

Success of Students at Institutions of Higher Education Who Receive Credit From Advanced Placement Examinations

A Progress Report to the Texas Legislature, per
House Bill 1992, 84th Texas Legislature

October 2016

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Agency Mission

The mission of the Texas Higher Education Coordinating Board (THECB) is to provide leadership and coordination for the Texas higher education system and to promote access, affordability, quality, success, and cost efficiency through *60x30TX*, resulting in a globally competitive workforce that positions Texas as an international leader.

Agency Vision

The THECB will be recognized as an international leader in developing and implementing innovative higher education policy to accomplish our mission.

Agency Philosophy

The THECB will promote access to and success in quality higher education across the state with the conviction that access and success without quality is mediocrity and that quality without access and success is unacceptable.

Agency Core Values

Accountability: We hold ourselves responsible for our actions and welcome every opportunity to educate stakeholders about our policies, decisions, and aspirations.

Efficiency: We accomplish our work using resources in the most effective manner.

Collaboration: We develop partnerships that result in student success and a highly qualified, globally competent workforce.

Excellence: We strive for excellence in all our endeavors.

The Texas Higher Education Coordinating Board does not discriminate on the basis of race, color, national origin, gender, religion, age or disability in employment or the provision of services.

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Executive Summary

Timely completion of a baccalaureate degree has become a challenge for many college students. In “Giving College Credit Where it is Due: Advanced Placement Exam Scores and College Outcomes,” scholars from Harvard and The College Board observed that “one potential way to ameliorate this problem is to give students the opportunity to earn college credit while still in high school” (Smith, Hurwitz, and Avery, 2015). Their report noted that the goal of reducing time to degree could be accomplished in a number of ways, including through the successful completion of Advanced Placement (AP) courses while still in high school. Achieving required scores on AP exams could allow students to earn college credit in lower-division introductory courses, freeing up time to fulfill both major and general education requirements, thus contributing to the timely completion of a student’s baccalaureate degree.

In 2015, the 84th Texas Legislature, Regular Session, passed House Bill (HB) 1992, instructing institutions of higher education, as they establish the minimum score required for the award of course credit on an AP examination, not to require a score of more than 3 unless the institution’s chief academic officer determines, based on evidence, that a higher score on the examination is necessary to indicate a student is sufficiently prepared to be successful in a related, more advanced course for which the lower-division course is a prerequisite. The statute became effective in fall 2016.

HB 1992 also directed the Texas Higher Education Coordinating Board (THECB) to conduct a study and issue a report, due in January 2019, comparing the academic performance, retention rates, and graduation rates – disaggregated by score – of students who complete a lower-division course at an institution to students who receive credit for that course based on a score of three or more on an AP exam. The legislation also required the THECB to submit a progress report, due in January 2017, prior to the full study and report. This report fulfills that requirement.

Effective fall 2016, most Texas public institutions of higher education have modified the minimum scores required on AP Exams that could result in the award of course credit. All but two public institutions submitted statements of compliance, signed by the chief academic officer, certifying that their institutions were in compliance with HB 1992.¹ Among two-year colleges (public community colleges, state colleges, and state technical colleges) in AY 2013-14, 31 of 54 institutions awarded course credit for a score of 3 on all AP Exams accepted at their institutions. In AY 2016-17, that number had increased to 44 colleges awarding credit for a 3 on all accepted AP exams. Among Texas public universities, in AY 2013-14, 5 of 35 four-year

¹ At the time of this progress report, Clarendon College had not yet made changes to its AP requirements and Southwest Texas Junior College had not yet responded to the THECB request for information.

institutions accepted a score of 3 on all AP Exams accepted by their institution. In AY 2016-17, the number of universities that awarded course credit for a score of 3 had risen to 19 of 34.²

To conduct the study of student performance required by HB 1992, THECB staff requested data from the state's public institutions of higher education to determine the amount of credit awarded for AP scores to first-time-in-college (FTIC) students who began college in AY 2013-14.

Preliminary data returned for students who were identified as FTIC in AY 2013-14 indicate that of 289,487 students, 2,759 community and technical college (CTC) and 17,986 public university students were awarded course credit for achievement on AP examinations. CTC students were awarded credit for 5,844 courses, and university students were awarded credit for 67,906 courses. In total, 20,745 students received credit for 73,750 courses, a median of 3 courses per student receiving credit.³

Persistence rates for those students who claimed AP credit enrolled in four-year institutions were comparable to persistence rates for all FTIC students for the first two years. Persistence rates for students who claimed AP credit enrolled in community colleges were higher than persistence rates for all students at community colleges in the first year, but were comparable to students persisting to the second year.⁴

The average grade point average (GPA) for this same set of students who claimed AP credit was 3.13 for CTC students and 3.22 for university students during their first year (AY 2013-14). The average GPA for the second year (AY 2014-15) was 3.07 for CTC students and 3.20 for university students.

² In 2015, The University of Texas-Pan American and The University of Texas at Brownsville merged to create The University of Texas-Rio Grande Valley, thus reducing the number of four-year institutions by one.

³ The total number of 2013-14 FTIC students in Texas public institutions (289,487) was calculated from THECB data. The number of students receiving credit for achievement on AP exams was calculated using institutional data provided by each institution.

⁴ Students transferring from community and technical colleges to four-year institutions were not tracked as part of this preliminary progress report. The 2019 study will use corroborating data from The College Board and the Texas Higher Education Coordinating Board to track transfers and graduations and to develop a more detailed picture of student success measures.

Background

House Bill 1992

The 84th Texas Legislature, Regular Session, passed House Bill (HB) 1992, "An Act relating to the granting of undergraduate course credit by advanced placement examination at public institutions of higher education." Effective June 3, 2015, HB 1992 amended Section 51.968 of the Texas Education Code (TEC), which deals with Undergraduate Course Credit for High School Students Completing Postsecondary-level Programs. HB 1992 also charged the Texas Higher Education Coordinating Board (THECB) to conduct a study of the performance of students who receive undergraduate course credit for achieving required scores on one or more Advanced Placement (AP) exams.

TEC Section 51.968 requires each institution of higher education (IHE) offering freshman-level courses to adopt and implement a policy to grant undergraduate course credit to entering freshman students who have achieved required scores on one or more examinations in the Advanced Placement Program. Each institution is instructed to establish conditions for granting course credit, including the minimum required scores on Advanced Placement (AP) examinations, and to identify the specific course credit or other academic requirements of the institution, including the number of semester credit hours (SCH) or other course credit that the institution will grant to a student who achieves required scores on AP examinations.

HB 1992 amended the existing legislation by adding Section 51.968 (c-1), which instructs institutions of higher education, as they establish the minimum required score on an AP examination, not to require a score of more than 3 unless the institution's chief academic officer determines, based on evidence, that a higher score on the examination is necessary to indicate a student is sufficiently prepared to be successful in a related, more advanced course for which the lower-division course is a prerequisite. This legislation applies to entering freshman students at institutions of higher education beginning with the 2016 fall semester.

HB 1992 also instructs the THECB, in consultation with institutions of higher education, the THECB's Undergraduate Education Advisory Committee (UEAC), and other interested parties, to conduct a study – due January 1, 2019 – on the performance of undergraduate students at institutions of higher education (IHEs) who receive undergraduate course credit for achieving the required scores on one or more AP exams.

This current submission, a progress report also required by HB 1992, provides an update on the implementation of HB 1992 and examines the academic performance of students who received undergraduate course credit for a score of three on one or more AP exams.

The Advanced Placement Program

The College Board's Advanced Placement Program is a cooperative educational endeavor between secondary schools, colleges, and universities. Designed to accelerate learning, reward achievement, and enhance high school and college programs, the Advanced Placement Program offers students the opportunity to pursue coursework that can result in college course credit while still in high school. Since its inception in 1955, the number of AP courses and exams has varied over time; for the 2015-16 academic year, 37 AP courses and exams were offered in 25 different subject areas (see Table 1) (College Board, 2016).⁵

Committees of college and high school faculty work together to develop AP courses and exams and to develop performance measures and standards designed to ensure that course content corresponds to the content taught in college courses. Compatibility studies are also conducted in which college faculty administer the AP Exam to students in the related college course, and student outcomes are correlated to final course grades. The results of both the alignment work and the compatibility studies are used to establish the scoring metrics for the relevant AP Exam.

AP Courses are taught by high school faculty, and while there are no rigidly defined selection criteria for who can serve as an AP teacher, The College Board provides and recommends professional development opportunities for those teaching AP courses. The College Board also conducts an AP Course Audit, which specifies the expectations for courses authorized to use the "AP" designation. Not all students who enroll in AP courses take the AP exam at the end of the year, and not all students who take the exam have enrolled in an AP course prior to sitting for the exam. Schools, in fact, may offer AP Exams without participating in the AP Course Audit.

AP exams are scored on a scale of 1 to 5. The scores are intended to reflect the degree of knowledge and skills in subject areas covered by a particular exam. Except for the recently introduced Seminar and Capstone courses and the AP Studio Art assessments, which consist of portfolio assessments, AP exams generally consist of a multiple-choice section and a free-response section. According to The College Board, a score of 3 suggests that the student is "qualified" to receive college credit, a score of 4 suggests a student is "well-qualified," and a score of 5 indicates that a student is "extremely well-qualified" to receive college credit. The American Council on Education has reviewed the AP Program and recommended that colleges and universities award credit for AP scores of 3 or higher on AP Examinations (American Council of Education, 2016).

⁵ Tests were grouped into subject areas as defined by the THECB.

Table 1. In 2015-16, 37 AP Courses and Exams were offered in 25 different Subject Areas.

Title of Exam	Field of Study
Art History	Art History
Biology	Biology
Calculus AB	Math
Calculus BC	Math
Capstone: Research	Interdisciplinary
Capstone: Seminar	Interdisciplinary
Chemistry	Chemistry
Chinese Language and Culture	Chinese
Comparative Government and Politics	Government
Computer Science A	Computer Science
Computer Science Principles	Computer Science
English Language and Composition	English
English Literature and Composition	English
Environmental Science	Environmental Sciences
European History	History
French Language and Culture	French
German Language and Culture	German
Human Geography	Geography
Italian Language and Culture	Italian
Japanese Language and Culture	Japanese
Latin	Latin
Macroeconomics	Economics
Microeconomics	Economics
Music Theory	Music Theory
Physics 1: Algebra-Based	Physics
Physics 2: Algebra-Based	Physics
Physics C: Electricity and Magnetism	Physics
Physics C: Mechanics	Physics
Psychology	Psychology
Spanish Language and Culture	Spanish
Spanish Literature and Culture	Spanish
Statistics	Statistics
Studio Art 2-D Design	Visual Art
Studio Art 3-D Design	Visual Art
Studio Art Drawing	Visual Art
US Government and Politics	U.S. Government
US History	History
World History	History

Methodology

The Coordinating Board, in consultation with Texas public institutions of higher education, UEAC, and other interested parties, is conducting a study on the performance of undergraduate students at institutions of higher education who receive undergraduate course credit for achieving required scores on one or more AP exams.

As previously mentioned, the study and resulting report, due in January 2019, will compare the academic performance, retention rates, and graduation rates – disaggregated by score – of students who complete a lower-division course at an institution to students who receive credit for that course based on a score of three or more on an AP exam.

The study will examine two cohorts of FTIC students (AY 2013-14 and AY 2016-17) who attend a Texas public institution of higher education. In March 2016, institutions were asked to provide student-level course information for any course credit awarded to AY 2013-14 FTIC students who claimed course credit for achieving a required score on an AP exam. A second request for similar data will be made for students enrolling in college for the first time in AY 2016-17.

The March 2016 request for data revealed that while institutions kept records of credit awarded, they did not always record the exam title or score of a student's individual AP examination. The College Board, therefore, has agreed to provide AP exam data for students who are identified by the THECB as FTIC in AY 2013-14 and AY 2016-17. For the 2019 report, data from The College Board will be matched to student-level course data provided by institutions and to other institutional data already reported to the THECB. This approach will enable the THECB to provide the required comparisons and allow the analyses to be disaggregated by score.

Initial Findings

The Coordinating Board's initial request for data on the number of FTIC students awarded course credit for AP Examinations in 2013 indicates that 17,986 students enrolling in four-year public universities claimed credit for 67,906 courses, and 2,759 students enrolling in public community and technical colleges (CTC) claimed course credit for 5,844 courses. In total, 20,745 students received credit for 73,750 courses (see Table 2). The median number of courses awarded to students at Texas public universities was 3, while the median for CTC students was 2.

Table 2. AP Course Credit Awards to 2013-14 FTIC Students in Texas Public Institutions of Higher Education.⁶

	Community and Technical Colleges	Universities	Total
Total students in 2013-14 Cohort (from THECB data)	189,043	100,444	289,487
Number of students who received credit for Achievement on AP Exams (from IHE AP Data)	2,759	17,986	20,745

	Community and Technical Colleges	Universities	Total
Number of Courses Claimed for Credit based on AP Exam scores (from IHE AP Data)	5,844	67,906	73,750

Although credit was awarded to students in almost all fields covered by the AP Exams, the top five fields in which course credit was awarded to students were English (15,983 courses), history (14,951 courses), Spanish (8,970 courses), math and statistics (8,561 courses), and physics (4,405 courses) (see Table 3).

⁶ The total number of AY 2013-14 FTIC students in Texas public institutions (289,487) was calculated from THECB data. The number of students receiving credit for achievement of AP exams was calculated using institutional data provided by each institution.

Table 3. Ten Most Reported Subject Areas Claimed for Credit by AP Exam-Takers.

Subject Area	Number of Courses for which Credit was Awarded	Number of Students Receiving Credit from Two-Year Institutions	Number of Students Receiving Credit from Public Universities
English	15,983	1,169	10,934
History	14,951	403	6,907
Spanish	8,970	1,018	2,245
Math (incl. Statistics)	8,561	482	6,209
Physics	4,405	47	1,774
Political Science/Government	3,930	170	3,747
Chemistry	3,455	51	1,291
Biology	3,059	110	1,379
Economics	2,963	159	2,662
Psychology	2,670	213	2,453

Preliminary persistence data for 16,874 4 FTIC students who were awarded course credit for achievement on at least one AP exam and could be matched to corresponding THECB data records were sorted by institutional type for analysis. Those preliminary data for university enrollees indicate less than 1 percentage point difference in rates of persistence between students who claimed course credit for achievement on AP exams and all FTIC students at public universities. The first-year persistence rate for students at public universities was 87.8 percent for those with AP credit and 87.1 percent for all students. The second-year persistence rate was 81.2 percent for those with AP credit and 80.7 percent for all students.⁷

The persistence rate at community colleges was higher for students who claimed course credit for achievement on AP exams than it was for all FTIC students at community colleges.⁸ The first-year persistence rate for students at community colleges was 75.1 percent for those with AP credit and 65.5 percent for all students. The second-year persistence rate for those with AP credit was 52.3 percent compared to 53 percent for all students (see Table 4).

⁷ Persistence data are calculated for first-time-in-college, degree-seeking, full-time fall enrollees who enrolled in the following fall semester.

⁸ To maintain student confidentiality, numbers for students enrolled in the state's technical colleges who claimed AP credit were not separated from Community College data.

Table 4. Preliminary Persistence Measures for Students Claiming AP Credit in 2013-14.

	Persistence to Fall 2014		Persistence to Fall 2015	
	<i>CTC</i>	<i>University</i>	<i>CTC</i>	<i>University</i>
Students with AP Course Credit	75.1%	87.8%	52.3%	81.2%
All Students	65.5%	87.1%	53%	80.7%

The average cumulative Grade Point Average (GPA) for this same group who claimed AP credit was 3.13 for CTC students and 3.22 for university students at the end of their first year (2013-14), and 3.07 for CTC students and 3.20 for university students at the end of their second year (2014-15) (see Table 5).

Table 5. Preliminary Grade Point Averages for Students in 2013-14.

	AY 2013-2014		AY 2014-2015	
	<i>CTC</i>	<i>University</i>	<i>CTC</i>	<i>University</i>
GPA for Students Claiming AP Credit	3.13	3.22	3.07	3.20

These findings are preliminary. The 2019 report will present a more detailed analysis and breakdown of student performance measures and incorporate additional institutional data for the FTIC 2016-17 cohort and The College Board data on test scores to allow comparisons based on disaggregated scores. The 2019 report also will account for additional variables to ensure more equivalent comparisons among student groups.

Crosswalks

In separate requests for information, institutions were asked to provide two “crosswalks,” or explanations of their policies for awarding course credit for AP Exam achievement. Crosswalks outlining institutions’ policies in 2013-14 were requested in December 2015, and crosswalks outlining institutions’ policies for fall 2016, which were to incorporate the requirements of HB 1992, were requested in April 2016. As part of the second request for 2016 crosswalk information, chief academic officers of each institution were required to sign a statement attesting that their institution was in compliance with the requirements outlined in HB 1992.

A survey of institutions' requirements for awarding course credit shows that in AY 2013-14, 31 CTCs (out of 54 public two-year institutions – community colleges, state colleges, and state technical colleges) and 5 universities (out of 35 four-year public universities) accepted a score of 3 on all AP examinations for which credit could be awarded. In AY 2016-17, this number had increased to 44 two-year institutions (of 54) and 19 four-year universities (of 34).

Progress and Recommendation

Texas Education Code (TEC), Section 51.968 requires that institutions award credit for AP test scores of 3 or more, unless the course is required as a prerequisite for a related subsequent course and the chief academic officer can show evidence that a higher score should be required for a student to be successful on the subsequent course. The nature and specific details about prerequisite courses and their subsequent course sequences has been left up to institutional discretion, in keeping with TEC Section 51.968. For example, an institution may require that a certain level of success (e.g., a B or better) be required to enroll in a later (upper-division) course, or that an introductory course be completed satisfactorily before enrolling in subsequent or upper-division courses within the discipline. Based on these considerations, when 2016 AP crosswalks were requested from institutions, Statements of Compliance also were required from chief academic officers at each institution to attest to their institution's compliance with the statute (see Appendix A). All but two public institutions submitted statements of compliance, signed by the chief academic officer, certifying that their institutions were in compliance with HB 1992.

As mentioned, the March 2016 request for student-level data revealed that institutions kept records of credit awarded, but not all institutions recorded the exam title or score of a student's individual AP examination. Keeping track, at the institutional level, of the title and score of the AP examination for which a student receives credit would be beneficial for any local institutional self-studies, and would enable researchers to assess more accurately the influence and impact of the AP program on student success.

Recommendation: Upon awarding course credit for an AP exam, Texas public institutions of higher education should document the AP exam subject title and score corresponding to each course for which credit is awarded.

The THECB will provide findings and conclusions required by HB 1992 using institutional, The College Board, and agency data in the 2019 report.

Appendix A

Texas Higher Education Coordinating Board Institutional and Chief Academic Officer Signature Page for Compliance

House Bill 1992 (84th Legislature), "An Act Relating to the Granting of Undergraduate Course Credit by Advanced Placement Examination at Public Institutions of Higher Education."

1. Section 51.968 (b), Education Code, requires each institution of higher education (IHE) that offers freshman-level courses to adopt and implement a policy to grant undergraduate course credit to entering freshmen students who have achieved required scores on one or more examinations in the Advanced Placement (AP) Program.
2. Section 51.968 (c), Education Code, requires each IHE to (1) establish the institution's conditions for granting course credit, including the minimum required scores on AP exams; and (2) identify the specific course credit or other academic requirements of the institution, including the number of semester credit hours or other course credit that the institution will grant to a student who achieves required scores on AP examinations.
3. The 84th Legislature passed HB 1992, which amends Section 51.968. In establishing the minimum required score on an Advanced Placement examination for granting course credit for a particular lower-division course under Subsection (c), an institution of higher education ***may not require a score of more than three unless the institution's chief academic officer determines, based on evidence, that a higher score on the examination is necessary to indicate a student is sufficiently prepared to be successful in a related, more advanced course for which the lower-division course is a prerequisite.***

I certify that _____ (Institution)
is in compliance with the criteria specified by Section 51.968, Education Code, as amended by H.B. 1992, and have determined, for any course credit for which an Advanced Placement score of 4 or higher is required, that this decision has been made based on documented evidence, and is necessary to ensure that students are sufficiently prepared to be successful in a related, more advanced course for which that course is a prerequisite.

Chief Academic Officer

Date

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For more information contact:

Dr. Douglas Jansen
Academic Quality and Workforce
Texas Higher Education Coordinating Board
P.O. Box 12788
Austin, TX 78711
PHONE (512) 427-6232
FAX (512) 427-6168
doug.jansen@thecb.state.tx.us