

# SCHOOL IMPROVEMENT PLAN

John S. Battle High School

2016-2017

A. *Two school-wide instructional goals indicated by Data*

OBJECTIVE 1: John S. Battle High school will implement strategies to improve student learning and mathematics ability in Algebra I. In particular, we will increase the mean scaled score for each reporting category from its current level provided from 2015-16 testing.

OBJECTIVE 2: John S. Battle High school will implement strategies to improve student learning and mathematics ability in Geometry. In particular, we will increase the mean scaled score for each reporting category from its current level provided from 2015-16 testing.

### Strategies

- Teachers will meet as a department at the beginning of the school year to compare class rosters and ensure students have been enrolled in the correct math course. If students are found to be enrolled incorrectly a request is sent to the guidance office for a schedule change for those students.
- Teachers will use data from Interactive Achievement from previous years, data from previous Standards of Learning tests, and data from formative and summative assessments collected during class to identify students who demonstrate an overall weakness in mathematics, specifically for Algebra I and Geometry courses. A list of these students will be developed and submitted to administration. A plan will then be developed to provide extra support and target weaknesses of the individual students or group of students.
- Interactive Achievement will be utilized for quizzes and tests to determine weaknesses of individual students and the class as a whole. This data will be used to guide instruction.
- Teachers will use diagnostic, formative, and summative assessments throughout the course to determine strengths and weaknesses of students and use the data to guide instruction.
- Teachers will follow the curriculum framework and testing blueprint provided by the state.
- Teachers will follow the pacing guide per course provided by the county and ensure all standards are included in instruction.
- Casio fx-9860GII graphing calculators will be used in each mathematics classroom. This calculator was chosen for its ease of use and special features that targets certain standards of learning. The older model will also be made available and placed in each mathematics classroom for students to check out to use at home.
- Tutoring will be provided before and after school to any student needing extra help. Tutoring is offered every day.

- Tutoring opportunities are offered by the project graduation teacher throughout the day during periods she is not working with project graduation students. The teacher may send students to her for individual support and help with concepts being taught in class. These students have been identified as having a weakness in those concepts.
- Project graduation tutoring will be provided during school approximately two class periods per week for those students who have been recognized as needing extra help to master mathematics state standards needed to meet graduation requirements.
- Teachers will utilize resources provided by the state including PowerPoints, test data, technology enhanced items, released practice questions, and any applicable released test.
- Teachers will attend workshops pertaining to standards of learning, teaching new standards, increasing rigor, vertical alignment, and Bloom's Taxonomy.
- Teachers will contact parents concerning students who are struggling with specific topics.
- Inclusion classes are offered in mathematics. Students receive instruction from the content teacher in a typical classroom setting. However, this will also allow for students to be pulled out of class by the resource teacher into a smaller group and receive more individualized help or receive small group testing as needed.
- The mathematics curriculum has added Algebra I, part 1 and Algebra I, part 2 classes for students with individual education plans. This allows these students to spend more time on learning, practicing, and applying mathematics standards. In general, they should experience more success in mathematics.
- The mathematics curriculum has added a Math Elective course. Math Elective will be utilized as a mathematics course for those students who are lacking the mathematics verified credit required for graduation or students currently enrolled in an Algebra I course who have been identified as having a significant weakness in mathematics. The objectives of this course should align with the standards of learning for Algebra I. This will allow a student who needs the verified credit the opportunity to receive instruction on the entire Algebra I curriculum again before taking the standards of learning test for verified credit. (This has not been fully implemented at this time)
- Teachers meet monthly to discuss items concerning the mathematics department. This includes teachers sharing ideas, strategies, lessons, materials and resources that have been successful for them. There is also discussion of student's observed individual weaknesses. For example, if a geometry student exhibits a weakness in solving equations, it is helpful to discuss this with their algebra teacher and compare observed issues and strategies. This is helpful for the student and the teacher. Teachers need to know what their students actually are learning and taking with them to the next course and what they are not learning. This is good feedback for the teacher to use and guide any changes they might need to make in their instruction.
- Teachers will use data provided to them concerning their specific standards of learning tests, identify areas of weakness, and evaluate their teaching methods and strategies previously used and make improvements.
- Content teachers will tutor students who are eligible for an expedited retake during the school day to prepare them for their retake.

- Student performance by question data will be utilized by the project graduation teacher and content teachers when preparing students for any retake of standards of learning tests.

### Indicators

- Mathematics department meeting minutes, written request for schedule changes sent to the guidance office, and new student schedules will indicate this discussion and results.
- The list of students submitted to administration and the written plan provided by administration.
- Data collected from Interactive Achievement and lesson plans to guide instruction.
- Data collected and displayed as student grades in Power Teacher and lesson plans guided by this data.
- Each teacher keeps a binder containing the curriculum framework and testing blueprint in their classroom for reference and guidance. Lesson plans indicate the framework and testing blueprint are being utilized.
- Each teacher keeps a pacing guide in their classroom for reference and guidance. Lesson plans indicate the pacing guide is being utilized.
- Purchase orders for the Casio calculator provided to all students and log of students checking out the older model of calculator from their teacher for use at home.
- Tutoring logs will be kept of student attendance.
- A log will be kept by the teacher of when and how often students are receiving extra help from the project graduation tutor. The project graduation tutor also keeps a log of attendance.
- Project graduation will keep a log of student attendance and the material taught during each session.
- Teachers will use the state resources in their lesson plans to prepare students for state testing.
- Certificates of attendance to workshops pertaining to standards of learning, teaching new standards, increasing rigor, vertical alignment, use of new calculator, and Bloom's Taxonomy. A log will also be present in TalentEd.
- Parent contact log.
- Student schedules and log of students being pulled out into a smaller group setting.
- The master schedule and student schedules will indicate the addition of these courses.
- The master schedule and student schedules will indicate the addition of these courses. Lesson plans for Math Elective will indicate the alignment with Algebra I.
- Meeting agendas and summaries are submitted to the principal.
- Teacher goals developed for TalentEd. Comparison of previous lesson plans and current lesson plans will demonstrate an evaluation and change of strategy/method on targeted objectives.
- A tutoring schedule will be provided to administration. Log of substitutes for content teachers.
- Documentation of material covered during tutoring that focuses on the student performance by question.

B. *Professional Development goal to support instructional goals.*

OBJECTIVE: John S. Battle High school will implement professional development strategies to increase learning and student achievement in the area of mathematics.

Strategies

- Provide opportunities through faculty and department meetings by sharing the best practices for all core areas with emphasis toward mathematics.
- Conduct presentations in faculty meetings by current faculty who demonstrate success in co-teaching methods.
- Provide opportunities to observe peers who have exhibited successful teaching strategies with the school, the division, and Region 7.
- Provide opportunities to attend the Southwest Virginia Council of Teachers of Mathematics held annually at Virginia Highlands Community College to learn alternate successful teaching methods.

Indicators

- Faculty and department meeting agendas
- Professional leave forms
- Talent Ed Professional development logs
- 20 day work forms