



CASE STUDY: SAM BARLOW HIGH SCHOOL



391

Total AP[®] students in 2016

557

AP[®] exams administered
in 2016

45%

AP[®] students scored 3+
in 2016

10

AP[®] courses offered

Introduction: A Changing School

Sam Barlow High School (SBHS) is an economically diverse public school on the outskirts of Portland, Oregon. The school is large for the region, with 1,752 students and a student to teacher ratio of 28:1.

Assistant Principal Michael Schaefer describes SBHS as having a clear and powerful mission: to offer an exceptional education to each of its students. While this mission remains a steady pillar of the institution, the growth of class sizes and the increasing diversification of student needs present mounting challenges.

Any school that values equity, like Sam Barlow High, is faced with a multitude of obstacles. Increasing the number of students with access to high-level curricula often results in a drastic increase in a teacher's workload; larger Advanced Placement (AP[®]) classes yield more grading, planning, differentiating, and remediating. Equity-based schools must also face the fact that historically, as AP[®] access has increased, so has the failure rate of the exam.

Michael Schaefer knew expanding Sam Barlow's AP[®] program would pose the aforementioned challenges, but explained he would not accept student exclusion of any kind. "I want my students to be prepared for college", he asserted, "and I know that is accomplished through the offering of AP[®] courses." **Schaefer was faced with the task of increasing access without compromising scores, all while on a tight budget.**



Assistant Principal Michael Schaefer

When Schaefer came across Albert, he was immediately impressed by its value as an instructional tool. He wanted teachers at his school to supplement instruction with the best tools available and so in the winter of the 2015-2016 school year, he implemented a school-wide Albert license.

Engagement and Results at Sam Barlow

Teachers at Sam Barlow utilized Albert frequently in everything from homework to exams. Biology instructor Tai Quirke explained:

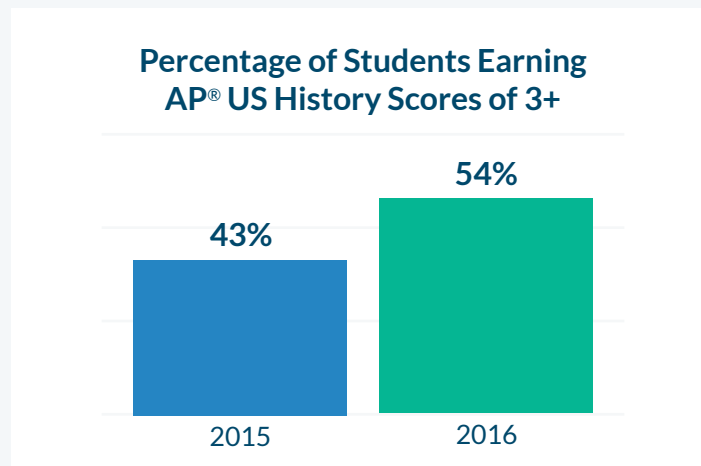
“After the (AP® Biology Exam) redesign, there wasn’t any good test review. I used Barron’s® and CliffsNotes®, but that was very frustrating because the content was not aligned. Writing questions (myself) was awkward and very hard. But then Albert came along and it actually made kids think, had great labs, and was actually useful.”

Instead of spending valuable time creating test-aligned questions and grading, Ms. Quirke was able to focus on her instruction.

Over the course of the 2015-2016 school year, the 443 SBHS students using Albert answered 198,806 College Board® aligned questions. That equates to each student answering 448 questions or completing approximately **7.5 AP® practice exams**. Ms. Quirke had her students review by assigning fifty questions per week. She found that because teachers gained access to Albert in January, many were trying to “cram” practice in before the test and some students found it overwhelming. She recommends teachers pace assignments throughout the year so students can get the most out of Albert.

Despite national trends of lower pass rates and drastic program-size increases, student scores at SBHS remained consistent and in some cases, even increased. For instance, the AP® English Language Program nearly doubled in size between 2015 and 2016 with no significant decrease in the average AP® test score.

The most striking data comes from the AP® US History (APUSH) program at Sam Barlow. APUSH instructor Andrew Pate supplemented his instruction with an effective implementation of Albert. His students answered an average of 595 questions each and therein practiced an equivalent of 10 AP® US History tests before taking the actual exam.



Between the 2014-2015 and 2015-2016 school years, Pate’s APUSH program grew in size by 26%. Despite a statewide decline in scores between the 2015 and 2016 exams, scores at SBHS significantly increased.

The **percentage of students earning scores of 3 or higher jumped from 43% in 2015 to 54% in 2016**. APUSH pass rates soared to a five-year high, and more students scored a 5 in 2016 than in any year since 2013 -- before the redesign of the exam.

Reflection

Teachers at Sam Barlow supplemented their instruction with Albert. They did not use Albert in lieu of traditional instruction, but employed it as a tool to provide students with expertly aligned practice.

A multitude of studies in cognitive science emphasize the significance of student practice of test-aligned problems. Researchers have cited substantial increases in test scores after students practiced problems aligned to the final test in content and semantic structure (McDaniel & Fisher, 1991). The format of questions matters too: students who had previously practiced on a format-aligned test had a 93% accuracy on subsequent same-format tests, while students who practiced with unaligned format tests scored 77% accuracy. At Sam Barlow High, Albert served to provide teachers and students with access to over 50,000 format-aligned practice questions.

In expanding their Advanced Placement® program to become more inclusive, Sam Barlow High School took a risk. Nationally, as access to Advanced Placement® courses has increased, average test scores have fallen. Instead of accepting lower achievement as a consequence of equity of access, Sam Barlow High aimed to challenge the status quo. This was accomplished through delivering high level curriculum in conjunction with the best value Advanced Placement® resource available, Albert.

Sam Barlow High School chose equity without compromise.

Key Outcomes at Sam Barlow:

- As access to AP® courses has expanded, national averages have dropped. Sam Barlow High School supplied teachers with the highest value test preparation and did not have to choose between strong scores and offering equitable education.
- The AP® English Language program at SBHS doubled in size between school years with no significant decrease in average AP® scores.
- AP® US History was offered to 26% more students in 2015-2016. Despite increases in class size, the percentage of students earning scores of 3 or higher jumped from 43% in 2015 to 54% in 2016.

Takeaways for Teachers:

- Supplement instruction with many short problem sets as opposed to fewer large assignments. This allows students to focus on practice questions without rushing.
- Begin implementing Albert early in the school year to ensure students have ample time to practice before the AP® exam.
- Give students the ability to do “corrections” on any missed problems so that they learn from Albert’s detailed explanations.



About Albert

Albert partners with classrooms, schools, and districts to help students achieve mastery of difficult academic subjects and to assist teachers in supplementing differentiated instruction.

With thousands of practice questions, world-class technology, and affordable pricing, Albert provides the greatest value for any school.



If Sam Barlow High's story resonated with you, contact us at schools@albert.io or call 1-800-554-8115 so we can discuss how Albert can help your school achieve its goals.