression and other serious mental health issues. In the case of a parent who is covered by health insurance, a mental health provider is identified through their carrier with referrals according to their carrier's protocol.

Parent Involvement

A parent orientation meeting will be held for all transitioning families to welcome them to the program and to introduce them to the staff. Parents will meet with instructional staff, and specialists in health, disabilities/mental health, social services, and parent involvement as well as initiative's Leadership Team. Parents will be surveyed to determine their interests and needs. Workshops, activities and family service plans will be developed in response to these surveys and parent interviews.

Family Advocates will offer all families home visits early in the program year. Monthly parent committee meetings will be held to include all parents, and parents will select representatives for the Total Learning Leadership Team. The Leadership Team

will meet monthly and will serve in an advisory capacity as the initiative progresses throughout the year(s). Parents will also have opportunities to contribute to classroom activities and will participate in monthly curriculum events that will connect parents to their child's academic activities.

Subsequent Years

The foregoing proposal discusses the first two years of Total Learning's implementation. In each successive year, additional grades will be added. For example in year two, sixteen first grade classrooms will be added, while the initiative continues to expand the number of participating kindergarten classrooms. The pattern of expansion is planned to continue through the fourth grade (year 5). The project anticipates that by year 5 the approach will have demonstrated its success and will become fully integrated into the K through 4 curriculum design. The project further anticipates that the upper grade and discipline-specific teachers will begin to modify their practices, and participate in professional development activities that will infuse Total Learning throughout the K-12 educational system.

Additionally, various aspects of Total Learning will continue to be implemented in collaboration with other school districts throughout the country. The positive outcomes anticipated in Bridgeport, Connecticut are expected to impact educational systems across the country.

Finally, teacher preparation is an important part of Total Learning. Connecticut's Commission of Higher Education and several Universities and Colleges are engaged in the development of Total Learning as a mechanism for informing institutions that are preparing America's new generation of teachers.

INDEPENDENT EVALUATION

While the Total Learning approach to the needs of children in Bridgeport draws extensively on academic research in social policy, education, and developmental psychology, as well as on the professional experiences and expertise of the collaborators, the overall approach itself is a new one. As a result, ABCD, the Bridgeport Board of Education, Arts Education IDEAS, and Music Together are committed to assessing the approach through a comprehensive evaluation, and subjecting the key components to a social scientific evaluation. The purpose of this evaluation is to determine the effectiveness of the Total Learning approach, and if success is demonstrated, to provide independent data to support the continuing roll out of a Total Learning approach beyond Bridgeport.

An independent evaluation by the Michael Cohen Group will assess the success of the initiative in achieving desired goals. Children will be assigned to classrooms according to the Bridgeport Board of Education's policies. Classrooms will be randomly assigned to the Total Learning model or the standard Board of Education model. Board of Education measures as well as those developed for this initiative will determine outcomes for children, parents, staff, and the learning community.

The Total Learning collaboration hypothesizes the following:

- 1) A comprehensive model that includes extended school day and year, and family support services in the primary grades will result in a positive impact on children in Bridgeport. Impact may be found in a variety of social and educational areas including, but not limited to: school attendance, parental involvement in

children's education, stability of the home environment, improvement in physical health, engagement in school and, ultimately, educational success (both short-term and long-term).

- 2) Utilizing a multi-modal, multi-sensory approach to deliver core curricular material in the classroom will result in positive, measurable educational outcomes. Impact is hypothesized to be found in core curricular achievements (math scores, vocabulary development, literacy, etc.), primarily as a result of increased engagement with material, and engagement and interest in school.
- 3) That providing BOTH a comprehensive model AND a multi-modal, multi-sensory classroom experience (that is, the “full” Total Learning model) will result in more impact than providing either alone, and this impact will be not only additive but also interactive (multiplicative):

The proposed design for a Total Learning evaluation necessitates three conditions of exposure to Total Learning:

- 1) Classrooms utilizing standard approach to curriculum, with no additional services to children or families [*control condition classrooms*],
- 2) Classrooms utilizing a multi-modal, multi-sensory approach to delivering curriculum, BUT without additional comprehensive components, in the form of additional social services, extended classroom days, or small group sizes [*curricular treatment, social services control*],

- 3) Classrooms with a multi-modal, multi-sensory approach to curriculum delivery AND additional comprehensive components of extended classroom days, smaller group sizes, and family support services [*curricular treatment, social services treatment*].

In this approach, 16 classrooms will have some form of intervention. All 16 classrooms will utilize the Total Learning multi-sensory, multi-modal approach to core curriculum delivery. However, only eight of those classrooms will ALSO receive the comprehensive elements (extended day and year, smaller group size and social services.)

Three conditions (complete control, partial intervention, and full intervention) are required in order to successfully evaluate the Total Learning program and provide some controls to create equivalent comparison groups.

The table below illustrates the distribution of characteristics across the 28 classrooms involved in the study.

	Comprehensive Total Learning (in-class and social and family services)	Total Learning In-classroom component ONLY	Control Classrooms
Number of classrooms	8	8	12
Number of students	Approx 180 (22/class)	Approx 180 (22/class)	Approx 260 (22/class)
Proportion of Head Start children	Equal across all three conditions. <i>Randomly assigned</i>		
Teacher background	Equal across all three conditions, <i>Randomly assigned</i>		
Formal In-class support	Total Learning Trainers, and Paraprofessional.	Total Learning trainers	No additional support
Classroom hours	Extended Day	Standard Bridgeport	Standard Bridgeport

Group Size	Smaller Group	Standard Bridgeport	Standard Bridgeport
Curricular delivery approach	Total Learning	Total Learning	Standard Bridgeport
Family Advocate, Case management services	Yes	No	No
Care coordination, chronic and serious health problems	Yes	No	No
Home visits. Household needs assessment, mental health intervention and care coordination	Yes	No	No
Development of Individual Health Plans	Yes	No	No
Regular parental events and parent/teacher meetings	Yes	Yes	No
Outreach to encourage and assist parent participation	Yes	No	No
Teacher participation in Leadership Team	No	No	No

Outcome Measures

This evaluation will measure the educational and social impact of participation in Bridgeport's Total Learning program. While research is currently being conducted to refine the in-classroom component of Total Learning, and this research will lead to the

refinement of the measures to be used to assess the impact of Total Learning next year, we outline below a proposed set of measures of Total Learning's impact.

State of Connecticut and Bridgeport existing assessments

Several assessments are currently conducted in all Bridgeport kindergarten classrooms.

These include:

- The Developmental Reading Assessment (DRA), currently conducted in January and May by teachers,
- Bridgeport Report Card. and
- Concepts of Print assessments.

As a component of the evaluation, data will be compiled from these measures for children in all three conditions. In addition, a baseline DRA may be conducted for all participating students in September of 2007.

Additional Academic outcome measures

Since Total Learning is designed to impact all areas of academic achievement, additional assessments of learning will be conducted at the beginning of academic year 2007, and at the conclusion of the 2007-2008 academic year (some assessments may be conducted at a mid-point in January 2008). These measures will be drawn from existing, validated and nationally normed tests, and may include:

- Vocabulary assessment (e.g. Peabody Picture Vocabulary Test-III)
- Core reading and math skills (Woodcock-Johnson sub-tests, perhaps Letter-Word Identification and Applied problems)
- Measures of Cognitive tasks

Social and Emotional measures

Socio-emotional learning is an essential component of children's development, valuable both in and of itself and because of its relationship to cognitive learning. Both the in-classroom component of Total Learning and the provision of family and social supports are hypothesized to impact not only the core curricular achievements of children, but also their social and emotional health and learning, which continue to influence children's educational experiences throughout their lifetimes. Therefore, this evaluation will also measure social and emotional outcomes. Data will be collected from parents and teachers in the form of baseline and regular surveys. In addition, researchers will assess children during the course of conducting the other assessments.

Family and social services outcomes

Total Learning's ambitious goals extend far beyond the Bridgeport classroom, into supporting children in all aspects of their lives. The comprehensive Total Learning approach includes extensive family and social support, monitoring and support of health and welfare, and support for parents and other family members. As a result, the proposed evaluation includes measures beyond the classroom, because achievement of positive outcomes in these areas are goals in and of themselves for Total Learning, and also because it is a core belief of the Total Learning collaborative that physical, social, and familial health have impact on future educational achievement.

Evaluators will measure social and family support outcomes primarily through:

- Parental completion of a periodic questionnaire (in August or September 2007, for baseline measures; at least once mid-year; and at the end of the school year),

measuring a host of variables about their social situation, their child's health and behavior, their personal health, and others;

- Social/case worker periodic assessments of families and children through the completion of a regular questionnaire, as well as their compilation of non-reactive data on family status. This may include: residence stability, employment status, domestic violence incidents, household composition, and mental and physical health reports.

Additional Data

Extensive demographic information will also be collected on children, teachers, parents, and other family members (including, but not limited to: age, gender, educational background, race/ethnicity, teaching experience, etc.). In addition, teachers will be regularly surveyed about their experiences in the classroom, their professional development experiences, and their overall satisfaction with work and [for those utilizing Total Learning] with Total Learning, and asked to report basic data on attendance and parent participation.

Timeline

July/August 2007	Oversee random assignment of: teachers to conditions, students to classrooms
August 2007	Distribute surveys to parents, teachers, and social workers
September 2007	Conduct baseline assessments
October 2007-	Conduct periodic assessments, periodic surveys (more detailed
April 2008	timeline TBD)

May-June 2008	Conduct post-intervention assessments and surveys
June-July 2008	Analyze data
July-August 2008	Report results to ABCD, Bridgeport Board of Education, and other stakeholders

APPENDIX A

TOTAL LEARNING PARTNERS: BACKGROUND AND EXPERIENCE

The **Total Learning Kindergarten-Grade 4** approach, developed by Dr. Susan Snyder, President of **arts education IDEAS**, will deliver the curriculum through integrated and multi-sensory, arts-based strategies that have been field tested in public schools throughout Connecticut including Hartford and Bridgeport, and have been demonstrated to be an effective model for education throughout the early and primary years. Arts education IDEAS, a Connecticut-based LLC, provides quality curriculum materials and consulting in early childhood teaching and learning, integrated curriculum, literacy, media and the arts. Their international client roster includes universities, governmental and local education agencies, and media development companies such as Children's Television Workshop, Disney, and Cookie Jar.

A.B.C.D. is an award winning, nationally and regionally recognized early childhood education program. More than 800 infants, toddlers, and preschoolers participate in early learning environments each year and leave prepared to succeed in Kindergarten. Results from the National Reporting System have confirmed A.B.C.D.'s effectiveness in early childhood education. The program, known for its innovative approaches, has been selected by the Administration for Children and Families, (ACF) and by others to pilot new approaches and innovations to education.

Music Together is an internationally recognized early childhood music program for infants, toddlers and their parents. First offered to the public in 1987, it pioneered the concept of a research-based, developmentally appropriate early childhood music

curriculum that strongly emphasizes and facilitates adult involvement. Central to the Music Together approach is that young children learn best from the powerful role model of parents/caregivers who are actively making music.

Summative and Formative evaluations of the Total Learning model will be conducted by **The Michael Cohen Group**. The Michael Cohen Group has an international reputation as a provider of superior qualitative and quantitative studies. Their clients have included Nickelodeon, PBS, Sesame Workshop, The Jim Henson Company, Disney, Hallmark Entertainment, to name a few. They have also conducted studies on Palestinian and Israeli children, educational issues in Thailand and evaluated many other education programs worldwide. In the aftermath of 911, the Michael Cohen Group was the principal investigator for mental health needs assessment for the children of the City of New York. The research component of Total Learning will allow for expansion of the approach from a small project in Bridgeport, Connecticut to a project with implications for education reform across the State, and indeed, the country.

Complete resumes of key personnel are available in Appendix B.

APPENDIX B
RESUMES/KEY PERSONNEL