

Achieve Highpoints

Description of Services: Achieve HighPoints, an approved Supplemental Educational Services provider in 16 states, is a state curriculum-driven, web-based math tutoring platform for students in grades 2-12 that helps students master mathematics skills from home at their own pace. As an online provider, we are able to cater to students without the usual time and transportation barriers. Students who use our platform via the laptop we provide for the duration of the program achieve an average 15 point increase in their pre and post-test results; 83% of users of just 10+ hours reported that their grades went up in school.

1. **Minimum & Maximum Number-Since** we are an online provider we are able to serve students in rural areas and urban areas alike. We anticipate that we can effectively reach 2,000 students statewide using a combination of on-line and virtual tutoring. Our minimum number of students is one.
2. **Methods of Supervision-** AchieveHighPoints is an online provider and we do not meet face to face with students. Students tutor at their home, online.
3. **Davs/Hours-** Since we are an online provider, students tutor afterschool, and weekends. Once the PPA is determined by the district we will divide the PPA by our hourly rate of \$60.00 that will provide us with the number of hours the student tutors. Once the student completes the program, we allow them to continue tutoring at no cost until the end of the school year.
4. **Diagnostic Assessment-Our** Software as a System (SaaS) math tutoring platform performs an assessment at the outset of the tutoring program. The first thing each new student does is to take this assessment based on the Mississippi curriculum for their grade. This assessment provides an overall score of between 0 and 100%. Each student receives a score for each curriculum strand and they are identified in green where the student is "Proficient" (>70 or 80% depending on state standards), and in red if the student "Needs Improvement" (<70 or 80%). This is the basis of the student's Individual Learning Plan developed specifically for them. The platform then leads them through the content and timing of their learning plan based on their results. Each lesson within the student's Individual Learning Plan also has a pre and post-test component so the student, parents, teachers and administrators can monitor progress for every topic at any given time throughout the duration of the program.

At the end of the program the students take a post-assessment test based on what they are expected to know at the end of the school year. This assessment also provides a score between 0 and 100%. The score of the original pre-assessment is deducted from the final or post assessment. This difference, expressed in the change in points between the post and pre-test is used as an internal benchmark of the effectiveness of the program. In aggregate, students experience an average increase of 15 points in their pre and post-testing with Achieve HighPoints. This combination of statistical test data and market research from a reliable source and the internal pre and post-test benchmarks developed for each student over the past four years provide us with the confidence we need to state that our product is an effective math education platform which will greatly benefit the students of Mississippi.

5. **Methodology-**According to the 'Foundations of Success', the final report published by the National Mathematics Panel in 2008 for the US, Department of Education, the use of technology has been effective in raising student achievement in math. The section on the use of technology states that '*Research on instructional software has generally shown positive effects on students' achievement in mathematics as compared with instruction that does not incorporate such technologies.*'¹ These studies show that technology-based drill and practice and tutorials can improve student performance in specific areas of mathematics. Other studies show that teaching computer

programming to students can support the development of particular mathematical concepts, applications, and problem solving. **This is the methodology we use for our tutoring platform.** We first assess the student's math skills and then help learn self-paced problem solving skills with 'step-by-step' solutions and explanations to a set of problems relating to a particular lesson. We then take the student through set of practice sessions to drill and reinforce the math skill. This is followed by a review to test their skills immediately.

James Kulik (1994) used a research technique called Meta-Analysis to aggregate the findings from more than 500 individual studies of computer-based instruction.² Some of the findings were that *students who used computer-based instruction scored higher percentiles on tests of achievement than those without computers; learned more in less time when they received computer-based instruction; and liked their classes more and developed a more positive attitude.* Many researchers have emphasized the importance of aligning the student's learning plan to the state standards. McLaughlin, Nolet, Rhim, and Henderson (1999)³, in their study have stated that *when the Individual Learning Plan (ILP) of the student is aligned with state standards, students showed improvement as the instruction was focused on meeting the challenging goals and this reduced their achievement gaps.* Thompson et al (2001) have reported a *positive impact of using state standards to create the ILP or SLP (student learning plan) based on the student's performance.*⁴

AchieveHighPoints uses this methodology to develop the student's Individual Learning Plan as the starting point for tutoring program. The learning plan follows the state curriculum exactly and is the direct output of the diagnostic assessment taken by the student. The goals defined in the ILP or SLP are clear and understandable to students, parents & teachers. Since our tutoring program is technology driven, each student learns the concepts and practices the skills at his or her own pace. This gives the student the flexibility to work on a topic until he or she attains a 'mastery level' before moving on to the next lesson.