



michael cohen group LLC
research, evaluation, consulting

THE TOTAL LEARNING INITIATIVE:

**Program Overview, Implementation, and Evaluation
2006-present**

March 2014

Action for Bridgeport Community Development (ABCD)
Bridgeport, Connecticut

In collaboration with

The Bridgeport Board of Education ~ arts education IDEAS ~
Music Together ~ The Michael Cohen Group (MCG) ~
Southwest Health Services

EXECUTIVE SUMMARY

Document Overview. The Total Learning Initiative (TLI) was introduced in 2006 in Bridgeport, Connecticut and continues through the present. This document offers a brief description of the Total Learning Initiative, a detailed overview of its seven-year and continuing implementation, and a summary of the ongoing program evaluation and key findings. Importantly, this report includes a discussion of the significant positive impact of TLI on young children's academic achievement and the persistent achievement gap, as well as a logical rationale for the critical need for ongoing Total Learning implementation and continued funding.

Evaluation and Positive Impact. The Total Learning Initiative works. The most recent assessment, conducted during the 2012-13 school year, demonstrated that teachers made statistically significant gains in classroom instruction (measured by the CLASS) and that students in TLI classrooms improved in their CMT scores at higher rates than at control schools.

Program Mission and Description. TLI is a collaborative partnership, administered by the Action for Bridgeport Community Development, that offers multi-faceted programming designed to combat the factor that underlies and perpetuates the persistent achievement gap in the United States: *poverty*. Arising from this perspective, TLI is comprised of multiple parts and components — educational and social — in-school, after-school and home-based, and includes students, educators, parents/caregivers and family service providers. The initiative is **Total** and addresses the full range of young children, family and educator needs. Simultaneously, all activities are focused on **Learning** — and aligned to engender the acquisition of new skills and knowledge by all involved — children, parents and educators. **Total Learning**, by definition, has been conceived, developed, implemented and assessed with these specific goals in mind — meeting the comprehensive overarching needs of young students and their families, and significantly increasing learning.

REPORT HIGHLIGHTS

- When implemented with fidelity and including all of the intended components, **children in TLI classrooms demonstrate significantly higher gains in early reading, literacy, and math skills than students in control classrooms.**
- TLI provides a best-practice model for sustaining public-private partnerships to combat the overwhelming consequences of poverty.
- TLI is creating a digital delivery for professional development (PD), significantly reducing the per-student cost.
- TLI has successfully implemented all or parts of the program for 7 years, overcoming significant challenges.
- Ongoing funding and support is critical to ensure continued program implementation, the innovative digitally delivered PD, and ongoing scientific assessment and evaluation.

SECTION I: BACKGROUND AND OVERVIEW OF THE TOTAL LEARNING INITIATIVE

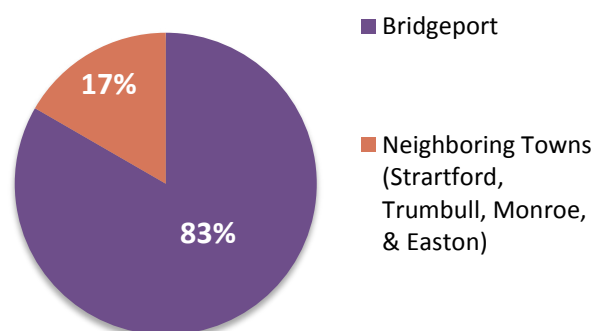
Background

The United States is experiencing an educational crisis. Currently, a large percentage of our young children are failing to acquire the early literacy, numeracy, and social skills that are the required foundations for life-long learning and academic success. A disproportionate number of these children live in families that are historically disadvantaged and represent the lower levels of the economic spectrum. Only 18% of students in low-income families scored in the proficient range on the 2011 4th grade National Assessment of Educational Progress reading assessment compared with 48% of their peers from higher-income families. Nationally, the achievement gap between students in low-income families and their peers in middle- and high-income families grew from 28% to 30% between 2009 and 2011.¹

The situation in Bridgeport is even worse. The percentage of children living at, near, or below poverty level (age 18 and below) in Bridgeport increased from 31% in 2010 to 39.9% in 2011, triple the rate of neighboring Fairfield County (12.8%) and 77% higher than the national child poverty rate of 22.5%.² The Bridgeport Child Advocacy Coalition estimates that 25% (or 2,540 children) of all Bridgeport children under the age of five are living in poverty.³ Families with young children in Bridgeport also receive significantly more federal support from the Temporary

Assistance to Needy Families (TANF) program (see chart at right). Students in Bridgeport schools emerge significantly behind their peers on all achievement measures as a result of these economic and social conditions. Their environments are often filled with highly stressful factors that impede a child's capacity for healthy cognitive development.⁴ Neighborhoods are often characterized by high crime rates, domestic violence, housing instability, food insecurity, poor health, and substance abuse. Children in these situations often suffer from mental and physical health issues, lack of facility with language, lack of sufficient positive parental and adult

Figure 1 -TANF Families w/ children under 5 (May 2013)



¹<http://voices.org/wp-content/uploads/2011/09/Issue-Brief-NAEP-2011-Reading-4-grade-overall-findings.pdf>

² State of the child in Bridgeport 2012 Report – Bridgeport Child Advocacy Coalition

³ State of the Child in Bridgeport, 2012 Report – Bridgeport Child Advocacy Coalition

⁴ Shonkoff, J. et. al., (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1), pp. 232-246.

support, and are not exposed to a variety of learning strategies that could develop their full capabilities.

Scientific research clearly indicates that it is essential that the full scope of young children's needs be addressed in order for healthy development and learning to occur. Educational interventions, however well intended, have historically addressed individual elements and dimensions of the overall set of young children's social, cognitive, and physical needs.

Action for Bridgeport Community Development, in collaboration with the Bridgeport Board of Education, arts education IDEAS, Southwest Health, and Music Together™, has developed a model of educational and social support, based upon research findings in the social policy, education, and child development arenas. The goal of the Bridgeport Total Learning collaboration is to develop a comprehensive and “whole child” approach to addressing the achievement gap.

The Total Learning Initiative

The Total Learning Initiative (TLI) is a comprehensive educational program for children ages birth to 9 in community settings. The TLI is comprised of organizations that bring a deep collective experience to working with families and children living in poverty. Working collaboratively under the leadership of Action for Bridgeport Community Development — a respected anti-poverty non-profit with an extraordinary history of successful community programs, the TLI includes anti-poverty service professionals, educators, curriculum developers, teacher trainers, family, social and mental health professionals, the Bridgeport Board of Education, and evaluators experienced in early education, lower-SES populations and assessing innovative programs and initiatives. Additionally, the TLI is aided by the continuing support of the Principals, teachers and the administration of the schools in which it has been implemented. The TLI represents a unique constellation of expertise and disciplines — and together provides a robust understanding of the needs of disadvantaged families living near or below the poverty level. Importantly, TLI provides a best practice model for an education-oriented non-profit, private and public sector collaboration, and **has been endorsed by Edward Zigler of Yale University, often referred to as “the father of Headstart”**.

Components of the Total Learning Initiative

At its core, the Total Learning approach is grounded in the belief that in order to effectively learn, children must be supported both academically and in other areas of their lives. Addressing the achievement gap between low- and higher-income children necessitates

addressing the needs of their families as well. Total Learning is comprised of eight essential components⁵, described briefly below (see Appendix B for more details).

Multi-Sensory Education-Based Classroom Pedagogy. This approach is based on scientific research and utilizes a multi-sensory approach, incorporating hands-on, brains-on, active learning. In Total Learning, curriculum is delivered through the lens of multiple intelligences, learning styles, and social-emotional skills providing a variety of hooks for children to grasp hold of and use as learning tools. Multifaceted activities require students to think critically, solve problems, work alone and together, and to develop verbal fluency to ask questions, share ideas, research solutions, and apply their learning to new situations.

Comprehensive In-Service Professional Development. All teachers, paraprofessionals, and teacher's aides receive extensive job-embedded coaching throughout the school year. Currently, the professional development (PD) component is transitioning to a digital format, using game based tutorials, model lessons, live workshops and in-classroom modeling/coaching, and a robust social network.

Lower Teacher/Student Ratio. All school-age classrooms are provided with a trained paraprofessional in order to reduce the child-staff ratio, resulting in additional adults to support children's learning.

Extended Day. For the first four years of the program implementation, the TLI-school age classrooms operated 9½ hours a day, 2½ hours beyond the typical school day. The purpose of this was to afford children more time in learning experiences to close the achievement gap.

Infant, Toddler, and Preschool Music Classes. Music Together (MT) provides weekly arts-based parent-child classes for low-income infants/toddlers, as well as in-class professional development for preschool teachers. MT is aligned with the Connecticut preschool framework.

Parent Involvement in K-4. In the school-age classroom, family workshops, activities and family service plans are developed in response to parent surveys and interviews. Bi-monthly parent

The Total Learning Initiative is a public-private partnership composed of 6 partners with expertise and a proven record of success working in the education space (see Appendix A for details):

Action for Bridgeport Community Development (ABCD).

arts education IDEAS (IDEAS)

Bridgeport Board of Education

The Michael Cohen Group (MCG)

Music Together

Southwest Health Services (Southwest)

⁵ See Section III for a discussion of component implementation

and family meetings and workshops are planned with the input and assistance of parents, trainers, and family workers.

Comprehensive Family Support Services. Each TLI classroom is assigned a family worker to provide intensive case management as needed. This includes home visits, development of individual family service plans, intervention to improve school attendance, referrals for needed services, and partnering with teachers to help engage parents.

Evaluation. Rigorous social scientific evaluation to inform both the early stages of the program, and to determine the effectiveness of the Total Learning approach is an important component of this Initiative.

SECTION II: IMPLEMENTATION AND FUNDING OF THE TOTAL LEARNING INITIATIVE

The Total Learning Initiative has been implemented since the 2006-07 academic year. It has tested a variety of configurations of inputs to test efficacy (existing in various forms depending on available funding as well as funding provisions). Since its inception, TLI has served over 7450 children, over 3500 parents, and more than 80 teachers from more than 16 schools. Figure 2 (shown below) details the gradual expansion of the initiative, as planned, into older grades as well as the components that were included in the full model each year.

The Connecticut State Department of Social Services initially recognized the importance of the Total Learning Initiative in 2006-07 and funded, along with small private grants, the Pilot Year of TLI. The first year consisted of one kindergarten classroom (N=16 children) and one family worker, with additional funds going to formative research and program development.

Figure 2: Year-by-year implementation, sample size, and parent participation of Total Learning initiative

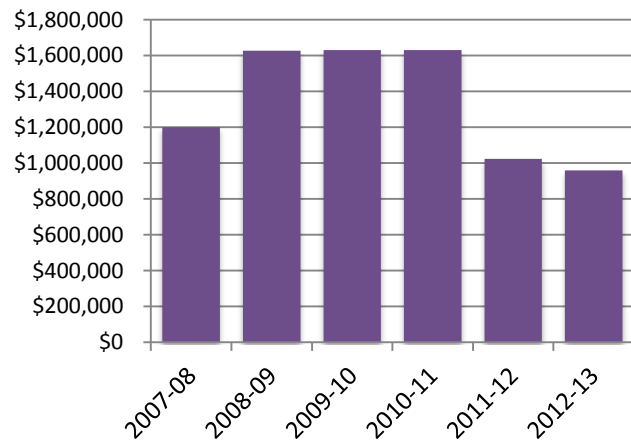
	2006-07*	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14*
<i># of classrooms served</i>								
0-3 yrs.	1	2	3	5	6	4	1	1
Pre-K	1	20	20	22	37	3	3	3
Kindergarten	1	16	19	20	23	5	-	1
1 st Grade	-	3	6	13	18	5	-	1
2 nd Grade	-	-	-	7	11	5	5	1
3 rd Grade	-	-	-	-	-	3	5	1
4 th Grade	-	-	-	-	-	-	5	1
<i>Total Learning components</i>								
Music Together	0-3, Pre-K	0-3, Pre-K	0-3, Pre-K	0-3, Pre-K	0-3, Pre-K	0-3, Pre-K	0-3, Pre-K	0-3, Pre-K
Family Workers	Yes	Yes	K Only	K Only	K Only	K Only	Yes	Yes
After School	Yes	Yes	Yes	Partial	No	No	No	No
Arts pedagogy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Para-Professionals	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Parent Participation</i>								
Age 0 to 5 (MT)	48	236	263	435	876	232	124	
Grades k to 4	25	198	330	462	440			

Note: * indicates formative research only

In 2007-08 (Year 2), TLI expanded into 16 kindergarten and three 1st grade classrooms. Funding was secured for the "Full Model" of Total Learning, which included; a) parent-child Music Together class; b) pre-school classroom-based Music Together classes and professional development; c) family workers for children in kindergarten; d) TL Arts pedagogy for school-age classrooms; e) TL professional development for school-age classrooms; f) paraprofessionals for participating school-age TL classrooms; and g) parent workshops and meetings at participating schools (not shown in the table, but present throughout).

TLI received a federal earmark for 2008-09 (Year 3), raising the total funding to \$1,627,000 and allowing a large-scale expansion of the initiative. This allowed TLI to expand, adding more kindergarten and first-grade classes as well as additional schools. However, the contracted family workers (*Child First*) were only contractually able to provide services to kindergarten families, reducing the depth of their impact. Also, Beginning in 2008-09, TLI began a gradual expansion into older grades. This expansion was a result of funding provisions that required the inclusion of older children over time.

Figure 3: TLI funding by year



In the academic years 2009-10 and 2010-11 (Years 4 and 5, respectively) the program continued to expand, both in size and in scale, including for the first time 2nd grade classrooms. This expansion, once again, saw a decrease in the number of families that had access to a family worker. In addition, the rapid expansion of grades and schools resulted in the defunding of the afterschool services, as the funding was tied up training teachers and hiring paraprofessionals.

In 2011-12 (Year 6), earmarks were no longer available from the federal government and the state of Connecticut reduced its contribution by 10%. The total budget was reduced to \$800,000 per year. These changes in funding limited the scope of TL intervention to one school. As per the funding stipulation, 3rd grade classes were added for the first time as well for a total of 18 classrooms.

In 2012-13 (Year 7) Southwest Health Services was hired to provide school-based family workers for all TL classrooms, moving closer to the original conception of Total Learning. TLI also expanded to include 4th grade classrooms and removed training and paraprofessionals in kindergarten classrooms, as per state funding requirements.

In 2013-14 (Year 8), TLI was reduced to 5 classrooms, one in each grade level from K -4. The current focus is to implement, beta test, and develop the TLI Digital Professional Development and reduce the cost-per-child of the intervention.

SECTION III: EVALUATION OF THE TOTAL LEARNING INITIATIVE

Research and evaluation has been a critical priority throughout the TLI partnership. The focus of this research has been both formative and summative. These research tools have different strengths, but work particularly effectively when combined. Formative research yields findings that have robust explanatory power, and provides feedback that informs program refinement. Summative evaluation findings have a high degree of descriptive power and provide evidence of causality. Formative research for TLI has focused on including the voice of the participants in the intervention's design through classroom observations, interviews, and surveys. In addition, a summative evaluation was conducted after each school year to assess the efficacy of the full intervention.

Pilot Year: 2006-2007

The first year of the TLI was exclusively focused on formative research. As classroom activities and professional development were implemented, teachers were interviewed and observed to ensure that all content was easy to use and effective. **Interviews conducted during the pilot year, and throughout the implementation, also yielded overwhelming support from teachers, parents, and administrators** about professional development activities, the arts-education classroom pedagogy, and Music Together:

"I continue to use *Music Together* because it supports language and vocabulary development, sequencing, storytelling, phonemic awareness, patterning, story recall, opposites, and feelings." - Preschool Teacher

"*Music Together* is so broad, so encompassing. It's not just learning songs and words, but language skills." - Preschool Teacher

"Over the years, I have found *Total Learning* helps my students increase or improve their English oral language development; there is constant interaction between the students in the studios that fosters this." - 2nd Grade Teacher

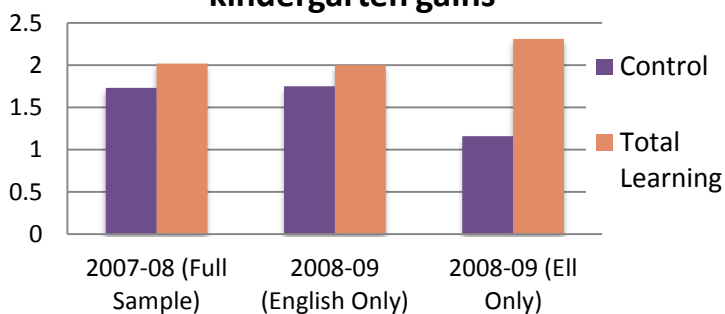
"I like how *Total Learning* uses the arts and different learning styles (drama, art, music, movement) to allow practically all students to fully enjoy themselves in one lesson or another. When *Total Learning* lessons align with the curriculum, the students are learning their grade level content while having fun." - 2nd Grade Teacher

Years 2 and 3: 2007-2009

Following the passage of *No Child Left Behind*, educational effectiveness was defined by student outcome measures. This reality also engendered distrust between administrators and the Board of Education and those who sought to collect data for fear of their schools being labeled as failing. As such, the impact of TLI could only be assessed using the student outcome measure already in use - the Developmental Reading Assessment (DRA).

Despite these limitations, the evaluation of the TLI netted statistically significant results for the first two years (see Figure 4 below). In Year 2, kindergarten students in TLI classrooms made statistically greater gains (Mean=2.02) than their non-TLI peers (Mean=1.73), $t(467)=-2.954$, $p<.01$. Significant gains were also observed for 1st grade students in Year 3, with TL students gaining an average of 12.45 reading levels and control students gaining 10.33, $t(180)=-2.756$, $p<.01$. Further, during these first few years there was encouraging evidence that the students in greatest need of assistance were benefiting the most from Total Learning. In 2007-08, kindergarten children in Total Learning with low baseline scores demonstrated significantly larger gains than low-baseline students at the control schools ($p<.001$).

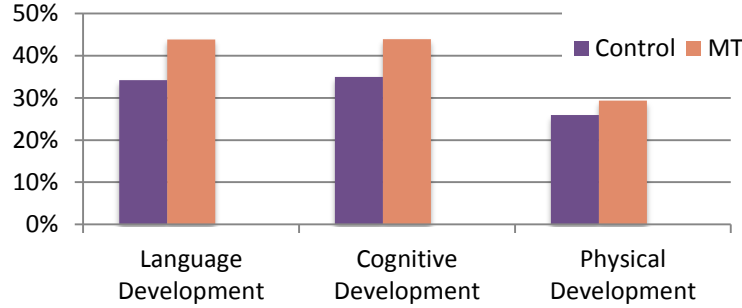
Figure 4: Statistically significant kindergarten gains



Music Together. An evaluation of the MT preschool classes was conducted during the 2007-08 school year. Teachers from participating classrooms and five control classrooms provided the *Creative Curriculum* (3rd edition) scores in October 2007 and May 2008 in four developmental domains: 1) Social Emotional Development; 2) Cognitive Development; 3) Language Development; and 4) Physical Development. **Preschoolers participating in the Music Together program made significantly greater gains in proficiency⁶ than children in non-Music Together classrooms in three of the four domains** (see Figure 5 on next page); Language Development ($t(471)=2.811$, $p<.001$), Cognitive Development ($t(471)=-2.453$, $p=.01$), and Physical Development ($t(471)=-2.310$, $p<.05$).

⁶ Measured as % of children for whom teachers observe behaviors "often."

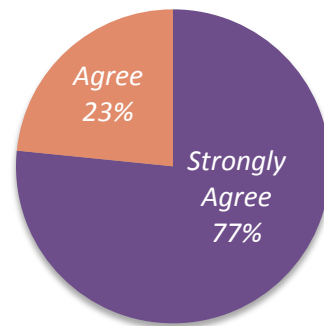
Figure 5 - Student Gains in Creative Curriculum Domains



A small sample of parents (47) whose children were enrolled in *Music Together* preschool classes completed surveys about their experiences with the program. The results of the survey showed that these families were more involved with music at home and continued to participate outside of the class.

- Children listened to *Music Together* CDs at home
- Children sang more at home
- Parents reported listening to the CDs with, and singing or dancing with their children twice a week or more.
- Parents also indicated that they spent time with their children “looking at the *Music Together* songbook” at least twice a week.

"I would like Music Together to continue for my child"



Years 4 through 6: 2009-2012

The plan for TLI, supported by funding, yielded a gradual expansion into older grades and the inclusion of additional sites. During this expansion, the evaluation efforts sought to identify which elements of TLI were most effective through experimental manipulation. Beyond comparing TLI to a control group, the full model was also compared to other experimental conditions; 1) *PD-Only* - classrooms only received classroom-based professional development; and 2) *Wrap-Around-Only* - classrooms received only the extra family services.

There were two unintended consequences to this expansion. As mentioned previously, the family services agency only covered children in kindergarten, leaving the older children without services. Also, with the addition of extra schools, the after-school program was eliminated from nearly all of the schools.

Throughout this period of expansion and experimental manipulation, mixed results were observed. There was no clear pattern in which elements were most effective, and results fluctuated by school and by year. **It became clear that the original vision of Total Learning, the Total, was paramount for the success of the initiative.**

Year 7: 2012-2013

TLI focused on just one school during year 7, and reinstated a key component of the original model: family services. *Southwest Health Services* began working with all of the families with children in TLI classrooms. In their first year as part of TLI, Southwest connected 24% of the families (70) to services. In all cases the families were engaged first by Southwest through family interviews.

In addition to the services, the district and teachers became more amenable to using additional assessment tools, including classroom observations. As such, the evaluation expanded to include the Classroom Assessment Scoring System (CLASS), a research-based⁷ observational assessment that has been linked to broad measures of student achievement and more accurately captures the wide impact of the TLI professional development. Finally, as students in grades 3 and 4 were included in TLI, changes in the Connecticut Mastery Test (CMT) were also assessed. The CMT is a standardized measure of student achievement that is administered to all Connecticut students in grades 3 through 8.

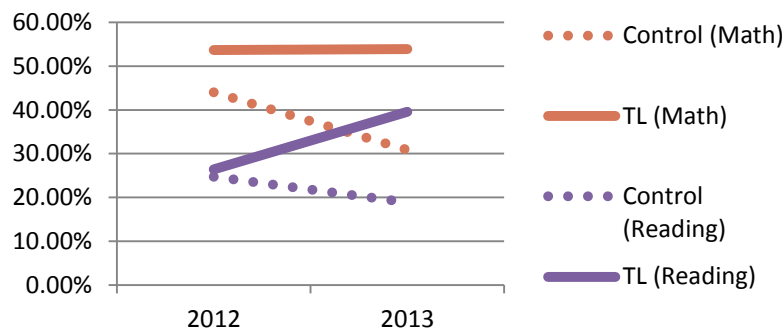
Classroom Climate and Process. Trained research professionals, certified as *CLASS* reliable, observed classrooms in December 2012 and again in May 2013 using the CLASS. Of the ten dimensions measured by the CLASS, **statistically significant gains were observed on two dimensions that are fundamental to TLI, *Concept Development* and *Language Modeling*.** Teachers scored an average of 2.42 and 2.82 out of seven, before the professional development, on the Concept Development (CD) and Language Modeling (LM) dimensions respectively. The mean CD dimension scores increased by .52 to 2.84 ($t(13)=-2.261, p=.045$), while the mean LM scores increased .69 to 3.51 ($t(13)=-2.274, p=.044$). This means that teachers participating in TLI improved in their ability to provide students with rich interactions and a stimulating learning environment.

⁷ Pianta, R., Howes, C., Burchinal, M., Bryant, D., Clifford, R., Early, C., et al. (2005). Features of pre-kindergarten programs, classrooms, and teachers: Do they predict observed quality of child-teacher interactions? *Applied Developmental Science*, 9(3), 144-159.

	Pre-Test		Post-Test		Mean Difference	t-value	p-value
	Mean	SD	Mean	SD			
Concept Development	2.42	0.718	2.94	1.140	0.52	-2.261	<i>0.045</i>
Language Modeling	2.82	0.650	3.51	1.089	0.69	-2.274	<i>0.044</i>

Connecticut Mastery Test. Student scores on the math and reading subsections of the Connecticut Mastery Test (CMT) were compared across the control and TLI schools. Using the 2011-12 scores for 3rd grade students as a baseline, this evaluation found that **grade 4 students in TLI made statistically significant gains in their level of proficiency for both reading ($F(1, 147)=16.318, p<.001$) and math ($F(1, 159)=4.749, p<.01$) on their 2012-13 CMT scores**, after controlling for English Language Learners (ELL) status. The figure below shows the changes in the percentage of students who met the state proficiency standards, demonstrating that students in TLI classrooms are performing better over time than those in control classrooms.

Figure 6 - CMT Proficiency by Cohort



Year 8 and beyond: 2013-2014

Along with the implementation of the digitized and blended version of professional development, **the 2013-14 formative evaluation will provide data to help lower the per-student cost of Total Learning.** Ongoing funding will allow for a summative assessment of the effectiveness of the digital professional development in 2014-15.

SECTION IV: THE FUTURE OF THE TOTAL LEARNING INITIATIVE

The TLI has demonstrated effectiveness when implemented with fidelity, i.e., all of the components discussed in *Section I* are successfully integrated. In recent years, increased efforts have been made to reduce the cost of TL and secure additional funding to increase the fidelity with which the program is implemented. The section below briefly describes these efforts and the future goals of the initiative.

Reduced Cost of Professional Development

The development of Total Learning Digital has enormous implications for the cost of implementation. This online professional development platform contains 24 sequential learning modules and 2 synthesis modules that allow teachers to learn at their own pace and on their own schedule. The social network component allows teachers to seek support from other teachers and call upon the expertise of TL veteran teachers. The video conferencing capabilities allow for TL trainers and experts to speak directly with teachers, entire classrooms, or even multiple classrooms, allowing one trainer to work with hundreds of students in a day.

This increased efficiency will lower the cost of the overall intervention.

Formation of Student Leadership Groups

During the current academic year (2013-14), former TL students have requested to be involved in TL again. In response to this demand, TL trainers have established *TL Student Leadership Groups*. Students from grades 6-7 are trained in how to assist K-4 teachers with TL activities. This provides leadership and mentorship opportunities to the student leaders as well as classroom assistance for the teachers and role models for the younger students.

Reinstating TLI Afterschool Services

The TLI has not received adequate funding to reinstate the afterschool services offered in the first few years of the partnership. With additional funding, this critical component of the TLI could be integrated into the model, reinforcing the classroom elements of TL that have demonstrated effectiveness.

Continuation of Total Learning

The far-reaching and devastating impacts of poverty require a constant and multi-pronged approach to intervention. Given the nature of inconsistent or unreliable funding and the mandate to expand to older students without additional funding, TL has never enjoyed prolonged implementation in one particular community. With additional funding, TL could actually help children from the time they enter toddler classes through elementary school.

SECTION V: IMPLICATIONS FOR THE TOTAL LEARNING INITIATIVE

Total Learning is an important initiative. It has demonstrated a model for upgrading the impact of public schooling at the early childhood and elementary level. It has a history of implementation and accompanying evaluation. It was founded on a comprehensive understanding of the social conditions that underlie the achievement gap. Additionally, it includes educational components that are based on recent advances in understanding of early childhood development, learning, pedagogy, curriculum, teacher quality and development, school culture, technology/digital learning, the critical factor of parent/caregiver and community support and involvement, and family support. It is a scalable initiative realized by incorporating resonant and meaningful innovation in technology and digital content and engaging, coordinating and integrating the abundance of community resources available to assist families. Overall, the Bridgeport Total Learning Initiative represents a best-practice example of a non-profit, private and public sector collaboration to increase the effectiveness of public education.

The implications of the TLI multi-year implementation and accompanying evaluations are critical to providing solutions to the persistent problems faced by public education.

1. Ongoing evaluation provides evidence that confirms the original TL hypothesis. **The combination of the TL components, in concert, yields significant gains in reducing the achievement gap.** Evidence indicates that each component, individually, has value. However, the combination of components, when fully implemented, potentiates the impact and the ‘total is greater than the sum of its parts.’
2. The challenges faced by children and families living near or below the poverty level are complex. The challenges faced by public education are equally complex. The solutions required to address these challenges are by definition complex and require multiple components.
3. The successful implementation of a multi-component initiative faces significant managerial, economic, social and political hurdles. TLI has, by all measures, successfully provided all the required components.
4. Additionally, learning — including student learning, teacher training and development, administrator support, and family and parent awareness — is a critical outcome.

5. Total Learning is therefore true to its name – Total – all the components together – and Learning – by all stakeholders and constituents – teachers, parents, students and schools.
6. School culture – as well as student performance outcome – is positively impacted.
7. Total Learning is striving to lower per-student cost as the professional development component cost is reduced by providing and delivering the teacher’s training via technology and digital content. By testing and improving the PD component digitally as part of its implementation, TLI exemplifies a best practice example of utilizing technology and digital content.
8. Ongoing funding and support for the TLI is critical at this juncture for the following reasons: a) To ensure the implementation of all components; b) To extend the assessment matrix to include measures in addition to student performance outcome (e.g. teacher quality, classroom environment quality, teacher attitude, school culture, parental/caregiver involvement, classroom management, and student engagement); c) To support the complete implementation of the digital PD component; and d) To expand the implementation within and beyond the Bridgeport education system.

APPENDIX A - COMPONENTS OF TOTAL LEARNING EXPANDED

Art Education-Based Classroom Pedagogy

This approach is based on scientific research cited by Howard Gardner, Geoffrey Canada, Pedro Noguera, Linda Darling-Hammond, and many others⁸, and utilizes a kinesthetic, aural, visual, proprioceptive, sensory integration incorporating hands-on, brains-on, active learning. In Total Learning, curriculum is delivered through the lens of these multiple intelligences, learning styles, and social-emotional skills providing a variety of hooks for children to grasp hold of and use as learning tools. Multifaceted activities require students to think critically, solve problems, work alone and together, and to develop verbal fluency to ask questions and share ideas, research solutions and apply their learning to new situations. This mode of curriculum delivery creates a highly interactive and engaging environment for children, their teachers, their paraprofessionals, and their parents.

Comprehensive In-Service Professional Development

In kindergarten through grade 4, the initial professional development for Total Learning Kindergarten involved a minimum of 60 hours, delivered by highly qualified trainers over the school year through classroom modeling, team teaching, coaching, and planning sessions. The goal was to train teachers to independently create and deliver the curriculum through use of sequential, multi-modal, developmentally appropriate strategies. The training was divided into a two-hour initiation, followed by three sequential training segments – Classroom Management, transmission of 20 multi-modal strategies, and synthesis.

The professional development component of Total Learning has begun a transition to a digital format. While the in-person PD was effective, many teachers tended to lean on the trainers rather than assimilate the strategies into their teaching. Total Learning Digital provides PD through on-line, game-based tutorials to build teacher skills, model lessons (with videos) and studio centers for the teacher to use each new strategy to deliver classroom curriculum. Total Learning Digital has a robust social network to provide in-person support to the teachers, as well as membership in a professional community through which to communicate and share with peers. The use of this technology allows a teacher to progress as quickly as s/he is able,

⁸ Darling-Hammond, L., Bransford, John, Eds. (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do.*, San Francisco: Jossey-Bass., Tough, P. (2009). *Whatever it takes: Geoffrey Canada's quest to change Harlem and America.*, New York, NY: Houghton-Mifflin. Noguera, P., (2008). *The trouble with Black boys: and other reflections on race, equity, and the future of public education.* San Francisco: Jossey-Bass.

and learn about how to deliver instruction while using technology at the same time, while also reducing the cost of PD.

As a result of initial formative assessment, the model was refined to add: (1) a four-segment Classroom Management Module; (2) a Synthesis component through which teachers develop strategies for applying what they have learned as they go forward while also preparing students for Mastery Testing; and (3) a social network for teachers to build a community of support.

Infant, Toddler, and Preschool Music Classes

Music Together provided an arts-based early intervention program for low-income and poor infants/toddlers, and preschoolers and their parents in Bridgeport. In the infant and toddler groups, children and their parents participate in weekly 45-minute classes. Highly qualified trainers deliver the Music Together curriculum that reinforces cognitive, language, literacy, and social skills development. Parents receive ongoing coaching throughout the classes. Each family receives a full set of materials (which includes music tapes or CDs, music books, and age appropriate musical instruments) to extend the activities to the home for additional practice.

In the Preschool program, children are engaged daily in highly interactive music and movement activities that are aligned with the CT Preschool Frameworks and assist the classroom teachers in all aspects of the children's development.

Parent Involvement in K-4

In the school-age classroom, family workshops, activities and family service plans are developed in response to parent surveys and interviews. In the first two years of the TLI implementation, a parent leadership team was created to meet monthly with the PD trainers and school principals. In addition to these meetings, monthly parent activities were organized. From the third year on, as implementation varied between schools, activities were planned at each school, facilitated by a collaborative team of the trainer, family worker, and school parent liaison. Often the trainer shared activities that supported newly learned classroom strategies, and the family worker addressed mental health and other family-based topics as identified within the school community.

A Comprehensive Program of Family Support Services

In the first four years of the TLI implementation (2006-2010), each TLI Classroom was assigned a family worker. They provided intensive case management that included home visits, development of individual family service plans, intervention to improve school attendance, referrals for needed services and a partner to the classroom teacher who often looked to family workers for assistance engaging parents. As funding was reduced, caseload sizes rose

dramatically, resulting in more crisis intervention than ongoing care coordination and case management. In 2012-13, increased allocation of funds made it possible to lower the caseloads of family workers to their previous levels, thereby making services more readily available to children and families who need them.

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. For this reason, a rigorous social scientific evaluation has been conducted. 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 its use beyond Bridgeport.

APPENDIX B - TOTAL LEARNING INITIATIVE PARTNERS

Action for Bridgeport Community Development (ABCD) — ABCD has provided structural organization as well as expertise in those elements of the Head Start curriculum and model that could be included in elementary education. In addition, ABCD’s early childhood providers have assisted in using the Total Learning approach to deliver an early childhood curriculum.

Bridgeport Public Schools — The Bridgeport Public Schools, as well as the Bridgeport Board of Education, is a public school partner with 23,000 students, mostly low-income and historically disadvantaged children. The provides the curriculum content and expertise in early childhood and literacy curriculum.

arts education IDEAS (IDEAS)— IDEAS has provided the curriculum alignment with standards, programs across disciplines, and social-emotional curriculum, Total Learning strategies and practices for curriculum delivery, professional development for early childhood and primary grade level teachers and support staff, administrative support to building level administrators, and overarching administrative support to the broader ABCD Bridgeport Total Learning Initiative.

Music Together— Music Together has provided an arts-based early intervention program for low-income infants/toddlers and preschoolers, and their parents in Bridgeport. Music Together has also provided curriculum alignment with the CT Preschool Frameworks, providing professional development for Pre-K classroom teachers and para professionals to use music and movement in their classrooms.

Child FIRST —Child FIRST provided services to families of children from birth through kindergarten for the first five years of the partnership. A program of Bridgeport Hospital, Child FIRST provided care coordination and case management including mental health services for parents and expectant mothers, home visitation and classroom consultation. Child FIRST has been designated by the Health Resources and Services Administration (HRSA) and the Administration for Children and Families (ACF) as one of twelve national, “evidence-based home visiting models.”

Southwest Health Services (Southwest) —Southwest was contracted to provide family services for the 2011-12 academic year instead of Child FIRST, and has continued through the present. The Total Learning administration decided to use Southwest because their clinicians are trained to work in schools and with elementary age children and their families.

The Michael Cohen Group (MCG) — MCG has provided comprehensive evaluation, including assessment of the development process, materials, training, teacher change, student change, parent/family/community change, and the entire process of implementing Total Learning.