# Imagine Edgenuity Students Recover 26\% More Credits and Graduate at a Higher Rate than Their Peers 

## OVERVIEW

During the 2015, 2016, and 2017 school years, Cypress-Fairbanks Independent School District (CFISD) students who passed the State of Texas Assessment of Academic Readiness (STAAR ${ }^{\circledR}$ ) End-of-Course (EOC) assessment, but failed the corresponding English I, English II, Algebra I, U.S. History, or Biology course, were given the option to retake the failed course in a traditional credit recovery classroom or use an Imagine Edgenuity online credit recovery course. Students in both groups completed their credit recovery coursework during their regularly scheduled block (Imagine Edgenuity students completed their coursework in computer labs).

| Cypress-Fairbanks ISD <br> Demographics ( $\mathbf{N}=1,962$ ) |  |
| :--- | :--- |
| Hispanic | $61 \%$ |
| African American | $25 \%$ |
| Caucasian | $10 \%$ |
| Asian | $2 \%$ |
| Multiracial | $1 \%$ |
| Native American | $1 \%$ |

## RESULTS

Across all subjects and years, results show that students enrolled in Imagine Edgenuity's online English I, English II, Algebra I, U.S. History, and Biology courses obtained more credits ( $99.7 \%$ versus $73.8 \%$ ) and achieved higher course grades ( $79.6 \%$ versus $64.5 \%$ ) than an equivalent group of students enrolled in a face-to-face credit recovery course (see Table 1)'. Data also indicate that 12th-grade students enrolled in Imagine Edgenuity credit recovery courses graduated at a higher rate than those who took the face-to-face credit recovery courses (see Table 2).

Table 1. Course Grade and Credit Attainment Rates, School Year 2015-16 to School Year 2017-18 Cypress-Fairbanks ISD Students, Treatment and Comparison Groups ( $N=1,962$ )

| Subject | Treatment Group |  |  |  |  | Comparison Group |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Students | Number of Enrollments | Average Grade | \# Credits Attempted | \% Credits Earned | Number of Students | Number of Enrollments | Average Grade | \# Credits Attempted | \% Credits Earned |
| Algebral | 128 | 136 | 77.0\%*** | 68 | 99.3\%* | 128 | 185 | 65.9\%*** | 92.5 | 69.7\%* |
| English I | 127 | 134 | 80.3\%*** | 67 | 100.0\%* | 127 | 151 | 62.4\%*** | 75.5 | 68.2\%* |
| English II | 207 | 220 | 79.1\%*** | 110 | 100.0\%*** | 207 | 255 | 65.2\%*** | 127.5 | 76.9\%*** |
| Biology | 215 | 222 | 79.5\%*** | 111 | 100.0\%** | 215 | 282 | 62.4\%*** | 141 | 70.6\%** |
| U.S. History | 304 | 317 | 82.2\%*** | 158.5 | 99.4\%* | 304 | 406 | 66.5\%*** | 203 | 78.1\%* |
| All | 981 | 1,029 | 80.0\%*** | 514.5 | 99.7\%*** | 981 | 1,279 | 64.6\%*** | 639.5 | 73.5\%*** |

*p < .05; **p < . 01; ***p < . 001
Note: Students earned 0.5 credits for a semester-long course and one credit for a year-long course.

[^0]Table 2. 12th-Grade Graduation Rates, Spring 2016 to Spring 2018
Cypress Fairbanks ISD Students, Treatment and Comparison Groups ( $N=714$ )

| Subject | Treatment Group |  | Comparison Group |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \# 12th Graders | 12th Graders Graduated | \# 12th Graders | 12th Graders Graduated |
| Algebra I | 7 | 5 (71.4\%) | 7 | 4 (57.1\%) |
| English I | 3 | 3 (100.0\%) | 3 | 3 (100.0\%) |
| English II | 63 | 52 (82.5\%*) | 63 | 51 (81.0\%*) |
| Biology | 28 | 25 (89.3\%**) | 28 | 19 (67.9\%**) |
| U.S. History | 256 | 209 (81.6\%***) | 256 | 206 (80.5\%***) |
| All | 357 | 294 (82.4\%***) | 357 | 283 (79.3\%***) |
| $*_{p}<.10 ; * * p<.05 ; * * * p<.001$ |  |  |  |  |

## SUCCESS FACTORS

The school attributes its success to:

- Making content material more personalized and accessible: Imagine Edgenuity courses use a variety of instructional formats, including video lectures, graphic displays, simulations, closed captioning, and text (with optional read-aloud support). Students could learn content material in a variety of ways.
- Customizing courses to match CFISD's curriculum scope and sequence: Using Imagine Edgenuity's Texas-specific courses, district curriculum staff customized the content of online courses to match the scope and sequence of face-to-face courses.
- Arming teachers with additional data to track progress: Computer-lab managers had access to students' real-time progress, engagement, and achievement data. They were able to closely monitor and use this data to motivate students and help them stay on track.

| Demographic |  | 2015-16 |  | 2016-17 |  | 2017-18 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Treatment | Comparison | Treatment | Comparison | Treatment | Comparison |
| Algebral | All Students | 51 | 51 | 46 | 46 | 31 | 31 |
| Grade Level | 9 | 37 (72.5\%) | 37 (72.5\%) | 25 (54.3\%) | 25 (54.3\%) | 19 (61.3\%) | 19 (61.3\%) |
|  | 10 | 3 (5.9\%) | 3 (5.9\%) | 13 (28.3\%) | 13 (28.3\%) | 4 (12.9\%) | 4 (12.9\%) |
|  | 11 | 9 (17.6\%) | 9 (17.6\%) | 5 (10.9\%) | 5 (10.9\%) | 6 (19.4\%) | 6 (19.4\%) |
|  | 12 | 2 (3.9\%) | 2 (3.9\%) | 3 (6.5\%) | 3 (6.5\%) | 2 (6.5\%) | 2 (6.5\%) |
| Gender | Male | 28 (54.9\%) | 28 (54.9\%) | 27 (58.7\%) | 27 (58.7\%) | 19 (61.3\%) | 19 (61.3\%) |
|  | Female | 23 (45.1\%) | 23 (45.1\%) | 19 (41.3\%) | 19 (41.3\%) | 12 (38.7\%) | 12 (38.7\%) |
| Ethnicity | Asian | 1 (2.0\%) | 1 (2.0\%) | - | - | 1 (3.2\%) | 1 (3.2\%) |
|  | Black | 10 (19.6\%) | 10 (19.6\%) | 13 (28.3\%) | 13 (28.3\%) | 9 (29.0\%) | 9 (29.0\%) |
|  | Hispanic | 37 (72.5\%) | 37 (72.5\%) | 32 (69.6\%) | 32 (69.6\%) | 16 (51.6\%) | 15 (48.4\%) |
|  | Multiracial | - | - | - | - | - | - |
|  | Native American | - | - | - | - | - | 1 (3.2\%) |
|  | White | 3 (5.9\%) | 3 (5.9\%) | 1 (2.2\%) | 1 (2.2\%) | 5 (16.1\%) | 5 (16.1\%) |
| LEP | Yes | 3 (5.9\%) | 3 (5.9\%) | 6 (13.0\%) | 6 (13.0\%) | 3 (9.7\%) | 3 (9.7\%) |
|  |  | 48 (94.1\%) | 48 (94.1\%) | 40 (87.0\%) | 40 (87.0\%) | 28 (90.3\%) | 28 (90.3\%) |
| Average Previous STAAR Score |  | 3681.6 | 3681.3 | 3712.2 | 3766.3 | 3812.4 | 3744.9 |
| English I | All Students | 41 | 41 | 41 | 41 | 45 | 45 |
| Grade Level | 9 | 19 (46.3\%) | 19 (46.3\%) | 26 (63.4\%) | 26 (63.4\%) | 33 (73.3\%) | 33 (73.3\%) |
|  | 10 | 13 (31.7\%) | 13 (31.7\%) | 9 (22.0\%) | 9 (22.0\%) | 11 (24.4\%) | 11 (24.4\%) |
|  | 11 | 8 (19.5\%) | 8 (19.5\%) | 4 (9.8\%) | 4 (9.8\%) | 1 (2.2\%) | 1 (2.2\%) |
|  | 12 | 1 (2.4\%) | 1 (2.4\%) | 2 (4.9\%) | 2 (4.9\%) | - | - |
| Gender | Male | 24 (58.5\%) | 24 (58.5\%) | 22 (53.7\%) | 22 (53.7\%) | 26 (57.8\%) | 26 (57.8\%) |
|  | Female | 17 (41.5\%) | 17 (41.5\%) | 19 (46.3\%) | 19 (46.3\%) | 19 (42.2\%) | 19 (42.2\%) |
| Ethnicity | Asian | 1 (2.4\%) | - | 2 (4.9\%) | - | - | - |
|  | Black | 7 (17.1\%) | 7 (17.1\%) | 13 (31.7\%) | 14 (34.1\%) | 20 (44.4\%) | 20 (44.4\%) |
|  | Hispanic | 27 (65.9\%) | 29 (70.7\%) | 19 (46.3\%) | 22 (53.7\%) | 19 (42.2\%) | 20 (44.4\%) |
|  | Multiracial | 1 (2.4\%) | - | 2 (4.9\%) | - | 2 (4.4\%) | 1 (2.2\%) |
|  | Native American | 1 (2.4\%) | 1 (2.4\%) | - | - | - | - |
|  | White | 4 (9.8\%) | 4 (9.8\%) | 5 (12.2\%) | 5 (12.2\%) | 4 (8.9\%) | 4 (8.9\%) |
| LEP | Yes | 1 (2.4\%) | 1 (2.4\%) | 1 (2.4\%) | 1 (2.4\%) | 1 (2.2\%) | 1 (2.2\%) |
|  |  | 40 (97.6\%) | 40 (97.6\%) | 40 (97.6\%) | 40 (97.6\%) | 44 (97.8\%) | 44 (97.8\%) |
| Average Previous STAAR Score |  | 3968.9 | 3928.3 | 3953.8 | 3919.1 | 3973.5 | 3956.2 |


| Demographic |  | 2015-16 |  | 2016-17 |  | 2017-18 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Treatment | Comparison | Treatment | Comparison | Treatment | Comparison |
| English II | All Students | 65 | 65 | 79 | 79 | 63 | 63 |
| Grade Level | 9 | 4 (6.2\%) | 4 (6.2\%) | 5 (6.3\%) | 5 (6.3\%) | 3 (4.8\%) | 3 (4.8\%) |
|  | 10 | 4 (6.2\%) | 4 (6.2\%) | 3 (3.8\%) | 3 (3.8\%) | 8 (12.7) | 8 (12.7) |
|  | 11 | 33 (50.8\%) | 33 (50.8\%) | 44 (55.7\%) | 44 (55.7\%) | 40 (63.5\%) | 40 (63.5\%) |
|  | 12 | 24 (36.9\%) | 24 (36.9\%) | 27 (34.2\%) | 27 (34.2\%) | 12 (19.0\%) | 12 (19.0\%) |
| Gender | Male | 36 (55.4\%) | 36 (55.4\%) | 50 (63.3\%) | 50 (63.3\%) | 36 (57.1\%) | 36 (57.1\%) |
|  | Female | 29 (44.6\%) | 29 (44.6\%) | 29 (36.7\%) | 29 (36.7\%) | 27 (42.9\%) | 27 (42.9\%) |
| Ethnicity | Asian | 4 (6.2\%) | 3 (4.6\%) | 1 (1.3\%) | - | - | - |
|  | Black | 11 (16.9\%) | 13 (20.0\%) | 20 (25.3\%) | 13 (16.5\%) | 16 (25.4\% | 17 (27.0\%) |
|  | Hispanic | 43 (66.2\%) | 43 (66.2\%) | 50 (63.3\%) | 59 (74.7\%) | 42 (66.7\%) | 42 (66.7\%) |
|  | Multiracial | 1 (1.5\%) | 1 (1.5\%) | 1 (1.3\%) | 1 (1.3\%) | 1 (1.6\%) | - |
|  | Native American | 1 (1.5\%) | - | 1 (1.3\%) | - | - | - |
|  | White | 5 (7.7\%) | 5 (7.7\%) | 6 (7.6\%) | 6 (7.6\%) | 4 (6.3\%) | 4 (6.3\%) |
| LEP | Yes | 3 (4.6\%) | 3 (4.6\%) | 2 (2.5\%) | 2 (2.5\%) | 1 (1.6\%) | 1 (1.6\%) |
|  |  | 62 (95.4\%) | 62 (95.4\%) | 77 (97.5\%) | 77 (97.5\%) | 62 (98.4\%) | 62 (98.4\%) |
| Average Previous STAAR Score |  | 3998.5 | 3915.4 | 3961.0 | 3938.1 | 3966.0 | 3957.4 |
| Biology | All Students | 61 | 61 | 92 | 92 | 62 | 62 |
| Grade Level | 9 | 18 (19.5\%) | 18 (19.5\%) | 33 (35.9\%) | 33 (35.9\%) | 22 (35.5\%) | 22 (35.5\%) |
|  | 10 | 14 (23.0\%) | 14 (23.0\%) | 21 (22.8\%) | 21 (22.8\%) | 24 (38.7\%) | 24 (38.7\%) |
|  | 11 | 17 (27.9\%) | 17 (27.9\%) | 27 (29.3\%) | 27 (29.3\%) | 11 (17.7\%) | 11 (17.7\%) |
|  | 12 | 12 (19.7\%) | 12 (19.7\%) | 11 (12.0\%) | 11 (12.0\%) | 5 (8.1\%) | 5 (8.1\%) |
| Gender | Male | 38 (62.3\% | 38 (62.3\% | 58 (63.0\%) | 58 (63.0\%) | 36 (58.1\%) | 36 (58.1\%) |
|  | Female | 23 (37.7\%) | 23 (37.7\%) | 34 (37.0\%) | 34 (37.0\%) | 26 (41.9\%) | 26 (41.9\%) |
| Ethnicity | Asian | 2 (3.3\%) | 1 (1.6\%) | 2 (2.2\%) | 1 (1.1\%) | - | 1 (1.6\%) |
|  | Black | 14 (23.0\%) | 14 (23.0\%) | 31 (33.7\%) | 32 (34.8\%) | 13 (21.0\%) | 15 (24.2\%) |
|  | Hispanic | 37 (60.7\%) | 38 (62.3\%) | 50 (54.3\%) | 50 (54.3\%) | 40 (64.5\%) | 38 (61.3\%) |
|  | Multiracial | 1 (1.6\%) | 1 (1.6\%) | - | - | 1 (1.6\%) | 1 (1.6\%) |
|  | Native American | - | - | 1 (1.1\%) | 1 (1.1\%) | 1 (1.6\%) | - |
|  | White | 7 (11.5\%) | 7 (11.5\%) | 8 (8.7\%) | 8 (8.7\%) | 7 (11.3\%) | 7 (11.3\%) |
| LEP | Yes | 4 (6.6\%) | 4 (6.6\%) | 8 (8.7\%) | 8 (8.7\%) | 4 (6.5\%) | 4 (6.5\%) |
|  |  | 57 (93.4\%) | 57 (93.4\%) | 84 (91.3\%) | 84 (91.3\%) | 58 (93.5\%) | 58 (93.5\%) |
| Average Previous STAAR Score |  | 3840.9 | 3767.3 | 3795.6 | 3758.9 | 3860.7 | 3807.1 |


| Demographic |  | 2015-16 |  | 2016-17 |  | 2017-18 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Treatment | Comparison | Treatment | Comparison | Treatment | Comparison |
| U.S. History | All Students | 100 | 100 | 104 | 104 | 100 | 100 |
| Grade Level | 9 | - | - | 3 (2.9\%) | 3 (2.9\%) | 2 (2.0\%) | 2 (2.0\%) |
|  | 10 | - | - | - | - | 1 (1.0\%0 | 1 (1.0\%0 |
|  | 11 | 11 (11.0\%) | 11 (11.0\%) | 19 (18.3\%) | 19 (18.3\%) | 12 (12.0\%) | 12 (12.0\%) |
|  | 12 | 89 (89.0\%) | 89 (89.0\%) | 82 (78.8\%) | 82 (78.8\%) | 85 (85.0\%) | 85 (85.0\%) |
| Gender | Male | 62 (62.0\%) | 62 (62.0\%) | 65 (62.5\%) | 65 (62.5\%) | 65 (65.0\%) | 65 (65.0\%) |
|  | Female | 38 (38.0\%) | 38 (38.0\%) | 39 (37.5\%) | 39 (37.5\%) | 35 (35.0\%) | 35 (35.0\%) |
| Ethnicity | Asian | 3 (3.0\%) | 2 (2.0\%) | 2 (1.9\%) | 2 (1.9\%) | 2 (2.0\%) | 2 (2.0\%) |
|  | Black | 24 (24.0\%) | 25 (25.0\%) | 20 (19.2\%) | 16 (15.4\%) | 27 (27.0\%) | 27 (27.0\%) |
|  | Hispanic | 58 (58.0\%) | 59 (59.0\%) | 67 (64.4\%) | 72 (69.2\%) | 56 (56.0\%) | 57 (57.0\%) |
|  | Multiracial | 3 (3.0\%) | 2 (2.0\%) | 1 (1.0\%) | - | 1 (1.0\%) | - |
|  | Native American | - | - | - | - | - | - |
|  | White | 12 (12.0\%) | 12 (12.0\%) | 14 (13.5\%) | 14 (13.5\%) | 14 (14.0\%) | 14 (14.0\%) |
| LEP | Yes | 9 (9.0\%) | 9 (9.0\%) | 9 (8.7\%) | 9 (8.7\%) | 9 (9.0\%) | 9 (9.0\%) |
|  |  | 91 (91.0\%) | 91 (91.0\%) | 95 (91.3\%) | 95 (91.3\%) | 91 (91.0\%) | 91 (91.0\%) |
| Average Previous STAAR Score |  | 3884.5 | 3937.9 | 3946.6 | 3988.9 | 3988.8 | 4038.5 |

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[^0]:    1 This study used a matched-comparison group design to evaluate the effects of Edgenuity credit recovery courses on student achievement. The analytical sample consisted of (1) a group of students who used Edgenuity online credit recovery courses; and (2) a comparison group of equivalent students who took a face-to-face credit recovery course. Edgenuity students were included in the analysis if they completed $100 \%$ of course activities with a grade greater than or equal to $70 \%$ and/or if their enrollment status was marked "completed" by a teacher. Researchers used exact matching to identify a comparison group whose baseline characteristics were similar to those of Edgenuity students at the beginning of the intervention. First, researchers identified comparison students whose grade level, gender, and English language status were identical to the Edgenuity sample. Next, researchers paired students based on their ethnicity. White students were required to be matched with white students. For those not self-identified as white, a match within ethnicity was made. If there was no matching student available, a student match was made by randomly selecting from remaining students who were from one of the remaining race/ethnicity categories. If a match using these procedures was not available for the Imagine Edgenuity student, that student was removed from the analysis. Finally, researchers used paired $t$-tests to determine whether performance on the prior year STAAR EOC assessments differed significantly between the treatment and comparison groups. No significant differences were found; therefore, the matching procedures used were successful in creating equivalent groups. See Appendix A.

