

U.S. Department of Education
2014 National Blue Ribbon Schools Program

[X] Public or [] Non-public

For Public Schools only: (Check all that apply) [] Title I [] Charter [X] Magnet [X] Choice

Name of Principal Mr. Michael W. Fanelli

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name Middlesex County Academy for Allied Health and Biomedical Sciences

(As it should appear in the official records)

School Mailing Address 1 Convery Boulevard

(If address is P.O. Box, also include street address.)

City Woodbridge State NJ Zip Code+4 (9 digits total) 07095-2650

County Middlesex State School Code Number* 23-3150-070

Telephone 732-634-5858 Fax 732-634-7078

Web site/URL http://www.mcvts.net E-mail fanellim@mcvts.net

Twitter Handle _____ Facebook Page _____ Google+ _____

YouTube/URL _____ Blog _____ Other Social Media Link _____

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I-Eligibility Certification), and certify that it is accurate.

Date _____
(Principal's Signature)

Name of Superintendent*Mr. Brian Loughlin E-mail: loughlinb@mcvts.net
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name Middlesex County Vocational and Technical Tel. 732-257-3300

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I-Eligibility Certification), and certify that it is accurate.

Date _____
(Superintendent's Signature)

Name of School Board
President/Chairperson Mr. John Bicsko, Jr.
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I-Eligibility Certification), and certify that it is accurate.

Date _____
(School Board President's/Chairperson's Signature)

**Non-public Schools: If the information requested is not applicable, write N/A in the space.*

PART I – ELIGIBILITY CERTIFICATION

Include this page in the school’s application as page 2.

The signatures on the first page of this application (cover page) certify that each of the statements below concerning the school’s eligibility and compliance with U.S. Department of Education, Office for Civil Rights (OCR) requirements is true and correct.

1. The school configuration includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school has made its Annual Measurable Objectives (AMOs) or Adequate Yearly Progress (AYP) each year for the past two years and has not been identified by the state as “persistently dangerous” within the last two years.
3. To meet final eligibility, a public school must meet the state’s AMOs or AYP requirements in the 2013-2014 school year and be certified by the state representative. Any status appeals must be resolved at least two weeks before the awards ceremony for the school to receive the award.
4. If the school includes grades 7 or higher, the school must have foreign language as a part of its curriculum.
5. The school has been in existence for five full years, that is, from at least September 2008 and each tested grade must have been part of the school for the past three years.
6. The nominated school has not received the National Blue Ribbon Schools award in the past five years: 2009, 2010, 2011, 2012, or 2013.
7. The nominated school has no history of testing irregularities, nor have charges of irregularities been brought against the school at the time of nomination. The U.S. Department of Education reserves the right to disqualify a school’s application and/or rescind a school’s award if irregularities are later discovered and proven by the state.
8. The nominated school or district is not refusing Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district-wide compliance review.
9. The OCR has not issued a violation letter of findings to the school district concluding that the nominated school or the district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan from the district to remedy the violation.
10. The U.S. Department of Justice does not have a pending suit alleging that the nominated school or the school district as a whole has violated one or more of the civil rights statutes or the Constitution’s equal protection clause.
11. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school or school district in question; or if there are such findings, the state or district has corrected, or agreed to correct, the findings.

PART II - DEMOGRAPHIC DATA

All data are the most recent year available.

DISTRICT (Question 1 is not applicable to non-public schools)

1. Number of schools in the district (per district designation):
- 0 Elementary schools (includes K-8)
 - 0 Middle/Junior high schools
 - 7 High schools
 - 0 K-12 schools
- 7 TOTAL

SCHOOL (To be completed by all schools)

2. Category that best describes the area where the school is located:
- Urban or large central city
 - Suburban with characteristics typical of an urban area
 - Suburban
 - Small city or town in a rural area
 - Rural
3. 1 Number of years the principal has been in her/his position at this school.
4. Number of students as of October 1 enrolled at each grade level or its equivalent in applying school:

Grade	# of Males	# of Females	Grade Total
PreK	0	0	0
K	0	0	0
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
8	0	0	0
9	26	46	72
10	17	50	67
11	18	30	48
12	16	24	40
Total Students	77	150	227

5. Racial/ethnic composition of the school:
- 0 % American Indian or Alaska Native
 - 49 % Asian
 - 5 % Black or African American
 - 17 % Hispanic or Latino
 - 0 % Native Hawaiian or Other Pacific Islander
 - 29 % White
 - 0 % Two or more races
 - 100 % Total**

(Only these seven standard categories should be used to report the racial/ethnic composition of your school. The Final Guidance on Maintaining, Collecting, and Reporting Racial and Ethnic Data to the U.S. Department of Education published in the October 19, 2007 *Federal Register* provides definitions for each of the seven categories.)

6. Student turnover, or mobility rate, during the 2012 - 2013 year: 1%

This rate should be calculated using the grid below. The answer to (6) is the mobility rate.

Steps For Determining Mobility Rate	Answer
(1) Number of students who transferred <i>to</i> the school after October 1, 2012 until the end of the school year	0
(2) Number of students who transferred <i>from</i> the school after October 1, 2012 until the end of the 2012-2013 school year	2
(3) Total of all transferred students [sum of rows (1) and (2)]	2
(4) Total number of students in the school as of October 1	210
(5) Total transferred students in row (3) divided by total students in row (4)	0.010
(6) Amount in row (5) multiplied by 100	1

7. English Language Learners (ELL) in the school: 0%
0 Total number ELL
 Number of non-English languages represented: 0
 Specify non-English languages:
8. Students eligible for free/reduced-priced meals: 7%
 Total number students who qualify: 17

If this method is not an accurate estimate of the percentage of students from low-income families, or the school does not participate in the free and reduced-priced school meals program, supply an accurate estimate and explain how the school calculated this estimate.

9. Students receiving special education services: 0 %
0 Total number of students served

Indicate below the number of students with disabilities according to conditions designated in the Individuals with Disabilities Education Act. Do not add additional categories.

- | | |
|--------------------------------|--|
| <u>0</u> Autism | <u>0</u> Orthopedic Impairment |
| <u>0</u> Deafness | <u>0</u> Other Health Impaired |
| <u>0</u> Deaf-Blindness | <u>0</u> Specific Learning Disability |
| <u>0</u> Emotional Disturbance | <u>0</u> Speech or Language Impairment |
| <u>0</u> Hearing Impairment | <u>0</u> Traumatic Brain Injury |
| <u>0</u> Mental Retardation | <u>0</u> Visual Impairment Including Blindness |
| <u>0</u> Multiple Disabilities | <u>0</u> Developmentally Delayed |

10. Use Full-Time Equivalents (FTEs), rounded to nearest whole numeral, to indicate the number of personnel in each of the categories below:

	Number of Staff
Administrators	2
Classroom teachers	13
Resource teachers/specialists e.g., reading, math, science, special education, enrichment, technology, art, music, physical education, etc.	3
Paraprofessionals	0
Student support personnel e.g., guidance counselors, behavior interventionists, mental/physical health service providers, psychologists, family engagement liaisons, career/college attainment coaches, etc.	2

11. Average student-classroom teacher ratio, that is, the number of students in the school divided by the FTE of classroom teachers, e.g., 22:1 14:1

12. Show daily student attendance rates. Only high schools need to supply yearly graduation rates.

Required Information	2012-2013	2011-2012	2010-2011	2009-2010	2008-2009
Daily student attendance	97%	97%	97%	96%	96%
High school graduation rate	100%	100%	100%	100%	100%

13. **For schools ending in grade 12 (high schools)**

Show percentages to indicate the post-secondary status of students who graduated in Spring 2013

Post-Secondary Status	
Graduating class size	44
Enrolled in a 4-year college or university	100%
Enrolled in a community college	0%
Enrolled in career/technical training program	0%
Found employment	0%
Joined the military or other public service	0%
Other	0%

14. Indicate whether your school has previously received a National Blue Ribbon Schools award.

Yes_ No X

If yes, select the year in which your school received the award.

PART III – SUMMARY

The Middlesex County Academy for Allied Health and Biomedical Sciences is a career academy public school offering the high school students of Middlesex County the opportunity to engage in a highly focused and engaging curriculum centering on health care and research in a small learning environment. The school's mission is to explore allied health and biomedical sciences intensively through classroom instruction, field experiences and college courses. Our goal is to teach our students an academically challenging and enriched curriculum that develops strong writing, critical thinking, investigative and research skills needed for success in college and professional careers. This is accomplished through project based learning and an interdisciplinary approach in order to enhance learning through connecting big ideas and experience.

The Academy allows students to develop relationships. Our size and our focus encourages students to collaborate with each other and with staff while learning our intense curriculum. This collaboration allows students to see what is necessary for them to pursue this career focus in college. In healthcare, the importance of collaboration is paramount. Working together are skills that practitioners perform daily and at the Academy we instill this through our project based and cooperative learning models. Students working together to perform a task is a norm. The need for communication, respect, collaboration and knowledge are imparted for the benefit of our students from day one.

They must know their content. For this collaboration to work, everyone must come prepared to do their best. Students must know their part and be prepared with all that they have learned so they may contribute just as healthcare professionals helping a patient all contribute. These skills are acquired and task accomplished under the watchful eyes of our staff. A veteran group of teachers, including a research PhD, a trauma surgeon, and an RN, allow our students to receive first hand knowledge of what they will encounter after college. All of the staff work to make our students aware of their potential while also making them aware of the larger issues they will encounter in the field.

The Academy has worked to develop traditions of success and support. Students begin their high school career with a three day academic introduction into high school. Here they have an opportunity to work with teachers and their senior mentors to understand the expectations and requirements that will be a daily part of their lives when school begins. At the opposite end, seniors conclude their careers with their Biomedical Innovations course. This course requires students to work in teams to accomplish a research proposal with an outside mentor after presenting their proposals to a committee of staff and outside professionals. These two events are excellent examples of how the Academy is focused on academics from before the beginning of a students' career as a freshman to the culmination of their high school career as seniors. We have developed traditions to keep our students focused and prepared to pursue their interests.

The Middlesex County Academy for Allied Health and Biomedical Sciences is worthy of the distinction of a national blue ribbon because of what occurs in our building on a daily basis. The level of academic pursuit presented by our staff and the engagement of our students is what allows the Academy to be worthy of this honor. Our students work at the highest caliber. This year, fifteen percent of the senior class was recognized as commended students in the National Merit Scholarship Competition. The freshman class of 2016 achieved an average PSAT score twenty points higher than the graduating class of 2013 did when they were freshman. The Academy has been recognized in 2013 by U.S. News and World Report as a Bronze Award winner and by JerseyCan.org, a New Jersey education advocacy group, as one of the top 10 high schools in the state based on student performance.

PART IV – INDICATORS OF ACADEMIC SUCCESS

1. Assessment Results:

The performance trends found in the Middlesex County Academy for Allied Health and Biomedical Sciences is upward. Over the past five years the number of students achieving advanced proficient status has increased to remarkable levels as evidenced by our state scores. It is the responsibility of the professional staff of the Academy to keep providing our students challenges academically, through differentiated instruction and the attainment of skills required for college readiness, as we continue to see what heights we are able to reach.

The state of New Jersey defines a student's academic progress in three ways: partially proficient; proficient; and advanced proficient. The state expects schools to assist students to reach levels of proficiency and to strive to take students to the next level. Additionally the state expects schools to do all that is in their power to assist students who are partially proficient. Schools are expected to provide services and interventions so that students may become proficient in their grade and subject matter.

During the past five years the standardized test data for the Academy has increased steadily and dramatically. Over the past three years, the Academy has had over ninety-seven percent of our student achieve proficiency or advanced proficiency on the state assessment. As the Academy philosophy took hold in our school, the levels of expectations rose. This was a mindful decision by administrators and staff. No one was to be satisfied with less than their best. New staff members were brought in whose ability and expectations mirrored this philosophy. Additionally the curriculum expectation increased causing our students to work to the highest levels of their ability and potential. The school's focus centered on maximizing the potential of each and every student. The results have shown the success of this philosophy. In the past two years, every student has achieved proficiency or advanced proficiency.

The need to collect data on student performance is on going. While the state's standardized test provide us one standard, the need to have our students take additional assessments is clear. We have sought ways to measure our students and to see areas for growth and enhancement through the use of classroom data as well nationally-normed tests, such as the Preliminary Scholastic Aptitude Test. The PSAT, the students' final examinations for their collegiate courses and the advanced placement test scores provide us with data to keep our standards high and allow us to challenge our students.

2. Using Assessment Results:

The Middlesex County Academy for Allied Health and Biomedical Sciences uses a variety of data to measure student success and gauge performance. From standardized test scores to collegiate grades to information collected by the classroom teachers, the Academy attempts to collect as much data as possible to help students achieve their personal best.

Each year all members of the student body, excluding seniors, are given the nationally standardized Preliminary Scholastic Aptitude Test. The PSAT allows the school to look at our classes collectively. It provides us a precursor as students prepare to take college entrance exams and other national recognized assessments. Teachers gather in professional learning communities and review the data to see both the individual and the group trends. This allows the Academy to target instruction and make curricular changes should they be necessary.

Additionally the allied health teachers receive data from our affiliation with Rutgers University. Academy teachers review their individual students final exam scores as well as the Academy's program as a whole. For the past four years, the Academy has been recognized by Rutgers as one of the highest performing New Jersey high schools for preparing students for the rigors of allied health and its related fields through our students grades. Academy students have consistently scored in the top of the state while our staff has used this data to reflect on their practice and address curricular areas going forward. This past semester had ninety-eight percent of our students pass the Rutgers University Allied Health final exam.

All staff have been using data to drive their instruction. Through pre-assessing students and using this data to determine the pacing of their instruction, staff have identified areas of need based on their students' scores. This dynamic is a positive way in which the staff engage with the data. By collecting and analyzing data on their own and then reviewing to establish a clearly defined goal, staff have become more intertwined with both the data, the teaching methodology, the assessment and the analysis. This process has been a positive experience and continues to improve each year. This year a staff member saw an area of attention regarding students understanding of human anatomical positioning. A goal was developed and instruction strategies of additional lessons and focused homework were given resulting in students not only meeting the goal but easily exceeding it.

Curricular changes have been made based on student assessment. After reviewing student writing, the staff refocused the curriculum in all areas to provide more writing instruction for students. Science labs required more writing during the lab and prior to the final report. English classes began to use a workshop model for writing so that students would receive feedback regarding their writing and so students would be able to increase their rigor in preparation for college. Students received guided practice in technical writing while teachers provided editing and critique on student writing. These interventions have resulted in greater fluency within the students' writing.

3. Sharing Lessons Learned:

The Middlesex County Academy for Allied Health and Biomedical Sciences has engaged with other educational institutions sharing our successes and engaging in dialogue for the betterment of students both at the Academy and elsewhere. Within district, our staff has collaborated with fellow district staff in developing honors curriculum. The Academy has networked with our neighboring county's school of allied health to exchange best practice techniques both in the classroom and for the building as a whole. A career academy is unique in terms of developing linkages with professionals, businesses and the state. The sharing of ideas in these areas is helpful in furthering developing a network of support for the Academy. Additionally, staff members have visited other school facilities engaging with stake holders to share ideas on methodologies and practices.

The Academy's staff members and students have been selected to share their success stories with both state and national audiences. An allied health teacher, who is also a registered nurse, has been asked to speak at the New Jersey State Nurses Convention. Additionally another staff member is a nationally certified biomedical sciences master teacher who each summer she trains teachers from around the country as they start teaching their own biomedical science curriculum. For the past three years, the Academy has presented our biomedical sciences curriculum at Rowan University to administrators and teachers from around the state of New Jersey. We have been asked to provide an overview of our curriculum and specifically focus on how it engages our students and provides them STEM experiences. This opportunity is a wonderful chance for our students to display their talents as they describe their projects and answer questions regarding their experiences.

Finally the Academy has hosted numerous organizations and businesses ranging from Rutgers University, the New Jersey Institute of Technology, the New Jersey Department of Labor, BIO-NJ, and the HealthCare Institute of New Jersey. We have provided these industries and institutions with examples of how a career academy provides education with a rigorous academic focus that successfully provides college ready students with career ready skills for the employers in our region.

4. Engaging Families and Community:

The Middlesex County Academy for Allied Health and Biomedical Sciences engages its families and community members regularly for support. An advisory committee consisting of industry and community members in allied health and biomedical sciences meet to advise the school and to offer their insights on how the school can continue to evolve. Additionally, they are the community in which we find mentors, cooperative education internships and job shadowing experiences for our students. Much of this is done in collaboration with our cooperative education program adviser whose daily job is to assist our students in finding the right experience that will enable them to have a career based experience before leaving for

college.

Our students interact with the community through a number of outreach opportunities. The biomedical capstone project requires a mentorship arrangement for students while their allied health classes require practicum experience. These two academic courses have our students interacting with health care professionals throughout our community. Whether it be volunteering at our local hospital, as many of our students do, or shadowing a doctor for the day, our students are involved in their future careers.

Additionally our students outreach through their extra-curricular activities such as HOSA, the Health Occupations Society of America, and Interact. HOSA students work with the local chapter of the American Heart Association raising funds and awareness to battle heart disease as well as visiting local nursing homes to provide smiles for the residents. The Interact Club allows our students to interact with local business leaders on civic based projects. Students have participated in the March of Dimes walk at Middlesex County College and attended meetings of the Rotary Club sharing their activities while also collecting toys and canned goods during the holiday season for donations to the St. James Food Pantry located in Woodbridge, New Jersey.

The Academy regularly interacts with parents. Through our parent teacher organization we solicit individuals to become involved in our mentoring program and to think of others they may know who could assist in this area. Parents have come in and shared their professional experiences, from banking to medicine, with our students and offered mentorships to others. Our website offers families an insight into the happenings of our school and allows parents to stay involved with their children's academics through our grading portal.

PART V – CURRICULUM AND INSTRUCTION

1. Curriculum:

The core curriculum of the Middlesex County Academy for Allied Health and Biomedical Sciences is focused on preparing students to be successful in transitioning to college while also being prepared to continue in a health care or health research major. From the beginning of the student's freshman year, they are exposed to both biomedical sciences and allied health classes regularly.

The Academy is fortunate to have articulated relationships with Rutgers University, the New Jersey Institute of Technology and Project Lead the Way. These articulations allow us to offer college courses in Allied Health and Biomedical Sciences that are accepted for college credit. Our alignment with Rutgers University allows all students to take four courses for credit: Dynamics of Health Care; Medical Terminology; and Anatomy and Physiology I & II. These college level courses prepare our students for their future course work as undergraduate students. In order to offer these courses and articulations, our instructors are recognized and certified as adjunct professors by Rutgers University. Upon completion of the course, the students travel to Rutgers to take their final examination so they may receive a transcript and a grade. These courses provide our students with a great experience from the beginning of their freshman year through to their senior year. Additionally, the New Jersey Institute of Technology offers college credits to our students based on their review of our curriculum and the student's completion of the courses. The relationship with Project Lead the Way allows our students to receive up to twelve college credits from the Missouri Institute of Technology and Stevenson University upon the completion of our biomedical sciences curriculum.

The Biomedical Sciences Program is a sequence of courses, all aligned with appropriate national learning standards, which follows an experiential project based approach to learning. Students explore the concepts of human medicine and are introduced to topics such as physiology, genetics, microbiology and public health. Through activities, like dissecting a heart and an eye, students examine the processes, structures and interactions of the human body – often playing the role of biomedical professionals. Additionally, students explore the prevention, diagnosis and treatment of disease, working collaboratively to investigate and design innovative solutions to the health challenges of the 21st century such as fighting cancer with nanotechnology. Throughout all of their biomedical science courses, students acquire strong teamwork and communication skills, and develop organizational, critical-thinking, and problem-solving skills while investigating a variety of roles in the biomedical sciences.

In addition to our biomedical science and allied health courses, our students take the New Jersey state requirements for English, Mathematics, History, Foreign Language and Physical Education. All of these courses, with the exception of Physical Education, are taught at the honors level with advanced placement courses being offered in English, American History, Spanish and Calculus. The non-science classes look for ways to integrate the Academy's focus so as to tap into student interest while also showing students the connections that exist. In English class, students have read non-fiction texts on topics of medicine and public health. In history classes, students spend extra time covering the history of medicine and effects that medical advancement has had on society. Students in senior year health take the Red Cross first aid class to become certified. Spanish classes utilize medical terminology in addition to regular vocabulary to widen the students knowledge in their areas of interest. This focus helps our students to take the knowledge in their core science classes and see the connections throughout the curriculum and thus let students see how their patients or research have connections that break out beyond the here and now.

The entire focus of the Academy is to ensure our students are well prepared for moving on to college and the work force. Our graduates have returned saying they are well prepared for the challenges of college and have successfully transitioned into the undergraduate experience. Additionally, Rutgers University has complimented the Academy on its high success rate for our students as determined by their exams and the final grades our students have earned.

2. Reading/English:

The Middlesex County Academy for Allied Health and Biomedical Sciences' language arts curriculum teaches the big ideas, the skills of critical thinking, writing and active reading, through literature. This focus is to develop both the skills of our students as well as to hone their point of view.

The language arts curriculum is strongly project-based with an emphasis on authentic assessments and daily writing. The writing can be creative or technical, and can vary from responses to prompts that encourage a personal perspective to those that require a highly critical approach. This is done in order to enhance the skills of all the students while enabling the Academy to give individual attention to students when needed. A premium is placed on texts that are both engaging and challenging. The texts vary from those that are taken from classic and contemporary literature to nonfiction texts. They may focus on the fields that are the primary focus of the academy, allied health and biomedical sciences, but may also emphasize matters that are more broadly of an ethical or aesthetic nature. Source materials include the anthology and outside texts that are literary in nature and augmented by relevant outside sources such as The New York Times.

There is also a balance between group learning activities and individual work. This fosters cooperative work skills even as it also encourages personal growth and independent thinking. The assessments require students to use their critical thinking when producing the product. By offering students a variety of literature to engage in, all students have the ability to succeed and improve regardless of their initial reading level. Because of the size and nature of the academy, instructors work with students to ensure their self-selected pieces are appropriate while continuing to challenge them and improve their literacy skills.

3. Mathematics:

The Middlesex County Academy of Allied Health and Biomedical Sciences mathematics program is based on a curriculum that is aligned with standards. It provides for the differentiated needs of students and is taught by teachers who are well-grounded in and comfortable with both content and methodology. Finally, our mathematics curriculum leads to excellence in math achievement for all students.

The mathematics curriculum at the Academy is designed to have students understand that math is not a subject studied alone but one that interacts with the other disciplines. Students are encouraged to understand mathematics conceptually. Throughout their experience in the Academy students take the skills and knowledge from their various mathematics courses and put them to practical use in their other classes. Chemistry students are regularly using their Algebra II knowledge to help solve a problem and understand a chemical equation. Statistics students use their understanding and relationship of numbers to develop better knowledge for use in their research and capstone classes. This conceptual understanding helps students to see the connections between their mathematics learning and their other academic disciplines.

When introducing new topics, the teachers of mathematics use various formal and informal pre-assessments to determine student readiness. This allows the teacher to plan lessons that engage all learners at the appropriate level upon entry into the topic. The learners with a strong foundation can quickly comprehend the learning at hand and advance or help others. Meanwhile the learner who does not have as strong an understanding can be given opportunities to ensure an understanding of the topic. This approach engages all of our learners.

Throughout the year students are encouraged to participate in mathematics league competitions. Though they are competing against others in the Academy, the region and the state, in reality, they are competing against themselves. They are trying to do their personal best using advanced mathematical concepts to solve real world problems.

4. Additional Curriculum Area:

The Middlesex County Academy for Allied Health and Biomedical Sciences is a career academy whose mission is to explore allied health and the biomedical sciences through a small personalized learning community. This exploration is to be done intensively while teaching and learning an academically

challenging and enriching program. All of this is accomplished through the utilization of project-based learning and an interdisciplinary approach which develops our students' college readiness skills. Thus our students emerge after four years with critical thinking, writing and collaborative skills that exceed what can be accomplished in a typical high school experience.

To fulfill this task our students take a lab science class for their first three years as well as a semester of Biomedical Science and a semester of Allied Health each year. In their senior year, students take Anatomy & Physiology I for a semester followed by semester of Anatomy & Physiology II. This is in addition to a year-long class in Biomedical Innovations. Students are immersed in the sciences from the beginning of their high school careers and that immersion continues through their graduation. The goal is to properly expose students through labs and real world experiences to these disciplines while preparing them for the challenges of the post-secondary world.

Students are engaged in all of their science classes in a multitude of ways. From direct instruction to collaborative labs, students are given multiple opportunities to experience the learning and demonstrate their proficiency. Additionally the block schedule employed by the Academy allows teachers to have double period classes twice a week and for labs to meet for three periods once a week. This additional time provides teachers with the opportunity to not only conduct a hands-on lab for their students but to also have a follow-up with students to ensure a true level of proficiency and beyond has been achieved.

By focusing on allied health and biomedical sciences, the Academy has selected a field that has been identified by the state of New Jersey as a high demand area for skilled workers. Our goal is to prepare our students for college and expose them to the career opportunities available to them within their own state and region.

5. Instructional Methods:

The Middlesex County Academy for Allied Health and Biomedical Sciences works to meet the needs of our learners on a regular basis. Our curricular focus is project based learning. Each class requires students to work together to achieve a goal. This allows students to be teamed so that their strengths complement each other. Additionally this helps students to push their personal boundaries to grow and expand.

This model, which is used in all classes, across all grade levels, helps our students to be successful. Whether it is discussing the dissection that occurred in biology or planning the last moves of the interpretative dance to display a work of Shakespeare, students have numerous opportunities to interact with material through classroom instruction, homework, quizzes and presentations. These methodologies allow students to show their knowledge or to have another opportunity to show their mastery of a topic. Presentations range from power points to three dimensional models to research papers. These projects allow our students to demonstrate to their instructor that they have mastered the learning at hand.

Teachers vary their instruction combining direct instruction, hands-on learning and group projects so that students are presented the same varieties they will face in post-secondary education and beyond. Instructors determine the best methodology to use with their class of students based on a number of factors: the subject material; the individual learners; the group dynamic; the acquired data. A number of the staff utilize personality type inventories to help to know their students better. This indicator allows the staff to know if a group may be too social and easily distracted or may not have individuals who will speak up on their behalf. This knowledge helps staff as a further data point to decide which instructional strategy or differentiated instruction methodology to use.

6. Professional Development:

The Middlesex County Academy for Allied Health and Biomedical Sciences in coordination with our district, the Middlesex County Vocational and Technical Schools, uses a three pronged approach to professional development for our teachers. The first prong consists of four professional development days for all teachers, focusing on instruction in the classroom and the importance of improving current practice. During the school year the protocol for the teacher evaluation and walk through system is being wedded to

the improvement of current teaching practice. The second prong consists of monthly professional learning community meetings. These teacher-led groups hold each other accountable for discussing formative assessment techniques used in the classroom. The third and final prong is that all teachers new to district become part of a cohort during their orientation program in August. They meet monthly throughout the year to learn about effective instruction and are coached to address any problems that arise in their classrooms.

During the first two district professional development days, all district teaching staff members were trained to incorporate teaching strategies found in the Classroom Instruction that Works research. These broad teaching strategies have been proven to improve student learning and meshes well with our current teacher evaluation system. The district also provides professional development training via a web-based opportunity. This web approach allows teachers to seek out professional development opportunities in a wide variety of topics to better serve our students in the classroom. District administrators can utilize the walk-through evaluation system in conjunction with these additional professional development opportunities to provide instant feedback to the instructor and to recommend further training.

We consider our teachers to be our most valuable asset. Therefore it is vital that our teacher evaluation system and the resulting professional development experiences exemplify our commitment to continuous and collaborative learning among professionals charged with improving student performance and learning opportunities. Professional development activities that arise out of our need to improve teacher practice will support our commitment to enriching the profession of teaching and improving student performance.

7. School Leadership

The leadership model that is in place at the Middlesex County Academy for Allied Health and Biomedical Sciences is collaborative. The model is designed to assist teachers to reach their highest levels of achievement and thus have students reach their highest ability levels in turn.

The principal is the role model for the school. As the instructional leader, it is the principal who provides feedback to staff to ensure that as a school we are meeting our students' potentials. Weekly review of lesson plans in addition to analysis of our walk-through data allows the administrator to collect data to share with staff. Identifying areas of strengths as well as areas to be addressed at faculty meetings and professional development days allows the entire school to know what we are doing and must do for the collective betterment of our students.

This year the focus has been on ensuring that objectives are clearly known to the students during their lessons through posting and restating. Research shows that there is a twenty-three percent increase in student achievement when the classroom teacher ensures that the objective is known and referred to throughout the lesson.

Additionally, the principal meets regularly with the School Improvement Panel (ScIP). The ScIP, which consists of a teacher, the principal and vice principal, is tasked with working proactively to plan building professional development, review collective data and develop improvement plans for staff members who may be in need of further assistance.

Finally, through the conducting of regular walk throughs, production of a weekly bulletin and an open door policy, communication flows freely and easily allowing for staff and administration to work together to overcome hurdles, whatever they may be, and keep the academy focused on student achievement. The small learning community that is an advantage for students is also an advantage for staff in that information can be communicated quickly and directly to ensure understanding.

PART VII - ASSESSMENT RESULTS

STATE CRITERION--REFERENCED TESTS

Subject: Math

Test: NJ HSPA

All Students Tested/Grade: 11

Edition/Publication Year: 2013

Publisher: Pearson

School Year	2012-2013	2011-2012	2010-2011	2009-2010	2008-2009
Testing month	Mar	Mar	Mar	Mar	Mar
SCHOOL SCORES*					
% Proficient plus % Advanced	100	100	97	59	40
% Advanced	95	78	80	2	4
Number of students tested	40	45	35	42	28
Percent of total students tested	100	100	100	100	100
Number of students tested with alternative assessment	0	0	0	0	0
% of students tested with alternative assessment	0	0	0	0	0
SUBGROUP SCORES					
1. Free and Reduced-Price Meals/Socio-Economic/Disadvantaged Students					
% Proficient plus % Advanced	0	0	83	50	43
% Advanced	0	0	50	0	4
Number of students tested	0	0	6	24	23
2. Students receiving Special Education					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					
3. English Language Learner Students					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					
4. Hispanic or Latino Students					
% Proficient plus % Advanced	0	0	82	0	67
% Advanced	0	0	0	0	0
Number of students tested	0	0	22	0	12
5. African- American Students					
% Proficient plus % Advanced	0	0	0	86	0
% Advanced	0	0	0	0	0
Number of students tested	0	0	0	7	4
6. Asian Students					
% Proficient plus % Advanced	100	100	96	67	66
% Advanced	96	85	92	11	33
Number of students tested	25	26	24	9	3
7. American Indian or Alaska Native Students					

% Proficient plus % Advanced					
% Advanced					
Number of students tested					
8. Native Hawaiian or other Pacific Islander Students					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					
9. White Students					
% Proficient plus % Advanced	100	100	100	0	89
% Advanced	100	73	100	0	0
Number of students tested	12	15	6	0	9
10. Two or More Races identified Students					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					
11. Other 1: Other 1					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					
12. Other 2: Other 2					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					
13. Other 3: Other 3					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					

NOTES:

STATE CRITERION--REFERENCED TESTS

Subject: Reading/ELA
All Students Tested/Grade: 11
Publisher: Pearson

Test: NJ HSPA
Edition/Publication Year: 2013

School Year	2012-2013	2011-2012	2010-2011	2009-2010	2008-2009
Testing month	Mar	Mar	Mar	Mar	Mar
SCHOOL SCORES*					
% Proficient plus % Advanced	100	100	100	86	75
% Advanced	98	80	69	5	0
Number of students tested	40	45	35	42	28
Percent of total students tested	100	100	100	100	100
Number of students tested with alternative assessment	0	0	0	0	0
% of students tested with alternative assessment	0	0	0	0	0
SUBGROUP SCORES					
1. Free and Reduced-Price Meals/Socio-Economic/Disadvantaged Students					
% Proficient plus % Advanced			100	83	74
% Advanced			17	4	0
Number of students tested			6	24	23
2. Students receiving Special Education					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					
3. English Language Learner Students					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					
4. Hispanic or Latino Students					
% Proficient plus % Advanced				82	67
% Advanced				0	0
Number of students tested				22	12
5. African- American Students					
% Proficient plus % Advanced				86	75
% Advanced				0	0
Number of students tested				7	4
6. Asian Students					
% Proficient plus % Advanced	100	100	100	89	67
% Advanced	100	88	71	22	0
Number of students tested	25	26	24	9	3
7. American Indian or Alaska Native Students					
% Proficient plus % Advanced					
% Advanced					

Number of students tested					
8. Native Hawaiian or other Pacific Islander Students					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					
9. White Students					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					
10. Two or More Races identified Students					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					
11. Other 1: Other 1					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					
12. Other 2: Other 2					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					
13. Other 3: Other 3					
% Proficient plus % Advanced					
% Advanced					
Number of students tested					

NOTES: