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VALIDATION STUDY



The Enlarged City School District of Middletown:
The Successful Turnaround
of a
High Poverty – High Minority School District

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The Successful Turnaround of a High Poverty – High Minority School District

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Note: The information in this report reflects student and organizational performance through July 1, 2011. This report will also establish a baseline from which necessarily organizational changes can be measured against as the district moves into meeting the new student performance standards put into place for the 2011-12 school year and beyond.

EXECUTIVE SUMMARY

The Successful Turnaround of a High Poverty – High Minority School District

By: Dale Mann, Managing Director, Interactive, Inc.
Kristy Tinsley, Research and Evaluation Director, Interactive, Inc.

Note: The information in this report reflects student and organizational performance through July 1, 2011. This report will also establish a baseline from which necessarily organizational changes can be measured against as the district moves into meeting the new student performance standards put into place for the 2011-12 school year and beyond.

Introduction: The Enlarged City School District of Middletown (ECSDM), in Orange County, New York, enrolls more than 6,800 students in seven schools and employs more than 1,000 teachers, administrators and staff. The Hispanic portion of the district's enrollment has grown from 38% in 2003-04 to 47% in 2010-11, and the White portion of the enrollment has declined from 34% to 23% in the same period. Over the period examined in this report, the district's population of students eligible for free and reduced meals has increased from 59% to 73%. Middletown's current leadership also inherited several exceptionally challenging circumstances. Despite increasing challenges from the changing student enrollment and other significant barriers to success, Middletown has improved academic achievement, graduation rates, and other indicators of student and school success. Middletown differs from the national trends that associate low-income family status with low student achievement. This report documents the multiple accomplishments of the district by comparing several performance indicators over time, by comparing Middletown's performance to other similar school districts, and by describing the programmatic and organizational changes the district has used to leverage improvement.

Student achievement in Middletown: Since 2003-04, elementary/middle student achievement scores have increased by 28 points for English Language Arts, 30 points for Mathematics, and 3 points for science. The achievement of high school students has improved even more; achievement increased 67 points for ELA and 78 points in Math. Additionally, five of the

district's seven schools have made remarkable improvements in student achievement since the district's introduction of new curricula.

In 2009-10, Middletown performed better than five of six selected comparison districts in ELA for elementary and middle students and performed better than all six comparison districts in Math. Middletown's high school students outperformed all six of the comparison districts in both English Language Arts and Math in 2009-10 by large margins.

When elementary and middle level achievement data are disaggregated by students identified as Limited English Proficient (LEP), Middletown outperforms four of the six districts in English Language Arts and five of the six districts in Math.

For students with disabilities, Middletown's student achievement scores are greater compared to three of the six comparison districts for both elementary/middle ELA and elementary/middle Math. In the high school, students with disabilities outperformed all of the comparison districts. In ELA, Middletown students with disabilities scored 29 points higher than the next highest-performing district in the comparison group, and 70 points higher than the lowest scoring district in the group. In Math, Middletown outperformed the next best-achieving district by 24 points and the lowest scoring district by 54 points.

Middletown enrolls 8% more Black students, 24% Hispanic students, and 26% less White students compared to New York statewide averages. The district has poverty levels that are 23% higher than that of the state and enrolls 4% more Limited English Proficient students than the state as a whole. Yet, despite the complications inherited from previous administrations and the challenges surrounding enrollment of students with more challenging academic needs, the district has continued to improve in the past several years. Middletown has increased their student performance outcomes, and performed similarly or better than statewide achievement average scores in 2009-10. Since 2004, Middletown has been removed from the State's Districts In Need of Improvement list and all but one of its schools has moved off the Schools In Need of Improvement list.

Middletown's student co-curricular accomplishments: Middletown graduation rates have increased dramatically since 2003-04, across all student subgroups. Fifty-eight percent of students in the class of 2004 graduated from Middletown High School. Eighty-three percent of the students in the class of 2010 graduated from the High School, for an increase of 25 percent. Extraordinary increases can be seen in all student subgroups, with the highest increases for Asian males, Black females, and Hispanic females. Middletown's overall graduation rate of 83% from 2009-10 exceeded the national average rate of 76%, and exceeded the New York State average rate of 74%.

The attendance of Middletown students has increased by two percent since 2004-05 and there have also been fewer behavior incidents in the district since 2004-05. The rate of student suspensions has dropped from 11% to 9%. Compared to 2004-05, more students now

participate in 21 of the 25 sports offered in Middletown. Overall, 444 more students are participating in Middletown sports programs compared to six years ago.

The Process of school improvement in Middletown: The district has fielded the following program initiatives in the last seven years:

1. Expanded ESL and transitional bilingual programs.
2. Implemented a daily 90-minute uninterrupted block for literacy instruction in elementary classrooms, and a 60-minute block for mathematics.
3. Creation of a fifth core subject, Literacy, for grades 6-9 that doubles time on reading, writing, listening, and comprehension.
4. An Extended Day Institute for students in grades 1-8.
5. A Summer Institute for at-risk students in grades K-8.
6. Extended instructional days for middle schools.
7. An additional instructional period at the high school (from eight periods to nine periods).
8. Seven Advanced Placement courses and more college level course offerings including the opportunity to earn a year of college credit (33 college course credits).
9. More fine arts, more vocal, and a strings program for grades 3-8 that now enrolls more than 430 students.
10. Pre-engineering courses in grades 7-12, Project Lead the Way.
11. Expanded counseling programs with a full-time College and Career Center available to secondary students and to Middletown graduates.
12. Increased co-curricular opportunities including athletic teams.

Prior to 2004, Middletown had no district-wide curriculum and no “scope and sequence” specifications to guide and guarantee consistent and evidence-based teaching and learning. The district’s sequence of audits established first what was being taught and second, how that repertoire should be modified and improved. The following audits were conducted in 2004-05:

- Curriculum, all topics, all levels;
- School safety and security;
- Physical education and athletics;
- Student support services;
- Special education; and
- Technology.

Opportunity to learn: Literacy The district's growing enrollment of ESL and bilingual students did not previously have pedagogical and teacher resources concentrated on their needs. The importance of literacy is signaled by a daily 90-minute uninterrupted block for reading and a 45-minute block for writing in elementary classrooms. A district-wide framework for teaching literacy was implemented, and the literacy focus is also integrated into other core subjects. A dual language program is offered to elementary students, in which they learn in two languages until at least the fifth grade.

Opportunity to learn: Extended learning time Extended learning infuses writing, reading and problem solving into other content areas. The rigor of this instructional time encourages students to remain focused on one task for an extended period.

Opportunity to learn: Early childhood education A new full-day kindergarten program was launched in September 2005. In 2006, the Pre-Kindergarten program shifted to offer two types of services: Targeted Pre-K and Universal Pre-K. Over the past several years, these programs have increased the number of students receiving services from 137 to 269 and have increased the number of community-based sites from 1 to 11.

Opportunity to learn: Music and electives In Middletown, additional music teachers were hired, and a strings program was implemented at the fourth grade level. More electives, such as guitar and fashion design have been added at the high school to keep students engaged and interested. These classes have become increasingly popular among the high school students, and all sections of these elective courses were full this past academic year.

Opportunity to learn: Guidance and college and career assistance Three years ago, a Director of Guidance Programs and Services was hired, as well as a College and Career Advisor and additional counselors for a total staff of 13 at the high school. The guidance department in Middletown has implemented several changes in an effort to create and support a college-attending culture for high school students. These supports for students are making a noticeable difference. Last year alone, 86% of Middletown High School's graduates were enrolled in college. Compared to 2005, the attendance rate for two-year colleges has increased by 40% and four-year college attendance rate has increased by 30%.

Opportunity to learn: Athletics The addition of the new sports facility at the high school has been a catalyst for the dramatic increase in sports participation. The high school's football field was replaced by a state-of-the art sports facility that supports football, soccer and lacrosse.

Technology for teaching and learning The district's \$12 million technology enhancement program ranks Middletown in the top 5% of technology-investing districts in the United States. ECSDM manages 60 professional development offerings about technology annually. Each classroom in the district has a SMART Board for interactive instruction and activities, and many teachers are using student responder systems for real-time formative assessment purposes. All administrators use iPads to collect data during classroom 'walk-throughs.' Other features of instructional technology present in the district include:

- Sound amplification in every classroom;
- Reliable wireless access in every classroom;
- Document cameras;
- Cisco digital IP phone system in every classroom (for parent communications);
- Five computer work stations for every classroom pre-K-to-8;
- A personal workstation for every teacher;
- 100 teacher laptops; and
- A 1:2:1 computing initiative in five classrooms with iPod touch devices.

New resources: By 2009-10 the district had doubled the number of bilingual and English-as-a-Second Language teachers on staff. The district has hired three technology integration specialists to ensure that the new hardware, software and connectivity is used to power better teaching and learning. To support implementation of the Literacy Framework, literacy coaches were placed in each school.

Teachers and instructional practices

Standards and expectations: District philosophy balances increased expectations of teachers with support for teachers. The district has adopted the acronym "HERO," which stands for "High Expectations are Meaningless without Rich Opportunities." The phrase has been a driving force for the district's initiatives. There has also been a focus on data-driven decision making in Middletown.

Support for teachers. The district supports an active Mentor-Intern Program so that new teachers can count on the assistance of mentors. The Middletown Mentor-Intern program was enhanced to support and retain highly qualified teachers. In addition, the district supports a Teacher Center, which provides professional development that meets the needs of staff and focuses on district-wide initiatives as well as technology integration.

Evidence based instruction: Each month, a team of district personnel meet to discuss data and accountability at the school and student levels. The district's accountability analyst creates "projection reports" to predict the outcomes of individual students and groups of

students. As importantly, each school has a monthly data team meeting consisting of the principal and an assistant principal with the participation (from the central office) of the directors of special education, of ESL/Bilingual, of literacy and of data/accountability.

Organization

The central administration was re-organized to parallel the instructional needs of the district. Now, in addition to the superintendent and the assistant superintendent for instruction and business office operations, there is an (1) assistant superintendent for instruction; (2) a chief technology officer; (3) a director of counseling program services; (4) a coordinator of literacy; (5) a coordinator of ESL/bilingual; and (6) a coordinator of special services. There are now up-to-date, written and agreed job descriptions for all employee categories. School buildings have been re-configured by grade level and in addition to an annual district-wide improvement plan.

Capital improvements: Middletown's curriculum initiatives have been paralleled with \$145 million worth of improvements to the district's school facilities. The attractiveness and functionality of those facilities contributes to student engagement and teacher morale. Middletown's ambitious campaign of capital improvements has been accomplished with minimal tax levy increases, on-time and within budget.

Finance: Middletown's per pupil expenditure is \$17,095, \$1,084 less than other high need districts and \$1,270 less than the average for all public schools in New York. Although the district spends less than the state average, the tax effort from its citizens is higher. Though Middletown is not a wealthy district, the voters have steadily supported the district and never come close to rejecting a school budget. Middletown has also aggressively and successfully pursued third-party funding; one example is its success in the extraordinarily competitive federal Race to the Top program.

Leadership: Who is responsible for Middletown's turn-around? We believe that the answer to that question is centered on Dr. Ken Eastwood whose accession to the superintendency coincides with the district's year-over-year rise in all key metrics beginning in 2005 and continuing to date. Locating the major reform leverage in the superintendent's leadership is empirically justified –no other role has the same responsibility, span of control and accountability as the superintendent. No other role has had the overarching vision. Crediting the superintendent obviously occurs in a context that includes the counsel and support of the board of education, the assistance, and advice of the other administrators and the cooperation and acceptance of the teachers.

The academic literature on school improvement mistakenly elevates leadership to a sine qua non. In fact, unless leadership is matched with coalition building and the sincere follow-through of other staff and leaders, nothing happens. One of the remarkable features of

Middletown's educational culture is the respect and admiration that the superintendent evokes in other administrators, teachers, and staff. Simply put, the superintendent (and thus the district) enjoys an extraordinary amount of trust, cooperation and respect.

In other venues, Dr. Eastwood has identified key components of the improvement strategy used for Middletown.

- Collect comprehensive and reliable data about student and adult performance;
- Commit to change where that the data indicate necessary;
- Work system-wide, collaboratively and with interconnected units;
- Challenge the staff, trust the staff, utilize the staff, support the staff and celebrate the staff;
- Set reasonable goals – high but attainable;
- Be patient, build for the long term;
- Celebrate success;
- Increase student engagement;
- Provide high expectations and rich opportunities; and
- Stay student-centered.

The accomplishments of Middletown's administrators, teachers, students, and communities are a significant and encouraging departure from the otherwise unlikely prospect of turning around public schools. Middletown, despite several challenges and barriers to success, is a documented example of a turnaround school district.

About Interactive, Inc.

Interactive, Inc. is a leading program evaluation firm focused on empirical answers to the perennial question: "What Works?" Our twenty-five years of peer-reviewed research and professional publication has made us a trusted source of commentary on what works in education. We have completed 200+ program evaluations in ways that minimize disruption to schools and maximize practical and empirical outcomes. The firm was founded in 1985 by Dale Mann, professor emeritus at Columbia University's Teachers College and its School for International and Public Affairs where Dr. Mann chaired the Department of Educational Administration.

TECHNICAL REPORT

**The Enlarged City School District of Middletown:
The Successful Turnaround of a District**

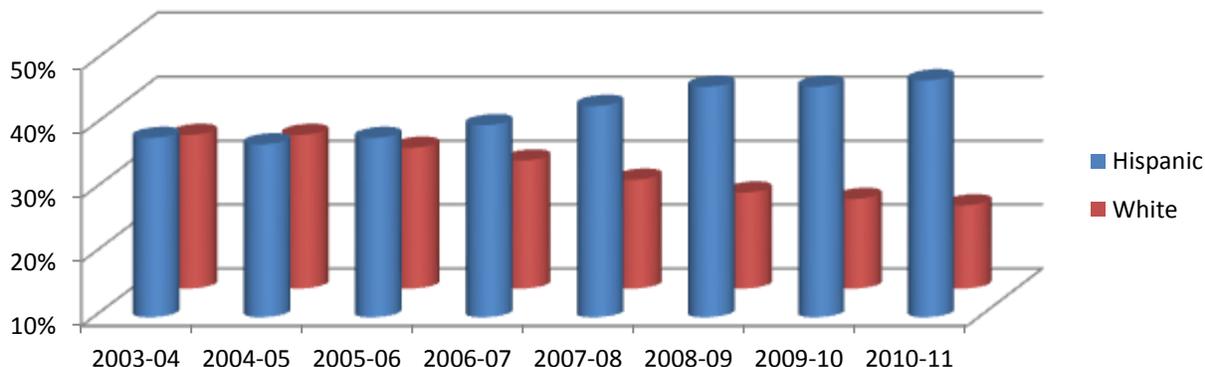
1.0 The Enlarged City School District of Middletown

The Enlarged City School District of Middletown (ECSDM), in Orange County, New York, enrolls more than 6,800 students in seven schools and employs more than 1,000 teachers, administrators and staff. Despite increasing challenges from the changing student enrollment, Middletown has improved academic achievement, graduation rates, and other indicators of student and school success. The table below presents the enrollment and demographic characteristics of Middletown from 2003-04 to 2010-11:

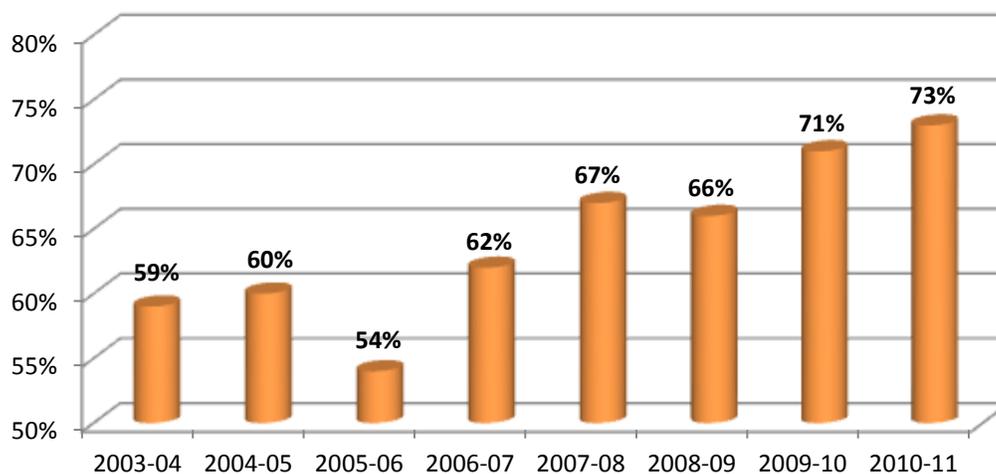
Table 1. Middletown City School District- Changes in District Characteristics , 2003-04 to 2010-11								
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Enrollment	5,317	6,621	6,814	6,714	6,596	6,656	6,731	6,866
African-American	26%	27%	27%	27%	27%	27%	27%	28%
Hispanic-American	38%	37%	38%	40%	43%	46%	46%	47%
Asian-American	2%	2%	3%	3%	2%	2%	2%	2%
White-American	34%	34%	32%	30%	27%	25%	24%	23%
Free and Reduced Meals Eligible	59%	60%	54%	62%	67%	66%	71%	73%

In the last six years, Middletown has enrolled more Hispanic students and more students from low-income families. While total enrollment has remained stable, the Hispanic portion of the district’s enrollment has grown from 38% in 2003-04 to 47% in 2010-11, and the White portion of the enrollment has declined from 34% to 23% in the same period. Eligibility for the federal free-and-reduced meals program is an indicator of low-income family status. Over the period examined in this report, the district’s population of eligible students has increased from 59% to 73%.

Figure 1. Changes in District-wide Enrollment of Hispanic and White Students (2003-04 to 2010-11)



**Figure 2. Increases in Poverty Level, 2003-04 to 2010-11
(Number of Students Eligible for Free or Reduced Meals)**



This trend is not uncommon; however, Middletown's success with a changed student population is uncommon. The number of Americans living in poverty has increased, resulting in a concurrent increase in poor children attending public schools (Good & McCaslin, 2008). Changes in demographics of a student population and increases in poverty levels are generally associated with low school achievement. "Schools...who enroll high numbers of students living in poverty face related problems, such as student absenteeism, and typically high rates of teacher, student and parent turnover." Such stability issues affect students considerably and children living in poverty often attend schools that have fewer resources (Good & McCaslin, 2008). Middletown differs from the national trends that associate low-income family status with low student achievement.

This report documents the multiple accomplishments of the district by comparing several performance indicators over time and by comparing Middletown's performance to other similar school districts. We conclude by describing the programmatic and organizational changes the district has used to leverage improvement.

1.1 The Starting point for Middletown's improvement: The 2004-2005 school year

Middletown's current leadership inherited the following exceptionally challenging circumstances:

- The previous superintendent was removed in disgrace.
- The district had 13 superintendents or interim superintendents over 20 years.
- All seven buildings were on the state's list of *Schools In Need of Improvement* and the high school alone was deficient in 21 areas.
- School building administrators were expected to manage student behavior, but were not expected to lead teacher instruction.
- 99% of student records contained inaccurate data.

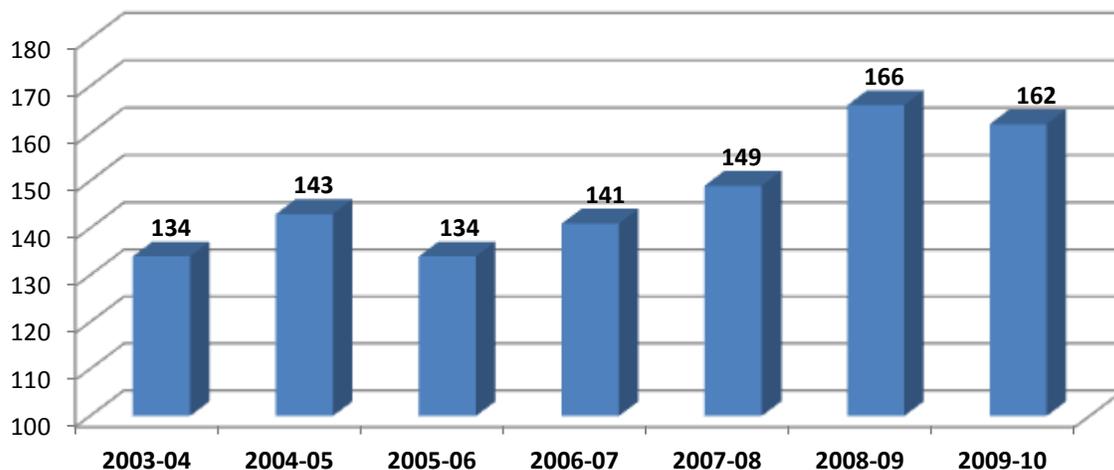
- The Title 1 and ESL/bilingual programs were out of compliance with Federal requirements.
- The district was in the bottom 10% by student attendance statewide.
- The dropout rate was 17-24%.
- The non-completion rate was 42%.
- There was no district-wide curriculum and no required planning documents.
- There was no curriculum planning specific to the particular needs of any of the under-performing and under-served student groups.
- In 2004, the school board and community were unaware of those deficiencies and thus felt no need for improvement or change.

2.0 Student achievement in Middletown

The State of New York requires that student achievement be assessed through standard measurements. The central tests measure English-Language Arts and Mathematics and at two organizational levels – (1) elementary and middle school students and (2) secondary school students. The tests also measure Science performance at the secondary level. To document the academic accomplishments of the district, the following figures present New York State aggregate *Performance Index* score data for Middletown students (all subgroups) in core content areas for elementary/middle students and secondary students¹. These data document gains in student achievement over the past five testing years².

2.1 Elementary and middle school student achievement

Figure 3. District-wide Performance in Elementary/Middle English Language Arts (2003-04 to 2009-10)

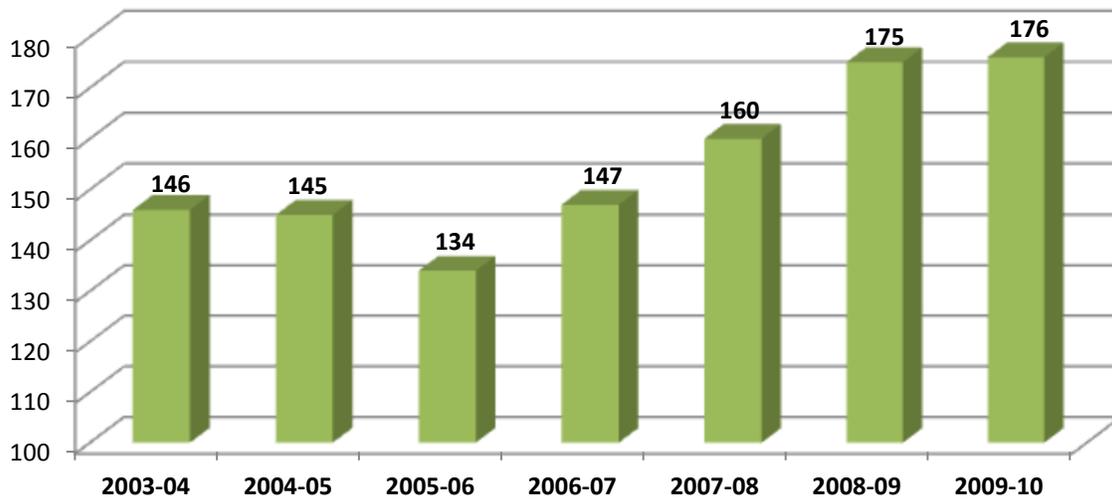


¹ Higher numbers indicate higher student achievement on a NYS *Performance Index* which is a value from 0 to 200 that is assigned to the performance of all students as a group or to students with similar descriptive characteristics. The score indicates how the named group performed on a required State test (or approved alternative) in English language arts, mathematics or science.

² Data source: NYSTART 2009-10 data, <https://www.nystart.gov/nystart/u/index.do>.

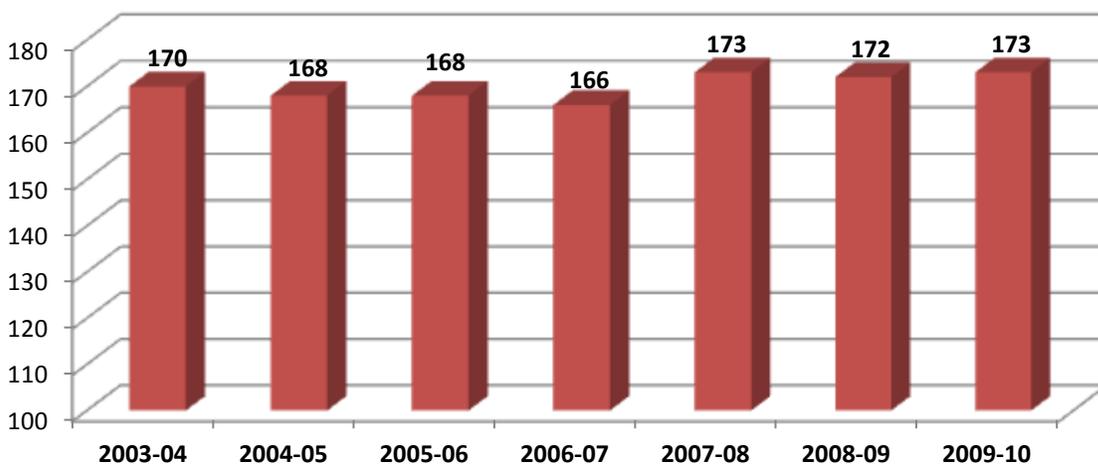
Student achievement in English-Language Arts has increased by 28 points (from 134 to 162) for elementary and middle school students since 2003-04. Elementary and middle school students have gained even more points in Mathematics. Those *performance index* scores have increased 30 points from 146 to 176 since 2003-04.

Figure 4. District-wide Performance in Elementary/Middle Mathematics (2003-04 to 2009-10)



Science scores for elementary and middle students have increased from 170 to 173 in this seven-year period.

Figure 5. District-wide Performance in Elementary/Middle Science (2003-04 to 2009-10)



2.2 Secondary school student achievement in Middletown

The achievement of high school students has improved even more than their elementary and middle school counterparts for both English Language Arts and Mathematics. For ELA, achievement increased from 123 in 2004 to 190 in 2010, for a total improvement of 67 points. In Math, *performance index* scores increased 78 points, from 111 to 189.

Figure 6. District-wide Performance in Secondary English Language Arts (2003-04 to 2009-10)

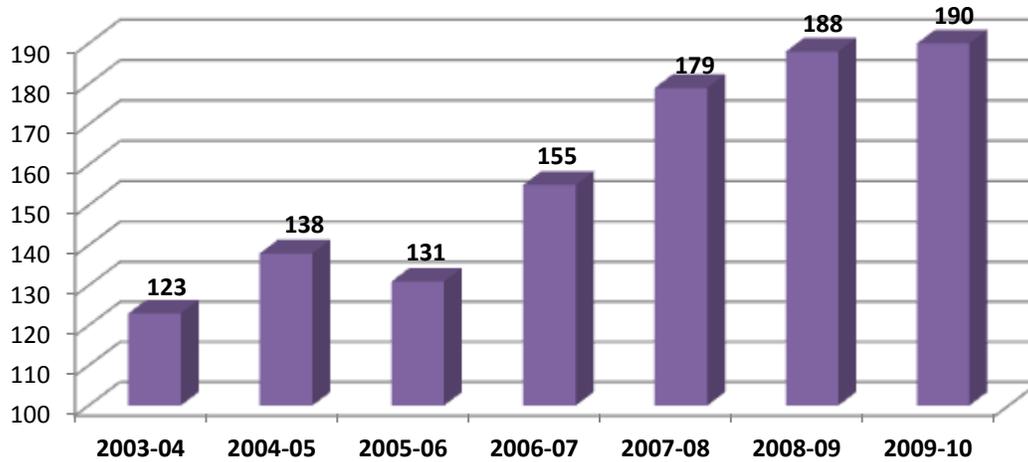
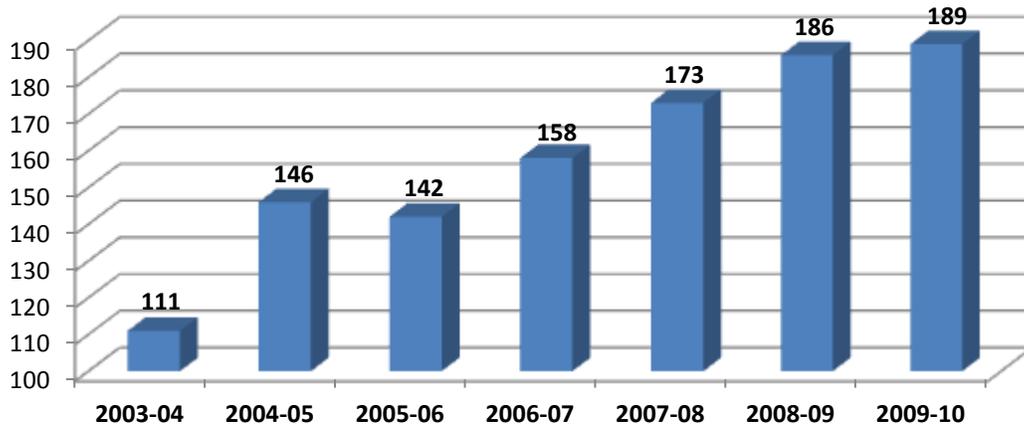


Figure 7. District-wide Performance in Secondary Mathematics (2003-04 to 2009-10)



Middletown’s accomplishments with secondary students are particularly noteworthy because the barriers to high school improvement are so high. Teenagers often arrive at high school with learning deficits that have been accumulating since early grades and the complex organizational structure and mission of high schools has made them historically resistant to reform.

2.3 Individual school achievement in Middletown

Five of the district's seven schools have made remarkable improvements in student achievement since the district's introduction of new curricula³. The tables that follow present the student achievement for all students in each of the schools in the past five years, as measured by the New York State *Performance Index*. The schools are listed beginning with the greatest average gain for all content areas tested.

Table 2. Individual School Performance in Core Content Areas, 2003-04 to 2009-10 (Listed as most-to-least improvement since 2003-04)								
Middletown High School								
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Increase since 2003-04
ELA	132	138	136	158	184	190	193	+61
Math	111	146	146	161	178	189	191	+80
Average gain								+70.5
Twin Towers Middle School								
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Increase since 2003-04
ELA	134	139	131	147	155	174	170	+36
Math	122	123	123	146	166	176	182	+60
Science	165	172	164	157	178	178	173	+8
Average gain								+34.7
Monhagen Middle School								
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Increase since 2003-04
ELA	144	135	132	141	148	169	169	+25
Math	130	121	115	132	153	176	173	+43
Science	162	162	157	160	163	170	163	+1
Average gain								+23.0
Mechanicstown Elementary School								
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Increase since 2003-04
ELA	141	156	138	137	159	169	161	+20
Math	171	174	151	157	173	184	184	+13
Science	181	175	177	177	183	180	183	+2
Average gain								+11.7
Maple Hill Elementary School								
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Increase since 2003-04
ELA	138	152	140	142	141	158	154	+16
Math	171	173	155	158	162	174	174	+3
Science	177	172	180	176	174	170	178	+1
Average gain								+6.7

³ There are not sufficient data on the NYSTART achievement data portal for the other two schools in Middletown (Truman Moon Primary Center and J.W. Chorley)

3.0 Middletown's student academic achievement compared to similar districts and to New York State

3.1 Selected comparison districts

In order to compare Middletown's characteristics and achievement with other localities, Interactive, Inc. identified six New York school districts as generally similar to the Enlarged City School District of Middletown. These six districts are located within the same or neighboring county. The selected districts had a free and reduced meal eligibility rate of at least 48% and a Hispanic enrollment of at least 23% in academic year 2009-10. Enrollment characteristics and measures of student achievement were used to compare similarity and performance among districts for the most recent testing year (2009-10).

As shown in the table below, Middletown enrolls more Hispanic students and has a higher free and reduced meal eligibility rate than five of the six comparison districts.

Table 3. Middletown and selected school districts, By size and student demography

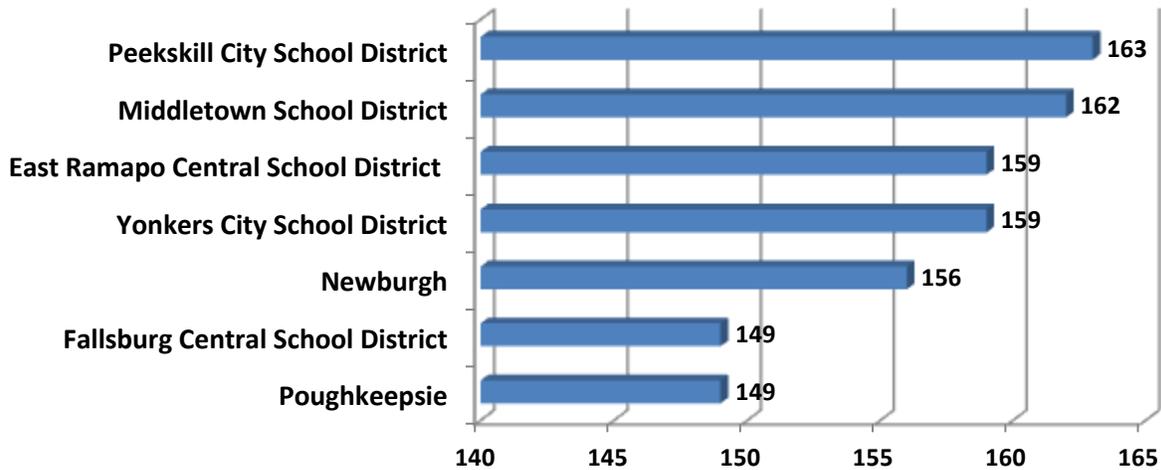
District	Enrollment	Black	Hispanic	Asian	White	F&R total	LEP
Middletown School District	6,731	27%	46%	2%	24%	71%	12%
East Ramapo CSD (Spring Valley)	8,022	54%	30%	7%	9%	62%	15%
Fallsburg CSD	1,348	16%	26%	2%	56%	54%	8%
Newburgh	11,644	29%	41%	2%	28%	63%	14%
Peekskill CSD	2,742	38%	47%	2%	13%	54%	15%
Poughkeepsie	4,500	61%	23%	1%	15%	80%	10%
Yonkers CSD	23,381	25%	52%	6%	18%	73%	14%

Source: NYSTART 2009-10 data, <https://www.nystart.gov/nystart/u/index.do>

3.2 District-level student achievement comparisons, all students

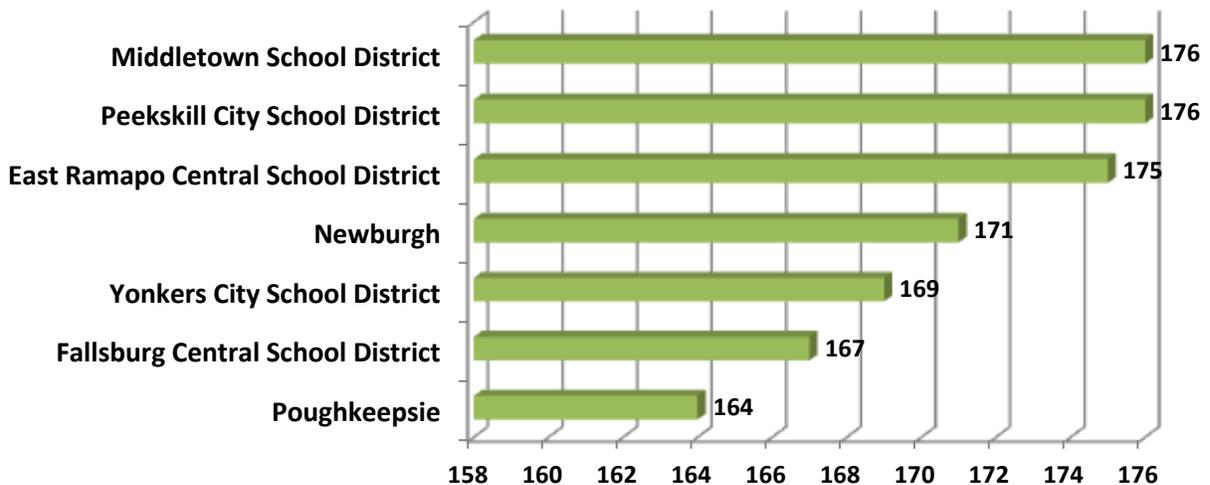
In 2009-10, Middletown performed better in English Language Arts for elementary and middle students than five of the six comparison districts, and scored only one point less than the highest-scoring district.

Figure 8. Elementary/Middle English Language Arts Student Performance, All students, 2009-10



Similarly, Middletown outperformed or matched the performance of all six of the comparison districts in Math for elementary and middle students, scoring 12 points higher than the lowest performing district in the group.

Figure 9. Elementary/Middle Mathematics Student Performance, All students, 2009-10



Middletown’s high school students outperformed all six of the comparison districts in both English Language Arts and Math in 2009-10 by large margins. The district’s secondary students scored 20 points higher than the next highest-performing district in ELA and 18 points higher than the next highest-performing district in Math.

Figure 10. Secondary English Language Arts Student Performance, All students, 2009-10

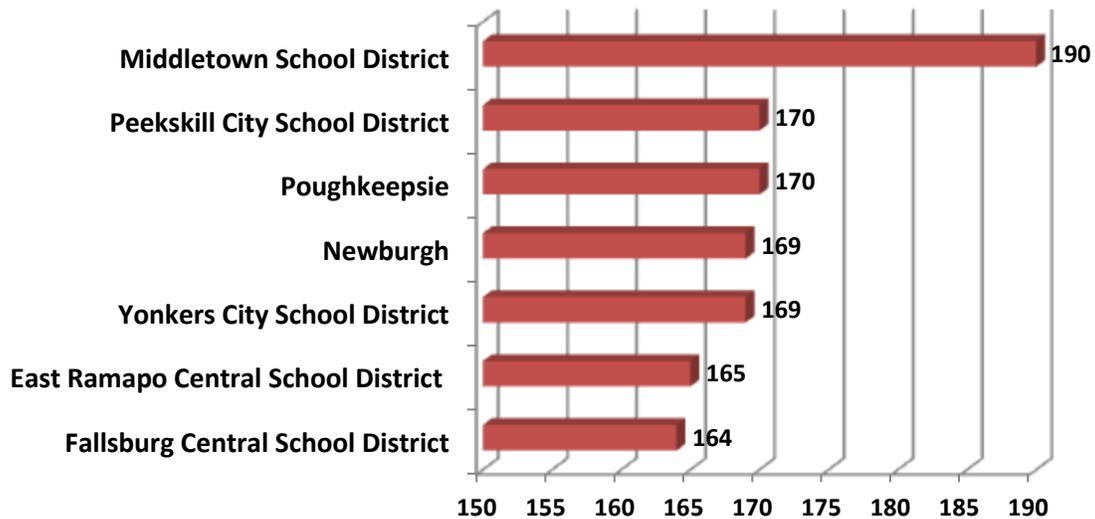
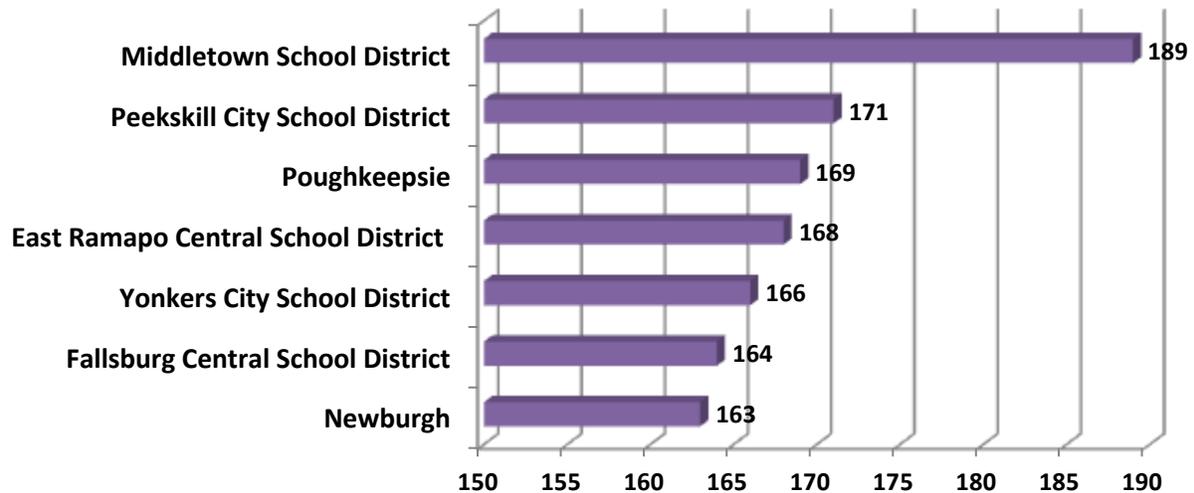


Figure 11. Secondary Mathematics Student Performance, All students, 2009-10



The following sections compare Middletown’s achievement to the same group of comparable districts, but compares performance for Limited English Proficient (LEP) students and students with disabilities.

3.3 Student achievement comparisons, Limited English Proficient (LEP) students

When elementary and middle level achievement data are disaggregated by students who are identified as Limited English Proficient (LEP), Middletown outperforms four of the six districts in English Language Arts and five of the six districts in Math⁴.

Figure 12. Elementary/Middle English Language Arts Student Performance, LEP students, 2009-10

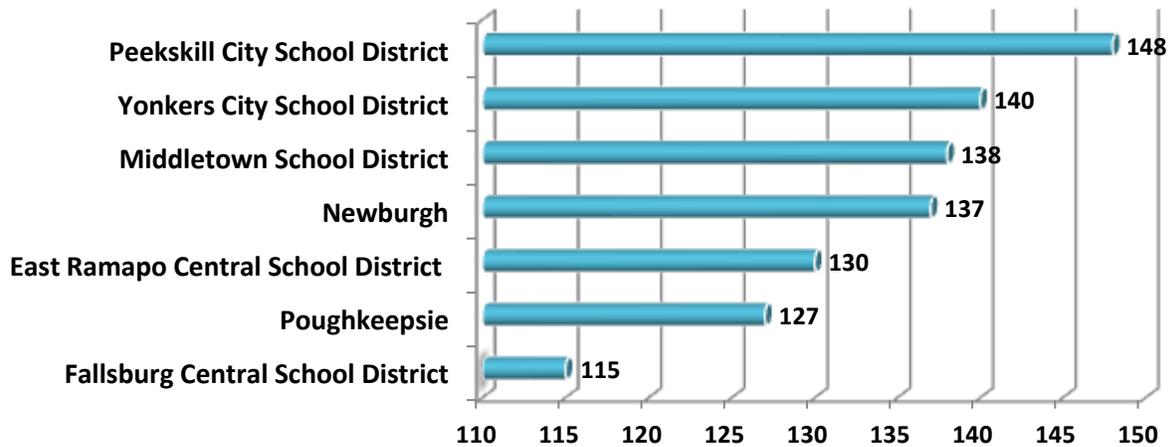
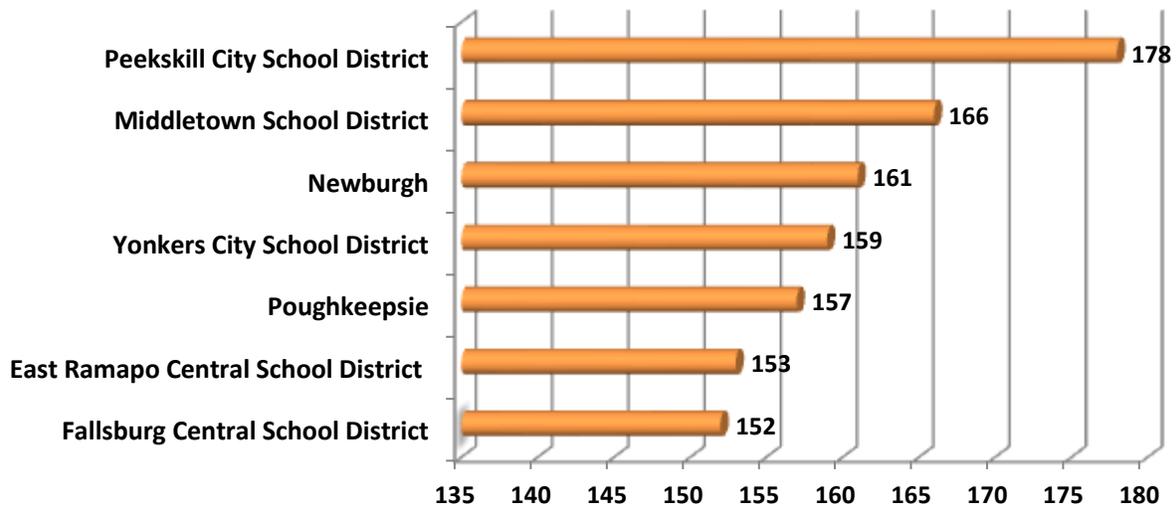


Figure 13. Elementary/Middle Math Student Performance, LEP students, 2009-10



⁴ Data were also not available for secondary-level LEP students in Middletown.

3.4 Student achievement comparisons, students with disabilities

For students with disabilities, Middletown’s student achievement scores are greater compared to two of the six comparison districts for elementary/middle ELA and three of the six districts for elementary/middle Math.

Figure 14. Elementary/Middle English Language Arts Student Performance, Students with Disabilities, 2009-10

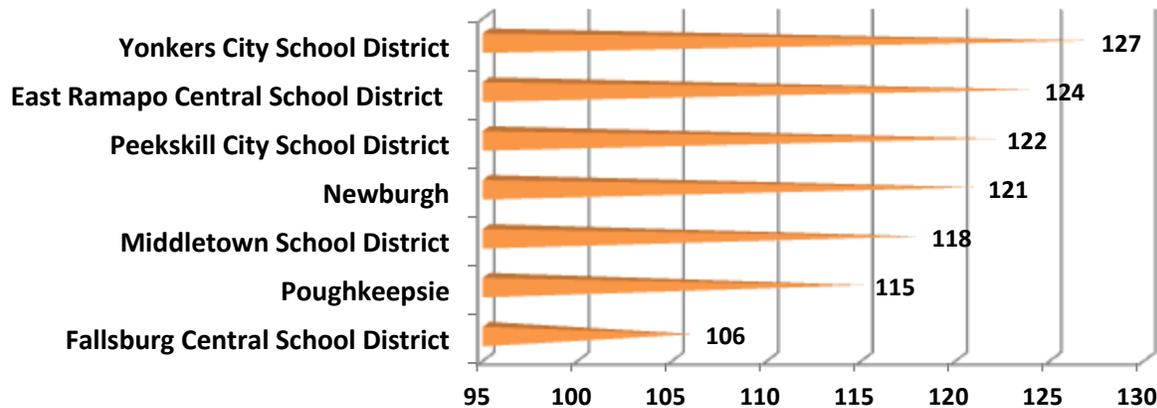
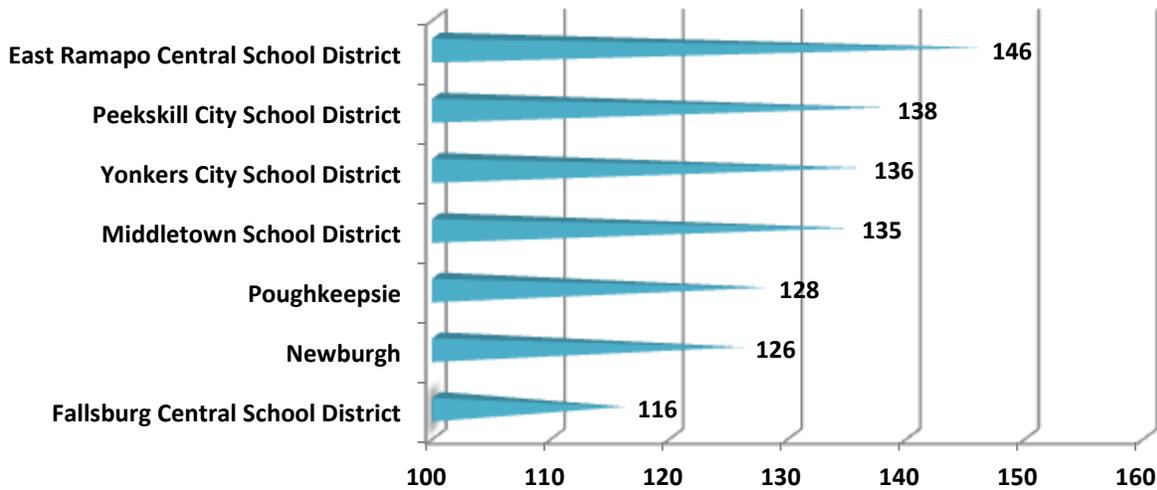


Figure 15. Elementary/Middle Mathematics Student Performance, Students with Disabilities, 2009-10



In the high school, those identified as students with disabilities in Middletown outperformed all of the comparison districts for which data are available, and the margin of difference between Middletown’s score and the next highest-scoring district is remarkable. In ELA, Middletown students with disabilities scored 29 points higher than the next highest-performing district in the comparison group, and 70 points higher than the lowest scoring district in the group⁵. In Math, Middletown outperformed the next best-achieving district by 24 points and the lowest scoring district by 54 points.

Figure 16. Secondary English Language Arts Student Performance, Students with Disabilities, 2009-10

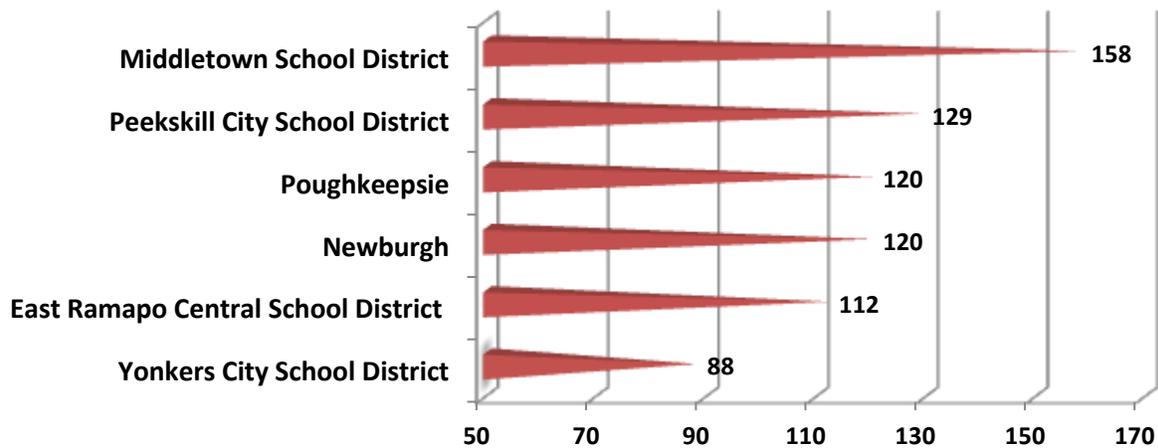
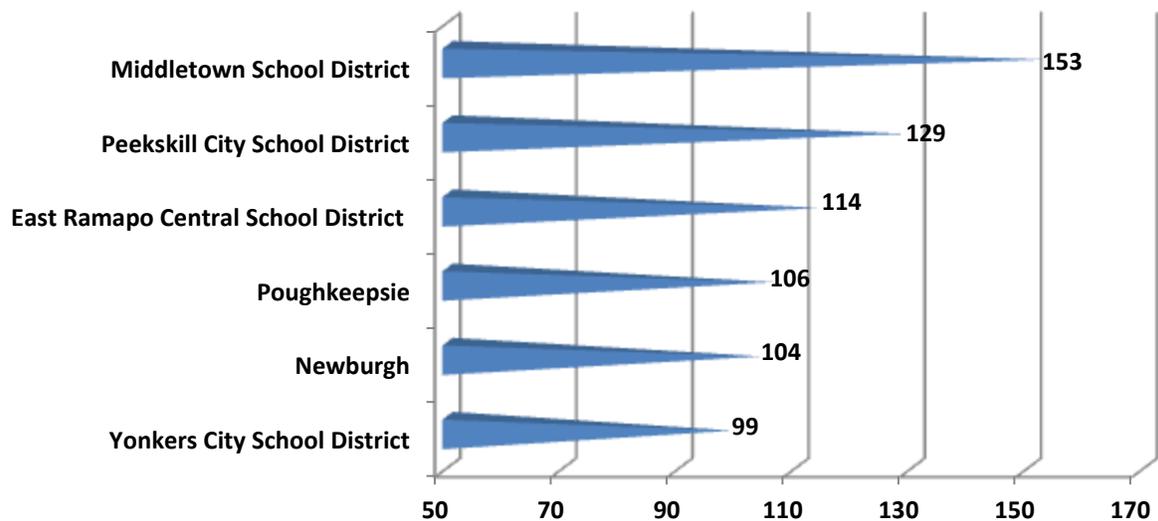


Figure 17. Secondary Mathematics Student Performance, Students with Disabilities, 2009-10



⁵ Data were not available for students with disabilities at the secondary level in one of the six comparison districts (Fallsburg).

3.5 Middletown's academic improvement compared to statewide performance

To compare the trajectory of Middletown's academic improvement since 2005-06 to statewide achievement trends, district-level achievement data were compared to statewide averages, and changes in the margin of difference were assessed. For English Language Arts and Math at both elementary/middle and secondary levels, the margin of difference between statewide achievement average scores and Middletown district-level achievement scores has consistently and dramatically decreased in the past five years.

The trajectory of Middletown's academic improvement in comparison to statewide averages is especially notable since the district enrolls more students in typically low-achieving categories than the state as a whole. As can be seen in the table below, Middletown enrolls 8% more Black students, 24% Hispanic students, and 26% less White students compared to New York statewide averages.

Similarly, the district has poverty levels that are 23% higher than that of the state and enrolls 4% more Limited English Proficient students than the state as a whole. Yet, despite the complications inherited from previous administrations and the challenges surrounding enrollment of students with more challenging academic needs, the district has continued to improve in the past several years. Middletown has increased their student performance outcomes, and performed similarly or better than statewide achievement average scores in 2009-10.

	Black	Hispanic	Asian	White	F&R Total	LEP
New York State	19%	22%	8%	50%	48%	8%
Middletown	27%	46%	2%	24%	71%	12%

As shown in the table below, the margin of difference between Middletown scores and statewide averages has decreased 10 points since 2005-06 for elementary/middle English Language Arts.

	Middletown	New York State	Margin of difference
2005-06	134	153	-19
2006-07	141	158	-17
2007-08	149	165	-16
2008-09	166	176	-10
2009-10	162	171	-9
Total decrease since 2005-06			10

For elementary/middle Math, the margin of difference has dropped 11 points.

Table 6. Elementary/Middle Mathematics Student Performance			
	Middletown	New York State	Margin of difference
2005-06	134	153	-19
2006-07	147	167	-20
2007-08	160	177	-17
2008-09	175	184	-4
2009-10	176	184	-8
Total decrease since 2005-06			11

The most dramatic decreases in the margin of difference between Middletown scores and statewide scores can be seen at the secondary level, where the difference dropped 48 points for English Language Arts, and Middletown's scores exceed statewide averages by 11 and 10 points in 2008-09 and 2009-10, respectively.

Table 7. Secondary English Language Arts Student Performance			
	Middletown	New York State	Margin of difference
2005-06	131	169	-38
2006-07	155	171	-16
2007-08	179	175	+4
2008-09	188	177	+11
2009-10	190	180	+10
Total decrease since 2005-06			48

In Mathematics at the secondary level, the margin of difference decreased 39 points, and Middletown's average score exceeded the statewide average by 8 points in both 2008-09 and 2009-10.

Table 8. Secondary Mathematics Student Performance			
	Middletown	New York State	Margin of difference
2005-06	142	173	-31
2006-07	158	175	-17
2007-08	173	177	-4
2008-09	186	178	+8
2009-10	189	181	+8
Total decrease since 2005-06			39

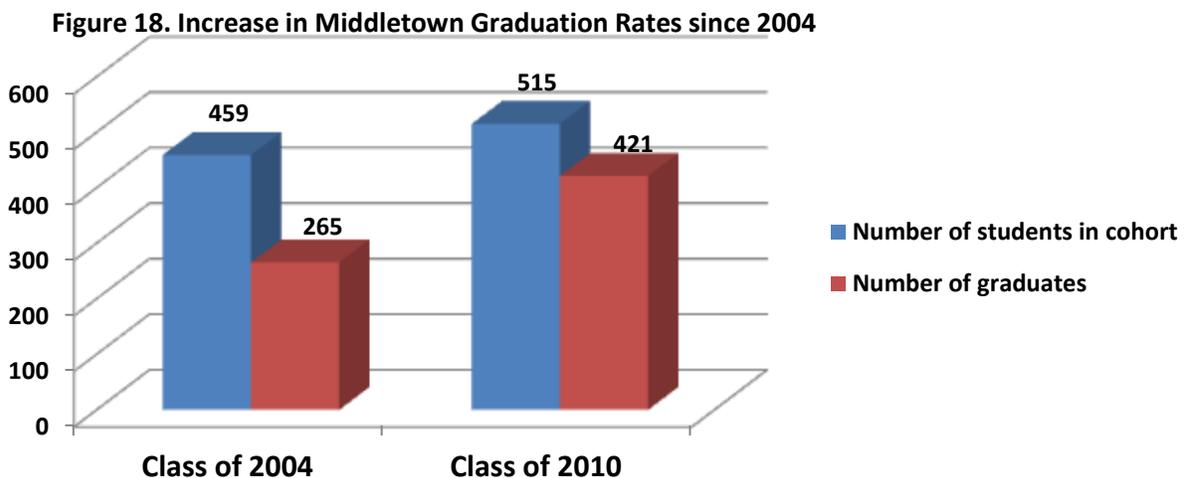
3.6 Summary of Middletown’s academic accomplishments

In Middletown, district-wide performance has improved substantially in English Language Arts, Math and Science. Five of the district’s seven schools have made remarkable improvements in student achievement in all core content areas since the introduction of new curricula, and Middletown’s district-wide performance scores have steadily increased, closing the margin of difference between Middletown achievement and statewide achievement averages at both elementary/middle and secondary levels. Since 2004, Middletown has been removed from the State’s *Districts In Need of Improvement* list and all but one of its schools has moved off the *Schools In Need of Improvement* list.

4.0 Middletown’s student co-curricular accomplishments

4.1 High school graduation

Middletown graduation rates have increased dramatically since 2003-04, across all student subgroups. As shown in the figure below, 58 percent of the students in the class of 2004 graduated from Middletown High School. Eighty-three percent of the students in the class of 2010 graduated from the High School, for an increase of 25 percent.

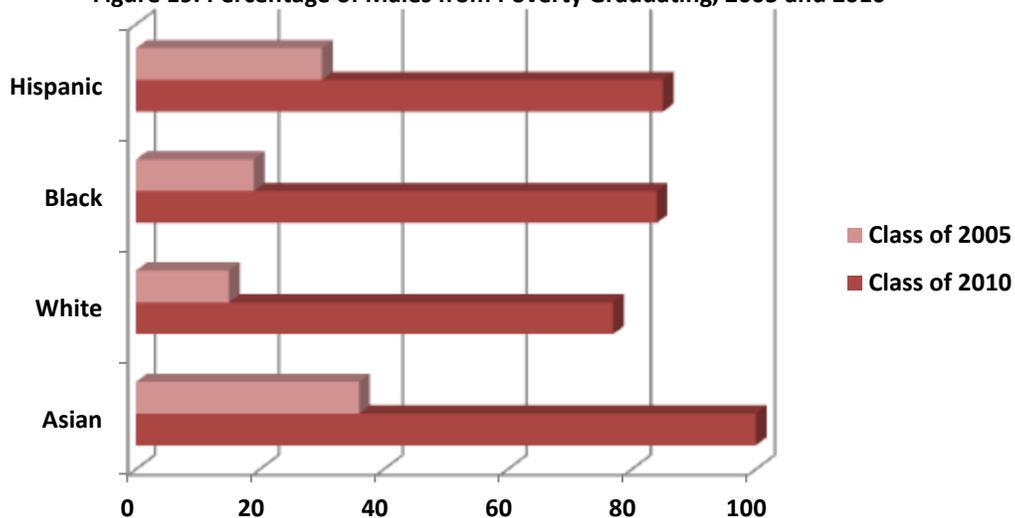


The table below presents August graduation rates for all students and all subgroups in Middletown. Extraordinary increases can be seen in all student subgroups, with the highest increases for Asian males, Black females, and Hispanic females.

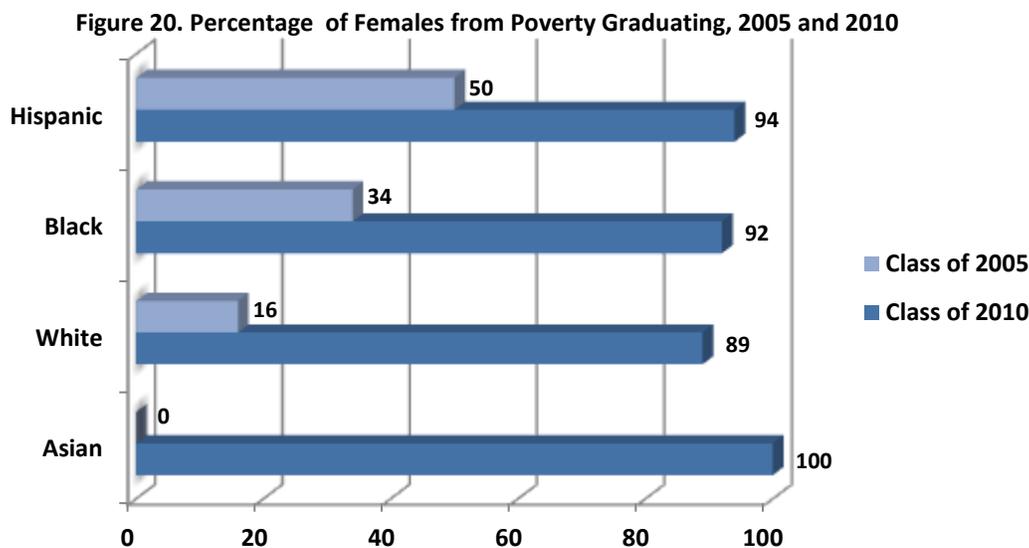
Table 9. Middletown Graduation Rates, by Year and Subgroup, 2003-04 to 2009-10								
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	% increase from 2003-04 to 2009-10
Total percent graduating	58	59	71	69	69	78	83	+25%
Economic Disadvantaged	Not available	51	66	65	65	78	82	+31%⁶
Black	54	54	70	71	74	82	87	+33%
Male	52	55	63	62	68	74	82	+30%
Female	56	52	76	77	90	90	92	+36%
Hispanic	49	52	65	62	63	70	79	+30%
Male	49	46	70	54	57	64	74	+25%
Female	49	60	59	72	71	79	83	+34%
White	64	67	74	73	72	84	82	+18%
Male	63	58	70	72	67	79	87	+24%
Female	66	74	78	74	78	87	80	+14%
Asian	60	64	100	77	75	64	94	+34%
Male	33	83	100	62	57	40	86	+53%
Female	71	40	100	80	100	83	100	+29%

Graduation rates of Middletown students from poverty (those eligible for free and reduced meals) have also increased considerably since 2005, for all ethnicity subgroups, and for both males and females.

Figure 19. Percentage of Males from Poverty Graduating, 2005 and 2010



⁶ The total percent increase in graduation rates for economically disadvantaged students was calculated beginning with 2004-05, due to unavailability of data from 2003-04.



Additionally, Middletown’s overall graduation rate of 83% from 2009-10 exceeded the national average rate of 76%, and exceeded the New York State average rate of 74%.

Among the comparison districts, Middletown has the highest overall graduation rate and for all student subgroups. In Middletown, Black students and White students graduate from high school at the same rate.

Table 10. Graduation Rates for Middletown Students and Selected Comparison Districts, For All Students and by Subgroup, 2009-10⁷: High-to-low by All students

	All students	Black	Hispanic	White
1. Middletown School District	75%	79%	69%	79%
2. East Ramapo Central School District (Spring Valley)	72%	74%	57%	75%
3. Peekskill City School District	69%	65%	70%	71%
4. Fallsburg Central School District	65%	-	70%	70%
5. Newburgh	64%	52%	62%	76%
6. Yonkers City School District	64%	57%	62%	71%
7. Poughkeepsie	55%	54%	44%	65%

⁷ The graduation rates presented in this table represent the values from the New York State Report Card Database from accountability year 2009-10, which are reflective of the graduation rates of students from the 2005 cohort (Class of 2009). The rates for Middletown may differ slightly from those reported in Table 9, because they are not reflective of August graduates and five-year graduates.

4.2 Student attendance and suspensions

Attendance is a pre-condition to academic success and Middletown's students had the highest attendance rates of all but one of the comparison districts in 2009-10. School attendance is also a proxy indicator of student attitudes. Students who don't like school tend not to come to school and Middletown's attendance rate signals a positive attitude towards school among the district's students.

	Rate
1. East Ramapo Central School District (Spring Valley)	95%
2. Middletown School District	94%
3. Fallsburg Central School District	93%
4. Newburgh	93%
5. Yonkers City School District	93%
6. Peekskill City School District	92%
7. Poughkeepsie	91%

The attendance of Middletown students has increased by two percent since 2004-05 and the increase may be attributed to the sharp increase in academic and co-curricular opportunities. Students are more engaged in both academics and extracurricular activities. As one school administrator said: "1,500 of our students walk to school every day...it's almost a mile for some of them, and they will walk through rain or snow because they want to be here." In the high school especially, there has been a push towards increasing attendance rates. If a student is absent, home-school liaisons call parents or guardians, and even conduct home visits. The students are aware of this process and the high school administrators believe this communication is an additional reason for the increase in their attendance rates.

There have also been fewer behavior incidents in the district since 2004-05⁸. As shown in the table below, the rate of student suspensions has dropped from 11% to 9%.

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Student attendance	92%	93%	93%	94%	94%	94%
Student suspensions	11%	8%	10%	9%	9%	9%

⁸ Data source: NYSTART 2009-10 data, <https://www.nystart.gov/nystart/u/index.do>. Data collected and reported in the New York State Report Card prior to academic year 2004-05 is believed to be inflated by prior administration. Therefore, those data are not included in this documentation of attendance rates and behavior incidents.

Middletown's suspension rate is only half that of the district with the highest rate, and it falls in the middle of the distribution of comparable districts.

Table 13. Student Suspensions for Middletown and Selected Comparison Districts, 2009-10: Low-to-high	
	Student suspensions
1. East Ramapo Central School District (Spring Valley)	4%
2. Newburgh	7%
3. Fallsburg Central School District	8%
4. Middletown School District	9%
5. Peekskill City School District	10%
6. Yonkers City School District	10%
7. Poughkeepsie	18%

4.3 Extra-curricular student participation

Middletown's students have become far more interested and involved in extracurricular activities and sports. The table below documents remarkable increases in participation for sports and intramural activities. Compared to 2004-05, more students now participate in 21 of the 25 sports offered in Middletown. Overall, 444 more students are participating in Middletown sports programs compared to six years ago [see table, next page].

Table 14. Participation in Interscholastic Athletics, 2004-05 to 2010-11⁹

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Increase from 2004-05 to 2010-11
FALL								
Football	115	122	150	160	185	198	205	+90
Volleyball	44	46	52	58	66	77	81	+37
Boys Soccer	66	68	66	68	70	98	93	+27
Girls Soccer	54	58	56	64	68	78	77	+23
Girls Cross Country	13	15	15	27	36	39	31	+18
Boys Cross Country	21	18	22	30	44	42	33	+12
Girls Tennis	25	30	28	35	27	23	27	+2
Cheerleading	30	44	30	33	25	28	31	+1
Girls Swimming and Diving	33	34	37	38	36	30	25	-8
WINTER								
Boys Basketball	75	70	70	72	70	79	74	-1
Girls Basketball	47	45	48	56	58	62	69	+22
Wrestling	38	35	42	43	45	61	78	+40
Girls Indoor Track & Field	35	44	44	55	44	83	68	+33
Boys Indoor Track & Field	22	18	18	36	56	77	70	+48
Boys Swimming and Diving	25	28	28	35	44	40	32	+7
Cheerleading	47	45	36	45	32	38	33	-14
SPRING								
Softball	48	56	54	64	76	64	58	+10
Baseball	78	70	81	80	82	89	82	+4
Girls Track & Field	62	75	80	83	72	199	69	+7
Boys Track & Field	48	53	58	62	86	131	74	+26
Boys Tennis	14	19	25	33	28	34	25	+11
Boys Golf	5	7	9	15	5	10	10	+5
Girls Golf	-	10	12	15	10	11	9	-1¹⁰
Boys Lacrosse	-	28	40	55	44	38	68	+40
Girls Lacrosse	-	22	35	45	32	45	45	+23
TOTAL	945	1060	1136	1307	1341	1674	1467	462

⁹ The availability of these kinds of detailed data in the athletic program is one example of the district's commitment to evidence-based reform. A new athletic director was hired in 2004-05, and these data have been consistently collected since.

¹⁰ Increases in student participation for girls golf, boys lacrosse, and girls lacrosse were calculated beginning with 2005-06, due to unavailability of participation data from 2003-04.

To accommodate students who want to play a sport but not at the most competitive level, the district developed intramural and after school programs, all of which have grown since 2005.

Table 15. Student Participation in Intramural Programs, 2004-05 to 2010-11	
Intramural programs	Number of participants
Football (Elementary, Middle and Summer)	125
Soccer (Elementary, Middle, Saturday, and Girls offseason training)	308
Wrestling (Elementary and Middle)	115
Basketball (Elementary, Middle and Basketball camp)	218
Weight Lifting	180
Golf (Middle and High)	33
Whiffleball (Elementary)	37
Volleyball (Middle and High)	48
Softball (Winter and Fall)	57
Pole Vaulting	15
Baseball	95
Lacrosse	77
Tennis	17
Track and Field	33
After school programs	
EDI Basketball Academy	90
Elementary EDI/Recreation program	500
Club programs	
Varsity Captains Club	48
Middletown Athletes Care (MAC) Club	55
Total	2051

5.0 The Process of school improvement in Middletown

In most American public schools, family background predicts a student's academic achievement. For Middletown, despite an increase in poverty levels and a much more linguistically diverse student population, the district has increased student achievement, high school graduation rates, and related key indicators. This section discusses the building blocks of Middletown's improvement strategy and tactics – especially curriculum, teaching, organization and finance.

5.1 Curriculum, instruction, and rich opportunities

The district has fielded the following program initiatives in the last seven years:

1. Expanded ESL and transitional bilingual programs.
2. Implemented a daily 90-minute uninterrupted block for literacy instruction in elementary classrooms, and a 60-minute block for mathematics.
3. Creation of a fifth core subject, *Literacy*, for grades 6-9 that doubles time on reading, writing, listening, and comprehension.
4. An *Extended Day Institute* for students in grades 1-8.

5. A *Summer Institute* for at-risk students in grades K-8.
6. Extended instructional days for middle schools.
7. An additional instructional period at the high school (from eight periods to nine periods).
8. Seven *Advanced Placement* courses and more college level course offerings including the opportunity to earn a year of college credit (33 college course credits).
9. More fine arts, more vocal programs and a strings program for grades 3-8 that now enrolls more than 430 students.
10. Pre-engineering courses in grades 7-12, *Project Lead the Way*.
11. Expanded counseling programs with a full-time *College and Career Center* available to secondary students and to Middletown graduates.
12. Increased co-curricular opportunities including athletic teams.

As a result of many of the district's initiatives, teachers report higher expectations of students, especially in the context of the *Literacy Framework*. One teacher said that "[The students] are expected to do a lot more reading and writing...and are held accountable for what they read." Another said that "They are doing a lot more small group work and are more responsible for explaining their thinking." A third commented that "A lot more is being asked of the students. They are deeper thinkers, they do a lot more on their own...they ask a lot of their own questions."

Curriculum audits. Prior to 2004, Middletown had no district-wide curriculum and no "scope and sequence" specifications to guide and guarantee consistent and evidence-based teaching and learning. The district's sequence of audits established first what was being taught and second, how that repertoire should be modified and improved. The following audits were conducted in 2004-05:

- Curriculum, all topics, all levels;
- School safety and security;
- Physical education and athletics;
- Student support services;
- Special education; and
- Technology.

A curriculum development team was tasked with drafting standards-based curricula for all subjects in 2005 and 2006. Additionally, Middletown's teachers were recruited to work over summers to prepare topic-specific scope and sequence documents.

Opportunity to learn: Literacy. There are now 14 languages spoken in the homes of Middletown's students. The district's growing enrollment of ESL and bilingual students did not previously have pedagogical and teacher resources concentrated on their needs. The importance of literacy is signaled by a daily 90-minute uninterrupted block for reading and a 45-minute block for writing in elementary classrooms. A district-wide framework for teaching literacy was implemented, which focuses on a variety of instructional approaches and

experiences for students to engage with texts and discuss their thinking in whole groups, small groups, and pairs. The *Literacy Framework* is centered around a workshop approach for teaching reading, writing and language. In grades 6-9, students attend a 45-minute literacy course in addition to their traditional English courses. The literacy focus is integrated into other core subjects, such as math, where students are encouraged to explain calculations or solutions using communication skills rather than simply solving problems. The framework also integrates higher-order thinking skills and 21st century learning, where students must learn how to make decisions about biases in Internet text, and investigate purposes and audiences.

The *Literacy Framework* provides teachers with information about how to teach literacy and provides students with many opportunities to engage with texts by reading, writing, listening, and speaking. The scope and sequence serves as a guide for teachers about which standards are taught and assessed in each quarter of each grade level and which types of materials can be used to meet the needs of all students. Within the scope and sequence are assessments to monitor student progress, including writing rubrics. A team of classroom teachers, reading teachers, literacy teachers, ESL teachers, and special education teachers comprise the Building Literacy Team and ensure that all students become proficient readers, writers, listeners, and speakers.

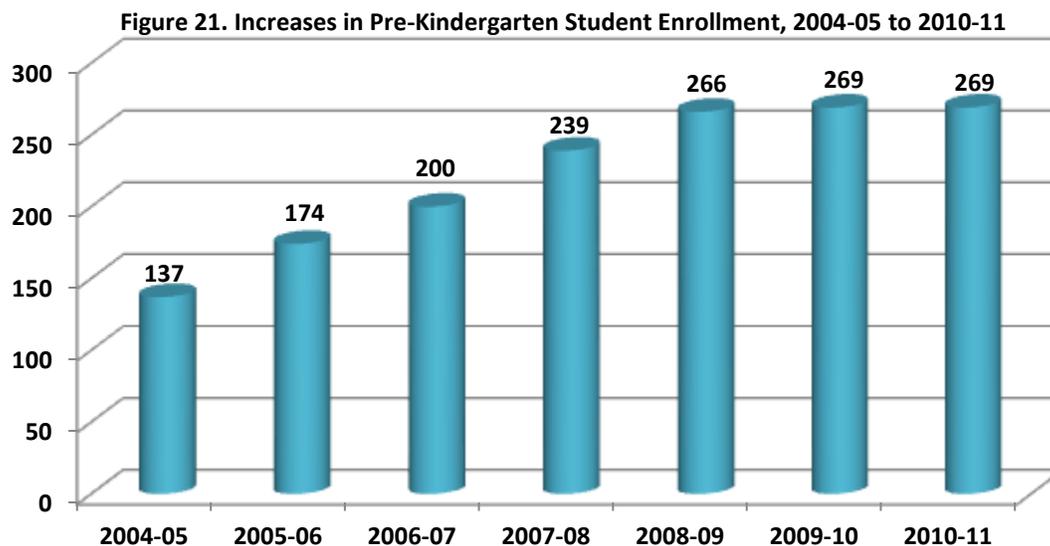
Through grant funding, a dual language program has also been added to the elementary schools. In this program, instruction is offered in English and Spanish equally on alternating days while students are evenly mixed (50/50) English speakers and Spanish speakers. The goal is for both groups to become fluent in both languages. English Language Learners in the program are tested annually on the NYSESLAT, but unlike students in the ESL and traditional bilingual programs, they do not leave the dual language program. Rather, they continue to learn in two languages until at least the fifth grade.

Opportunity to learn: Extended learning time. Extended learning infuses writing, reading and problem solving into other content areas. The rigor of this instructional time encourages students to remain focused on one task for an extended period. One building principal said that extended learning time was implemented so that “Literacy and English Language Arts are connected to the scope and sequence for Science and Social Studies. The idea is to move into more project based learning with a real world problem.” In addition to literacy time, the district also implemented an extended learning block for math.

Opportunity to learn: Early childhood education. In November 2004, a committee was created to replace the half-day kindergarten program with a full-day kindergarten program. The new full-day kindergarten program was launched in September 2005.

In 2004, the Pre-Kindergarten program was offered to only 137 disadvantaged students in eight sections that were a half-day each. In 2006, the program shifted to offer two types of services: Targeted Pre-K and Universal Pre-K. Targeted Pre-K is offered to ELL and disadvantaged students, while Universal Pre-K provides services to students off-site in half-day sections. Over the past several years, these programs have increased the number of students receiving services from 137 to 269, and have increased the number of community-based sites from one

to 11. Students in the full-day Targeted Pre-K program are immersed in a language-rich environment that increases time-on-task and engagement in academic activities. Student in full-day Pre-K have demonstrated Kindergarten readiness skills on the Primary Assessment of Literacy Skills (PALS) and a pre-post Math assessment. Both Pre-K programs follow the district's pre-kindergarten scope and sequence, and implement Middletown's *Literacy Framework*.



Opportunity to learn: Music and electives. Music education is an option that many districts conclude they cannot afford, especially among chronically low-achieving districts. In Middletown, additional music teachers were hired, and a strings program was implemented at the fourth grade level. One teacher reported that “Over 400 students are involved [in the strings program]; it’s getting more students engaged and involved...This gives a lot of students a place to belong, and they wouldn’t have that otherwise.”

More electives, such as guitar and fashion design have been added at the high school to keep students engaged and interested. These classes have become increasingly popular among the high school students, and all sections of these elective courses were full this past academic year.

Opportunity to learn: Guidance and college and career assistance. Following the New York School Counselors model and the most current literature about effective guidance programs, the district created a K-12 guidance plan, which is now updated each year. Until recently, job descriptions for school counselors were outdated. Those have been replaced and annual performance evaluations have been updated for counselors. Three years ago, a Director of Guidance Programs and Services was hired, as well as a College and Career Advisor and additional counselors for a total staff of 13 at the high school. Together, the guidance team has created a number of packets and booklets for students, such as a college planner workbook, which students use to complete college applications. The guidance team also hosts several events each year such as essay writing workshops, a college fair and college application

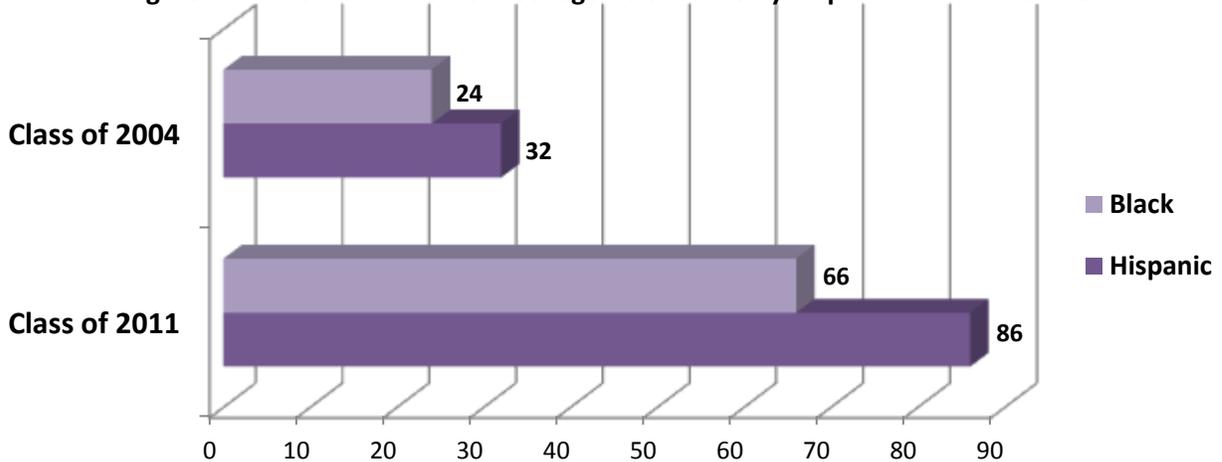
workshops, which drew 45 participants this past year. In the last two years, college-related program attendance has increased by 20 percent.

The guidance department in Middletown has implemented several changes in an effort to create and support a college-attending culture for high school students. A college and career center was created, which is staffed by a full-time college center advisor. Additional programming was added to such as a freshman transition program, “Middie move-up day,” and four-year course planning for all 9th grade students. The district also supports students with college tours, a college planner booklet, a senior exit interview (to document final post-secondary plans), a College Ambassadors Club and several workshops for assistance with admissions, financial aid, writing the college essay, college interviewing, and creating a college resume.

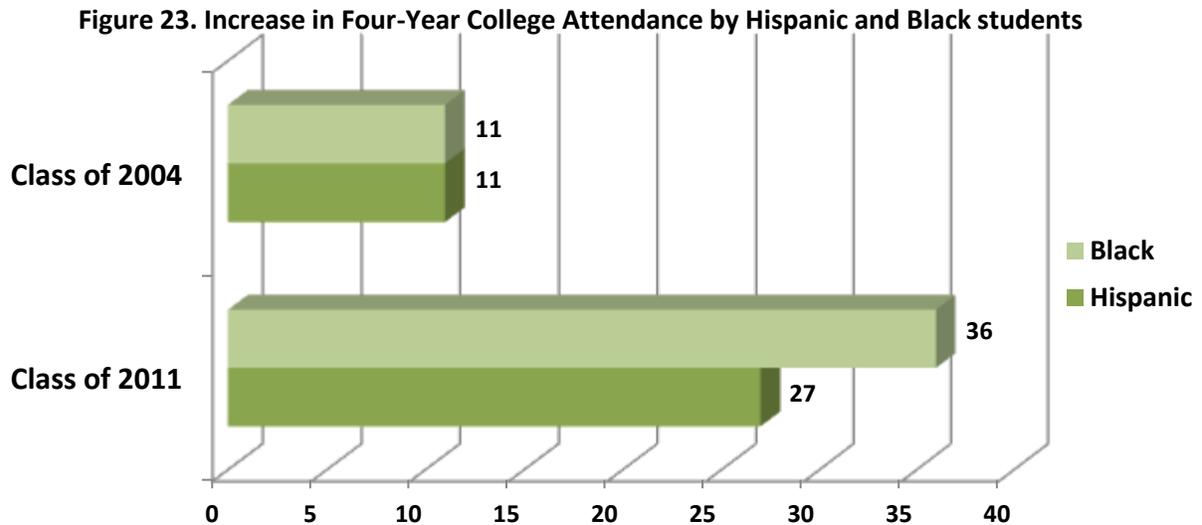
These supports for students are making a noticeable difference. Last year alone, 86% of Middletown High School’s graduates were enrolled in college. Compared to 2005, the attendance rate for two-year colleges has increased by 40% and four-year college attendance rate has increased by 30%. For both two-year and four-year colleges, attendance rates by Middletown students have increased the most for Black and Hispanic student populations.

Two-year college attendance by Hispanic students has increased from 32% in 2004 to 86% in 2011, and has increased from 24% in 2004 to 66% in 2011 for Black students.

Figure 22. Increase in Two-Year College Attendance by Hispanic and Black Students



Four-year college attendance for Hispanic students has grown from 11% to 27% in 2011 and from 11% to 36% for Black students.



Opportunity to learn: Athletics. The addition of the new sports facility at the high school has been a catalyst for the dramatic increase in sports participation. The high school's football field was replaced by a state-of-the-art sports facility that supports football, soccer and lacrosse. Around the field, there is a running track made of a pore rubber surface; one of only six of its kind in the United States.

Technology for teaching and learning. The district's \$12 million technology enhancement program ranks Middletown in the top 5% of technology-investing districts in the United States. Beginning in 2006, the district began to provide teachers and students with additional digital resources in the classroom including classroom-embedded professional development from three specialists in the integration of technology into classroom instruction.

Middletown's pursuit of *e-Rate* funding and New York State's *Contract for Excellence* program has resulted in \$6.8 million of support. The district's technology infrastructure was updated, and now most of the district's buildings have wireless capability. Additionally, all phones, announcements and clocks are connected and coordinated with the district's website for emergency purposes. Each classroom in the district has a SMART Board for interactive instruction and activities¹¹, and many teachers are using student responder systems for real-time formative assessment purposes. All administrators have (and use) iPads to collect data during classroom 'walk-throughs.' Other features of instructional technology present in the district include:

¹¹ In contrast with other districts, Middletown teachers are not eligible to have an IWB in their classroom until they have completed the prior, required training on the instructional uses of SMART boards.

- Sound amplification in every classroom;
- Reliable wireless access in every classroom;
- Document cameras;
- Cisco digital IP phone system in every classroom (for parent communications);
- Five computer work stations for every classroom pre-K-to-8;
- A personal workstation for every teacher;
- 100 teacher laptops; and
- A 1:2:1 computing initiative in five classrooms with iPod touch devices.

ECSDM manages 60 professional development offerings about technology annually. As one school principal noted, “There is a plethora of after-school professional development opportunities for teachers.” The district has created a technology-rich environment in which students acquire 21st century skills in ways that foster creativity, problem-solving and collaboration. There are at least 3,500 computers and 27 computer labs in the district. Teachers say that “there has been a lot of time, money and effort put into raising the bar for teachers.”

New resources. By 2009-10 the district had doubled the number of bilingual and English-as-a-Second Language teachers on staff. The district has hired three technology integration specialists to ensure that the new hardware, software and connectivity is used to power better teaching and learning. To support implementation of the *Literacy Framework*, literacy coaches were placed in each school. These coaches, along with each building administrator have received weeks of literacy training through collaboration with Lesley University. Each building has its own literacy team to discuss student data and plan instruction.

The district not only initiates priorities, it staffs them. For example, when ESL-Bilingual was identified as a critical area, over four years, 23 new teachers were hired. When literacy was implemented as a core content area, certified literacy teachers were hired for each school to provide additional instruction in reading and writing. In addition, literacy coaches were hired for each building to provide support for teachers with literacy instruction. When the instrumental music program was enlarged, the district hired a third music teacher in the middle schools. The superintendent made the coordinator of the *Mentor-Intern* program a full-time position. The staff and administration in Middletown are grateful for the timely support to help implement district initiatives.

5.2 Teachers and instructional practices

Standards and expectations. District philosophy balances increased expectations of teachers with support for teachers. The district has adopted the acronym “HERO,” which stands for “**H**igh **E**xpectations are Meaningless without **R**ich **O**pportunities.” The phrase has been a driving force for the district’s initiatives.

There has also been a focus on data-driven decision making in Middletown. District administration and building principals are not the only ones working with student data to make instructional decisions. Almost 60% of teachers surveyed reported that they are part of a team that meets to make decisions using student data. Teachers are now responsible for collecting and analyzing more student data. Teachers reported that “Middletown has embraced a data approach” and that they “are more focused on at-risk students, to keep them from falling through the cracks.”

Support for teachers. The district supports an active *Mentor-Intern Program* so that new teachers can count the assistance of mentors. The Middletown *Mentor-Intern* program was enhanced to support and retain highly qualified teachers. New teachers are assigned to trained mentors who provide support through frequent and guided contact for a two-year period. Both the intern and the mentor receive release time for classroom visitations, and a certified replacement teacher for classroom coverage. The program facilitates a confidential, non-evaluative mentor experience for teachers, in addition to professional development in areas such as classroom management, communication, etc.

As previously mentioned, Middletown has worked in collaboration with Lesley University in Cambridge, Massachusetts for intensive training in the new literacy program. Administrators spent a full week in training, and literacy coaches underwent intensive six-week training intervals for the first year and two to three week training intervals for the following year. According to one of the district’s middle school administrators, “The idea is that teachers receive ongoing embedded professional development in specific strategies to use in their classroom.”

In addition, the district supports a Teacher Center, which provides professional development that meets the needs of staff and focuses on district-wide initiatives as well as technology integration. One teacher commented, “I have never grown so much as a teacher as in the last few years.”

Evidence based instruction. The achievement component of Middletown’s schooling culture is now, “Prove it.” For the most part, teachers do not describe instruction as being “test-driven” but instead describe it as “evidence-based.” Each month, a team of district personnel meet to discuss data and accountability at the school and student levels. The district’s accountability analyst creates “projection reports” to predict the outcomes of individual students and groups of students. The reports reinforce the fact that without instructional changes to address the state’s evolving accountability measures, students will not be successful. The approach is proactive, where data are used to predict future performance and make decisions about what the district, its schools and its teachers need to do to make adequate progress.

As importantly, each school has a monthly data team meeting consisting of the principal and an assistant principal with the participation (from the central office) of the directors of special education, of ESL/bilingual, of literacy and of data/accountability. Teams focus on “What’s happening in classrooms? How is that monitored? What are the next steps?” School meetings

are formally recorded with written minutes. “Root cause” analyses are conducted to examine the background and trajectories of individual students who are struggling academically. The district uses “*Data Mate*,” an automated system that produces displays from the NYS English Language Arts and Mathematics Assessments for grades 3-8 in addition to collecting other academic data in the student management system from the MAP, DRP, PALS, Fountas and Pinnell Benchmark Assessment, and quarterly benchmark assessments. The system automatically disaggregates the data and analyses by student groups. The data are also linked to the district’s *Literacy Framework*. All administrators attend data management workshops in the summer on, for example, value-added calculations and student growth models.

The athletic program is another example of the district’s commitment to data. In order to improve the validity and reliability of personal fitness scores, they adopted *Fitness-Gram*, a computer program that reports in English and Spanish and measures body-mass index in addition to fitness for all K-12 students.

5.3 Organization

The central administration was re-organized to parallel the instructional needs of the district. Now, in addition to the superintendent and the assistant superintendent for instruction and business office operations, there is an (1) assistant superintendent for instruction; (2) a chief technology officer; (3) a director of counseling program services; (4) a coordinator of literacy; (5) a coordinator of ESL/bilingual; and (6) a coordinator of special services. There are now up-to-date, written and agreed job descriptions for all employee categories. School buildings have been re-configured by grade level and in addition to an annual district-wide improvement plan.

The structure of the high school’s administrative team has also been changed. Rather than one school-wide principal, the school has adopted a “house system,” in which four administrators are each responsible for a particular group of students and teachers. In addition to the executive principal, each of the four houses has a principal, guidance counselors, and two clerical staff. One high school teacher said that they have seen the school “rise from a low grade, struggling building full of negativity to a high quality, academically rigorous school...with many opportunities for students and excellent facilities.”

Finally, the school administration approach was shifted in each building in the district. Each principal is expected to serve as the primary instructional leader, supported by an assistant principal who focuses on management.

5.4 Capital improvements

Middletown’s curriculum initiatives have been paralleled with \$145 million worth of improvements to the district’s school facilities. The attractiveness and functionality of those facilities contributes to student engagement and teacher morale. At the high school, there is (1) a new music wing with a state-of-the-art performing arts theater; (2) additional science and computer labs; and (3) a new library. The most dramatic additions at the secondary level have

been athletic facilities that include: (1) a stadium¹²; (2) baseball/softball and soccer/lacrosse fields; (3) a renovated swimming pool; and (4) a new gym and training facility. At the middle schools, there are new athletic fields that are also available for public use.

The district is constructing a new, 200,000 square foot elementary building with no increase in tax levies. The building will have \$6 million of technology enhancements paid for by the federal *e-Rate* program. Additionally, all buildings have new roofs designed to last 25 years. Twin Towers Middle School has been extensively renovated. Finally, ECSDM has completed \$5 million in energy management improvements that are intended to be self-financing from lower utility costs.

Middletown's ambitious campaign of capital improvements has been accomplished with minimal tax levy increases, on-time and within budget.

5.5 Finance

Middletown spends less per pupil than other high-needs districts and less than the average for all New York State public schools. Middletown's per pupil expenditure is \$17,095, \$1,084 less than other high need districts and \$1,270 less than the average for all public schools in NY. Although it spends less than the state average, the tax effort from its citizens is higher. Though Middletown is not a wealthy district, the voters have steadily supported the district and never come close to rejecting a school budget. Because the district spends less than the state average, state aid for some programs is reduced. In terms of state aid not received, ECSDM has lost an average of \$7.5 million a year for which it would otherwise qualify - \$30 million since 2007.

Middletown no longer has to rely on borrowed money ("Bond Anticipation Notes"). The district's Moody's financial rating should improve from A2 to A1 based on its reserves. And those accomplishments have been realized with tax levy increases of less than four percent annually, one of the lowest increases in the Hudson Valley. Finally, Middletown has aggressively and successfully pursued third-party funding; one example is its success in the extraordinarily competitive federal *Race to the Top* program.

5.6 Leadership

Throughout this report, Interactive, Inc. has referenced "the district", "ECSDM", "the schools" for describing improvement, reform and innovation. From a technical, social science perspective, those references are an instance of what is called "misplaced concreteness." The issue is one of agency – who is responsible for Middletown's turn-around? We believe that the answer to that question is centered on Dr. Ken Eastwood whose accession to the

¹² The new stadium seats 4,000 and is so advanced that it would be more likely to be on a college or university campus than on a public high school campus. The surfaces of the playing fields and the tracks meet the highest international standards. The lights on the playing field will support televised night games. There is a 24-foot wide high definition video display for live video and instant replays. The stadium's concession operation is run by students and returns \$27,000 a year. When the stadium hosts state or regional events, attendees fill up every hotel within 30 miles.

superintendency coincides with the district's year-over-year rise in all key metrics beginning in 2005 and continuing to date.

Locating the major reform leverage in the superintendent's leadership is empirically justified – no other role has the same responsibility, span of control and accountability as the superintendent. No other role has had the overarching vision.

Crediting the superintendent obviously occurs in a context that includes the counsel and support of the board of education, the assistance, and advice of the other administrators and the cooperation and acceptance of the teachers. The academic literature on school improvement mistakenly elevates leadership to a *sine qua non*. In fact, unless leadership is matched with coalition building and the sincere follow-through of other staff and leaders, nothing happens. One of the remarkable features of Middletown's educational culture is the respect and admiration that the superintendent evokes in other administrators, teachers, and staff. Simply put, the superintendent (and thus the district) enjoys an extraordinary amount of trust, cooperation and respect.

In other venues, Dr. Eastwood has identified key components of the improvement strategy used for Middletown.

- Collect comprehensive and reliable data about student and adult performance;
- Commit to change where the data indicate necessary;
- Work system-wide, collaboratively and with interconnected units;
- Challenge the staff, trust the staff (don't micromanage), utilize the staff, support the staff and celebrate the staff (central and building administrators, teachers and support personnel);
- Set reasonable goals – high but attainable;
- Be patient¹³, build for the long term;
- Celebrate success;
- Increase student engagement;
- Provide high expectations and rich opportunities; and
- Stay student-centered.

The table below [next page] compares Middletown's turnaround strategy to other, documented school improvement strategies in the most current literature.

¹³ Despite the "patience" dictum, the trajectory of improvement in the district disproves the fallacy that "Change in schools requires decades".

Table 16. Middletown School Improvement Strategy Compared to Other School Improvement Recommendations		
Ken Eastwood, Middletown	IES Practice Guide, “Turning Around Chronically Low-Performing School”	Southern Regional Education Board
Set reasonable goals – high but attainable Commit to change everywhere that the data indicate	Signal the need for dramatic change with strong leadership	Create a strategic vision for graduating students who are prepared for postsecondary options
Get comprehensive and reliable data about student and adult performance	Maintain a consistent focus on improving instruction: Use data and change instruction to meet goals, monitor progress and make adjustments	Lead schools to analyze a variety of student data, examine the root causes behind student failure or dropping out
Work system-wide, collaboratively and with interconnected units		Focus on policies and support services for each school to attain its own strategic vision with the context of the district’s vision
Challenge the staff, trust the staff (don’t micromanage), utilize the staff, support the staff and celebrate the staff (central and building administrators, teachers and support personnel)	Build a committed staff: Examine strengths and weakness of staff members, and replace staff members that resist the turnaround efforts	Invest in high-quality professional development for district staff, principals and teachers Consider working with external school improvement consultants to develop a strategic vision
Celebrate success	Make visible improvements early in the school turnaround process (quick wins): Think about strategies that they have the funds and authority to implement; that do not require consensus of all staff	
Be patient, build for the long term		
Increase student engagement		
Provide high expectations and rich opportunities		
Stay student-centered		

6.0 Teacher responses to school improvement in Middletown

The district has historically supported teacher involvement on all building and district committees and teams. The union appoints members to participate in the Professional Development Plan (PDP), the Annual Professional Performance Review (APPR), the School Improvement Team (SIT), the Teacher Center Policy Board, the Mentor/Intern Advisory Council, the Code of Conduct Committee, and Building Level Safety teams. This has helped pave the way for teachers to join in supporting the new reform initiatives. Both teacher and administrative leaderships acknowledge some resistance and some turbulence particularly with major initiatives such as the literacy program or the introduction of frequent classroom ‘walk-throughs’ by administrators. But they also conclude that the opposition is not unusual, it is generally transitional and it is ordinarily accommodated in the process of change.

6.1 Teacher turnover and district morale

Teacher morale was negatively affected by the district’s turmoil prior to 2005. One teacher said: “Things have gotten a lot better here, things are more organized. It seems like stress levels have dropped... people seem happier around here.” Another commented: “We have come a long way, I am proud to say I work in Middletown.” The rate of teacher turnover in ECSDM has dropped by half since 2004 and that suggests teacher re-dedication to the work of the district.

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Teacher turnover	15%	15%	15%	10%	8%	8%

Middletown’s teacher turnover rate is considerably lower than five of the six comparison districts, and is lower than all six of the districts.

	Rate
1. Middletown School District	8%
2. Fallsburg Central School District	9%
3. Yonkers City School District	13%
4. Poughkeepsie	14%
5. Newburgh	17%
6. East Ramapo Central School District (Spring Valley)	23%
7. Peekskill City School District	36%

6.2 Teacher attitudes and opinions

Teacher sentiments currently reflect positive morale in Middletown schools. Ninety-two percent of the teachers surveyed agree that the district has undergone dramatic changes in the past five years. More than half of the teachers (62%) agree that the district is operating much better than it did five years ago.

Several teachers interviewed in Middletown stated that while they have worked hard to improve student achievement, there is still a lot of work to be done. This encouraging conclusion is supported by survey responses, where seventy percent of teachers who completed the survey report that the students in Middletown are improving, but they need to improve more.

Teachers are generally in agreement that they are receiving ample training and resources to be successful. Eighty-three percent of the teachers reported that there are enough professional development opportunities offered for them to successfully implement district initiatives. A majority of teachers also agree that they have enough technology resources (83%) and print materials (57%) to teach their students. Teachers also believe that the district's goals for student achievement are attainable - 68% agree with the statement "The current goals for student achievement are reasonable."

Teachers were asked what would best facilitate additional improvement in the district, and their responses are presented in the table below:

Table 19. Teacher responses to the survey question: Further improvement in the district will depend on...		
Response option	% of teacher respondents	# of teacher respondents
Increased parental involvement	27%	53
Smaller class size	23%	44
More money	19%	36
More support from administrators	17%	34
Other	14%	28

A majority of teachers reported that increased parental involvement would lead to further improvement in Middletown, followed by smaller class size and more money.

Teacher survey responses document the availability external consultants who visit the district for professional development, training, and support. More than 80% of teachers report that they work with these consultants "sometimes" or "often."

Finally, survey respondents were asked to provide three words to describe the Enlarged City School District of Middletown. The most common response was "innovative," followed by the word "technological." The top six words reported, from most common to less common, are as follows:

- *Innovative;*
- *Technological/Technology;*
- *Growing;*
- *Challenging;*
- *Caring; and*
- *Progressive.*

During face-to-face interviews, several teachers reported an improvement in district morale. For instance, when asked what changes have occurred in the district, one teacher said “The organization of things; now we communicate and trust each other.” A teacher made the comment that “Now, I hear people say they want a job here, and want to send their students here. I feel very proud to be part of a district that has come full circle.”

When asked about their perceptions of the district’s strategy, teachers generally reported an awareness of the changes being made, the reasons for the changes, and the effect they have had on the district as a whole. One teacher said that the “district strategy is to set high expectations and never to settle...To use data to guide instruction, policy and curriculum, while providing top notch resources and facilities.”

7.0 The improbability of school reform

Middletown’s leaders inherited a system in which every building¹⁴ was identified by the State as “in need of improvement” (that is, New York State’s indication of failure to make “adequate yearly progress” in connection with *No Child Left Behind*). Within five years, every Middletown school, except one, has made sufficient progress as to be removed from the *SINI* list. To gauge the likelihood that a district could lever such progress, consider the following national evidence.

Sparks (2010) studied chronically low-performing elementary and middle schools: “Of 2,025 chronically low-performing elementary and middle schools identified in 10 states in 2003-04...only about 1 percent had improved enough to exceed their state’s average performance five years later.”

Smarick (2010) examined similar low-performing schools in a number of states.

In Ohio, 52 chronically low-performing schools were “restructured.” “Even after several years of reform efforts and millions of tax dollars, these schools did not exhibit any student performance gains. Nationally, only 19 percent of the schools forced to restructure in 2004-05 made enough progress in two years to exit their improvement status.”

In California, 109 of 968 (11 percent) of failing elementary schools were able to make exemplary progress after targeted intervention. One in 394 middle and high schools met this mark. Only one quarter of all of these schools were able to meet school-wide and subgroup growth targets annually.

School reform is a world in which one secondary school in about 400 was able to improve. For elementary schools, at the high end, 11 out of a hundred improved: at the low end, one out of a hundred improved. Smarick (2010) concludes that “school fix-it” efforts are consistently ineffective and, where on occasion they help a single school they cannot be scaled to a district-wide strategy. The improbability of school reform may explain the passivity of many educators. “Three years ago, there were 3,500 schools in the most drastic ‘restructuring’ phase of failing to make *Adequate Yearly Progress* (Scott, 2008) but a General Accounting Office study showed that 40% of those schools had done nothing in response (Tomsho, 2008).

¹⁴ And the district.

The accomplishments of Middletown's administrators, teachers, students, and communities are a significant and encouraging departure from the otherwise unlikely prospect of turning around public schools. Middletown is a documented example of a turnaround school district.

8.0 About Interactive, Inc.

Interactive, Inc. is a leading program evaluation firm focused on empirical answers to the perennial question: "What Works?" Our twenty-five years of peer-reviewed research and professional publication has made us a trusted source of commentary on what works in education. We have completed 200+ program evaluations in ways that minimize disruption to schools and maximize practical and empirical outcomes. The firm was founded in 1985 by Dale Mann, professor emeritus at Columbia University's Teachers College and its School for International and Public Affairs where Dr. Mann chaired the Department of Educational Administration.

Interactive, Inc. is listed on the Institute of Education Science *Registry of Evaluation Researchers*. Our 200+ past and present R&E sites and clients include:

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 K12, Inc.
 LeapFrog
 Lightspan
 NIET
 Pearson
 Plato Learning, Inc.
 Scholastic
 Sun Microsystems

Dale Mann, the firm's managing director, has been involved with school improvement since the 1960's when his Washington service included responsibility as Special Analyst for Education in the Executive Office of President Lyndon Johnson and work implementing the Elementary and Secondary Education Act. Dr. Mann is the author of books and articles on school reform including *Policy Decision Making in Education* and, *Making Change Happen?*

He is the founding chair of the International Congress for School Effectiveness, an organization with members from 66 countries focused on improving schools for the most-needy children. With the Soros Foundations and the World Bank, he created networks of administrators to reform the national school systems of Russia, Ukraine, Kazakhstan, Kyrgyzstan, Latvia, Lithuania and Estonia and has worked in 20+ countries.

Since 1985, he has concentrated in developing and evaluating the gains from e-learning, a field in which Mr. Mann has been identified as one of America's ten most influential leaders.

Kristy Tinsley, M.S., the firm's Director of Research and Evaluation, has a wide range of experience with the leadership of large-scale evaluation projects, research methodology, instrument design, data collection, analysis and statistics. Ms. Tinsley's data collection experience is comprehensive and includes quantitative and qualitative data. She has designed several unique survey instruments, and has conducted more than 200 interviews during 100 site visits to schools and school districts.

Ms. Tinsley graduated with a Bachelor of Arts in Psychology from Christopher Newport University and a Master of Science in Experimental Psychology from the University of Memphis. She is currently an advanced doctoral student in Educational Psychology at Virginia Commonwealth University.

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Appendix 1: Methods

This was a mixed-methods documentation and analysis of the multiple activities and processes used by ECSDM in transforming its classroom, school and student performance. In addition to quantitative student performance data, we examined other records of student performance including co-curricular participation, discipline, retention, graduation and post-secondary outcomes. Student performance and other quantitative indicators were also collected for several comparable districts and the New York State. We collected post-only, retrospective self-report web-survey data from each major role. Response rates by role are shown in the table below.

Web-survey response rates, by respondent role	
Respondent role	Number of respondents
Teacher	222
Teaching Assistant	18
Other	16
District Administrator	6
Guidance Counselor	3
Psychologist	3
School administrator	3
Social worker	2
Total	273

The analysis also utilized qualitative data, including interview transcripts, artifacts and documents. Forty-two teachers and twenty-five district staff members were interviewed using a semi-structured interview protocol. Additionally, three current and former school board members were interviewed. The artifacts include: program descriptions; grant proposals, reports and evaluations; district schedules and logs of activities; school-level information such as professional development plans and descriptions, supervisory routines, and other paper and electronic information. All qualitative data were systematically and content analyzed to identify themes and confirm or disconfirm the quantitative analysis.

In addition to our own recognized corpus of empirical work, we regularly apply procedural and methodological guidelines characteristic of accepted practices in mixed methods evaluation¹⁵.

The achievement data reported in this document describe populations, not samples; therefore inferential statistics are neither appropriate nor supportable. Analytic procedures applied in this report are consistent with federal, state, and generally accepted empirical practices.

¹⁵ (1) American Evaluation Association (2004). *American Evaluation Association Guidelines for Evaluators*, American Evaluation Association: Fairhaven, MA, www.eval.org. (2) Creswell, J. W. & Clark, V. L. P. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage Publications; (3) Frechtling, J. and L. Sharp (Eds.). (1997). *User-friendly Handbook for Mixed Method Evaluations*: Arlington, Virginia; (4) Tashakkori, A. & Teddlie, C. (Eds.) (2003). *Handbook of mixed methods in social and behavioral research*. Thousand Oaks, CA: Sage Publications, Inc.

