# CASE STUDY: GEORGE RANCH HIGH SCHOOL



**778** Total AP<sup>®</sup> students in 2016

**1515** AP<sup>®</sup> exams administered in 2016

61% AP® students scored 3+ in 2016





#### Introduction: A Diverse and Expanding School

George Ranch High School (GRHS) is a fringe rural, major minority public school about an hour outside Houston, Texas. The school has a student population of 2060 and a student to teacher ratio of 20:1. 58% of the student body are minorities, while 23% come from economically disadvantaged backgrounds.

GRHS's mission is "to provide opportunities for all students to be successful at George Ranch High School in a safe secure environment while becoming productive, responsible members of society and life-long learners through commitment to excellence." Staying true to this mission, about 49% of GRHS's diverse population of students took Advanced Placement<sup>®</sup> exams in 2016, which is a steep increase in participation from previous years.

Any equity based school knows increasing access to AP<sup>®</sup> courses is not an easy task, but GRHS remained steadfast in their mission to help students prepare for higher level courses.

Margaret Wilkening, Social Studies Chair, explained, "Our school is interesting in that we have a very diverse population and offer open enrollment. We encourage 33% - 50% of our student body to take at least one AP<sup>®</sup> course because we want to provide them with the framework they need for college level courses."

George Ranch implemented a school-wide Albert license in 2014 to give their AP<sup>®</sup> students access to rigorous AP<sup>®</sup> aligned practice.



Social Studies Department Chair Margaret Wilkening

### **Engagement and Results at George Ranch**

Teachers at George Ranch supplemented their teaching with Albert, by using it as an additional resource to provide students with AP<sup>®</sup> curriculum aligned, rigorous practice. Teachers at George Ranch used Albert frequently in everything from daily homework to quizzes, as well as for end of year review. Ms. Wilkening explained:

"We explored other resources, but nothing compared. The textbook questions were too content based, and did not require the critical thinking that was needed for the AP<sup>®</sup>, and other sources such as Barron's<sup>®</sup> and AP<sup>®</sup> Insight were not as useful. AP<sup>®</sup> Insight only focused on challenge areas, and we wanted practice for the whole course. The review materials on Albert were outstanding, so there was no comparison to the other sources."

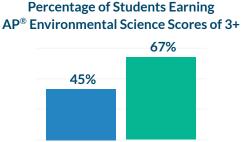
Over the course of the 2015-2016 school year, GRHS's second year using Albert, 778 AP<sup>®</sup> students answered 339,693 College Board<sup>®</sup> aligned questions on Albert. That's about 436 questions per student or approximately **7 AP<sup>®</sup> practice exams.** 

Mrs. Wilkening had her students review by assigning questions from each section for every unit. Questions were always graded on completion, rather than accuracy, to help students focus on learning from the explanations as opposed to worrying about grades. She also assigned additional questions as they began to review for the AP<sup>®</sup> exam closer to the spring. By the end of the school year, AP<sup>®</sup> US History students each answered 430 rigorous practice questions.

**Despite national trends in 2016 of lower pass rates in many AP® courses, student scores at GRHS improved over the previous year in many different AP® subjects.** Mr. Tim Bowman's AP® English Literature class had a 57% pass rate with an average score of 3.051 compared to the global pass rate of 54% and average score of 2.75.

Even compared to their past performance, George Ranch High School saw a significant improvement in their scores in the years after they started using Albert for additional practice. For example, their AP® Computer Science A average score in 2014 was 2.33 with a pass rate of 33%. This past year, the average score was 3.44 and the pass rate was 75%. Over the course of the 2015-2016 school year, AP® Computer Science students at GRHS completed approximately 13,000 Albert practice questions with an average of 420 questions per student, the equivalent of 10.5 multiple choice practice exams.

Between the 2014-2015 and 2015-2016 school years, the Environmental Science program grew in size by 48% from the 2013-2014 school year. Even with this significant increase in students, the pass rate for Environmental Science jumped from 50% to 66% after GRHS's first year using Albert. In 2016 their pass rate was 67% while the global average was only 45% in 2016. This year also marked the highest number of 5's ever scored in this course at George Ranch.



Global GRHS

Mrs. Wilkening explained, "Our students really liked the extra practice and said it helped tremendously with preparing them for the AP<sup>®</sup> exam. Some of our students had already purchased Albert individually before we had purchased the school license for the year because they liked the practice and were eager to get started. I too, love the program and was glad I could provide my students with the extra practice."

Overall, George Ranch has seen an increase in scores and pass rates in 19 different AP<sup>®</sup> courses since adopting Albert. They have also been able to expand their AP<sup>®</sup> program by increasing the number of students taking Advanced Placement<sup>®</sup> exams, and have also added 3 new AP<sup>®</sup> courses.

### Reflection

A multitude of cognitive studies have illustrated the importance of receiving feedback on learning and retention. However, it has been proven that immediate feedback on practice exams (received right after a question is answered) is much more effective than delayed feedback (given all at once at the end of the practice exam) (Kulick & Kulick, 1988). When comparing test performance, students who received immediate feedback demonstrated significantly higher scores than students who received delayed feedback (Epstein et al., 2002). Results of this study indicated that immediate feedback actively engages students and promotes correction of initially incorrect responses (Epstein et al., 2002). At George Ranch High School, teachers were able to promote retention of advanced material through the use of rigorous and curriculum aligned AP® questions on Albert.

George Ranch High School faced the challenge of providing a diverse student body with equal access to Advanced Placement<sup>®</sup> curriculum, while sticking to their mission of helping each and every student become college ready. Normally, this would result in a decrease in scores as more students became exposed to AP<sup>®</sup> exams for the first time. However, **GRHS was able to achieve this mission while also improving AP<sup>®</sup> scores and pass rates across the board.** This was accomplished through teaching high level curriculum in conjunction with the best value Advanced Placement<sup>®</sup> resource available, Albert.

#### Key Outcomes at George Ranch:

- Typically when access to AP<sup>®</sup> courses has expanded, average test scores have significantly decreased. However, George Ranch supplied teachers with Albert and did not have to pick between high performance and equal opportunity for their students.
- George Ranch High School has experienced an increase in AP<sup>®</sup> scores for 19 different AP<sup>®</sup> courses since adopting Albert as their test preparation resource.
- In both courses that expanded and in courses that remained stable in size, GRHS saw an increase in both pass rates and average scores year over year, while also beating the global averages across the board.

#### **Takeaways for Teachers:**

- Give small sections of problems over the course of the entire school year so students can work through problems in digestible pieces, while also answering 5+ AP<sup>®</sup> exams worth of practice by the end of the year.
- Count Albert scores towards completion grades so students focus on learning from Albert's detailed explanations.
- Use Albert as a "check for understanding" after covering core concepts. Students will get immediate feedback on recently covered topics, and teachers can also get feedback on the students understanding of the material.

## 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 George Ranch 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.

Epstein, M. L., Lazarus, A. D., Calvano, T. B., Matthews, K. A., Hendel, R. A., Epstein, B. B., & Brosvic, G. M. (2002). Immediate feedback assessment technique promotes learning and corrects inaccurate first responses. The Psychological Record, 52(1), 187-201.

Kulik, J. A., & Kulik, C.-L. C. (1988). Timing of feedback and verbal learning. Review of Educational Research, 58(1), 79-97.

AP® and Advanced Placement® are registered trademarks of the College Board, which was not involved in the production of, and does not endorse, Albert.io.

Barron's® is a registered trademark of Dow Jones, L.P., which was not involved in the production of, and does not endorse, Albert.io.

Image Source: Building Facilities. (n.d.). Retrieved September 22, 2016, from http://www.idcus.com/projects/building-facilities/