

Paterson Public Schools

PATERSON PUBLIC SCHOOL DISTRICT
PATERSON, NEW JERSEY.

SCHOOL PROFILE

26,000 STUDENTS
GRADES PREK-12
86% Title I
10% Caucasian
39% African American
50% Hispanic
1% Asian

PLATO ACHIEVE NOW™ IMPLEMENTATION

- AfterSchool Model
- Grades 2-7
- Five Month Implementation
- Mathematics Focus

RESEARCH INSTRUMENTS

New Jersey Assessment of Skills and Knowledge (NJ ASK)
PLATO eduTest™ New Jersey Fixed Benchmark Tests (FBT)

RESEARCH TIME FRAME

2003-2004 School Year

STUDENTS IN PATERSON PUBLIC SCHOOLS MADE SIGNIFICANT GAINS IN MATHEMATICS AS MEASURED BY PLATO EDUTEST FIXED BENCHMARK TESTS

DURING THE 2003-2004 SCHOOL YEAR PATERSON PUBLIC SCHOOLS RECEIVED PLATO eduTEST™ ASSESSMENT AND PLATO ACHIEVE NOW™ AS PART OF A 21ST CENTURY LEARNING PROGRAM GRANT TO DEVELOP AN AFTERSCHOOL PROGRAM THAT WOULD ASSIST IN ADDRESSING THE SUPPLEMENTAL EDUCATIONAL SERVICES (SES) NEEDS OF THE DISTRICT. eduTEST™ ASSESSMENT RESULTS WERE USED TO GUIDE INSTRUCTION, TO IDENTIFY AREAS OF HIGH NEED AND TO MONITOR STUDENT ACHIEVEMENT. PLATO ACHIEVE NOW™ PROVIDED ADDITIONAL INSTRUCTIONAL PIECES TO SUPPORT THE DISTRICTS CURRICULUM. THE INITIAL IMPLEMENTATION FOCUSED ON CONDUCTING THREE FIXED BENCHMARK SESSIONS FOR GRADES 2-7 IN MATHEMATICS. EVALUATION OF THE PROJECT WAS REQUESTED TO: 1) EXAMINE THE IMPACT THAT DETAILED INSTRUCTION MAY HAVE HAD ON STUDENT PERFORMANCE IN MATHEMATICS; 2) CONFIRM HYPOTHESES CONCERNING STATISTICAL ASSOCIATION OF PLATO eduTEST™ NEW JERSEY FIXED BENCHMARK TESTS WITH THE NEW JERSEY ASSESSMENT OF SKILLS AND KNOWLEDGE (ASK).

SCHOOL RESULTS

TO PROVIDED VALIDITY EVIDENCE, 2003-04 STUDENT PERFORMANCE ON THE NEW JERSEY ASSESSMENT OF SKILLS AND KNOWLEDGE (ASK) WAS CORRELATED WITH PERFORMANCE ON THE PLATO NEW JERSEY eduTEST™ FIXED BENCHMARK TESTS IN MATHEMATICS FOR GRADE THREE. A MODERATE CORRELATION BETWEEN THE FBT AND NEW JERSEY ASK (r=0.66) WAS OBSERVED FOR GRADE THREE MATHEMATICS.

eduTEST™ DATA WAS PROVIDED FOR 445 STUDENTS FROM GRADES THREE AND FIVE. INDIVIDUAL TEST DATA FOR CURRENT GRADE THREE STUDENTS FROM THE 2004 ADMINISTRATION OF THE NJ ASK WAS PROVIDED. THIRD GRADE STUDENTS SHOWED SIGNIFICANT POSITIVE GAINS IN MEAN SCORES FROM BASELINE TO MIDYEAR OF 2.75 POINTS, FROM MID YEAR TO END OF YEAR OF 9.47 AND FROM BASELINE TO END OF YEAR OF 11.10 POINTS. STUDENTS IN GRADE FIVE SHOWED GAINS IN MEAN SCORES FROM BASELINE TO MID YEAR OF 4.16 POINTS AND FROM BASELINE TO END OF YEAR POF 5.02 POINTS.

SCHOOL IMPLEMENTATION PROGRESS

Standards: Paterson Public Schools used a 21st Century Learning Program Grant to purchase Plato eduTest Assessment and Plato Achieve Now to address the Supplemental Education Services needs of the district. The goal of the implementation was to use Plato eduTest assessment results to identify high student need areas, to guide instruction and to monitor student improvement. Plato Achieve Now provided instructional mathematics pieces as an enhancement to the district's curriculum. Lessons were tailored to emphasize identified objectives which were currently addressed through the district's regular curriculum.

Curriculum and Instruction: Plato eduTest Assessment Fixed Benchmark Tests were constructed using items which were created based on frameworks derived through a thorough review of New Jersey state test blueprints, state standards and assessments and information from several national education organizations.

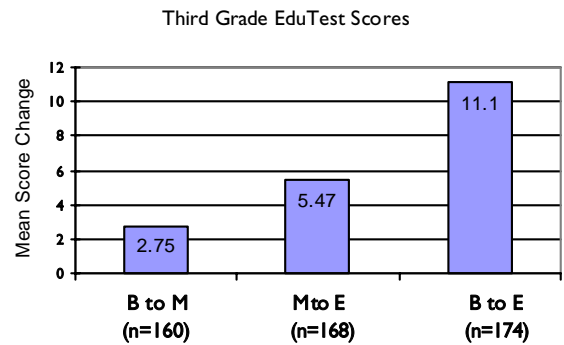
Assessment/Evaluation: During the 2003-2004 school year 5327 Plato eduTest Assessment Fixed Benchmark tests were administered to students in grade 2-7 in three sessions: 1) Dec/Jan; 2) Jan/Feb; 3) March. 4.45% were formative assessments while 95.55% were fixed benchmark assessments. The instructional period was five months. Program success was measured using both eduTest scores as well as individual student test data from the NJ Assessment of Skills and Knowledge.

Professional Development: Professional development was designed to ensure the production of a tutorial model which would facilitate the districts goal of improving performance on targeted mathematics objectives.

Parental Involvement: .

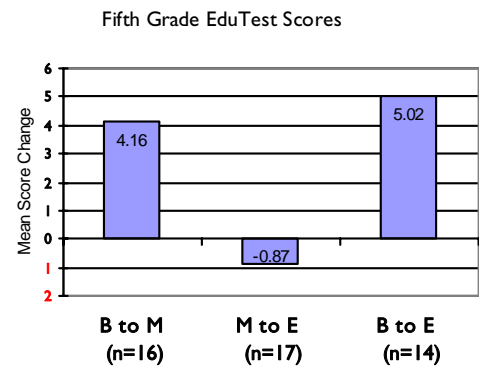
Third Grade Students Show Significant Gains in Mathematics

Third grade students showed significant positive gains when mean change scores of the eduTest Fixed Benchmark assessments were examined. Students made a significant gain in mean change score from Baseline (B) to Mid Year (M) of 2.75 points, from Mid Year (M) to End of Year (E) of 9.47 points and from Baseline (B) to End of Year (E) of 11.10 points.



Fifth Grade Students Show Gains in Mathematics

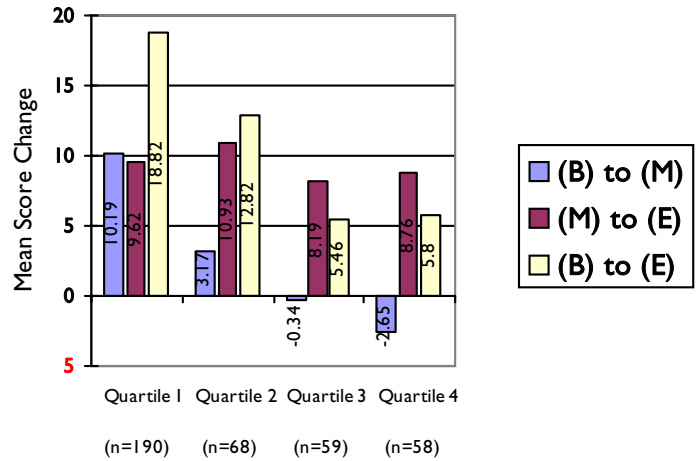
Fifth grade students showed positive gains when mean change scores of the eduTest Fixed Benchmark assessments were examined. Students made a gain in mean change score from Baseline (B) to Mid Year (M) of 4.16 points, a slight drop from Mid Year (M) to End of Year (E) of -0.87 points and an overall gain from Baseline (B) to End of Year (E) of 5.02 points.



Third Grade Students In the Lowest Quartiles Show Significant Gains

Mean and change scores on the eduTest FBT were calculated by quartiles in the Paterson School District. Grade three Quartile 1 students were those students whose Fixed Benchmark Test baseline scores were in the lowest 25% of the sample. Quartile 2 students were those students whose Fixed Benchmark Test baseline scores were between 25% and 50% of the sample. Quartile 3 students were those students whose Fixed Benchmark Test baseline scores were between 50% and 75% of the sample. Quartile 4 students were those students whose Fixed Benchmark Test baseline scores comprised the top 25% of the sample. Quartile 1 students showed a significant gain of 10.19 points from Baseline (B) to Mid year (M), a gain of 9.62 points from Mid year (M) to End of year (E) and a significant gain of 18.82 points from Baseline (B) to End of year (E) when mean change scores were examined. Quartile 2 students showed a significant gain of 3.17 points from Baseline (B) to Mid year (M), a gain of 10.93 points from Mid year (M) to End of year (E) and a significant gain of 12.82 points from Baseline (B) to End of year (E) when mean change scores were examined. Quartile 3 students showed a statistically significant drop of 0.34 points from Baseline (B) to Mid year (M), a gain of 8.19 points from Mid year (M) to End of year (E) and a significant gain of 5.46 points from Baseline (B) to End of year (E) when mean change scores were examined. Quartile 4 students showed a statically significant drop of 2.65 points from Baseline (B) to Mid year (M), a gain of 8.76 points from Mid year (M) to End of year (E) and a significant gain of 5.80 points from Baseline (B) to End of year (E) when mean change scores were examined.

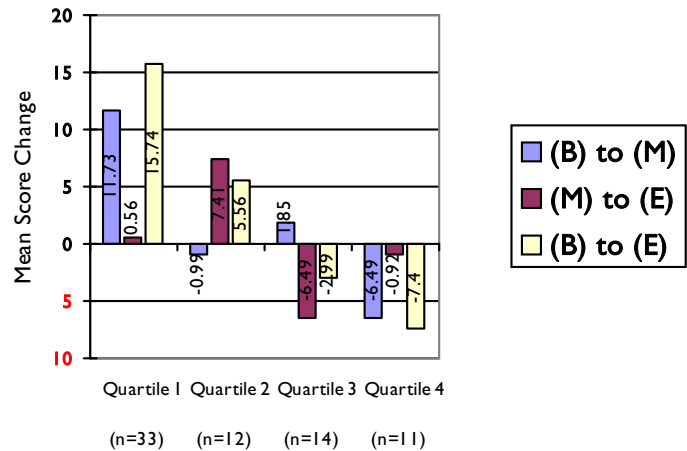
Third Grade EduTest Score Change By Quartile



Fifth Grade Students In the Lowest Quartiles Show Significant Gains

Mean and change scores on the eduTest FBT were calculated by quartiles in the Paterson School District. Grade five Quartile 1 students were those students whose Fixed Benchmark Test baseline scores were in the lowest 25% of the sample. Quartile 2 students were those students whose Fixed Benchmark Test baseline scores were between 25% and 50% of the sample. Quartile 3 students were those students whose Fixed Benchmark Test baseline scores were between 50% and 75% of the sample. Quartile 4 students were those students whose Fixed Benchmark Test baseline scores comprised the top 25% of the sample. Quartile 1 students showed a significant gain of 11.73 points from Baseline (B) to Mid year (M), a gain of 0.56 points from Mid year (M) to End of year (E) and a significant gain of 15.74 points from Baseline (B) to End of year (E) when mean change scores were examined. Quartile 2 students showed a statistically significant drop of 0.99 points from Baseline (B) to Mid year (M), a gain of 7.41 points from Mid year (M) to End of year (E) and a gain of 5.56 points from Baseline (B) to End of year (E) when mean change scores were examined. Quartile 3 students showed a gain of 1.85 points from Baseline (B) to Mid year (M), a drop of 6.49 points from Mid year (M) to End of year (E) and a statistically significant drop of 2.99 points from Baseline (B) to End of year (E) when mean change scores were examined. Quartile 4 students showed a statically significant drop of 6.49 points from Baseline (B) to Mid year (M), a drop of 0.92 points from Mid year (M) to End of year (E) and a statistically significant drop of 7.40 points from Baseline (B) to End of year (E) when mean change scores were examined.

Fifth Grade EduTest Score Change By Quartile



Paterson Public Schools

Paterson Public Schools located in Paterson, New Jersey supports approximately 26,000 students in grades Pre K – 12 on 36 campuses. The mission of this district, in partnership with their community, is to educate all students to realize their maximum potential by demonstrating attainment of world class standards. The district's Supplemental Education Services program based on a continuous improvement model focused on student achievement in Mathematics and professional development. The accompanying professional development focused on successful implementation of both Plato eduTest and Plato Achieve Now resulting in a school model which improved district performance in Mathematics.

PEP-21 is an acronym for the Paterson Educational Partnership for 21st Century Community Learning Centers. PEP-21 Supplemental Educational Services is a partnership between Paterson Public Schools and various local agencies to provide an educationally based after school program that is located in various Paterson Public Schools, as well as other safe, easily accessible community sites. PEP-21 uses PLATO/EduTest® to support a certified teacher's small group direct instruction. PLATO/EduTest® is a combination of a comprehensive online skills assessment program used to identify each student's specific needs, as well as PLATO Adventure CD's that are aligned to all of the state standards-based skills in order to address those specific needs. In other words we have the teachers, tools, and technology needed to help your child achieve success on their individualized level.

The PEP-21 Supplemental Educational Services program is in session Monday through Friday for three hours each day. The first hour of the program is dedicated to extending the student's school day and providing the additional hour of PLATO® supported instruction referred to above. PEP-21 S.E.S. also offers homework assistance during the second hour and recreational/cultural time, during the third hour, that helps to create a well rounded learner.

PEP-21 seeks to: increase student achievement and reduce drop-out rates; create additional recreational, physical fitness, social and cultural outlets for students and adults; provide instruction to foster greater awareness of the necessity for maintaining a healthy diet promoting good physical and mental health and safety; increase the technological capacity of students and those not attending and; to provide literacy education to out-of-school youth and their families.

The mission of the PEP project and the partnership members is to cooperatively provide services within four Paterson Public Schools and the greater community that will increase student achievement, bring greater health to the community, strengthen families and brighten the economic future of the city.

The goal is to meet the Secretary of Education's Absolute Priority of offering expanded learning opportunities for Paterson's children and youth and activities increase student achievement and reduce drop-out rates create additional recreational, physical fitness, social and cultural outlets for students and adults increase the technological capacity of students and those not attending school.

The Paterson Education Partnership Members are Paterson Public Schools, The Boys and Girls Club,

The Girls Scouts, Rutgers Cooperative Extension, Police Athletic League, HOPE Worldwide, Paterson Housing Authority, City of Paterson Department of Human Resources/Recreation, Hyacinth Foundation, YMCA, St. Joseph's Hospital, The NJ Community Corporation

Partnership members provide literacy education; integrated health, education, social services, recreation and cultural programs, summer and weekend programs in conjunction with recreation programs, nutrition and health programs, telecommunications and technology education for individuals of all ages, support and training for child-care providers, services for individuals who leave school before graduating from secondary school and services to individuals with disabilities.



For more information, call 800.44.PLATO or visit www.plato.com

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