

MILTON PUBLIC SCHOOLS

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Elementary Program Assignment, July 25, 2012

Milton Public Schools Core Values

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- High Academic Achievement for All
- Excellence in the Classroom
- Collaborative Relationships and Communication
- Respect for Human Differences
- Risk-taking and Innovation for Education

Milton Public Schools District Success: Milton High School

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- ▣ Advanced Placement – since 2001 the MPS has doubled the amount of AP test takers and number of AP tests taken – while increasing the percent of qualifying scores from 50% to 66% of all tests taken.
- ▣ SAT – since 2002 MHS has increased the percentage of students taking the SAT (from 90% to 99%) while maintaining an average combined score of 1550. The combined score average for all schools nation-wide (public and private) is 1500.
- ▣ College Acceptance - 97% students go on to 2 and 4 year colleges.

Milton Public Schools Success: Elementary Programs

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- MPS provides two incredible elementary program options:
 - ▣ English with Spanish
 - ▣ French Immersion

- * MPS has maintained and flourished in the area of world language instruction for elementary students while other districts in the state have reduced or eliminated these offerings.

Milton Public Schools Historic Review of Elementary Programming

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- Spanish at the elementary level was introduced in all four schools in September of 1998. In the last five years the amount of Spanish instructional time offered to students in grades 1-5 has remained constant.
- The French Immersion program began in one school (Cunningham Elementary) in September 1987. The French Immersion program currently exists in all four of our elementary schools.

Milton Public Schools Program Enrollment Trends

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- Over time the district has monitored the enrollment trends of each program.
- The purpose of the annual analysis is to ensure that both programs were meeting the needs of all students and to inform the district's strategy in student assignment each year.
- The 2008-2009 grade 1 enrollment data began to indicate an increasing percentage of parents/guardians choosing French Immersion.

Historic Enrollment Trends— Percentage by Program

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Grade 1 Enrollment by Program Percentage*		
	English	French
2012-13	34%	66%
2011-12	46%	54%
2010-11	41%	59%
2009-10	41%	59%
2008-09	44%	56%
2007-08	56%	44%

*Based on October 1 enrollments; 2012-13 projected;
Does not include students in substantially separate special education programs or co-taught special education students

Historic Enrollment Trends – Class Size by Program

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Average Gr. 1 Class Size		
	E ↓	F ↑
2012-13	14.9	25.1
2011-12	16.4	24.6
2010-11	17.3	25.1
2009-10	18.7	26.6
2008-09	16.9	25.5
2007-08	20.3	21.0

Based on October 1 enrollments; 2012-13 projected

Periodic Review of Enrollment Trends

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During the 2009-2010 school year the Milton Public Schools commissioned the World Language Committee to analyze enrollment trends for both programs.

World Language Committee 2010

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Work of the Committee

- ❑ Collaborated as a group of administrators, teachers, and parents
- ❑ Solicited input from teachers and parents/guardians through online surveys
- ❑ Analyzed elementary programs
- ❑ Developed four possible assignment plans
- ❑ Identified strengths and weaknesses of each assignment plan
- ❑ Created “Alternate Assignment Plan”

World Language Committee 2010: Primary Option

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“Alternate Assignment” as of 2010

(Current Grade 1 Assignment Process)

- Parent/Guardian select program for Grade One - English or French
- Fixed number of classes per school for English/French
- Lottery held by school to fill classes if oversubscribed
- Auxiliary class(es) created to accommodate program choice for all students

World Language Committee 2010: Secondary Option

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Lottery/Capping of French Immersion

- One of the two viable options proposed by the World Language Committee
- Committee concluded that capping the program would be necessary if enrollment trends continued

Historic Enrollment Before and After WLC Recommendation – Sections by Program/School

	Sections of Grade 1	Collicot		Cunn		Glover		Tucker		Total	
		E	F	E	F	E	F	E	F	E	F
Lottery held 2 Aux	2012-13	2	2	1	2	2*	3	2	1	7	8
No Lottery 1 Aux	2011-12	3*	2	2	2	2	2	2*	1	9	7
Lottery Held 2 Aux	2010-11	2	2	2	2	2*	2	2*	2	8	8
WLC Report	2009-10	2	2	1	2	2	2	2*	1	7	7
	2008-09	2	2	1	1	2*	2	2*	1	7	6
	2007-08	2	1	2	2	2*	2	2*	1	8	6

* Includes 1 section of co-taught

Historic Enrollment Trends— Percentage by Program

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Grade 1 Enrollment by Program Percentage*		
	English	French
2012-13	34%	66%
2011-12	46%	54%
2010-11	41%	59%
2009-10	41%	59%
2008-09	44%	56%
2007-08	56%	44%

*Based on October 1 enrollments; 2012-13 projected;
Does not include students in substantially separate special education programs or co-taught special education students

Impact of Enrollment Trends on Optimal Classroom Learning Environment

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- Decreased enrollment in English with Spanish program has:
 - ▣ Created “single strands” in schools
 - ▣ Limited the flexibility of classroom assignment
 - ▣ Limited options for inclusion programs
 - ▣ Limited the pool of role models for co-taught programs
- Increased enrollment in French Immersion has increased class size (26 per class) with no educational assistant support
- Resulted in an imbalance of student demographic representation in both programs
- * ***Thus, the enrollment imbalance has limited the district’s ability to provide the best learning environment for all students***

Timeline of Process to Date

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- April 2012 – Leadership Team Reviews Program Selection for the 2012-13 School Year
- June 2012 – Superintendent Gormley presents to School Committee concerns with enrollment trends; recommends capping as an option
- June 2012 – To further investigate the issue, the School Committee directs the district to review the student achievement data for both programs
- July 2012 – Presentation of student achievement data by Laura O'Dwyer, Ph.D.

Student Achievement Data

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Laura O'Dwyer, Ph.D.

Associate Professor, Department of
Educational Measurement, Research and
Evaluation, Boston College

Overview of the MCAS

- MCAS is used to meet the requirements of the Education Reform Law of 1993.
- This law specifies that the testing program must
 - ▣ test all public school students in Massachusetts, including students with disabilities and English Language Learner students;
 - ▣ measure performance based on the Massachusetts Curriculum Framework learning standards;
 - ▣ report on the performance of individual students, schools, and districts.

Overview of the MCAS

Performance Level	Scaled Score Point Range
Advanced	260–280
Proficient	240–258
Needs Improvement	220–238
Warning (grades 3–8)	200–218

- Scores are reported on a scale from 200 to 280
- Scale scores are converted to performance levels: Advanced, Proficient, Needs Improvement, and Warning

Data Analysis

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- Describe the patterns in Milton students' 5th grade MCAS scores in ELA and Math for 6 years:
 - ▣ 2005-2006 to 2010-2011

- Describe the patterns in Milton students' 3rd grade MCAS scores in ELA and Math for the 2010-2011 school year
 - ▣ The only data available for 3rd grade

5th Grade Performance on MCAS

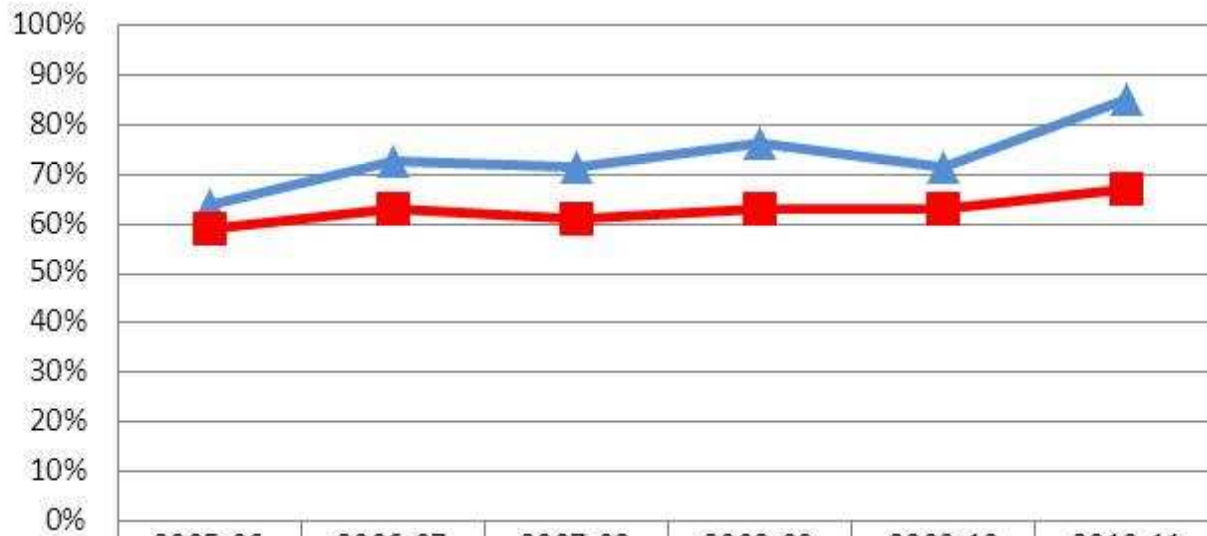
Question: How are students performing on the MCAS?

- Compare 5th grade ELA and MATH performance to state averages over 6 years
- Compare 5th grade ELA and MATH performance for French and English programs over 6 years

5th Grade Performance on MCAS: Compared to State Average

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**ELA 5th grade MCAS
Percent Proficient & Advanced**



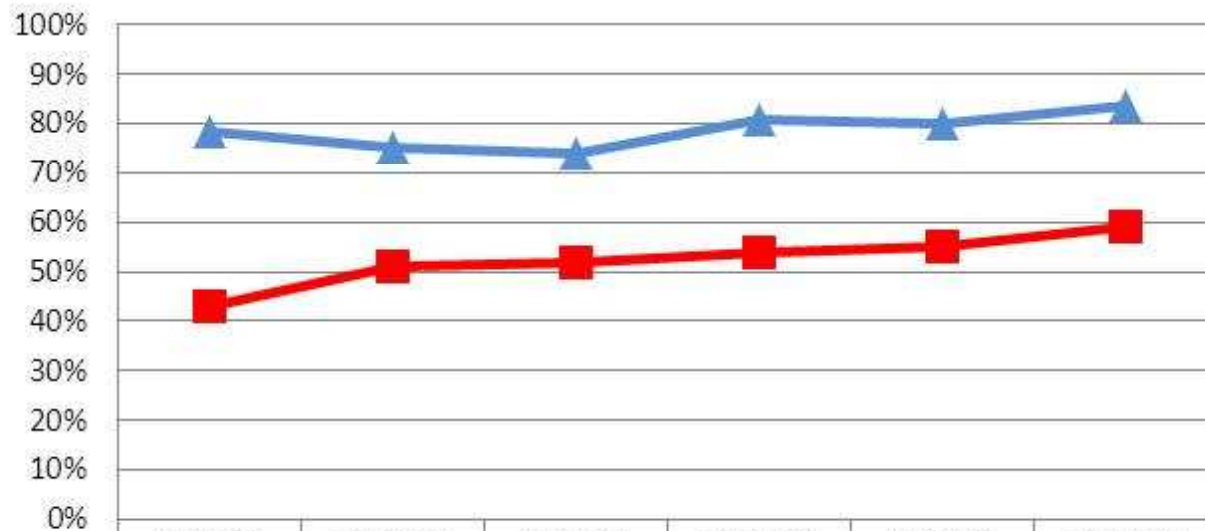
—▲— Milton	64.0%	72.6%	71.5%	76.5%	71.6%	85.3%
—■— State	59.0%	63.0%	61.0%	63.0%	63.0%	67.0%

For ELA:

Percentages of Milton 5th graders scoring in the Proficient and Advanced ranges are above the state average in all years

5th Grade Performance on MCAS: Compared to State Average

**MATH 5th grade MCAS
Percent Proficient & Advanced**



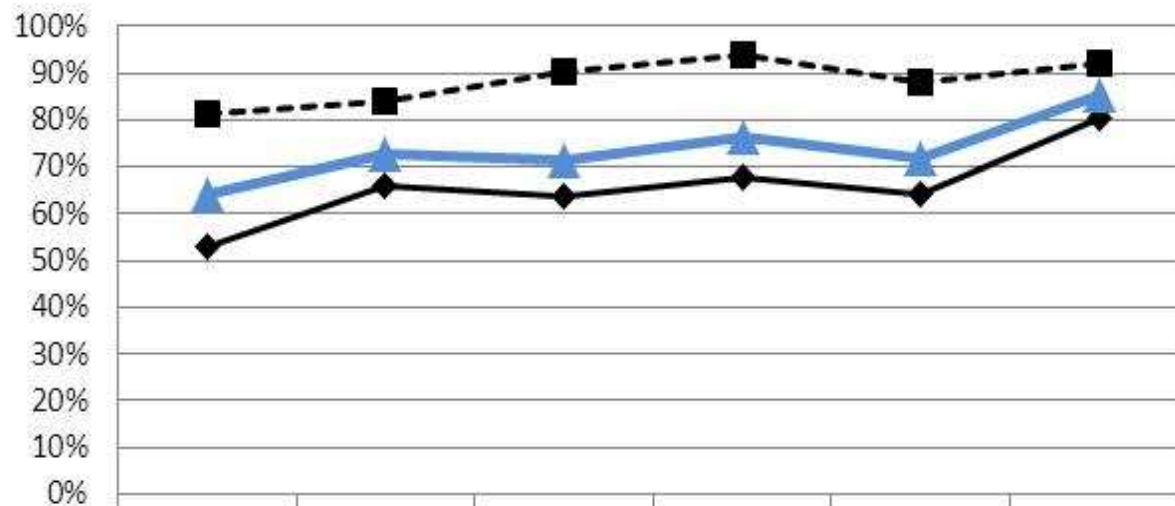
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Milton	78.32%	75.17%	73.93%	80.95%	80.14%	83.50%
State	43.00%	51.00%	52.00%	54.00%	55.00%	59.00%

For Math:

Percentages of Milton 5th graders scoring in the Proficient and Advanced ranges are above the state average in all years

5th Grade Performance on MCAS by French and English Programs

**ELA 5th grade MCAS
Percent Proficient & Advanced**



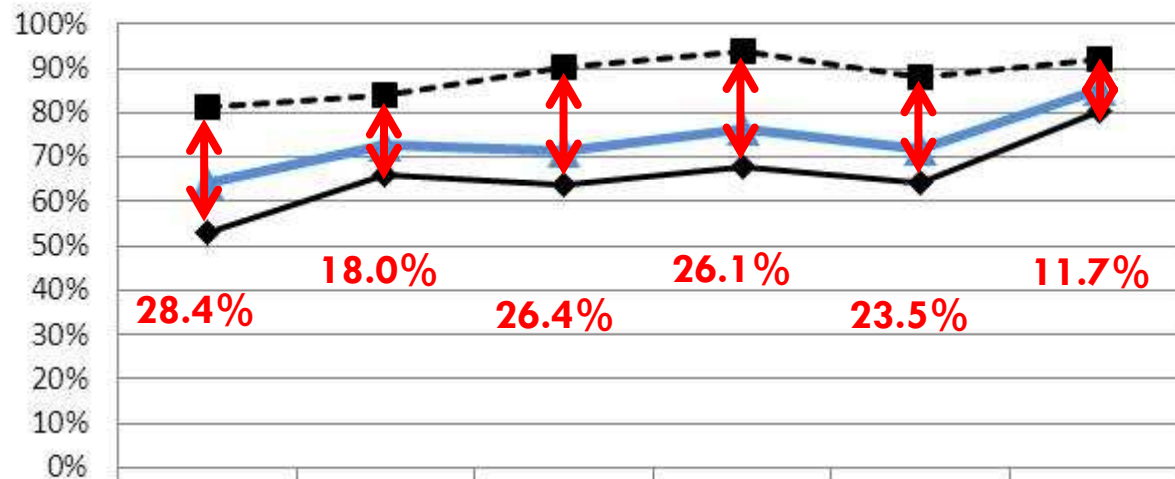
English	52.9%	66.0%	63.8%	67.7%	64.3%	80.4%
French	81.3%	84.0%	90.2%	93.8%	87.8%	92.1%
Milton	64.0%	72.6%	71.5%	76.5%	71.6%	85.3%

For ELA:

There are differences in the percentages of 5th graders scoring in the Proficient and Advanced ranges across the French and English programs

5th Grade Performance on MCAS by French and English Programs

**ELA 5th grade MCAS
Percent Proficient & Advanced**



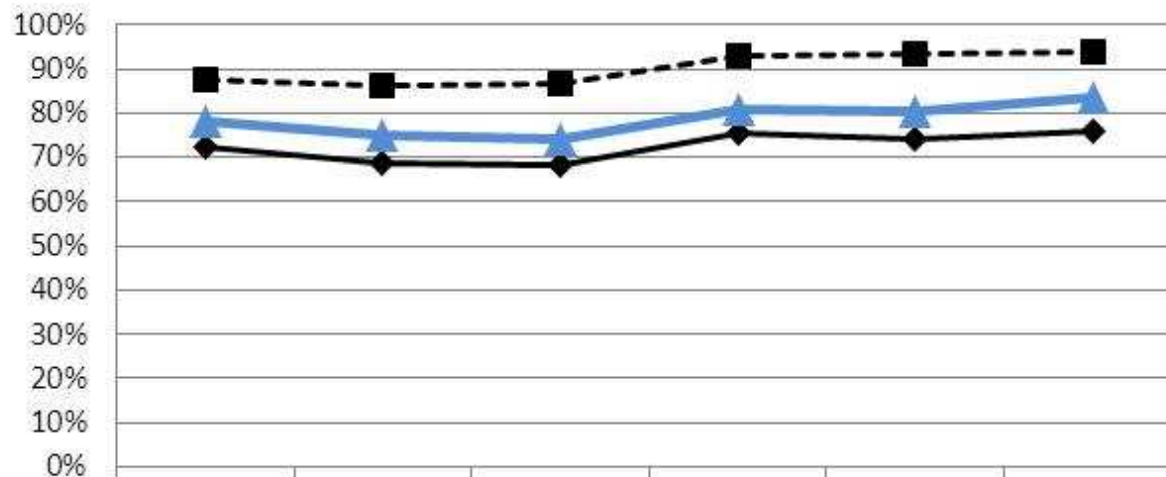
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
English	52.9%	66.0%	63.8%	67.7%	64.3%	80.4%
French	81.3%	84.0%	90.2%	93.8%	87.8%	92.1%
Milton	64.0%	72.6%	71.5%	76.5%	71.6%	85.3%

For ELA:

Difference was smallest in the most recent year for which data were available (11.7%)

5th Grade Performance on MCAS

MATH 5th grade MCAS Percent Proficient & Advanced



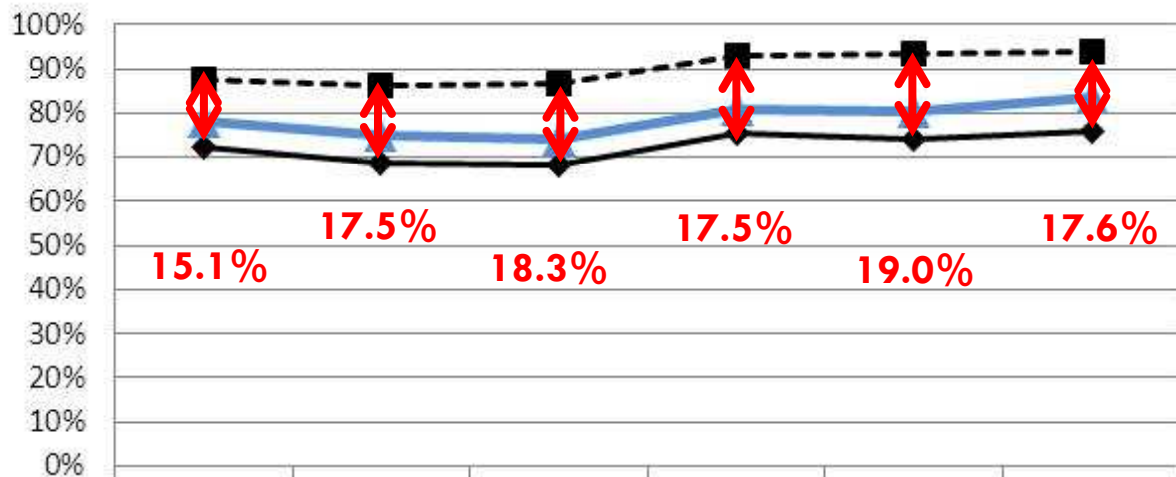
English	72.41%	68.59%	68.34%	75.25%	74.24%	76.02%
French	87.50%	86.11%	86.65%	92.71%	93.26%	93.65%
Milton	78.32%	75.17%	73.93%	80.95%	80.14%	83.50%

For Math:

There are differences in the percentages of 5th graders scoring in the Proficient and Advanced ranges across the French and English programs

5th Grade Performance on MCAS

**MATH 5th grade MCAS
Percent Proficient & Advanced**



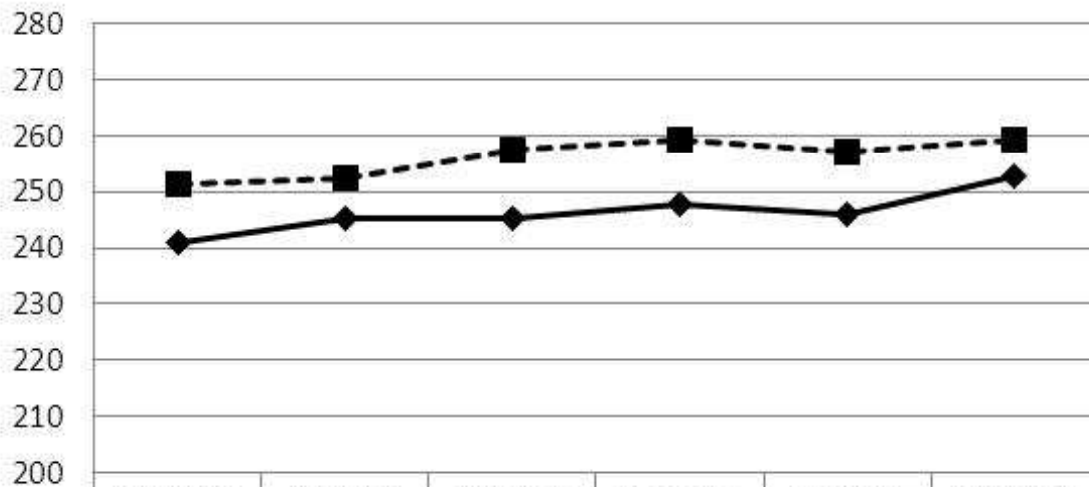
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
English	72.41%	68.59%	68.34%	75.25%	74.24%	76.02%
French	87.50%	86.11%	86.65%	92.71%	93.26%	93.65%
Milton	78.32%	75.17%	73.93%	80.95%	80.14%	83.50%

For Math:

Smaller differences in Math compared to ELA

Comparing Average MCAS Scale Scores: ELA

Average ELA MCAS Scale Score for English and French Programs



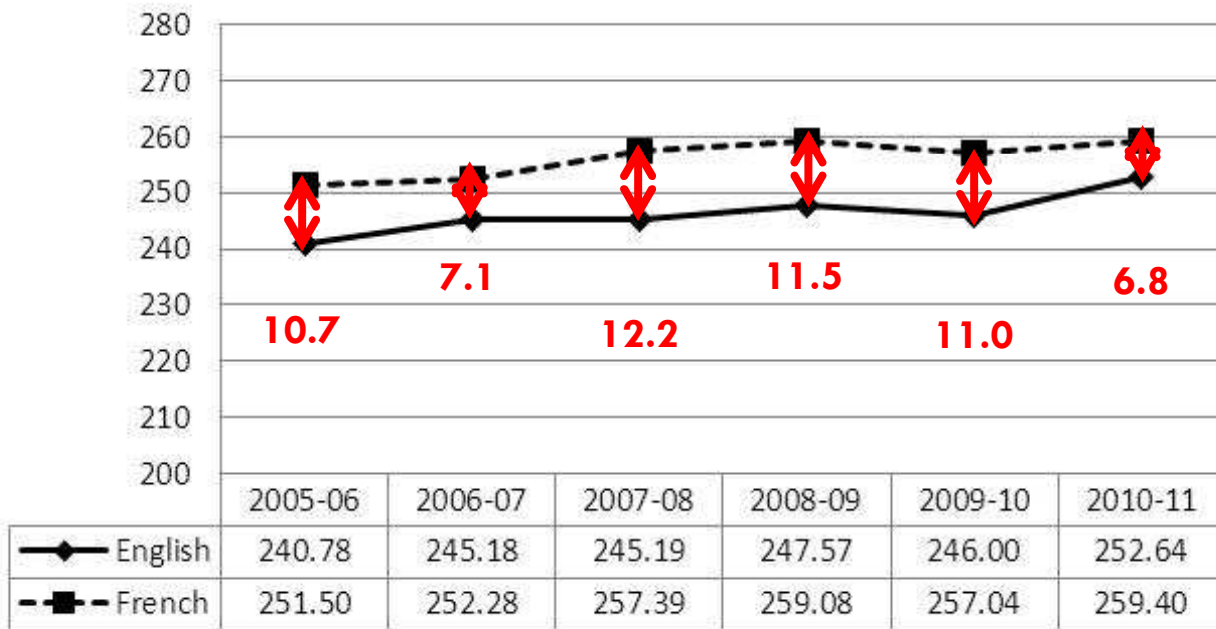
—◆— English	240.78	245.18	245.19	247.57	246.00	252.64
-■- French	251.50	252.28	257.39	259.08	257.04	259.40

For ELA:

Average ELA MCAS scale scores are higher for students in the French program

Comparing Average MCAS Scale Scores: ELA

Average ELA MCAS Scale Score for English and French Programs

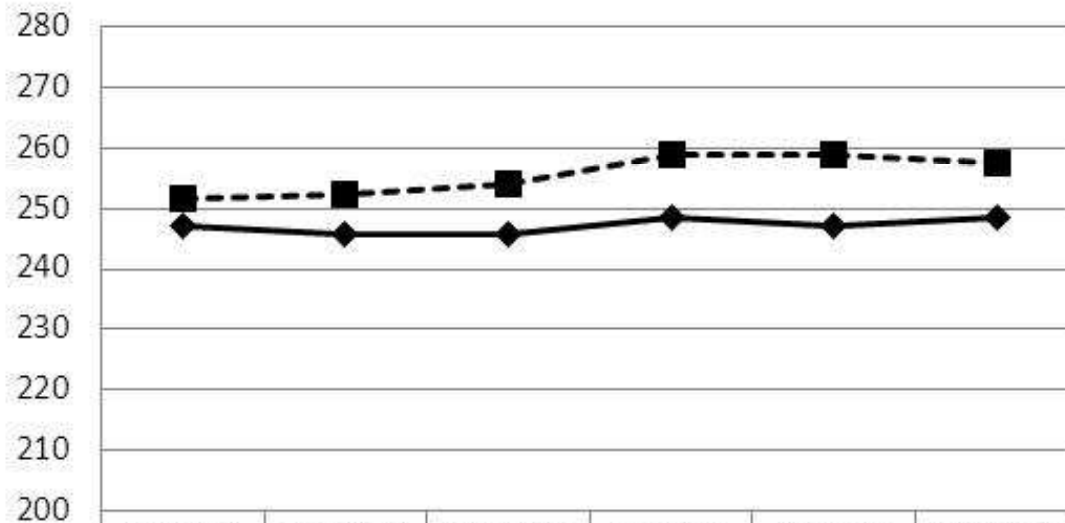


For ELA:

All scale score point differences are statistically significant

Comparing Average MCAS Scale Scores: Math

Average Math MCAS Scale Score for English and French Programs: ALL Students



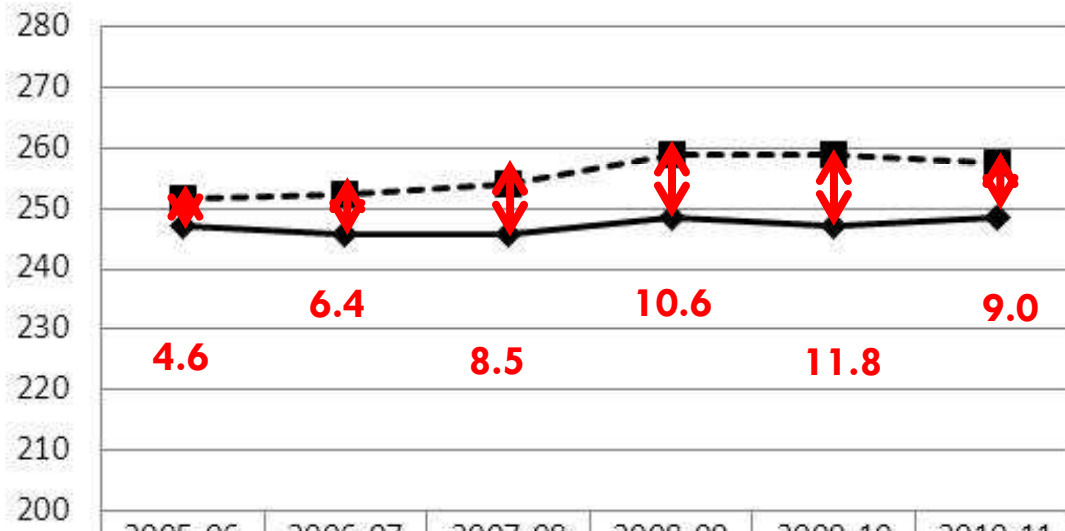
—◆— English	246.99	245.84	245.63	248.34	247.03	248.48
-■- French	251.57	252.24	254.12	258.92	258.81	257.48

For Math:

Average Math MCAS scale scores are higher for students in the French program

Comparing Average MCAS Scale Scores: Math

Average Math MCAS Scale Score for English and French Programs: ALL Students



	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
English	246.99	245.84	245.63	248.34	247.03	248.48
French	251.57	252.24	254.12	258.92	258.81	257.48

For Math:

All scale score point differences are statistically significant

What could account for these differences?

- ❑ Differences in the demographic characteristics of students in the French and English programs may account for some of the gap between programs
- ❑ **Questions:**
 - ❑ Are there differences in the demographic characteristics of the students in the two programs?
 - ❑ If students are matched on demographic characteristics, do the differences decrease?

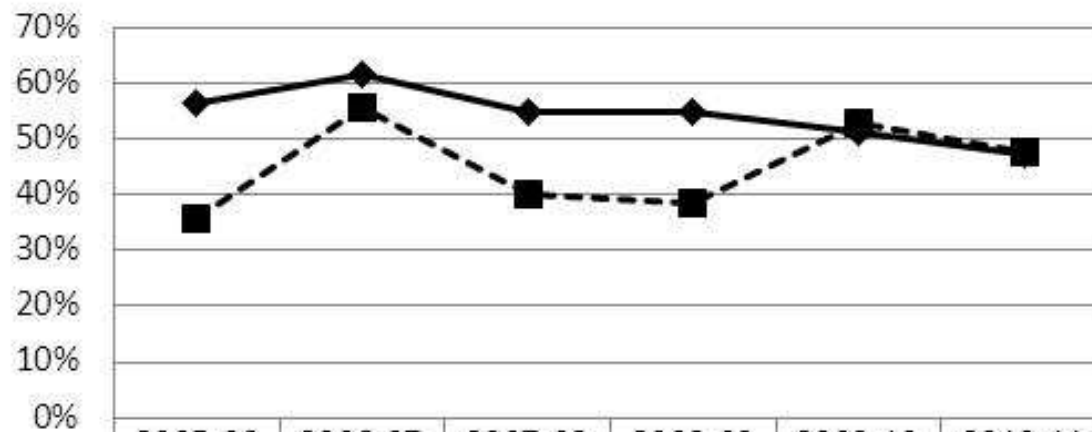
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Are there differences in the demographic characteristics of the students in the two programs?

Comparing Demographic Characteristics: Percentage of Male Students

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Percentage of Male Students in French and English Programs



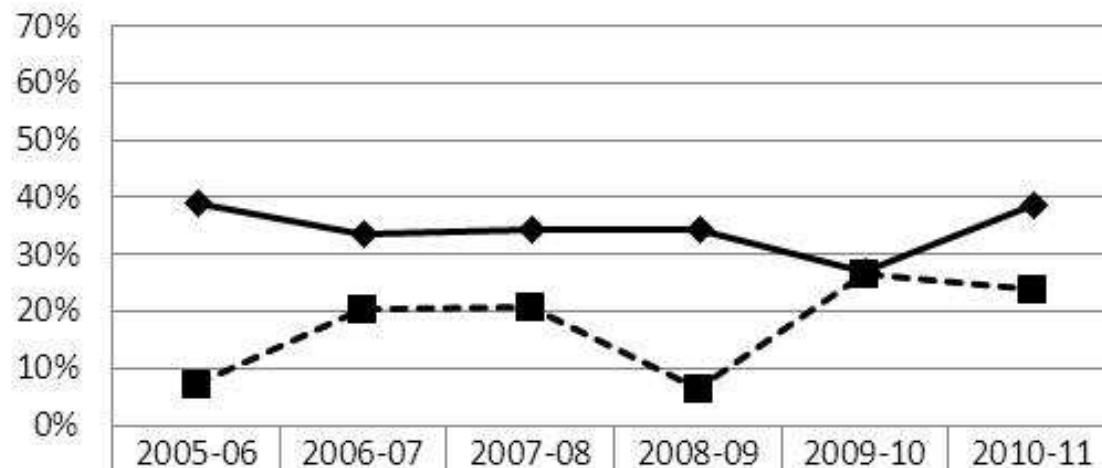
English	56.3%	61.8%	54.8%	55.1%	51.1%	47.4%
French	35.7%	55.6%	40.2%	38.5%	52.9%	47.6%

The percentage of males in the French and English programs has balanced out in the last two cycles

Comparing Demographic Characteristics: Percentage of Minority Students

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Percent Minority in French and English Programs



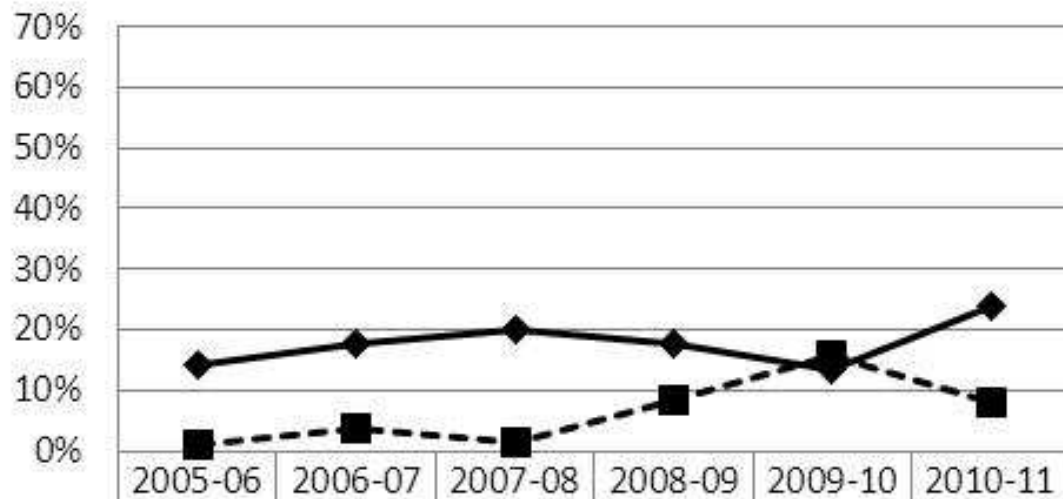
—◆— English	39.1%	33.5%	34.2%	34.3%	27.1%	38.7%
-■- French	7.1%	20.4%	20.7%	6.3%	26.7%	23.8%

The percentage of minority students tends to be higher in the English program

Comparing Demographic Characteristics: Percentage of Low Income Students

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Percent Low Income in French and English Programs



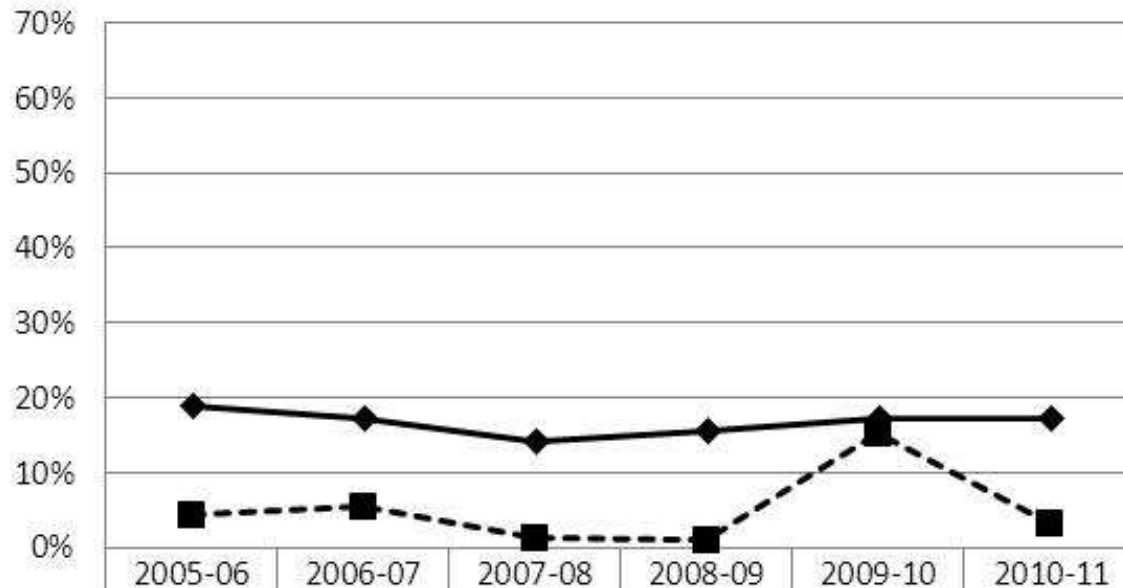
—◆— English	14.4%	17.8%	20.1%	17.7%	13.6%	23.7%
-■- French	0.9%	3.7%	1.2%	8.3%	15.6%	7.9%

The percentage of low income students tends to be higher in the English program

Comparing Demographic Characteristics: Percentage of Students with IEPs

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Percentage of Students with IEPs in French and English Programs



—◆— English	19.0%	17.3%	14.1%	15.7%	17.2%	17.3%
- -■ - - French	4.5%	5.6%	1.2%	1.0%	15.3%	3.2%

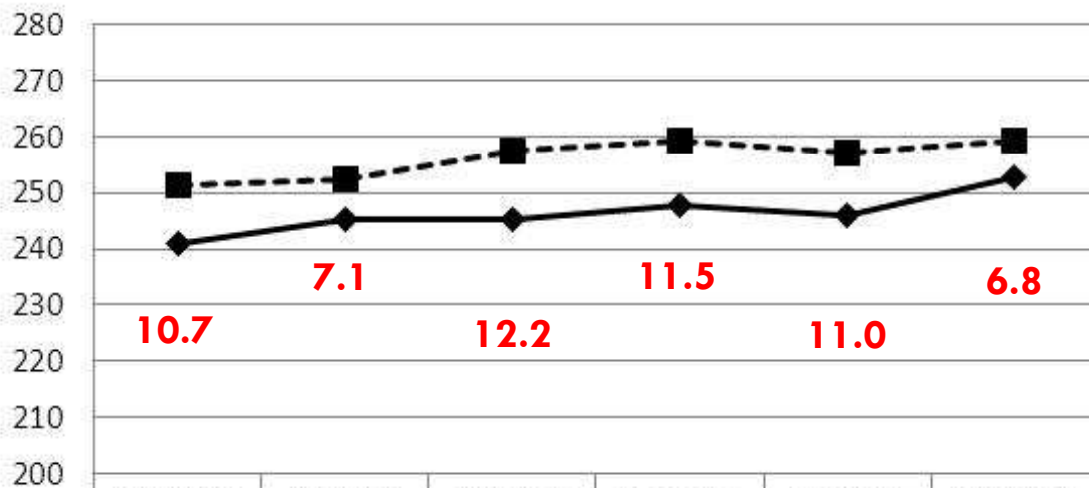
The percentage of students with IEPs tends to be higher in the English program

If students are matched on demographic characteristics, do the differences decrease?

- Will explore this question by matching students on gender, minority status, IEP status, and low income status

Comparing Average MCAS Scale Scores: ELA

Average ELA MCAS Scale Score for English and French Programs



	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
—◆— English	240.78	245.18	245.19	247.57	246.00	252.64
-■- French	251.50	252.28	257.39	259.08	257.04	259.40

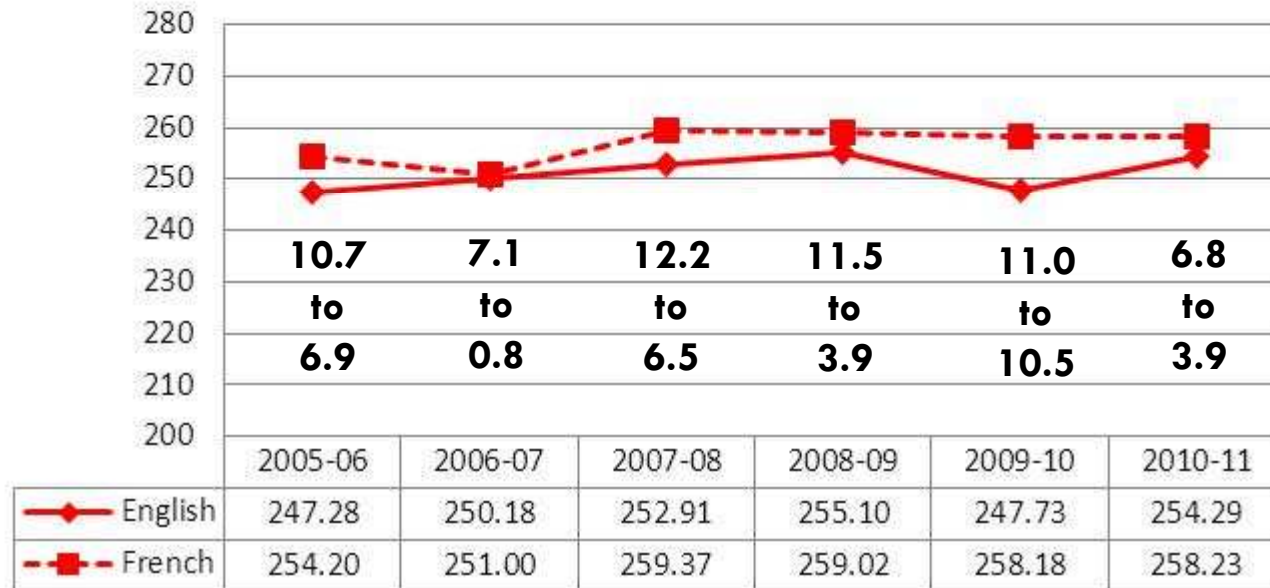
Repeated from before for ELA:

Average MCAS scale scores are higher for students in the French program

All differences are statistically significant

Comparing Average MCAS Scale Scores: ELA

Average ELA MCAS Scale Score for English and French Programs: Males, non-minority, no IEP, not low income

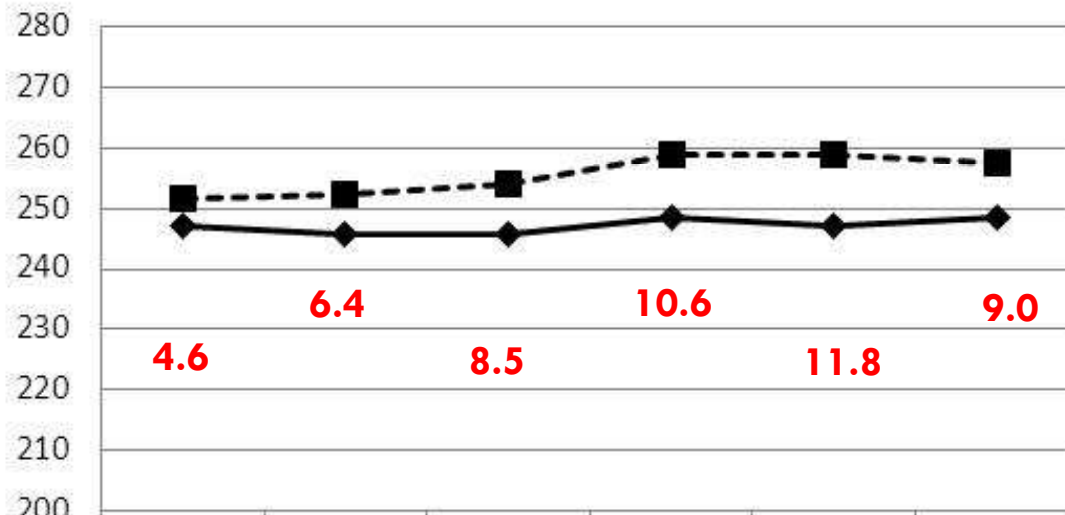


Gaps decrease when students in French and English programs are matched by gender, minority status, IEP status, low income status

Differences no longer significant in '06-'07, '08-'09, '10-'11

Comparing Average MCAS Scale Scores: Math

Average Math MCAS Scale Score for English and French Programs: ALL Students



	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
English	246.99	245.84	245.63	248.34	247.03	248.48
French	251.57	252.24	254.12	258.92	258.81	257.48

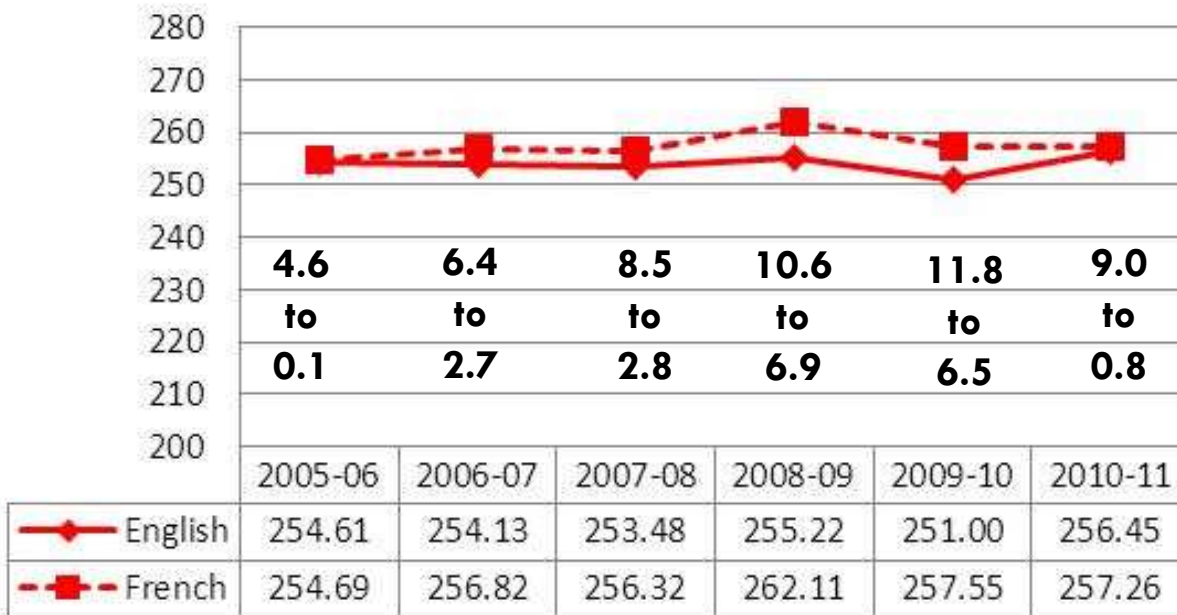
Repeated from before for Math:

Average MCAS scale scores are higher for students in the French program

All differences are statistically significant

Comparing Average MCAS Scale Scores: Math

Average MATH MCAS Scale Score for English and French Programs: Males, non-minority, no IEP, not low income



Gaps decrease when students in French and English programs are matched by gender, minority status, IEP status, low income status

Differences no longer significant in '05-'06, '06-'07, '07-'08, '10-'11

Summary of Findings from Review of 5th Grade MCAS Scores

- On average, 5th grade MCAS scores in Milton are higher than the state average
- There are differences in the scores for the French and English programs
 - Students in the French program tend to score higher than students in the English program
- However, we cannot necessarily conclude that one program is better than the other:
 - Self-selection to programs result in differences on measured (e.g., demographics) and/or unmeasured (e.g., parental involvement etc.) characteristics

Summary of findings from review of 5th grade MCAS scores

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Questions posed:

- **Are there differences in the demographic characteristics of the students in the two programs?**
 - Yes. The English program tends to have higher percentages of male, minority, low income and IEP students
- **If students are matched on demographic characteristics, do the differences decrease?**
 - Yes. For ELA and Math and for all years, the gap between the English and French program scores decreased when students were matched on gender, minority status, low income status and IEP status

3rd Grade Performance on MCAS

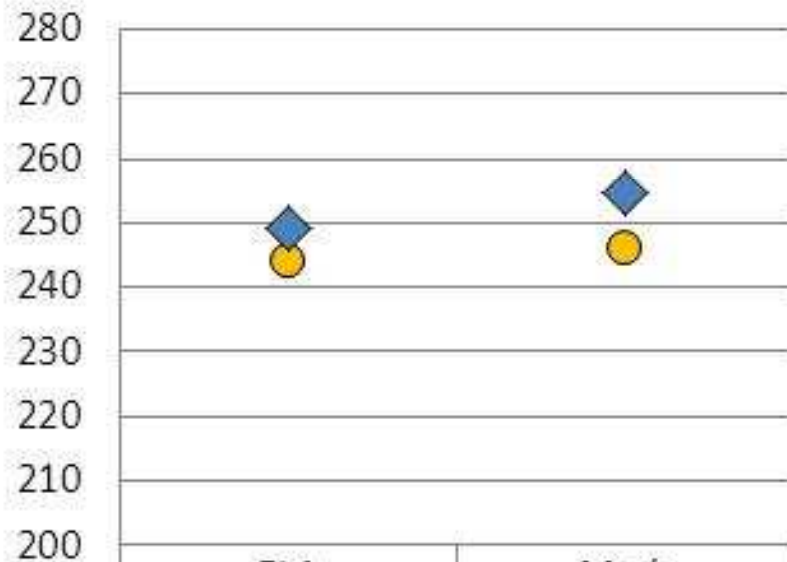
Questions:

- What are the average MCAS scores for students in the French and English programs?
- What are the average MCAS scores by sub-group for students in the French and English programs?

Reminder – only summarize 3rd grade scores for the 2010-'11 school year

What are the average MCAS scores for students in the French and English programs in 2010-'11?

Average ELA and Math MCAS Scores for Grade 3

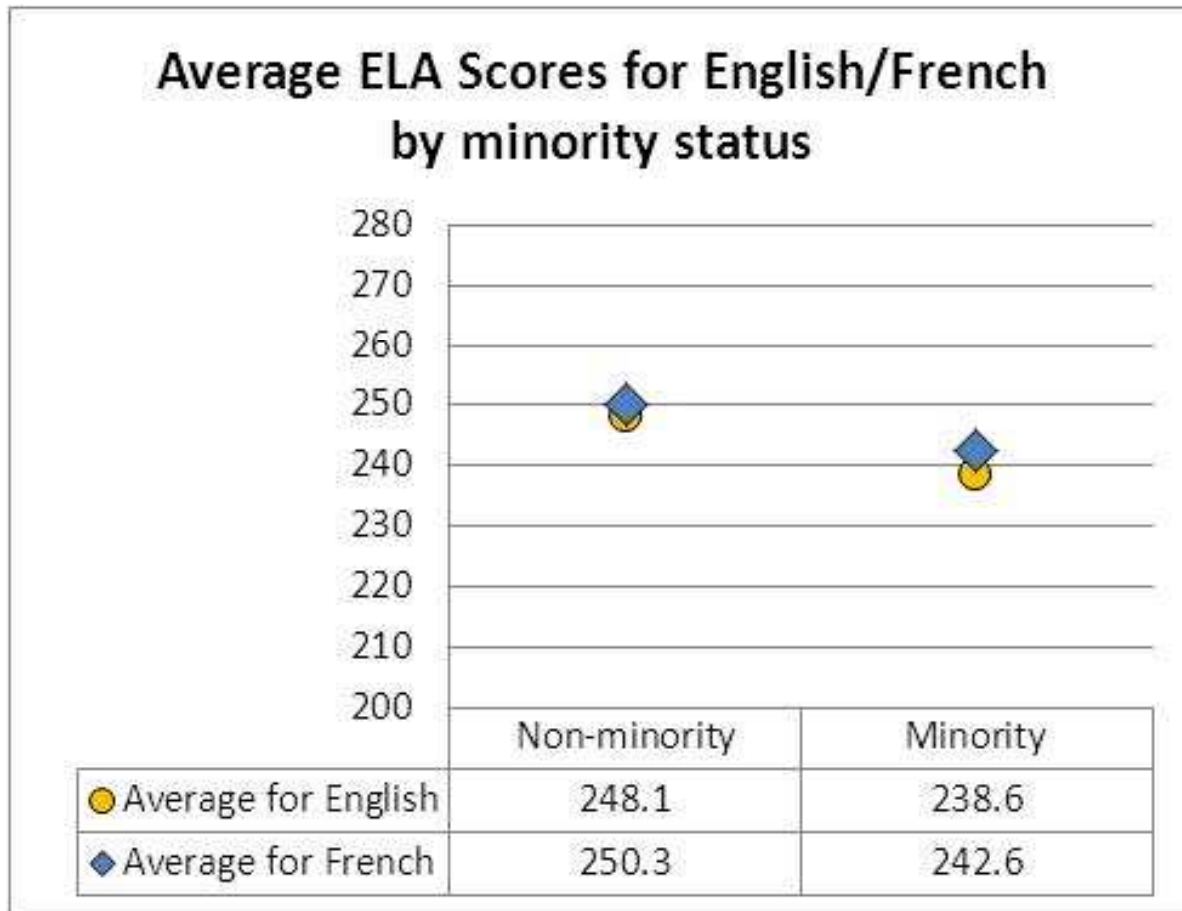


	ELA	Math
● Average for English	243.9	246.1
◆ Average for French	249.3	254.6

For ELA and Math:

Similar to the 5th grade analyses, average scale scores for students in the French program are higher than for students in the English program

What are the average MCAS scores for minority and non-minority students in the French and English programs in 2010-'11?

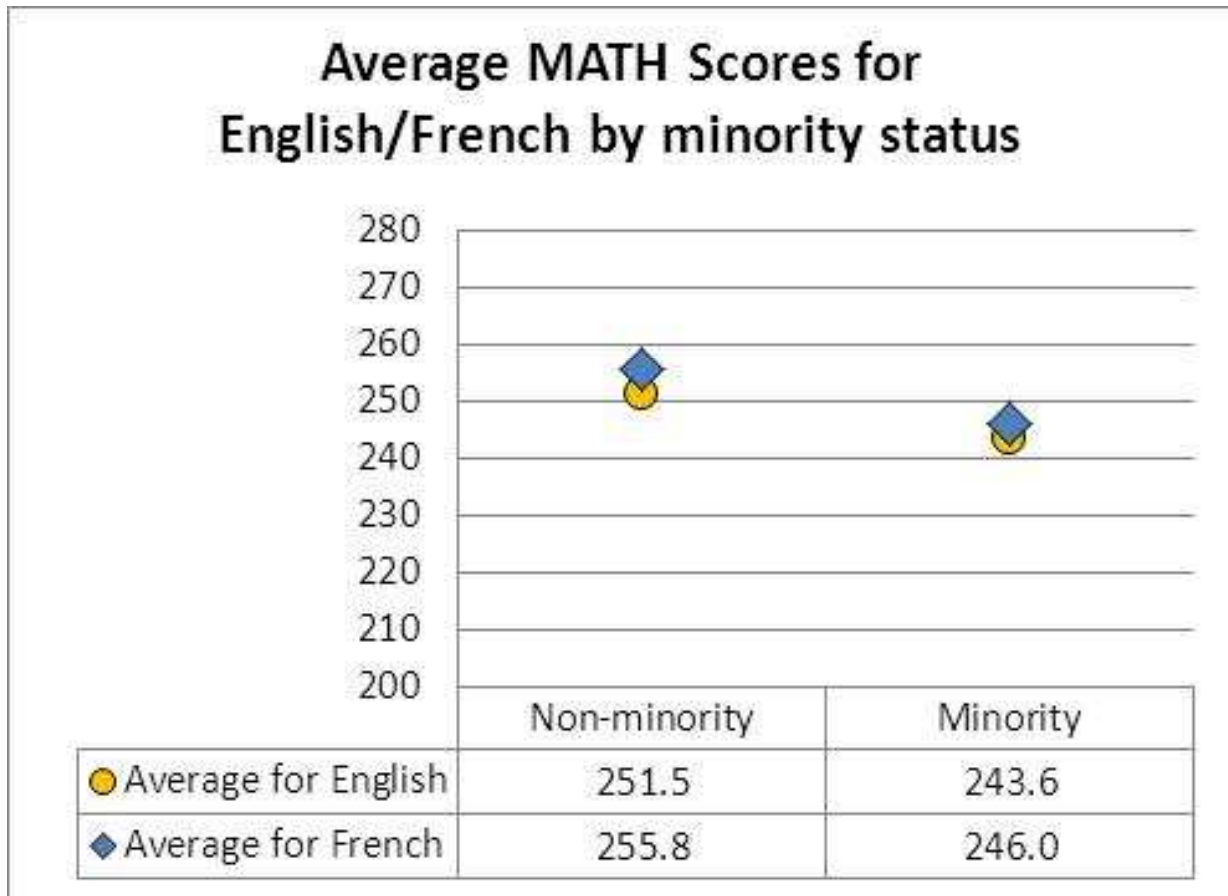


For ELA:

Minority students appear to score lower than non-minority students in both the French and English programs

Only small differences within programs

What are the average MCAS scores for minority and non-minority students in the French and English programs in 2010-'11?



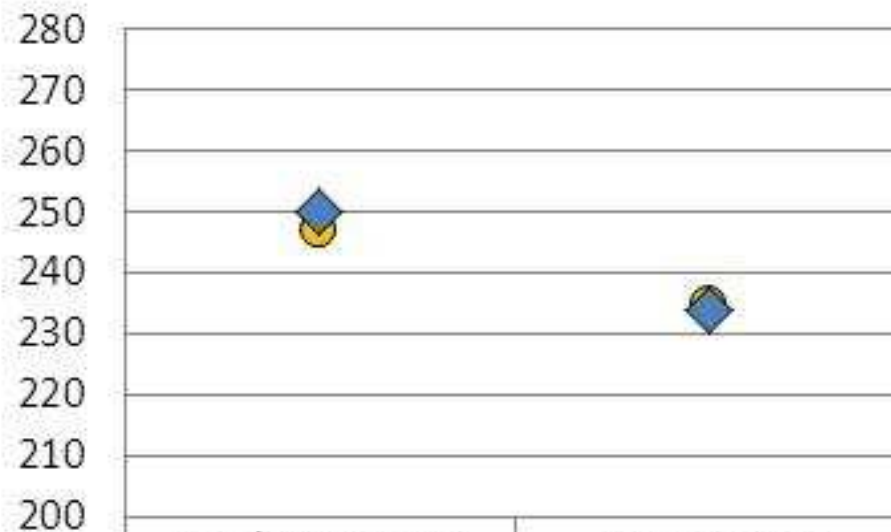
For Math:

Minority students appear to score lower than non-minority students in both the French and English programs

Only small differences within programs

What are the average MCAS scores for non-low income and low income students in the French and English programs in 2010-'11?

Average ELA Scores for English/French by low-income status



	Not low income	Low income
● Average for English	247.1	234.7
◆ Average for French	250.0	233.7

For ELA:

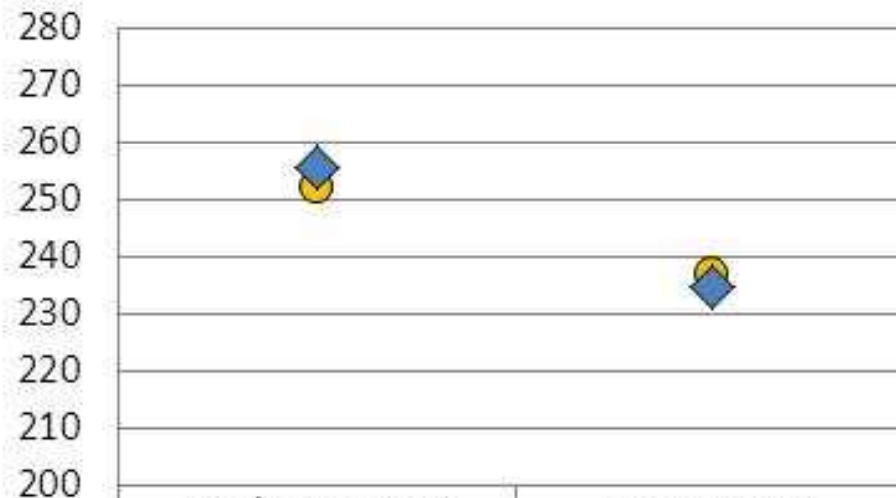
Low income students appear to score lower than non-low income students in both the French and English programs

Only small differences within programs

What are the average MCAS scores for non-low income and low income students in the French and English programs in 2010-'11?

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Average MATH Scores for English/French by low-income status



	Not low income	Low income
● Average for English	251.9	236.8
◆ Average for French	255.4	234.7

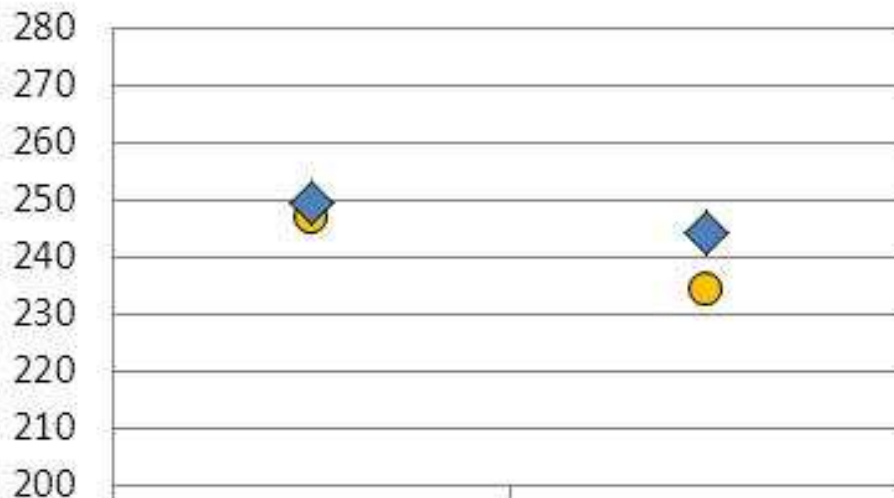
For Math:

Low income students appear to score lower than non-low income students in both the French and English programs

Only small differences within programs

What are the average MCAS scores for non-IEP and IEP students in the French and English programs in 2010-'11?

Average ELA Scores for English/French by IEP status



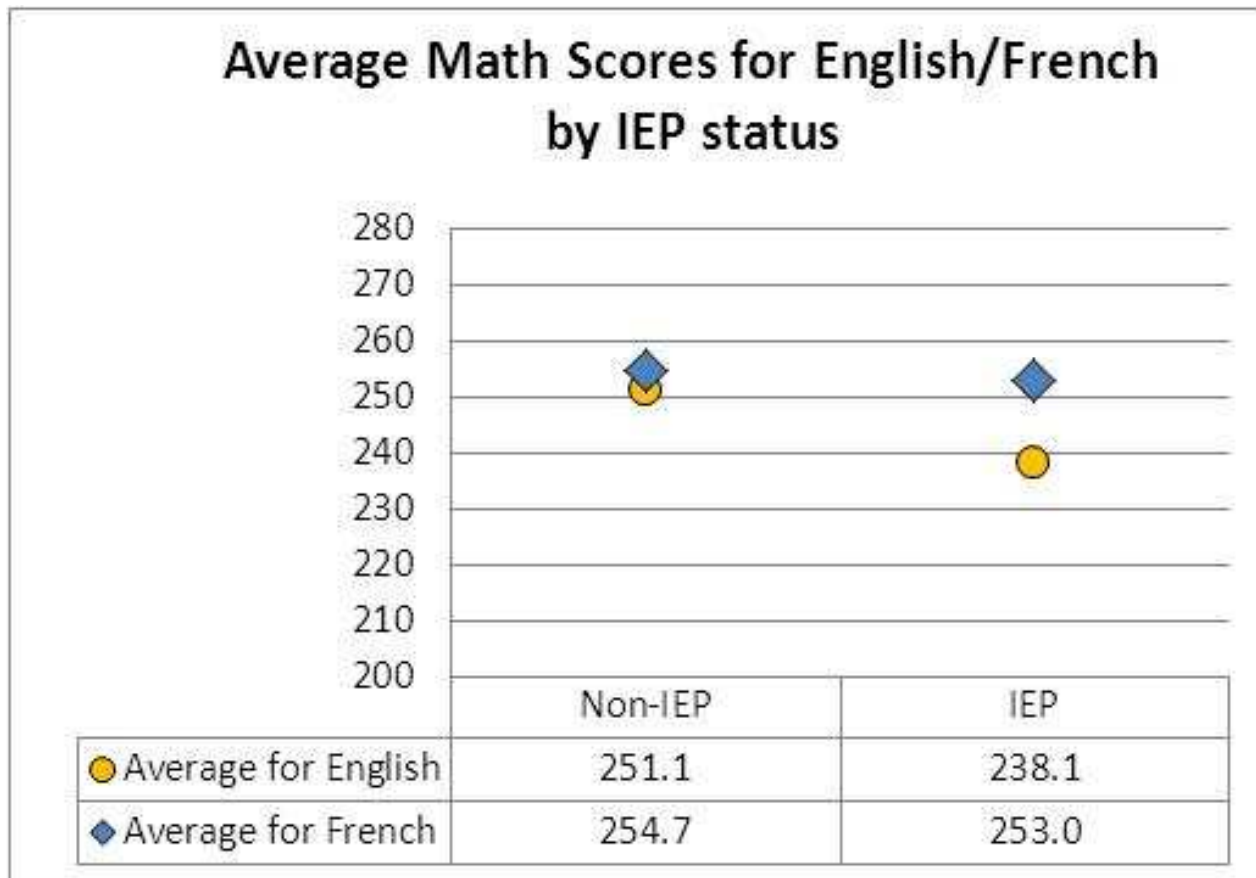
	Non-IEP	IEP
● Average for English	247.0	234.3
◆ Average for French	249.6	244.3

For ELA:

IEP students appear to score lower than non-IEP students in both the French and English programs

IEP students in the French program do almost as well as non-IEP students in the French program

What are the average MCAS scores for non-IEP and IEP students in the French and English programs in 2010-'11?



For Math:

IEP students appear to score lower than non-IEP students in both the French and English programs

IEP students in the French program do almost as well as non-IEP students in the French program

Summary of Findings from Review of 3rd Grade MCAS Scores

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- Average scale scores for students in the French program were higher than for students in the English program
- For minority and low income status:
 - ▣ Minority and low income students scored lower than non-minority and non-low income students, respectively in both programs
 - ▣ There were only very small differences within the English and French programs
- For IEP status:
 - ▣ For ELA, IEP students scored slightly lower than non-IEP students in the French and English programs
 - ▣ For Math, scores for the IEP students in the French program were similar to the scores for non-IEP in the French and English programs

Overall Summary of Findings

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- On average, scores in the French program were higher than scores in the English program
- Families self-select into a program therefore valid comparisons are compromised by self-selection issues
 - ▣ There are (measured) demographic differences between the students in the two programs
 - ▣ There are likely to be unmeasured differences between the characteristics of the students in the two programs (e.g., parental aspirations, parental involvement etc.)
- Overall, the gap between the English and French program scores decreased when students were matched on gender, minority status, low income status and IEP status

Why Change the Student Assignment Process?

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The district is responsible for two high quality programs that provide optimal learning environments for all students.

- **District Capacity**

- The change in enrollment trends has produced an imbalance that limits the district's ability to create optimal learning environments for all students within our schools, programs, and classrooms.

- **Student Achievement**

- Student achievement data over time indicates an achievement gap between the French and English programs that can be associated with the imbalance of demographics between the programs.

Superintendent's Recommendation

In order to continue to offer two robust programs for Milton Public School students the district should adapt the current Lottery system and implement a “Lottery/ Capping” model as developed by the 2010 World Language Committee to ensure a quality educational environment for all children through balanced program enrollment.

- End of presentation