The Validity of CLEP Scores for Course Placement Decisions

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May 2025

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Introduction

The study presents evidence of placement validity for the College Level Examination Program (CLEP). Specifically, we address the question: How do CLEP credit-holding students perform in subsequent courses compared to students without CLEP exam score who took the corresponding introductory course at their home institution.

Data and Methodology

Data

Our analyses examine course grades in subsequent courses for students with CLEP credit and those without CLEP exam score for seventeen CLEP exams in five subject areas including American Government, Introductory Psychology, Introductory Sociology, History of United States I, History of United States II, Principles of Macroeconomics, Principles of Microeconomics, Calculus, College Algebra, College Mathematics, Precalculus, Chemistry, Biology, French Language: Levels 1 & 2, Spanish Language: Levels 1 & 2, Analyzing and Interpreting Literature, and College Composition.1 The exams in our study are among the highest volume across the 34 exams that CLEP offers. The data for our study comes from two sources. The first is a College Board database of CLEP exam records from 2014 to 2024 that contains exam titles, scores, and dates of CLEP exams taken. The second is a database of college-level coursework maintained by the College Board to study the validity of exam scores and includes institutions attended, titles of courses taken, grades earned, and terms in which courses were completed. Students in our study graduated high school in 2017, 2018, 2020, 2021, or 2022 and immediately enrolled in a four-year institution.2 The total number of students and institutions that were included in the analysis varies by CLEP exam title and is provided in the Results section.

Identifying Introductory and Subsequent Courses

To determine whether a student received CLEP exam credit or took an equivalent introductory course(s), we used the CLEP credit policy published by each institution in 2021 and 2022. These policies provide the minimum CLEP score required to receive credit and/or placement and identify the equivalent course(s) for which credit and/or placement is earned. Students with the minimum CLEP score needed for credit/placement were categorized as using their CLEP credit to place out of introductory course as long as there was no record of them taking that same course prior to taking the CLEP Exam or in college before taking the subsequent course. Students with no CLEP score on record in the subject being studied and who took the equivalent introductory college course before taking the subsequent course served as the comparison group.

¹ Samples sizes for other CLEP exams were not large enough to include in the study (n<10).

² College outcome data was not collected for the 2019 cohort.

Subsequent courses were defined as courses taken immediately following the CLEP exam for CLEP credit-holding students or the equivalent introductory course for students without CLEP exam scores. Data from the subsequent courses were included only if it had a valid numeric grade ranging from 0 to 4 and if it was not listed as the CLEP equivalent introductory course(s) listed in the CLEP credit policy at the institution.

Analyses

For each CLEP exam studied, the average grade in the subsequent course(s) was calculated across institutions from the sample of students with CLEP exam credit who did not take the equivalent introductory course at the institution before taking the subsequent course and students without CLEP exam scores who did take the equivalent course at the institution before taking the subsequent course. A series of independent t-tests were conducted to test the significance of subsequent course performance difference between the two student groups. To be included in the analysis, the institution must award CLEP credit for the exam analyzed, document a specific introductory equivalent course for which credit and/or placement is earned, and have at least one student in each comparison group.

Results

Table 1 shows the number of institutions that award CLEP credit or placement included in the sample for each subject by CLEP exam score. As the table shows, a minimum CLEP exam score of 50 was used in most subjects to award credit or placement, as recommended by the American Council on Education.

Number of Institutions

Table 1. Number of institutions³ granting credit/placement by required CLEP exam score.

| | | Granting Credit/Placement for an CLEP Exam Score of: | | | |
|--------------------------------|---------------------------------|---|----|-----|--|
| Subjects | Exams | <50 | 50 | >50 | |
| | Introductory Sociology | 0 | 7 | 1 | |
| | American Government | 1 | 12 | 1 | |
| | History of United States I | 0 | 14 | 5 | |
| Lister , and Casial | History of United States II | 0 | 11 | 4 | |
| History and Social Sciences | Introductory Psychology | 0 | 8 | 1 | |
| 0000000 | Principles of Macroeconomics | 0 | 5 | 3 | |
| | Principles of Microeconomics | 1 | 5 | 3 | |

³ An institution may be counted in more than one score category in the same subject area if they have different credit and placement policies for different courses. For example, an institution may award credit/placement for one math course if the student earns at least a score of 50 and the institution may award credit/placement for a different math course if the student earns a score that is higher than 50.



Table 1 (Continued)

| | | Number of Institutions Granting Credit/Placement for a CLEP Exam Score of: | | |
|-----------------|---------------------------------------|---|----|-----|
| Subjects | Exams | <50 | 50 | >50 |
| | College Algebra | 0 | 24 | 4 |
| Math | Precalculus | 0 | 12 | 1 |
| Math | Calculus | 1 | 11 | 2 |
| | College Mathematics | 0 | 4 | 1 |
| Science | Biology | 0 | 14 | 7 |
| Science | Chemistry | 1 | 8 | 3 |
| World | Spanish Language 1 & 2 | 3 | 19 | 27 |
| Languages | French Language 1 & 2 | 2 | 6 | 8 |
| Composition and | Analyzing and Interpreting Literature | 0 | 5 | 1 |
| Literature | College Composition | 0 | 11 | 3 |

Table A1 – A3 in the Appendix shows the characteristics of institutions in each sample. The total number of institutions ranges from 5 to 28 depending on the subject. Most institutions in our samples are public, less selective, and have an undergraduate enrollment of 20,000 students or more, except for our sample for Analyzing and Interpreting Literature which has fewer institutions with an undergraduate enrollment of 20,000 or more. Geographic locations of institutions included in the sample varies for each exam title.

Table 2 shows for each CLEP exam we studied the number of students and the average grade students earned in subsequent course(s) for CLEP students who placed out of the introductory course and for the comparison group of students without CLEP exam scores who took the equivalent introductory course. In most subjects, students with CLEP credit earned statistically significant higher grades on average in subsequent courses than those without CLEP exam scores, with average differences favoring CLEP students ranging from .11 to .82 on the GPA scale. There were few exceptions including Calculus, College Math and French Language Level 1 & 2 where the difference between average courses grades for CLEP and non-CLEP students was not statistically significant suggesting that students with CLEP credit perform about the same as their peers in in the subsequent course even though they did not take the equivalent introductory course on the college campus.

Table 2. Subsequent Course Participation and Means for CLEP and Non-CLEP students by Subject and Exam.

| | | CLEP Nor | | | on-CLEP | | |
|--------------------------------|-------------------------------------|----------|------------------|--------|------------------|---|--|
| Subjects | Exams | N | Average Grade | N | Average Grade | Average Grade Diff: CLEP Minus Non-CLEP | |
| | Introductory Sociology | 17 | 3.91 | 4,103 | 3.49 | 0.42* | |
| | American Government | 71 | 3.62 | 13,882 | 3.18 | 0.44* | |
| | History of United States I | 43 | 3.73 | 17,565 | 2.91 | 0.82* | |
| History and Social Sciences | History of United States II | 24 | 3.40 | 6,698 | 2.93 | 0.47* | |
| | Introductory Psychology | 21 | 3.82 | 13,175 | 3.22 | 0.60* | |
| | Principles of Macroeconomics | 10 | 3.57 | 10,031 | 3.03 | 0.54* | |
| | Principles of Microeconomics | 17 | 3.66 | 11,706 | 3.21 | 0.45* | |
| | College Algebra | 127 | 3.16 | 14,474 | 2.68 | 0.48* | |
| | Precalculus | 46 | 2.98 | 6,538 | 2.53 | 0.45* | |
| Math | Calculus | 55 | 3.00 | 21,237 | 2.91 | 0.09 | |
| | College Mathematics | 16 | 3.09 | 733 | 2.69 | 0.40 | |
| 0.1 | Biology | 52 | 3.43 | 8,284 | 2.98 | 0.45* | |
| Science | Chemistry | 21 | 3.46 | 15,831 | 3.03 | 0.44* | |
| World - Languages | Spanish Language 1 & 2 | 273 | 3.59 | 3,574 | 3.48 | 0.11* | |
| | French Language 1 & 2 | 22 | 3.64 | 557 | 3.45 | 0.19 | |
| Composition and | Analyze and Interpret Literature | 143 | 3.47 | 4,267 | 3.15 | 0.33* | |
| Literature | College Composition | 47 | 3.56 | 29,592 | 3.16 | 0.40* | |

*The group difference is statistically significant at the p < 0.05

Conclusion

Findings reveal that students who earn course credits for achieving the minimum required score on CLEP exam per their institution's credit policy perform the same or better in subsequent courses than their peers without CLEP exam scores who took the equivalent introductory college course at the institution. These results are consistent with prior research on the validity of CLEP scores for making credit and placement decisions.⁴

Institutions interested in results for their own institution are encouraged to conduct their own CLEP validity studies. The Admitted Class Evaluation Service™ [ACES] is a free online service from the College Board that colleges and universities can use to understand how performance on CLEP Exams relates to student performance in subsequent coursework.⁵

⁴ See: https://eric.ed.gov/?id=ED574772

⁵ For more information visit: https://aces.collegeboard.org

Appendix

Table A1. Characteristics of institutions that granted credit/placement for a CLEP exam in History and Social Sciences.

| | | History & Social Sciences | | | | | | |
|-----------------------------|------------------------|------------------------------|------------------------|----------------------------------|-----------------------------------|---------------------|---------------------------------|---------------------------------|
| | | Intro Sociology | American Government | History of United States I | History of United States II | Intro Psychology | Principles of Macroeconomics | Principles of Microeconomics |
| | No. of Institutions | 8 | 14 | 19 | 15 | 9 | 8 | 9 |
| | Middle States | 13% | 21% | 11% | 13% | 0% | 0% | 0% |
| | Midwest | 38% | 29% | 37% | 27% | 44% | 50% | 44% |
| | New England | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| U.S. Region | Southern | 38% | 14% | 37% | 33% | 11% | 25% | 22% |
| | South- western | 13% | 29% | 16% | 27% | 22% | 25% | 33% |
| | Western | 0% | 7% | 0% | 0% | 22% | 0% | 0% |
| Control | Private | 38% | 21% | 11% | 7% | 11% | 13% | 11% |
| Control | Public | 63% | 79% | 89% | 93% | 89% | 88% | 89% |
| | 0%-25% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Admittance | 25%-50% | 13% | 14% | 0% | 0% | 0% | 13% | 22% |
| Rate | 50%-75% | 63% | 50% | 74% | 67% | 44% | 63% | 67% |
| | 75%-100% | 25% | 36% | 26% | 33% | 56% | 25% | 11% |
| | 1,000 - 4,999 | 38% | 21% | 26% | 27% | 11% | 13% | 0% |
| | 5,000 - 9,999 | 0% | 7% | 5% | 0% | 11% | 0% | 0% |
| Undergraduate Enrollment | 10,000 - 19,999 | 13% | 14% | 21% | 20% | 11% | 13% | 11% |
| | 20,000 and Above | 50% | 57% | 47% | 53% | 67% | 75% | 89% |

| | | Math | | | Science | | |
|-----------------------------|---------------------|--------------------|-------------|----------|------------------------|---------|-----------|
| | | College Algebra | Precalculus | Calculus | College Mathematics | Biology | Chemistry |
| | No. of Institutions | 28 | 13 | 12 | 5 | 17 | 8 |
| | Middle States | 7% | 0% | 8% | 0% | 0% | 13% |
| | Midwest | 25% | 38% | 8% | 40% | 35% | 25% |
| | New England | 0% | 0% | 0% | 0% | 6% | 0% |
| U.S. Region | Southern | 21% | 31% | 33% | 20% | 24% | 13% |
| | South- western | 36% | 23% | 50% | 40% | 35% | 25% |
| | Western | 11% | 8% | 0% | 0% | 0% | 25% |
| Control | Private | 11% | 15% | 8% | 0% | 12% | 13% |
| Control | Public | 89% | 85% | 92% | 100% | 88% | 88% |
| | 0%-25% | 0% | 0% | 0% | 0% | 0% | 0% |
| Admittance | 25%-50% | 7% | 8% | 25% | 0% | 6% | 13% |
| Rate | 50%-75% | 54% | 23% | 33% | 40% | 65% | 50% |
| | 75%-100% | 39% | 69% | 42% | 60% | 29% | 38% |
| Undergraduate Enrollment | 1,000 - 4,999 | 11% | 8% | 8% | 0% | 6% | 0% |
| | 5,000 - 9,999 | 14% | 8% | 0% | 20% | 0% | 13% |
| | 10,000 - 19,999 | 11% | 23% | 8% | 40% | 29% | 25% |
| | 20,000 and Above | 64% | 62% | 83% | 40% | 65% | 63% |

Table A2. Characteristics of institutions that granted credit/placement for a CLEP exam in Math and Science.

Table 3A. Characteristics of institutions that granted credit/placement for a CLEP exam in World Languages and Composition and Literature

| | | World Languages | | Composition & Literature | | |
|-----------------------------|------------------------|------------------------|-----------------------|------------------------------|------------------------|--|
| | | Spanish Level 1 & 2 | French Level 1 & 2 | Analyze/ Interpret Lit | College Composition | |
| | No. of Institutions | 28 | 8 | 6 | 13 | |
| | Middle States | 4% | 0% | 33% | 0% | |
| | Midwest | 32% | 25% | 0% | 23% | |
| | New England | 4% | 0% | 0% | 8% | |
| U.S. Region | Southern | 14% | 50% | 33% | 46% | |
| | South- western | 25% | 13% | 17% | 15% | |
| | Western | 21% | 13% | 17% | 8% | |
| Control | Private | 29% | 13% | 17% | 0% | |
| Control | Public | 71% | 88% | 83% | 100% | |
| | 0%-25% | 7% | 0% | 0% | 0% | |
| Admittance | 25%-50% | 4% | 13% | 0% | 0% | |
| Rate | 50%-75% | 25% | 63% | 33% | 15% | |
| | 75%-100% | 64% | 25% | 67% | 85% | |
| | 1,000 - 4,999 | 21% | 0% | 17% | 8% | |
| Undergraduate | 5,000 - 9,999 | 7% | 0% | 33% | 23% | |
| Undergraduate Enrollment | 10,000 - 19,999 | 18% | 50% | 33% | 23% | |
| Linominorit | 20,000 and Above | 54% | 50% | 17% | 46% | |

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