

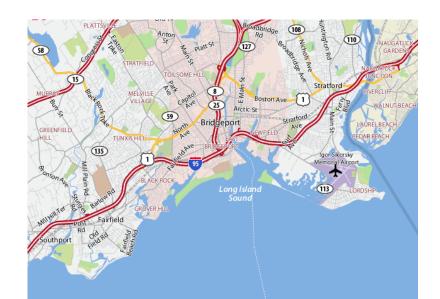
## Bridgeport Total Learning Initiative

Bridgeport Board of Education's
Innovative Approach to Reducing the
Achievement Gap

#### Problem:

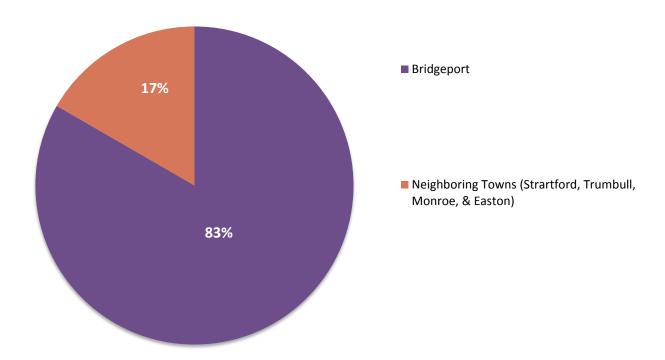
# The Achievement Gap is Growing The achievement gap between students in lowincome families and their peers in middle- and high-income families grew from 28% to 30% between 2009 and 2011.

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



#### Bridgeport's Comparative Need

Figure 1 -TANF (Temporary Assistance for Needy Familes)
Families w/ children under 5 (May 2013)

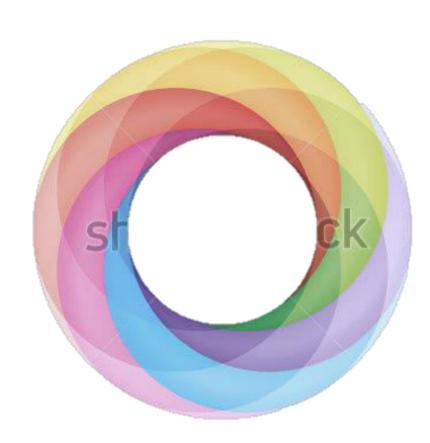


## Importance of Reducing the Achievement Gap

- McKinsey & Company report, "the persistence of the achievement gap in the US has the economic effect of a 'permanent national recession.' If the achievement gap between black and Latino performance and white performance had been narrowed, GDP in 2008 would have been \$310 billion to \$525 billion higher (2-4 percent).
- Waste of human capital and productivity
- Pipeline to jail

## Total Learning Provides an Evidence-Based Answer through Quality Early Learning (P-3+)

- Systems-based collaborative approach
- Birth 9 year old
  - Infant-toddler and parents
  - Pre-K (3 and 4 year olds)
  - Kindergarten Grade 4)
- Smaller adult-child ratio
- Families
- Extended Day and Year
- Mental Health



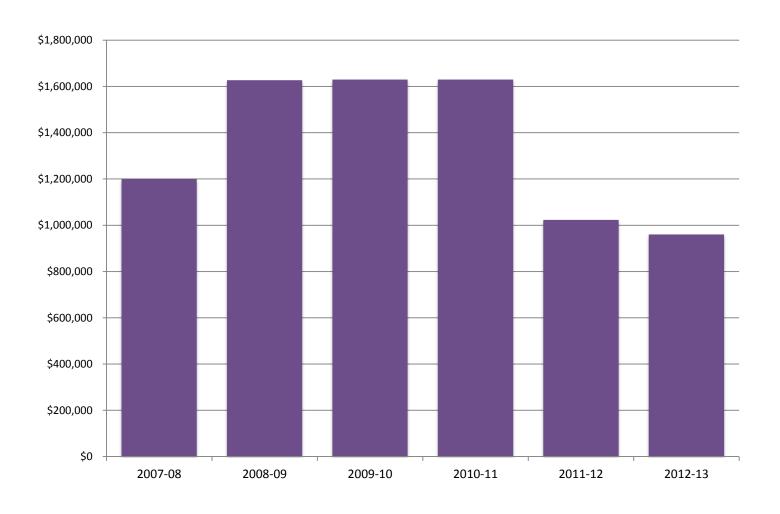
## Bottom Line Results: Total Learning Reduces the Achievement Gap

- The end goal is to reduce the achievement gap.
- Comparing State Mastery tests from 2011-2013, Total Learning students reduced the achievement gap more than the control group or District.
  - Reading: reduced 5.6% in Grade 3 and 26.2% in Grade 4.
  - Writing: reduced 46.8% in Grade 3 and 42.2% in Grade 4
  - Mathematics: reduced 51.8% in Grade 4

The conclusion from the Connecticut Mastery Test results is that the children in Cesar Batalla elementary school were exposed to a very different educational experience. The difference was Total Learning.

#### Year by Year Funding History

#### TLI funding by year



#### Year by Year Implementation

Figure 22: 2Year-by-year 12mplementation, 3sample 3size, 3and 4parent 4participation 12pt otal 12learning 12nitiative 2

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0-313yrs.?	1?	2?	32	52	62	4?	1?	1?
₹ Pre-K	1?	202	202	22?	372	32	3?	32
Kindergarten 2	1?	162	192	202	232	52	-?	1?
1 <sup>st</sup> Grade 2	-?	32	62	132	182	52	-?	1?
2 <sup>nd</sup> <b>IG</b> rade?	-?	-?	-?	72	112	52	52	1?
3 <sup>rd</sup> <b>IG</b> rade®	-?	-?	-?	-?	-?	32	52	1?
4 <sup>th</sup> IGradel	-?	-?	-?	-?	-?	-?	52	1?
Total@Learning@tomponents@		<b>??</b>	???	<b>??</b> ?	<b>??</b> ?	<b>??</b>	<b>?</b> ?	<b>??</b>
Music Together 2	0-3, <b>∄</b> Pre-K?	0-3, <b>∄</b> Pre-K፻	0-3, <b>∄</b> re-K	0-3, <b>∄</b> Pre-K	0-3, <b>∄</b> re-Kl	0-3, <b>∄</b> Pre-K⊡	0-3, <b>∄</b> Pre-K⊡	0-3, <b>∄</b> re-l
Family <b>®</b> Workers®	Yes?	Yes?	K <b>∄</b> Only⊡	K <b>©</b> Only	K <b>©</b> Only®	K <b>®</b> Only®	Yes?	Yes⊡
After: School 2	Yes?	Yes?	Yes2	Partial2	No?	No?	No?	No
Arts@pedagogy@	Yes?	Yes?	Yes2	Yes2	Yes2	Yes⊡	Yes?	Yes2
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Note: 2\* and icates aformative are search abnly 2

#### Our Approach has Varied Based on:

- Available funding
- Research Indications and Hypotheses
- District Changes
  - Curriculum
  - Interest
  - Assessment Options
- Educational Priority Changes
- Technological Advances

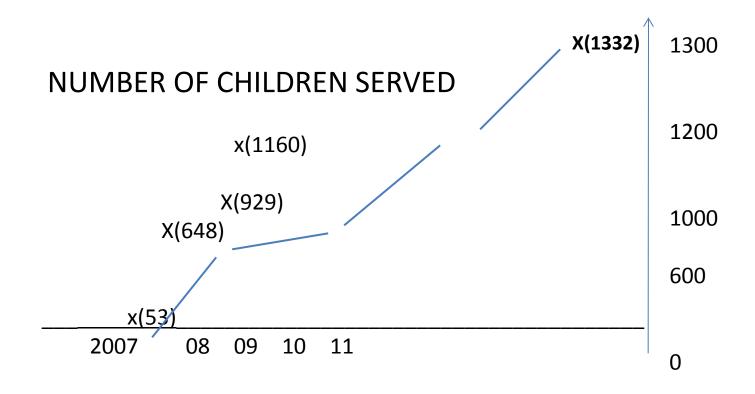
#### **Evidence of Success**

- Summative
  - Teacher Quality
    - Emotional Support
    - Classroom Organization
    - Instructional Support
  - Student Achievement
- Formative
  - Teacher response
  - Parent attendance and response
  - Student participation and response
  - Visitors observations
  - Materials/Curriculum Review

#### **Evaluation Team Curriculum Review**

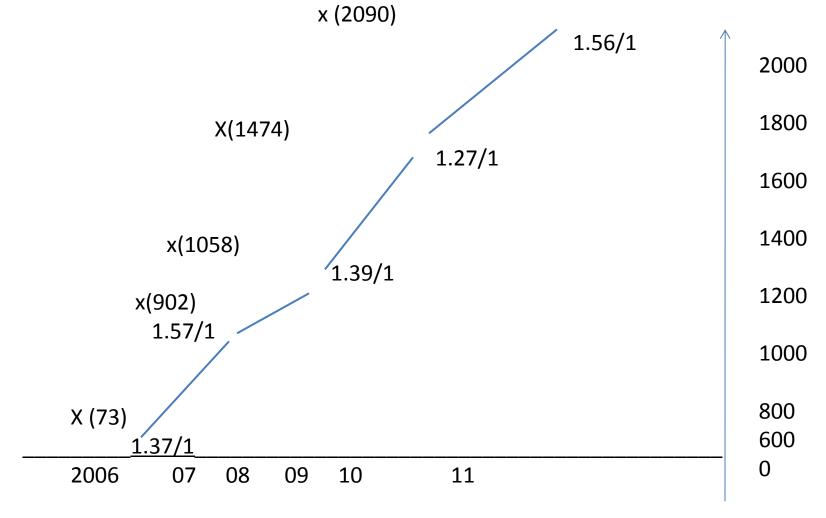
"This is an extremely ambitious project in scale, content, and intention and has, if executed well, the potential to positively impact not only individuals within early childhood classrooms but the fields of early childhood education, arts education, literacy education, and public education in general. It offers a remarkably well conceived interweaving of complimentary and largely discreet fields in the service of improving what public education has to offer children who are most vulnerable to inadequate teaching practices. It stands to benefit a great number of children, teachers, schools and communities and to support the achievement of both quantifiable (test scores, retention rates, college admissions) and affective (quality of life) goals. Specifically, this program is more than capable of helping to ensure that the academic gains made by children in Head Start programs are retained throughout their elementary school experience and beyond."

#### **Enrollment Has Grown**



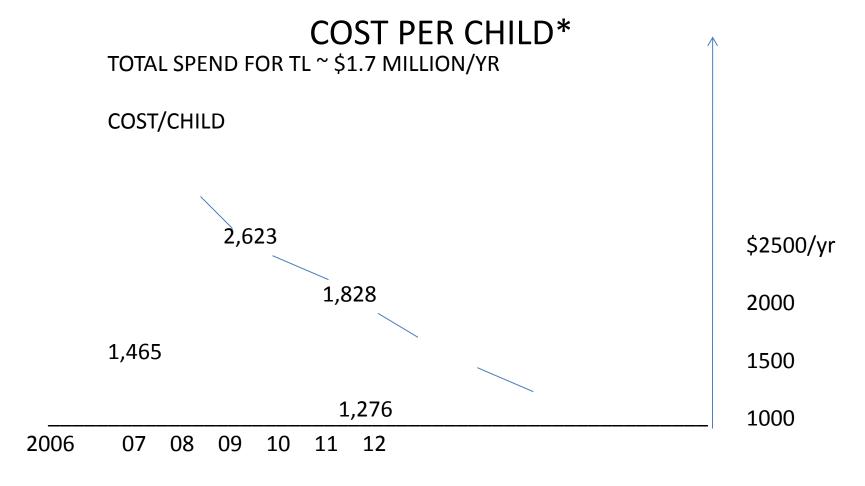
10/10/2014

#### Parent Involvement Has Grown\*



10/10/2014

#### Total Learning actual costs have declined



<sup>•</sup>Total cost/year including special evaluation. Note that TL is operating successfully at <~40% of the originally planned run rate and still generating essential results. Full funding would have expanded the impact significantly.

### Rigorous Evaluation Has Tracked the Actual Growth of Children

"Across the three summative evaluations, statistical analyses indicated that Bridgeport Public School students in classrooms assigned to Total Learning, consistently made significantly greater gains in learning as determined by standardized test scores than did children in classrooms that did not participate."

Michael Cohen Group LLC

10/10/2014

#### Two and Three Year Olds\*

Two and three year olds who participated in Total Learning ranked above National norms in key developmental domains after exposure to Music Together.

- •Two Year olds' scores ranked:
  - 60<sup>th</sup> Percentile on receptive and expressive language skills
  - 68<sup>th</sup> Percentile on Interpersonal and coping Skills
  - 50<sup>th</sup> Percentile on fine and gross motor skills
- •Three Year olds' scores ranked:
  - 90<sup>th</sup> Percentile on receptive and expressive language skills
  - 80<sup>th</sup> Percentile on Interpersonal and coping skills
  - 65<sup>th</sup> Percentile on fine and gross motor skills
- •Students who do not participate typically rank well below the 50<sup>th</sup> percentile.

\* 2007 data

#### Results – Accelerated Learning – Pre-School

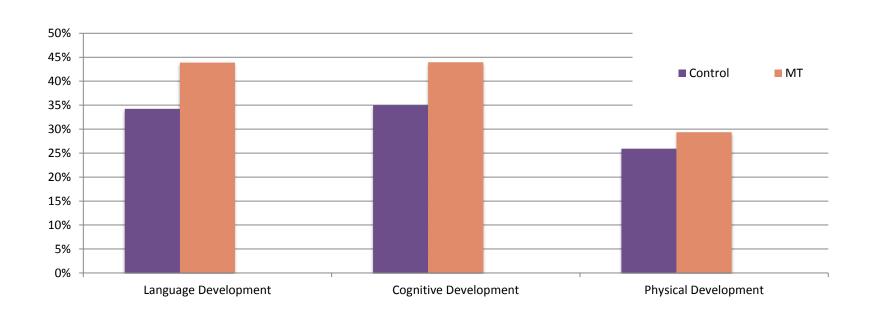


#### 2007-08 School Year

 "Pre-school students in the Music Together classroom made significantly greater gains in <u>cognitive development</u> (p< .015) and <u>language</u> <u>development</u> than students in the control classes." (P < .005)</li>

#### Early Learning – Music Together

#### **Student Gains in Creative Curriculum Domains**



#### 4 Year Olds

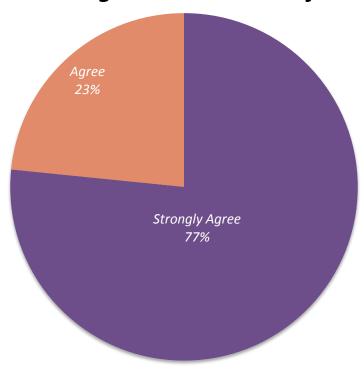
Four year olds in Total Learning preschool classrooms made significantly greater gains in cognitive skills (problem solving) from October 2007 to May 2008 than did preschoolers who did not participate in the program.

MCG report



#### Parents Say. . .

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



#### Results – Accelerated Learning in Kindergarten



"Students in Total Learning made <u>significantly higher</u> <u>scores</u> on the second administration of *Concepts of Print* and *Developmental Reading Assessment* than did children in the control group."

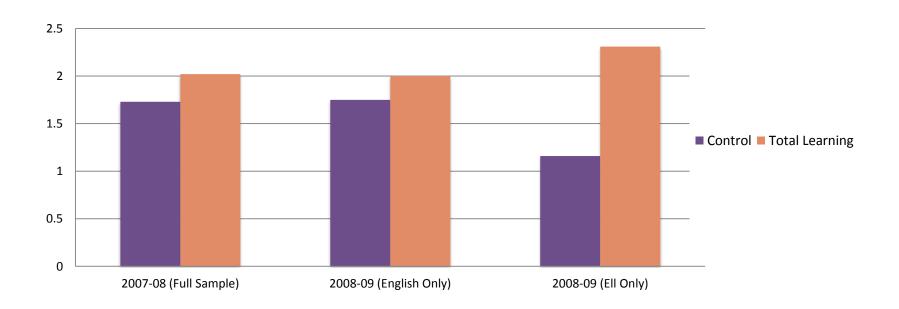
#### Kindergarten

A kindergarten student in a *Total Learning* intervention classroom would rank <u>8 percentile points higher (at the 58th percentile)</u> than a student in the control group performing at the group mean or 50th percentile.



#### Statistically Significant Gains

#### Statistically significant kindergarten gains



#### Results - Accelerated Learning - Kindergarten



 "Students who scored the <u>lowest</u> on their initial DRA tests, in the full treatment condition made significantly greater gains from pre-test to post-test than other students."

F(2,55) = 3.146; p = .001.

#### First Grade

The mean standing of students in Total Learning First Grade classrooms is at the 66th percentile, compared to the mean standing of students in the control group at the 50th percentile.

10/10/2014

#### English Language Learners (ELL)

Results indicate that an average ELL *Total Learning* student would rank 23 percentile points higher (or at the 73rd percentile) on the DRA than would an ELL student (at the 50th percentile) in the control group.



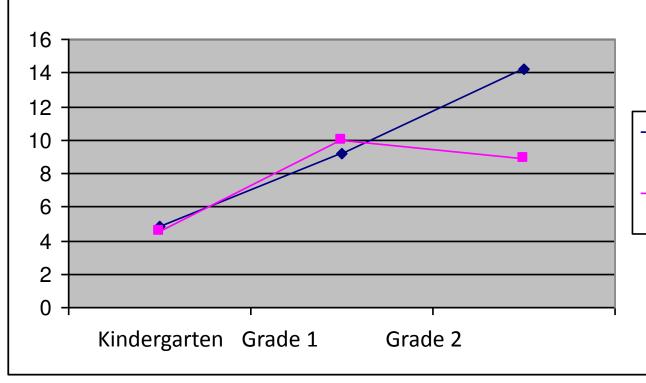
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#### Reading Gains





#### DRA average grade level gains January to May, 2011



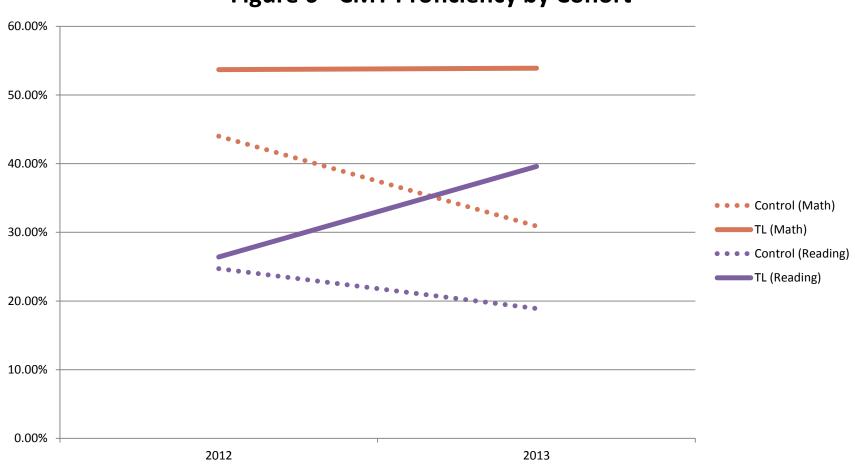
- average gains, classrooms with PD
- average gains, wrap around only

#### **CMT Gains**

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.

#### **CMT Proficiency by Cohort**

**Figure 6 - CMT Proficiency by Cohort** 



#### Kids say . . .

"We learn more and we have more fun!"



### Results – Increased Teacher Capacity



"Total Learning makes teaching more rewarding – increasing the chances of teacher retention for longer periods."

Yemi Onibokun, Ph.D.

State Department of Education Official

Teachers volunteer and ask for Total Learning.

www.aeideas.com ~

#### Highly Conducive to Student Learning

CLASS observations and student reports showed that the learning environment was warm, rich, engaging, productive, and highly conducive to student learning.



#### **Teacher Quality**

 Teachers participating in TLI significantly improved in their ability to provide students with rich interactions and a stimulating learning environment, measured by the CLASS Observation Tool.



#### **Teacher Quality**

During 2013-14, teachers participating in TLI improved in their ability to provide students with rich interactions and a stimulating learning environment.

Statistically significant gains were observed on two dimensions [of the CLASS assessment] that are fundamental to TLI, Concept Development and Language Modeling.

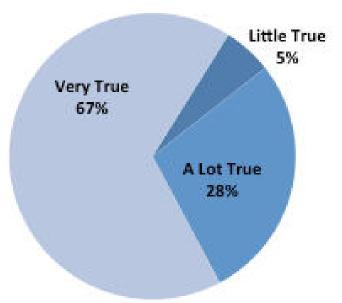
	Pre-Test		Post-Test		Mean	+ value	p-value
	Mean	SD	Mean	SD	Difference	t-value	p-value
Concept Development	2.42	0.718	2.94	1.140	0.52	-2.261	0.045
Language Modeling	2.82	0.650	3.51	1.089	0.69	-2.274	0.044

#### Summer Camp, 2014

 As a result of the 18 day summer camp, there was a statistically significant increase in children's DRA scores from the spring (Mean-20.21 to the summer (Mean-22.14, t(19)=3.950,p=.001. This difference translates into an average increase in .71 reading levels per student. Further, none of the children's DRA scores declined from the spring to the summer.

#### Summer Camp – Liking of School

Table 2 - "I Enjoyed the Total Learning Summer School..."

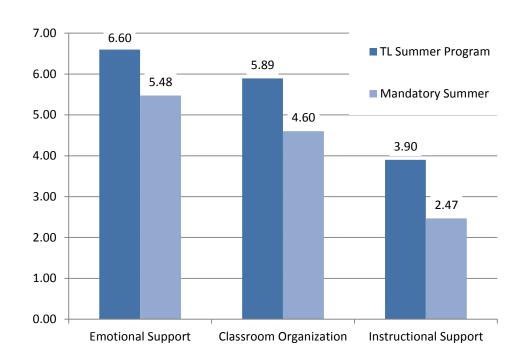


"I wish camp was longer. Can you ask Mr. Sanchez if we can stay the rest of the summer?"

## Summer Camp – CLASS Observations

- The Total Learning group displayed higher scores on all three subscales of the CLASS observation compared to the mandatory classrooms.
- The TL classroom also had a higher overall score on the CLASS (5.58) compared to the mandatory classroom (4.31).

**Table 1 - Average CLASS Subscales** 



# Student's reasons for enjoying the Total Learning Summer Camp Experience

Response	N	%
Reading	9	42.9%
Recess	7	33.3%
Clay	6	28.6%
Centers	5	23.8%
Music	4	19.0%
Friends	3	14.3%
Collage	2	9.5%

# Mental Health: Families Connected to Services

In 2012-13, Southwest connected 24% of the families (70) to services. In all cases the families were engaged first by Southwest through family interviews.

## Other Observations Count Too

- "Something GOOD IS HAPPENING in Bridgeport..."
- -- CT SDE (State Department of Education) upon inspection of Total Learning and seeing the <u>progress and enthusiasm of teachers.</u>

"Total Learning is a model which should be replicated across the country" Upon inspection of the overall program by Margaret Spellings,

**US Commissioner of Education** 



Bridgeport parents, teachers and administrators participating in Total Learning in numerous venues voice similar positive sentiments.



# **SDE Summary**

"TLI is a very exciting program. It presents a new approach to early childhood education and curriculum planning.

Expanding the Head Start model to include more children, increased family support services, age appropriate curriculum, enhanced learning environment, extended day/year for curriculum focused learning activities and innovative professional development program make TLI a feasible program for closing the achievement gap. The program exhibits face validity. It is a new way of laying a successful foundation for learning readiness.

SDE should continue to support this program and examine its replication in other towns."

# Teachers Say . . .

"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." - 2<sup>nd</sup> 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." - 2<sup>nd</sup> Grade Teacher

"I have never had a group that has progressed this fast and I am convinced that it is due to Total Learning! I feel like I have a whole new way of looking at teaching. This is great for those of us who have been at this for a while and need to refresh ourselves, to say nothing of how effective it is for the children." -Grade 1 teacher

# It's Time to Replicate Success

- Total Learning has been shown to be effective.
- The cost comes down as more children and classrooms are served.



## Institutionalization

- With new funding, we can:
  - Expand the Pre-K program to all 3 and 4 year olds
  - Expand the K-4 approach through Total Learning Digital
     Professional Development, supported by paraprofessionals or other adults, plus family and mental health supports.
  - Expand the Summer Camp program throughout the district
  - Reinstate and refine Total Learning's after school program through training providers and monitoring.
  - Conduct gold standard research on Teacher Quality and Student Growth, academically and social-emotionally

## Institutionalization, continued

- Seek funding for specific components of the initiative such as paraprofessionals, family workers, mental health, or technology.
- Work with the State of CT to replicate in other school districts with underserved populations
- Prepare to apply for a grant under the Total Learning Act H.R. 3893 when it becomes law.

# Institutionalization of TL 2012-13 Needs to be updated

#### Birth-3 and 3-4 year olds

- Continue Parent-child 0-3 year program in 4 schools
- Expand Parent-Child 0-3
  year program to 13 schools
  to get to "steady state" in
  17 schools
- Expand Pre-K 3-4 year olds from2 at Batalla to 39 classes reaching all 17 schools
- All in 2012-13

#### K-4

- Continue K-4 program in Batalla
- Reinforce K-4 in Barnum, Hall, Cross, Longfellow, Roosevelt where ~30 trained teachers are now working
- Plan extension of K-4 to remaining 26 elementary schools over say 3-1/3 years, 2013-17

## **Future Effort**

#### TEACHER TRAINING

A detailed proposal for teacher education has been prepared with Fairfield University. This could fund a major component of TL by making it an integral part of university teacher training delivered in schools.



### **Future Effort**

#### REPLICATION

House Bill #3973 Early Learning Innovation Act is before Congress with a proposed authorization of millions to take the program to cities across the country.

## **FUTURE EFFORT**

#### SHARED RESPONSIBILITY

- Social services pick up much of wrap around work
- Local universities pick up teacher training and professional development

#### REDUCED COST

 Track reductions in discipline issues, retention, remediation, special needs to measure offsets to costs in BPS

# SUMMARY EQUIVALENT TOTAL INVESTMENT IF EXISTING SERVICES NOT USED OR COSTS NOT SHARED

ITEM	2012-13	2013 – 2016+	STEADY STATE
Batalla	0	\$1127/student	\$1127/Steady state
0-3 yr olds	4 schools@\$262/ student =\$21,000. to install in 13 more schools @\$300/ child = \$78,000 Total = \$99,000	\$262/child/year 340 students =\$89,080/year	\$262/child/year 340 students =\$89,080/year
3-4 yr olds	39X20X\$495.25 = \$381,895 to install in 17 schools (-lower cost of 2 existing classes @386/student)	\$386/child/year 780 students =\$301,080/year	\$386/child/year 780 students =\$301,080/year
K-4 Expansion	Planning/Financing /Enlisting partners, no new cost	\$<10 million/year Installation @~10 schools/year	\$1127/child/year x 8660 students =\$9,759,820/year

Note: Total Learning costs are over and above basic schooling costs.

These costs can be allocated to different entities, or simply use existing services. Reduction of discipline issues, retention and special needs costs may render TL to

## Payoff from Early Childhood Education

Studies going back sixty years track the long term effects of early childhood education.

Minneapolis Federal Reserve Bank has assessed various studies showing

FINANCIAL PAYOFF

Annual ROI up to 18%

### KEYS TO FEDERAL FUNDING (cont'd.)

- District leadership requesting TL
- •Strong support and effort by the Connecticut congressional delegation (House and Senate).
- Joint District/TL meetings with the US Secretary of Education and the Secretary of Housing and Urban Development for neighborhood development funds.

## The Total Learning Institute

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