

Financial Education in Our Schools

Financial Literacy Pilot Program

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MASSACHUSETTS DEPARTMENT OF
ELEMENTARY AND SECONDARY
EDUCATION



Program Overview

Legislation: Establishes a Financial Literacy Pilot program for Gateway Municipalities and an advisory committee

To equip high school students with the knowledge and skills needed to become self-supporting and to enable them to make critical decisions regarding personal finances.

- ★ National Standards for Financial Literacy
<http://www.councilforeconed.org/wp/wp-content/uploads/2013/02/national-standards-for-financial-literacy.pdf>
 - ★ I. Earning Income
 - ★ II. Buying Goods and Services
 - ★ III. Saving
 - ★ IV. Using Credit
 - ★ V. Financial Investing
 - ★ VI. Protecting and Insuring People
- ★ MA Mathematics and Technology Curriculum Framework
<http://www.doe.mass.edu/frameworks/current.html>
 - ★ Functions
 - ★ Exponents
 - ★ Spreadsheets



Timeline

Award – June 30, 2013	Planning Period
July 2013 - June 2014	1 st Year of Implementation
July 2014 – June 2015	2 nd Year of Implementation
July 2015 – June 2016*	3 rd Year of Implementation

*Pending appropriation of funding



Grantees

Competitive grants awarded to 10 districts (11 high schools) partnered with banks, credit unions, community organizations, and/or higher education institute.

FY2014 Data			
Gateway Districts	High School(s)	Number of Teachers Delivering Curriculum	Number of Students Engaged
Fall River	BMC Durfee High School	30	560
Haverhill	Haverhill, High School	3	570
Holyoke	Dean Technical High School	3	74
Lowell	Lowell High School	10	261
Lynn	Lynn High School	5	608
Quincy	North Quincy High School	3	74
	Quincy High School	4	48
Revere	Revere High School	10	92
Salem	Salem High School	2	109
Springfield	Putnam Vocational High School	4	546
Worcester	Worcester Technical High School	7	50



District Strategy

- ★ All Students
- ★ All Freshman
- ★ Special Populations
- ★ Community Outreach
- ★ Stand alone course
- ★ Add to Math courses
- ★ Add to the multiple disciplines
- ★ Add to Business Major (Voc)
- ★ Add to Advisory Blocks
- ★ Credit/Money Strong for Life Fair
- ★ Family Financial Literacy Day
- ★ 2014 National Economics Challenge



Curriculum Resources

- ★ Academic Innovations
- ★ National Endowment for Financial Education (NEFE)
- ★ Junior Achievement
- ★ Valmo Village
- ★ Boston Federal Reserve Bank
- ★ Network for Teaching Entrepreneurship
- ★ National Financial Educators Council



FY2014 Findings

Program Models

- ★ The sites created program models that contained a diversity of curricula and activities.

Strategic considerations

- ★ Students may be served best by exposure to financial literacy concepts throughout the four years of high school.
- ★ Financial literacy curriculum should be targeted to the interests and capacities of different age groups.
- ★ Increased family outreach may benefit student and family financial decision-making.

Gateway Districts	High School(s)	FY14	FY15	FY16
Fall River	BMC Durfee High School	560		
Haverhill	Haverhill, High School	570	610	675
Holyoke	Dean Technical High School	74	175	225
Lowell	Lowell High School	261	446	1080
Lynn	Lynn High School	608	750	810
Quincy	North Quincy High School Quincy High School	122	137	137
Revere	Revere High School	92	131	200
Salem	Salem High School	109	130	250
Springfield	Putnam Vocational High School	546	525	650
Worcester	Worcester Technical High School	50	158	171



Evaluation

University of Massachusetts Donahue Institute
(UMDI)

- ★ Student content knowledge?
- ★ Student behavioral changes?
- ★ Educator impact?
- ★ School/District impact?

<http://www.doe.mass.edu/STEM/grants.html>



Financial Literacy Summit

Financial Literacy Pilot Program Evaluation Findings

May 1, 2015

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Presentation Overview

- **Participating Schools and Students**
- **Student Outcomes**
- **Promising Program Components**
 - **Community Partnerships**
 - **Experiential Learning Opportunities**
 - **Embedded Financial Literacy Curriculum**



Participating Schools and Students

- 11 high schools in 10 Gateway Cities
- 2,992 students in the 2013 – 2014 school year*
 - 73% low-income students
 - 45% white, 33% Hispanic or Latino, 11% Asian, 9% African American, 2% Multiracial non-Hispanic, 1% American Indian or Alaska Native
 - 15% special education students
 - 12% English language learners
 - 55% below proficient Math MCAS scores
 - 36% below proficient ELA MCAS scores

**Demographic profile based on 1,289 students for whom demographic information was available based on grantee reports .*

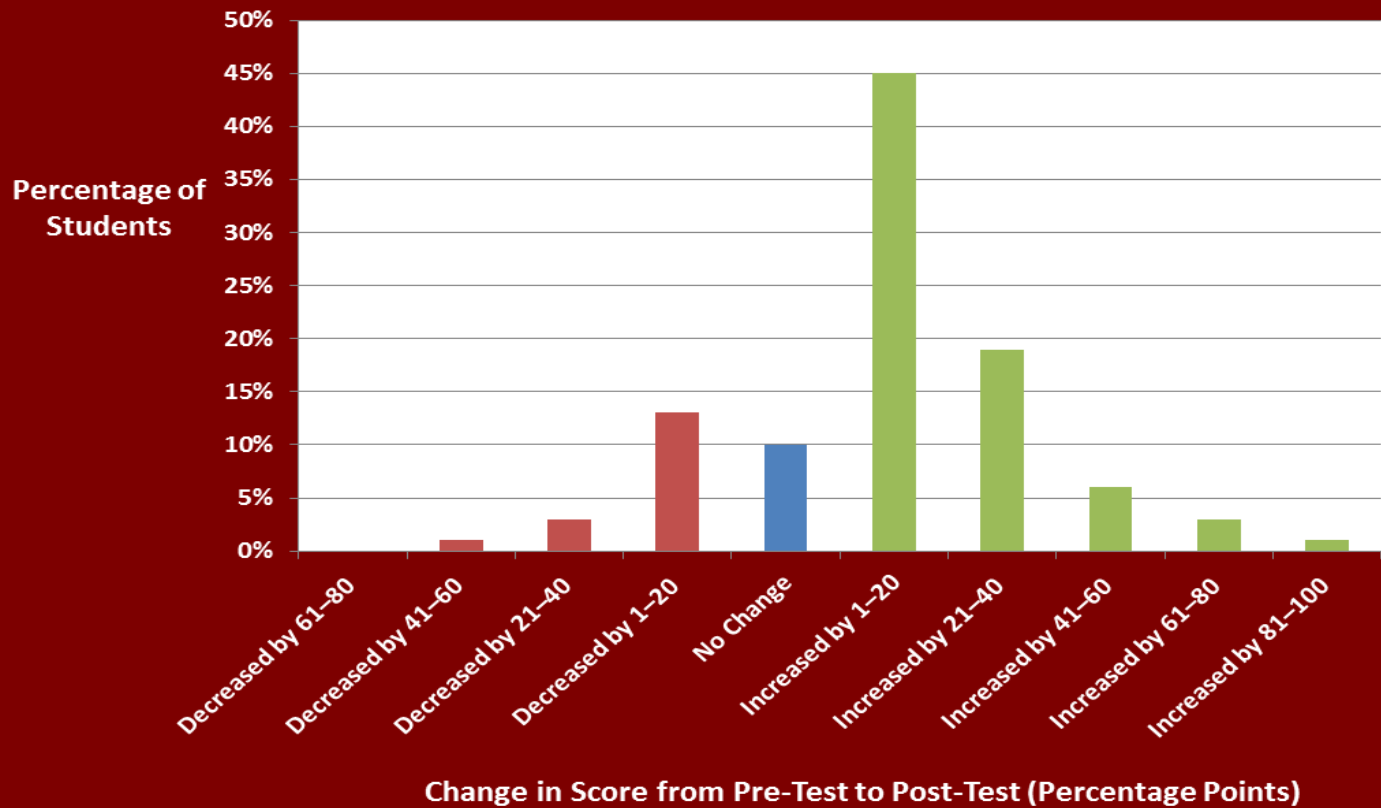


Assessing Student Outcomes

- 2013 – 2014 School Year
 - First year of implementation
 - FLP schools developed their own pre- and post-test instruments
 - Great variation in instruments from school to school
 - True/false, multiple choice, essay, attitudinal, and mathematical questions
- 2014 – 2015 School Year
 - Second year of implementation
 - Common pre- and post-test instruments developed by UMDI
 - 20 multiple choice questions
 - Questions informed by review of grantees' 2013 – 2014 instruments, publically available tests, and National Standards for Financial Literacy

Student Outcomes in School Year 2013 – 2014

Figure 1: Change in Students' Scores From Pre-Test to Post-Test
(N=1,129)



Examples of Community Partnerships

- Banks and Credit Unions
 - **Haverhill Bank** (Haverhill High School)
 - **Jeanne D'Arc Credit Union** (Lowell High School)
- Higher Education
 - **Clark University** (Worcester Technical High School)
 - **Bay Path College** (Dean Technical High School)
- Businesses and Community-Based Organizations
 - **Junior Achievement** (Dean Technical High School, Putnam Vocational Technical Academy, and B.M.C Durfee High School)
 - **Cabot Money Management** (Salem High School)

Pairing High School and College Students at Worcester and Dean Technical High Schools

Worcester Tech and Clark University

- Clark entrepreneurship students team up with high school students for a business plan competition.
- Worcester looking to expand partnerships and Clark interested in giving back to inner city schools.
- Students hearing advice from new sources. Gets them thinking about college.
- Benefits to Clark students: build a mentor/mentee relationship and share area of expertise.

Dean Tech and Bay Path College

- Bay Path students assist high school students to navigate JA Finance Park budgeting simulation.
- Partnership developed with support from Junior Achievement.
- One-on-one interaction encourages students and makes them feel “visible and important.”
- Benefits to Bay Path students: college students build teaching skills build and relationships across socioeconomic boundaries.

Benefits of Community Partnerships

- Curriculum and Instruction Support
 - Provide established curriculum and materials
 - Develop courses and adapt curriculum
 - Professional development
 - Volunteer instructors
- Mentors and Role-Models
 - In-class speakers
 - Events and conferences
 - Inspire and guide students
- Expanded Resources
 - Funding, space, and personnel for financial literacy events
 - Connection with new people and organizations
 - Sustainability past the life of the FLP grant



Experiential Learning Opportunities

- Credit for Life Fairs
- Stock Market Challenge
- Budgeting Exercises
- Business Plans
- Capstone Projects
- Job Shadowing
- Field Trips and Conferences
- Education and Outreach



Putnam Voc Tech Students Participate in Teen Shark Tank Challenge

- Junior Achievement of Western MA's 2015 Teen Shark Tank Challenge
- Create unique products and compelling business plans to pitch to a panel of judges
- Math and microeconomic concepts: time, wages, capital, cost per item, break-even, and profit points
- Mentorship: Valley Venture Mentors helped students develop financial reports and product pitches
- Technology: students post pitch online, receive feedback, fix pitch, and then repost video
- Students develop presentation, planning, creative, analytical, mathematical, and teamwork skills



Benefits of Experiential Learning Opportunities

- Improved student engagement
- Application of knowledge and skills in real-world situations
- Greater knowledge retention
- Peer-to-peer learning
- Community involvement and outreach
- Development of analytical, leadership, and technological skills
- Opportunity to assess student learning



Embedded Financial Literacy Curriculum

- Required courses or trades
 - Hospitality and restaurant management, finance and marketing, and web development trades at Worcester Technical High School
 - Freshman mathematics at Revere High School
- Special academic programs
 - Programs for teen mothers, ELLs, and students with social/emotional issues at Quincy and North Quincy High Schools
 - 21st Century Community Learning Center at B.M.C. Durfee High School (Fall River)
- School-wide or grade-wide events
 - Family Financial Fluency event at Lynn Classical High School
 - Financial Literacy Awareness Weeks in advisory periods at Revere High School



Embedded Financial Literacy Curriculum at Lynn Classical High School

- Goal: Create a permanent program that is “self-contained” within other courses and that will last after the grant money is gone
- Financial literacy content incorporated required courses and electives including Algebra, Pre-Calculus, Computer Literacy, Street Law, and Spanish II
- Family Financial Fluency Night
 - American Credit Counseling (Credit scores and reports)
 - Office of the Attorney General (Identity-theft protection)
 - Certified financial coaches
 - Student personal finance “Jeopardy” competition
 - Free food, childcare, and translation services



Embedded Financial Literacy Curriculum at Lynn Classical High School

- Approach:
 - Create financial literacy content that does not change the underlying subject curriculum
 - Financial literacy content from one course builds upon financial literacy content from the other courses
 - Focus on real-world aspects
 - Promote teacher buy-in by involving them in curriculum development
 - Work with partners Wheelock College and Valmo Villages to review curriculum and give feedback
 - Scale-up: Try to embed in every class because “they are getting good at it”



Benefits of Embedded Financial Literacy Curriculum

- Augments existing courses and programs
 - Meaningful discussion
 - Connects personal finance to other content areas and real-world issues
 - Math is more appealing
 - Family involvement
- Promotes Sustainability of Financial Literacy Pilot
 - Reduces need for additional staff to teach stand-alone courses
 - Financial literacy becomes part of core academic courses that cannot be eliminated
 - Increases buy-in and involvement of staff school-wide
 - Improves teachers' financial literacy skills



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FY14 Financial Literacy Pilot Program Evaluation Report can be found at

www.doe.mass.edu/stem/grants.html

