| | | | | | Pre- | Number | | | | |
|---------------|----------|--------------|--------------|--------------------|---------------|----------|------------|--------|------------------|---------------------|
| Classroom | | | Grade-Level | Content Area | SCORE | of P-12 | Post-SCORE | "Y-X" | 1137 AVII 115511 | #/X/ X/ AOH |
| Sample | Semester | | Assessed | Assessed | (X) | Students | (Y) | Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
| Classroom 428 | | 2019 | Kindergarten | Mathematics | 77.60 | 25 | 87.20 | 9.60 | -9.60 | 92.16 |
| Classroom 429 | | 2019 | 5th Grade | Integrated Science | 36.97 | 50 | 92.47 | 55.50 | -55.50 | 3080.25 |
| Classroom 430 | | 2019 | 6th Grade | Music | 5.00 | 23 | 6.00 | 1.00 | -1.00 | 1 |
| Classroom 431 | Winter | 2019 | 6th Grade | Mathematics | 18.60 | 14 | 91.40 | 72.80 | -72.80 | 5299.84 |
| Classroom 432 | Winter | 2019 | 1st Grade | Integrated Science | 31.50 | 19 | 75.40 | 43.90 | -43.90 | 1927.21 |
| Classroom 433 | | 2019 | 5th Grade | Mathematics | 71.00 | 25 | 90.00 | 19.00 | -19.00 | 361 |
| Classroom 434 | Winter | 2019 | 11th Grade | Mathematics | 2.00 | 28 | 75.00 | 73.00 | -73.00 | 5329 |
| Classroom 435 | Winter | 2019 | 5th Grade | Integrated Science | 12.78 | | 83.11 | 70.33 | -70.33 | 4946.3089 |
| Classroom 436 | | 2019 | 5th Grade | Music | 32.00 | 32 | 99.00 | 67.00 | -67.00 | 4489 |
| Classroom 437 | Winter | 2019 | 7th Grade | English | 48.00 | 62 | 92.00 | 44.00 | -44.00 | 1936 |
| Classroom 438 | Winter | 2019 | 6th Grade | Social Studies | 22.00 | 129 | 94.00 | 72.00 | -72.00 | 5184 |
| Classroom 439 | Winter | 2019 | 4th Grade | Integrated Science | 44.00 | 19 | 82.35 | 38.35 | -38.35 | 1470.7225 |
| Classroom 440 | Winter | 2019 | Kindergarten | Integrated Science | 60.40 | 20 | 98.40 | 38.00 | -38.00 | 1444 |
| Classroom 441 | Winter | 2019 | 10th Grade | Social Studies | 40.00 | 90 | 75.00 | 35.00 | -35.00 | 1225 |
| Classroom 442 | Winter | 2019 | 1st Grade | Integrated Science | 47.00 | 19 | 74.00 | 27.00 | -27.00 | 729 |
| Classroom 443 | Winter | 2019 | 1st Grade | Integrated Science | 23.00 | 19 | 82.00 | 59.00 | -59.00 | 3481 |
| Classroom 444 | Winter | 2019 | 11th Grade | Social Studies | 5.28 | 116 | 12.54 | 7.26 | -7.26 | 52.7076 |
| Classroom 445 | | 2019 | 12th Grade | Music | 49.53 | 43 | 92.56 | 43.03 | -43.03 | 1851.5809 |
| Classroom 446 | Winter | 2019 | 8th Grade | Mathematics | 21.00 | 24 | 90.00 | 69.00 | -69.00 | 4761 |
| Classroom 447 | Winter | 2019 | 10th Grade | Social Studies | 3.57 | 40 | 85.00 | 81.43 | -81.43 | 6630.8449 |
| Classroom 448 | Winter | 2019 | 11th Grade | English | 49.50 | 20 | 67.30 | 17.80 | -17.80 | 316.84 |
| Classroom 449 | Winter | 2019 | 6th Grade | Social Studies | 46.00 | 34 | 78.00 | 32.00 | -32.00 | 1024 |
| Classroom 450 | | 2019 | 2nd Grade | Mathematics | 14.90 | 21 | 59.40 | 44.50 | -44.50 | 1980.25 |
| Classroom 451 | | 2019 | 2nd Grade | Integrated Science | 62.60 | 22 | 92.40 | 29.80 | -29.80 | 888.04 |
| Classroom 452 | Winter | 2019 | 9th Grade | Earth Science | 40.00 | 11 | 72.00 | 32.00 | -32.00 | 1024 |
| Classroom 453 | | 2019 | 9th Grade | Social Studies | 19.00 | 32 | 77.00 | 58.00 | -58.00 | 3364 |
| Classroom 454 | | 2019 | 6th Grade | Music | 68.00 | 37 | 88.00 | 20.00 | -20.00 | 400 |
| Classroom 455 | Winter | 2019 | 11th Grade | Economics | 55.00 | 21 | 88.00 | 33.00 | -33.00 | 1089 |
| Classroom 456 | | 2019 | 10th Grade | Social Studies | 44.40 | 47 | 79.53 | 35.13 | -35.13 | 1234.1169 |
| Classroom 457 | Winter | 2019 | 4th Grade | Mathematics | 65.00 | 22 | 82.00 | 17.00 | -17.00 | 289 |
| Classroom 458 | Winter | 2019 | 10th Grade | Social Studies | 52.95 | 52 | 68.35 | 15.40 | -17.00 | 237.16 |
| | | | | | | 13 | 55.00 | 52.70 | | |
| Classroom 459 | Winter | 2019 2019 | 5th Grade | Mathematics | 2.30 60.00 | | 100.00 | 40.00 | -52.70 -40.00 | 2777.29 |
| Classroom 460 | | | 6th Grade | Music | | 6 | | | | 1600 |
| Classroom 461 | Winter | 2019 | 9th Grade | Social Studies | 51.00 | 49 | 80.00 | 29.00 | -29.00 | 841 |
| Classroom 462 | Winter | 2019 | 1st Grade | Social Studies | 38.00 | 25 | 60.00 | 22.00 | -22.00 | 484 |
| Classroom 463 | | 2019 | 4th Grade | Physical Education | 71.00 | 28 | 89.00 | 18.00 | -18.00 | 324 |
| Classroom 464 | Winter | 2019 | 9th Grade | English | 60.33 | 72 | 89.00 | 28.67 | -28.67 | 821.7796889 |
| Classroom 465 | Winter | 2019 | 7th Grade | Music | 77.40 | 31 | 85.50 | 8.10 | -8.10 | 65.61 |
| Classroom 466 | | 2019 | 9th Grade | English | 83.00 | 80 | 88.00 | 5.00 | -5.00 | 25 |
| Classroom 467 | Winter | 2019 | 5th Grade | Music | 25.00 | 113 | 75.00 | 50.00 | -50.00 | 2500 |

| | | | | | Pre- | Number | | | | |
|---------------|----------|------|--------------|--------------------|-------|----------|------------|--------|------------------|--|
| Classroom | | | Grade-Level | Content Area | SCORE | of P-12 | Post-SCORE | "Y-X" | WY MILL HERM | #/\/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ |
| Sample | Semester | | Assessed | Assessed | (X) | Students | (Y) | Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
| Classroom 468 | | 2019 | 7th Grade | Mathematics | 30.00 | 61 | 72.00 | 42.00 | -42.00 | 1764 |
| Classroom 469 | | 2019 | 7th Grade | Music | 60.00 | 10 | 90.00 | 30.00 | -30.00 | 900 |
| Classroom 470 | | 2019 | 12th Grade | English | 70.00 | 36 | 94.00 | 24.00 | -24.00 | 576 |
| Classroom 471 | Winter | 2019 | 11th Grade | Chemistry | 60.86 | 23 | 80.43 | 19.57 | -19.57 | 382.9849 |
| Classroom 472 | Winter | 2019 | 8th Grade | Mathematics | 21.80 | 30 | 82.50 | 60.70 | -60.70 | 3684.49 |
| Classroom 473 | | 2019 | 7th Grade | English | 83.70 | 86 | 92.30 | 8.60 | -8.60 | 73.96 |
| Classroom 474 | | 2019 | 10th Grade | English | 56.60 | 58 | 85.90 | 29.30 | -29.30 | 858.49 |
| Classroom 475 | | 2019 | 11th Grade | Mathematics | 30.16 | 22 | 57.51 | 27.35 | -27.35 | 748.0225 |
| Classroom 476 | | 2019 | 5th Grade | Mathematics | 27.00 | 24 | 42.00 | 15.00 | -15.00 | 225 |
| Classroom 477 | Winter | 2019 | 10th Grade | Social Studies | 27.00 | 64 | 78.00 | 51.00 | -51.00 | 2601 |
| Classroom 478 | Winter | 2019 | 9th Grade | Music | 20.00 | 53 | 85.00 | 65.00 | -65.00 | 4225 |
| Classroom 479 | Winter | 2019 | 10th Grade | Music | 54.00 | 17 | 82.00 | 28.00 | -28.00 | 784 |
| Classroom 480 | Winter | 2019 | Kindergarten | Language Arts | 45.00 | 22 | 56.00 | 11.00 | -11.00 | 121 |
| Classroom 481 | Winter | 2019 | 6th Grade | Mathematics | 7.00 | 23 | 65.00 | 58.00 | -58.00 | 3364 |
| Classroom 482 | Winter | 2019 | Kindergarten | Mathematics | 50.00 | 18 | 63.00 | 13.00 | -13.00 | 169 |
| Classroom 483 | Winter | 2019 | 2nd Grade | Mathematics | 68.00 | 21 | 86.00 | 18.00 | -18.00 | 324 |
| Classroom 484 | Winter | 2019 | Kindergarten | Mathematics | 56.00 | 15 | 76.00 | 20.00 | -20.00 | 400 |
| Classroom 485 | Winter | 2019 | 10th Grade | German | 20.00 | 15 | 60.00 | 40.00 | -40.00 | 1600 |
| Classroom 486 | Winter | 2019 | 9th Grade | Biology | 49.00 | 118 | 76.00 | 27.00 | -27.00 | 729 |
| Classroom 487 | Winter | 2019 | 4th Grade | Mathematics | 55.00 | 24 | 68.00 | 13.00 | -13.00 | 169 |
| Classroom 488 | | 2019 | 5th Grade | Social Studies | 1.94 | 18 | 42.00 | 40.06 | -40.06 | 1604.8036 |
| Classroom 489 | Winter | 2019 | Kindergarten | Integrated Science | 68.00 | 26 | 89.67 | 21.67 | -21.67 | 469.4444444 |
| Classroom 490 | | 2019 | Kindergarten | Mathematics | 46.90 | 23 | 54.76 | 7.86 | -7.86 | 61.7796 |
| Classroom 491 | Winter | 2019 | Kindergarten | Mathematics | 73.00 | 21 | 92.00 | 19.00 | -19.00 | 361 |
| Classroom 492 | Winter | 2019 | 1st Grade | Mathematics | 62.00 | 21 | 90.00 | 28.00 | -28.00 | 784 |
| Classroom 493 | | 2019 | 5th Grade | Social Studies | 0.00 | 20 | 98.24 | 98.24 | -98.24 | 9651.0976 |
| Classroom 494 | | 2019 | Kindergarten | Mathematics | 57.00 | 23 | 82.00 | 25.00 | -25.00 | 625 |
| Classroom 495 | Winter | 2018 | 6th Grade | Music | 66.00 | 77 | 86.00 | 20.00 | -20.00 | 400 |
| | Winter | 2019 | 10th Grade | Social Studies | 60.00 | 56 | 100.00 | 40.00 | -40.00 | 1600 |
| Classroom 497 | Winter | 2019 | 5th Grade | Mathematics | 39.00 | 18 | 87.20 | 48.20 | -48.20 | 2323.24 |
| Classroom 498 | Winter | 2019 | 8th Grade | English | 23.00 | 19 | 65.30 | 42.30 | -42.30 | 1789.29 |
| Classroom 499 | Winter | 2019 | 6th Grade | Music | 50.00 | 23 | 90.00 | 40.00 | -42.30 -40.00 | 1600 |
| Classroom 500 | | 2019 | Kindergarten | Language Arts | 43.00 | 23 | 91.00 | 48.00 | -48.00 -48.00 | 2304 |
| | | 2019 | | | | 29 | 80.00 | 67.00 | -67.00 | |
| Classroom 501 | Winter | | 6th Grade | Language Arts | 13.00 | | | | | 4489 |
| Classroom 502 | | 2019 | 3rd Grade | Mathematics | 57.50 | 24 | 83.30 | 25.80 | -25.80 | 665.64 |
| Classroom 503 | | 2019 | Kindergarten | Mathematics | 56.00 | 24 | 92.00 | 36.00 | -36.00 | 1296 |
| Classroom 504 | | 2019 | 7th Grade | Social Studies | 51.90 | 27 | 70.40 | 18.50 | -18.50 | 342.25 |
| Classroom 505 | | 2019 | 3rd Grade | Integrated Science | 57.50 | 20 | 73.00 | 15.50 | -15.50 | 240.25 |
| Classroom 506 | | 2019 | 10th Grade | Mathematics | 46.50 | 85 | 81.00 | 34.50 | -34.50 | 1190.25 |
| Classroom 507 | Winter | 2019 | 2nd Grade | Mathematics | 56.00 | 22 | 94.00 | 38.00 | -38.00 | 1444 |

| Classroom | Compostor | Vasii | Grade-Level | Content Area | Pre- SCORE | Number of P-12 | Post-SCORE | "Y-X" | IIV VII ou IIEDII | W/Y MAGU on HEDAGU |
|--------------------------------|-----------|-------|-----------------------|--------------------|---------------|-------------------|---------------------|-----------------|-------------------------|---------------------|
| Sample Classroom 508 | Semester | 2019 | Assessed 9th Grade | Assessed Music | (X) | Students 10 | (Y) 90.80 | Change 22.00 | "X-Y" or "ED" -22.00 | "(X-Y)^2" or "ED^2" |
| Classroom 509 | | 2019 | 5th Grade | | 42.00 | 15 | 78.30 | 36.30 | -36.30 | 484 1317.69 |
| | | | | Language Arts | | | | | | |
| Classroom 510 | | 2019 | Kindergarten | Mathematics | 38.00 | 23 | 43.00 | 5.00 | -5.00 | 25 |
| Classroom 511 | Winter | 2019 | 5th Grade | Integrated Science | 52.00 | 25 | 77.00 | 25.00 | -25.00 | 625 |
| Classroom 512 | | 2019 | 1st Grade | Mathematics | 62.00 | 22 | 85.00 | 23.00 | -23.00 | 529 |
| Classroom 513 | | 2019 | 7th Grade | English | 35.00 | 21 | 57.00 | 22.00 | -22.00 | 484 |
| Classroom 514 | | 2019 | 10th Grade | Chemistry | 33.70 | 29 | 76.70 | 43.00 | -43.00 | 1849 |
| Classroom 515 | | 2019 | 3rd Grade | Social Studies | 87.00 | 31 | 93.00 | 6.00 | -6.00 | 36 |
| Classroom 516 | | 2019 | 12th Grade | Art | 25.00 | 25 | 62.00 | 37.00 | -37.00 | 1369 |
| Classroom 517 | Winter | 2019 | 5th Grade | Social Studies | 3.54 | 24 | 13.61 | 10.07 | -10.07 | 101.4049 |
| Classroom 518 | | 2019 | 5th Grade | Social Studies | 47.00 | 19 | 71.00 | 24.00 | -24.00 | 576 |
| Classroom 519 | | 2019 | 9th Grade | Health | 54.00 | 24 | 85.00 | 31.00 | -31.00 | 961 |
| Classroom 520 | Winter | 2019 | 3rd Grade | Language Arts | 55.00 | 22 | 72.00 | 17.00 | -17.00 | 289 |
| Classroom 521 | Winter | 2019 | 1st Grade | Mathematics | 56.00 | 23 | 78.00 | 22.00 | -22.00 | 484 |
| Classroom 522 | Winter | 2019 | 5th Grade | Integrated Science | 31.00 | 25 | 71.00 | 40.00 | -40.00 | 1600 |
| Classroom 523 | Winter | 2019 | 6th Grade | Language Arts | 32.70 | 22 | 64.60 | 31.90 | -31.90 | 1017.61 |
| Classroom 524 | Winter | 2019 | 1st Grade | Mathematics | 48.80 | 22 | 65.90 | 17.10 | -17.10 | 292.41 |
| Classroom 525 | Winter | 2019 | 4th Grade | Integrated Science | 47.00 | 23 | 80.00 | 33.00 | -33.00 | 1089 |
| Classroom 526 | Winter | 2019 | 4th Grade | Mathematics | 52.50 | 19 | 69.00 | 16.50 | -16.50 | 272.25 |
| Classroom 527 | Winter | 2019 | 4th Grade | Language Arts | 57.00 | 24 | 72.00 | 15.00 | -15.00 | 225 |
| Classroom 528 | Winter | 2019 | 3rd Grade | Social Studies | 52.60 | 26 | 73.50 | 20.90 | -20.90 | 436.81 |
| Classroom 529 | Winter | 2019 | 2nd Grade | Mathematics | 54.00 | 22 | 83.00 | 29.00 | -29.00 | 841 |
| Classroom 530 | | 2019 | 3rd Grade | Mathematics | 55.00 | 19 | 67.00 | 12.00 | -12.00 | 144 |
| Classroom 531 | | 2019 | 2nd Grade | Social Studies | 40.00 | 24 | 83.00 | 43.00 | -43.00 | 1849 |
| Classroom 532 | Winter | 2019 | 8th Grade | Social Studies | 9.00 | 67 | 71.00 | 62.00 | -62.00 | 3844 |
| Classroom 533 | | 2019 | 9th Grade | Social Studies | 41.81 | 126 | 72.43 | 30.62 | -30.62 | 937.5844 |
| Classroom 534 | | 2019 | Kindergarten | Mathematics | 66.00 | 23 | 83.00 | 17.00 | -17.00 | 289 |
| Classroom 535 | Winter | 2019 | Kindergarten | Mathematics | 93.42 | 20 | 93.75 | 0.33 | -0.33 | 0.1089 |
| Classroom 536 | | 2019 | 1st Grade | Mathematics | 33.00 | 23 | 98.00 | 65.00 | -65.00 | 4225 |
| Classroom 537 | Winter | 2019 | 4th Grade | Mathematics | 28.00 | 22 | 71.00 | 43.00 | -43.00 | 1849 |
| Classroom 538 | Winter | 2019 | 7th Grade | Music | 46.20 | 30 | 88.20 | 42.00 | -42.00 | 1764 |
| Classroom 539 | Winter | 2019 | 9th Grade | English | 20.00 | 44 | 90.00 | 70.00 | -70.00 | 4900 |
| Classroom 540 | | 2019 | 7th Grade | English | 74.00 | 43 | 93.00 | 19.00 | -19.00 | 361 |
| Classroom 541 | Winter | 2019 | 9th Grade | Social Studies | 34.00 | 109 | 42.00 | 8.00 | -8.00 | 64 |
| Classroom 542 | | 2019 | 4th Grade | Integrated Science | 59.00 | 22 | 86.00 | 27.00 | -6.00 | 729 |
| | | 2019 | 5th Grade | | 33.00 | 24 | 60.00 | 27.00 | -27.00 -27.00 | 729 |
| Classroom 543 Classroom 544 | | 2019 | | Social Studies | 58.00 | 26 | 67.00 | 9.00 | -27.00 | 81 |
| | | | 4th Grade | Mathematics | | | | | | |
| Classroom 545 | | 2019 | 1st Grade | Mathematics | 54.00 | 22 | 70.00 | 16.00 | -16.00 | 256 |
| Classroom 546 | | 2019 | 5th Grade | Social Studies | 37.14 | 24 | 76.00 | 38.86 | -38.86 | 1510.0996 |
| Classroom 547 | Fall | 2019 | 10th Grade | English | 50.00 | 26 | 95.00 | 45.00 | -45.00 | 2025 |

| | | | | | Pre- | Number | | | | |
|---------------|----------|------|--------------|--------------------|-------|----------|------------|--------|---------------|---------------------|
| Classroom | | | Grade-Level | Content Area | SCORE | of P-12 | Post-SCORE | "Y-X" | | |
| Sample | Semester | Year | Assessed | Assessed | (X) | Students | (Y) | Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
| Classroom 548 | Fall | 2019 | 8th Grade | Social Studies | 32.00 | 28 | 78.00 | 46.00 | -46.00 | 2116 |
| Classroom 549 | Fall | 2019 | 11th Grade | Social Studies | 15.90 | 62 | 88.92 | 73.03 | -73.03 | 5332.720875 |
| Classroom 550 | Fall | 2019 | 8th Grade | Spanish | 29.86 | 82 | 77.81 | 47.95 | -47.95 | 2299.2025 |
| Classroom 551 | Fall | 2019 | 10th Grade | Music | 25.00 | 23 | 75.00 | 50.00 | -50.00 | 2500 |
| Classroom 552 | Fall | 2019 | 10th Grade | Earth Science | 40.02 | 11 | 87.22 | 47.20 | -47.20 | 2227.84 |
| Classroom 553 | | 2019 | 7th Grade | Social Studies | 32.00 | 26 | 83.00 | 51.00 | -51.00 | 2601 |
| Classroom 554 | | 2019 | 11th Grade | Mathematics | 47.50 | 33 | 53.50 | 6.00 | -6.00 | 36 |
| Classroom 555 | Fall | 2019 | 10th Grade | French | 28.00 | 18 | 94.00 | 66.00 | -66.00 | 4356 |
| Classroom 556 | Fall | 2019 | 9th Grade | Mathematics | 96.00 | 28 | 88.00 | -8.00 | 8.00 | 64 |
| Classroom 557 | Fall | 2019 | 8th Grade | Physical Education | 83.00 | 45 | 95.00 | 12.00 | -12.00 | 144 |
| Classroom 558 | Fall | 2019 | 8th Grade | English | 72.14 | 26 | 75.60 | 3.46 | -3.46 | 11.9716 |
| Classroom 559 | Fall | 2019 | 10th Grade | Spanish | 43.00 | 27 | 81.00 | 38.00 | -38.00 | 1444 |
| Classroom 560 | | 2019 | 8th Grade | English | 49.00 | 61 | 74.50 | 25.50 | -25.50 | 650.25 |
| Classroom 561 | Fall | 2019 | 9th Grade | English | 20.25 | 55 | 55.75 | 35.50 | -35.50 | 1260.25 |
| Classroom 562 | Fall | 2019 | 11th Grade | Economics | 70.30 | 20 | 93.00 | 22.70 | -22.70 | 515.29 |
| Classroom 563 | | 2019 | 11th Grade | Mathematics | 41.00 | 46 | 80.00 | 39.00 | -39.00 | 1521 |
| Classroom 564 | | 2019 | 6th Grade | Language Arts | 72.20 | 41 | 92.90 | 20.70 | -20.70 | 428.49 |
| Classroom 565 | | 2019 | 1st Grade | Language Arts | 68.86 | 19 | 74.12 | 5.26 | -5.26 | 27.709696 |
| Classroom 566 | | 2019 | 10th Grade | English | 56.25 | 52 | 76.25 | 20.00 | -20.00 | 400 |
| Classroom 567 | Fall | 2019 | 3rd Grade | Language Arts | 0.00 | 23 | 100.00 | 100.00 | -100.00 | 10000 |
| Classroom 568 | Fall | 2019 | 2nd Grade | Mathematics | 78.00 | 24 | 92.00 | 14.00 | -14.00 | 196 |
| Classroom 569 | | 2019 | 1st Grade | Mathematics | 25.00 | 21 | 97.00 | 72.00 | -72.00 | 5184 |
| Classroom 570 | | 2019 | 9th Grade | Social Studies | 26.00 | 64 | 53.00 | 27.00 | -27.00 | 729 |
| Classroom 571 | Fall | 2019 | 5th Grade | Integrated Science | 33.00 | 22 | 78.00 | 45.00 | -45.00 | 2025 |
| Classroom 572 | Fall | 2019 | 10th Grade | Mathematics | 4.61 | 34 | 72.46 | 67.85 | -67.85 | 4603.6225 |
| Classroom 573 | Fall | 2019 | 11th Grade | English | 50.00 | 73 | 100.00 | 50.00 | -50.00 | 2500 |
| Classroom 574 | Fall | 2019 | 5th Grade | Social Studies | 43.00 | 27 | 78.00 | 35.00 | -35.00 | 1225 |
| Classroom 575 | | 2019 | 10th Grade | Music | 30.00 | 20 | 83.00 | 53.00 | -53.00 | 2809 |
| Classroom 576 | | 2019 | 9th Grade | Art | 61.66 | 24 | 92.86 | 31.20 | -31.20 | 973.44 |
| Classroom 577 | Fall | 2019 | 10th Grade | English | 1.00 | 50 | 88.00 | 87.00 | -87.00 | 7569 |
| Classroom 578 | Fall | 2019 | Kindergarten | Social Studies | 64.00 | 15 | 88.00 | 24.00 | -24.00 | 576 |
| Classroom 579 | Fall | 2019 | 5th Grade | Language Arts | 31.00 | 21 | 62.00 | 31.00 | -31.00 | 961 |
| Classroom 580 | Fall | 2019 | 4th Grade | Mathematics | 53.00 | 27 | 73.00 | 20.00 | -20.00 | 400 |
| Classroom 581 | Fall | 2019 | 3rd Grade | Social Studies | 83.00 | 24 | 90.00 | 7.00 | -7.00 | 49 |
| Classroom 582 | | 2019 | 5th Grade | Integrated Science | 51.00 | 24 | 97.00 | 46.00 | -46.00 | 2116 |
| Classroom 583 | | 2019 | 4th Grade | Mathematics | 14.00 | 27 | 96.00 | 82.00 | -82.00 | 6724 |
| Classroom 584 | | 2019 | Kindergarten | Mathematics | 66.00 | 23 | 90.00 | 24.00 | -24.00 | 576 |
| Classroom 585 | | 2019 | 2nd Grade | Language Arts | 62.26 | 22 | 87.88 | 25.62 | -25.62 | 656.3844 |
| Classroom 586 | Fall | 2019 | 3rd Grade | Social Studies | 24.00 | 24 | 78.00 | 54.00 | -54.00 | 2916 |
| Classroom 587 | Fall | 2019 | 2nd Grade | Social Studies | 50.00 | 19 | 80.00 | 30.00 | -30.00 | 900 |

| Classroom Sample | Semester | Voar | Grade-Level Assessed | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-------------------------|----------------------------|----------------------|-------------------------------|-------------------|-----------------|---------------|---------------------|
| Classroom 588 | | 2019 | 12th Grade | Art | 55.00 | 11 | 80.00 | 25.00 | -25.00 | 625 |
| Classroom 589 | | 2019 | 5th Grade | Social Studies | 35.00 | 22 | 72.00 | 37.00 | -37.00 | |
| Classroom 590 | | 2019 | 1st Grade | Language Arts | 39.00 | 22 | 78.00 | 39.00 | -39.00 | 1521 |
| | Fall | 2019 | 2nd Grade | Mathematics | 33.64 | 22 | 54.53 | 20.89 | -20.89 | 436.3921 |
| Classroom 592 | | 2019 | 4th Grade | Mathematics | 64.00 | 16 | 71.00 | 7.00 | -7.00 | |
| Classroom 593 | | 2019 | 4th Grade | Mathematics | 33.00 | 22 | 80.20 | 47.20 | -47.20 | 2227.84 |
| Classroom 594 | | 2019 | 5th Grade | Mathematics | 17.00 | 22 | 87.00 | 70.00 | -70.00 | 4900 |
| Classroom 595 | | 2019 | 1st Grade | Mathematics | 61.00 | 20 | 95.00 | 34.00 | -34.00 | 1156 |
| Classroom 596 | | 2019 | 11th Grade | Spanish | 13.20 | 25 | 46.40 | 33.20 | -33.20 | 1102.24 |
| | Fall | 2019 | 1st Grade | Health | 38.00 | 26 | 92.00 | 54.00 | -54.00 | 2916 |
| Classroom 598 | | 2019 | Kindergarten | Social Studies | 39.00 | 22 | 72.00 | 33.00 | -33.00 | 1089 |
| Classroom 599 | | 2019 | 3rd Grade | Social Studies | 15.00 | 24 | 97.00 | 82.00 | -82.00 | 6724 |
| Classroom 600 | | 2019 | 2nd Grade | Mathematics | 4.00 | 21 | 95.00 | 91.00 | -91.00 | 8281 |
| | Fall | 2019 | 3rd Grade | Mathematics | 25.00 | 23 | 85.00 | 60.00 | -60.00 | 3600 |
| Classroom 602 | | 2019 | 1st Grade | Mathematics | 77.00 | 16 | 84.00 | 7.00 | -7.00 | 49 |
| Classroom 603 | | 2019 | 2nd Grade | Mathematics | 22.00 | 23 | 48.00 | 26.00 | -26.00 | 676 |
| Classroom 604 | | 2019 | 7th Grade | Physical Education | 81.00 | 30 | 85.00 | 4.00 | -4.00 | 16 |
| Classroom 605 | | 2019 | 4th Grade | Mathematics | 50.00 | 28 | 82.00 | 32.00 | -32.00 | 1024 |
| Classroom 606 | | 2019 | 3rd Grade | Language Arts | 96.00 | 24 | 96.00 | 0.00 | 0.00 | 1024 |
| | | 2019 | 4th Grade | | 22.00 | 21 | 85.80 | 63.80 | -63.80 | 4070.44 |
| Classroom 607 | | 2019 | 4th Grade | Social Studies Mathematics | 54.00 | 21 | 83.00 | 29.00 | -03.60 | 841 |
| Classroom 608 | | | | | | | | | | |
| Classroom 609 | | 2019 | 1st Grade | Language Arts | 80.00 | 21 24 | 95.00 | 15.00 38.00 | -15.00 | 225 1444 |
| Classroom 610 | | 2019 | 1st Grade | Language Arts | 46.00 8.70 | 23 | 84.00 | | -38.00 | |
| | Fall | 2019 | 3rd Grade | Mathematics | | | 64.55 | 55.85 | -55.85 | 3119.2225 |
| | | 2019 | 1st Grade | Mathematics | 51.00 | 22 | 86.00 | 35.00 | -35.00 | 1225 |
| Classroom 613 | | 2019 | 1st Grade | Mathematics | 59.50 | 21 | 90.60 | 31.10 | -31.10 | 967.21 |
| Classroom 614 | | 2019 | 3rd Grade | Social Studies | 37.50 | 28 | 80.00 | 42.50 | -42.50 | 1806.25 |
| Classroom 615 | | 2019 | Kindergarten | Integrated Science | 29.52 | 21 | 87.14 | 57.62 | -57.62 | 3319.949161 |
| Classroom 616 | | 2019 | 4th Grade | Mathematics | 52.00 | 19 | 70.00 | 18.00 | -18.00 | 324 |
| Classroom 617 | | 2019 | 1st Grade | Mathematics | 45.00 | 39 | 91.00 | 46.00 | -46.00 | 2116 |
| Classroom 618 | | 2019 | 1st Grade | Language Arts | 60.00 | 26 | 88.00 | 28.00 | -28.00 | 784 |
| Classroom 619 | | 2019 | 4th Grade | Mathematics | 12.00 | 19 | 78.00 | 66.00 | -66.00 | 4356 |
| Classroom 620 | | 2019 | 4th Grade | Mathematics | 51.70 | 23 | 63.40 | 11.70 | -11.70 | 136.89 |
| Classroom 621 | Fall | 2019 | 1st Grade | Language Arts | 62.00 | 3 | 80.00 | 18.00 | -18.00 | 324 |
| Classroom 622 | | 2019 | Kindergarten | Mathematics | 61.90 | 23 | 89.00 | 27.10 | -27.10 | 734.41 |
| Classroom 623 | | 2019 | 2nd Grade | Mathematics | 60.38 | 18 | 80.60 | 20.22 | -20.22 | 408.8484 |
| Classroom 624 | | 2019 | 4th Grade | Mathematics | 13.00 | 24 | 70.37 | 57.37 | -57.37 | 3291.3169 |
| Classroom 625 | | 2019 | 4th Grade | Integrated Science | 32.00 | 25 | 67.00 | 35.00 | -35.00 | 1225 |
| Classroom 626 | | 2019 | 2nd Grade | Integrated Science | 46.00 | 23 | 71.80 | 25.80 | -25.80 | 665.64 |
| Classroom 627 | Fall | 2019 | Kindergarten | Mathematics | 77.00 | 17 | 84.00 | 7.00 | -7.00 | 49 |

| Classroom Sample | Semester | Year | Grade-Level Assessed | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-------------------------|-----------------------|----------------------|-------------------------------|-------------------|-----------------|---------------|---------------------|
| Classroom 628 | Fall | 2019 | 5th Grade | Social Studies | 14.00 | 25 | 65.00 | 51.00 | -51.00 | 2601 |
| Classroom 629 | Fall | 2019 | Kindergarten | Mathematics | 84.30 | 22 | 96.70 | 12.40 | -12.40 | 153.76 |
| Classroom 630 | Fall | 2019 | Kindergarten | Language Arts | 3.70 | 24 | 38.00 | 34.30 | -34.30 | 1176.49 |
| Classroom 631 | Fall | 2019 | 4th Grade | Mathematics | 13.00 | 13 | 56.00 | 43.00 | -43.00 | 1849 |
| Classroom 632 | Fall | 2019 | 1st Grade | Mathematics | 71.00 | 21 | 76.00 | 5.00 | -5.00 | 25 |
| Classroom 633 | Fall | 2019 | 3rd Grade | Mathematics | 14.00 | 10 | 82.00 | 68.00 | -68.00 | 4624 |
| Classroom 634 | Fall | 2019 | 3rd Grade | Integrated Science | 50.00 | 23 | 89.00 | 39.00 | -39.00 | 1521 |
| Classroom 635 | Fall | 2019 | 1st Grade | Mathematics | 42.00 | 14 | 72.00 | 30.00 | -30.00 | 900 |
| Classroom 636 | Fall | 2019 | 1st Grade | Integrated Science | 19.00 | 24 | 81.00 | 62.00 | -62.00 | 3844 |
| Classroom 637 | Fall | 2019 | 1st Grade | Integrated Science | 24.00 | 28 | 85.00 | 61.00 | -61.00 | 3721 |
| Classroom 638 | Fall | 2019 | 3rd Grade | Social Studies | 64.00 | 24 | 79.00 | 15.00 | -15.00 | 225 |
| Classroom 639 | Fall | 2019 | 3rd Grade | Social Studies | 0.00 | 20 | 90.00 | 90.00 | -90.00 | 8100 |
| Classroom 640 | Fall | 2019 | 6th Grade | Mathematics | 70.83 | 21 | 85.19 | 14.36 | -14.36 | 206.2096 |
| Classroom 641 | Fall | 2019 | 3rd Grade | Integrated Science | 42.00 | 27 | 83.00 | 41.00 | -41.00 | 1681 |
| Classroom 642 | Fall | 2019 | 3rd Grade | Mathematics | 44.00 | 20 | 72.00 | 28.00 | -28.00 | 784 |
| Classroom 643 | Fall | 2019 | 1st Grade | Social Studies | 67.06 | 17 | 68.24 | 1.18 | -1.18 | 1.3924 |
| Classroom 644 | Fall | 2019 | 3rd Grade | Language Arts | 30.00 | 13 | 65.00 | 35.00 | -35.00 | 1225 |
| Classroom 645 | Fall | 2019 | 5th Grade | Language Arts | 14.00 | 19 | 27.00 | 13.00 | -13.00 | 169 |
| Classroom 646 | Fall | 2019 | 7th Grade | Music | 76.60 | 36 | 89.24 | 12.64 | -12.64 | 159.7696 |
| Classroom 647 | Fall | 2019 | 9th Grade | Social Studies | 50.00 | 18 | 86.00 | 36.00 | -36.00 | 1296 |

| Number | of | Tests | = | N |
|--------|----|--------------|----|----|
| | | | 22 | 20 |

Number of P-12 Students: Average % Improvement: 34.45

| + | $-\frac{\sum d}{N}$ |
|---|--|
| | $-\frac{1}{1 + \sum d^2 - \frac{(\sum d)^2}{N}}$ |
| | $\sqrt{\frac{N(N-1)}{N(N-1)}}$ |

| "X-Y" or "ED": | "(X-Y)^2" or "ED^2" |
|-----------------------|---------------------|
| -7579.22 | 358059.11 |
| L =Top Value (∑d/N) | -34.45 |
| M =Middle value | 96947.28 |
| O =Bottom Value | 48180.00 |
| P =Square root of M/O | 1.42 |
| T = (L/P) | -24.29 |
| ∞ = 0.05 | Critical T = 1.645 |
| | Significant |
| T/Square Root of N = | |
| Effect | -1.637 |

| Classroom Sample | Semester | Year | Grade-Level Assessed | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-------------------------|-----------------------|----------------------|-------------------------------|-------------------|-----------------|---------------|---------------------|
| Classroom 428 | | 2019 | Kindergarten | Mathematics | 77.60 | 25 | 87.20 | 9.60 | -9.60 | ` ' |
| Classroom 440 | | 2019 | Kindergarten | Integrated Science | 60.40 | 20 | 98.40 | 38.00 | -38.00 | |
| Classroom 480 | | 2019 | Kindergarten | Language Arts | 45.00 | 22 | 56.00 | 11.00 | -11.00 | |
| Classroom 482 | | 2019 | Kindergarten | Mathematics | 50.00 | 18 | 63.00 | 13.00 | -13.00 | |
| Classroom 484 | | 2019 | Kindergarten | Mathematics | 56.00 | 15 | 76.00 | 20.00 | -20.00 | |
| Classroom 489 | | 2019 | Kindergarten | Integrated Science | 68.00 | 26 | 89.67 | 21.67 | -21.67 | 469.4444444 |
| Classroom 490 | | 2019 | Kindergarten | Mathematics | 46.90 | 23 | 54.76 | 7.86 | -7.86 | |
| Classroom 491 | | 2019 | Kindergarten | Mathematics | 73.00 | 21 | 92.00 | 19.00 | -19.00 | |
| Classroom 494 | | 2019 | Kindergarten | Mathematics | 57.00 | 23 | 82.00 | 25.00 | -25.00 | 625 |
| Classroom 500 | | 2019 | Kindergarten | Language Arts | 43.00 | 23 | 91.00 | 48.00 | -48.00 | |
| Classroom 503 | Winter | 2019 | Kindergarten | Mathematics | 56.00 | 24 | 92.00 | 36.00 | -36.00 | 1296 |
| Classroom 510 | Winter | 2019 | Kindergarten | Mathematics | 38.00 | 23 | 43.00 | 5.00 | -5.00 | |
| Classroom 534 | Winter | 2019 | Kindergarten | Mathematics | 66.00 | 23 | 83.00 | 17.00 | -17.00 | 289 |
| Classroom 535 | Winter | 2019 | Kindergarten | Mathematics | 93.42 | 20 | 93.75 | 0.33 | -0.33 | 0.1089 |
| Classroom 578 | Fall | 2019 | Kindergarten | Social Studies | 64.00 | 15 | 88.00 | 24.00 | -24.00 | 576 |
| Classroom 584 | Fall | 2019 | Kindergarten | Mathematics | 66.00 | 23 | 90.00 | 24.00 | -24.00 | 576 |
| Classroom 598 | Fall | 2019 | Kindergarten | Social Studies | 39.00 | 22 | 72.00 | 33.00 | -33.00 | |
| Classroom 615 | Fall | 2019 | Kindergarten | Integrated Science | 29.52 | 21 | 87.14 | 57.62 | -57.62 | 3319.949161 |
| Classroom 622 | Fall | 2019 | Kindergarten | Mathematics | 61.90 | 23 | 89.00 | 27.10 | -27.10 | 734.41 |
| Classroom 627 | | 2019 | Kindergarten | Mathematics | 77.00 | 17 | 84.00 | 7.00 | -7.00 | 49 |
| Classroom 629 | Fall | 2019 | Kindergarten | Mathematics | 84.30 | 22 | 96.70 | 12.40 | -12.40 | |
| Classroom 630 | Fall | 2019 | Kindergarten | Language Arts | 3.70 | 24 | 38.00 | 34.30 | -34.30 | 1176.49 |

| Number of Tests = N | Number of P-12 Students: | Average % Improvement: | "X-Y" or "ED": | " |
|---------------------|--------------------------|------------------------|------------------------|---|
| 22 | 470 | 22.31 | -490.88 | |
| | | | L =Top Value (∑d/N) | |
| | | | M =Middle value | |
| | | Σd | O =Bottom Value | |
| | | N | P = Square root of M/O | |
| | t = | | T = (L/P) | |
| | | $(\Sigma d)^2$ | - 0.05 | - |

| nber of P-12 Students: | Average % improvement: | X-Y OF ED: | |
|------------------------|--------------------------------|-----------------------|--------------------|
| 470 | 22.31 | -490.88 | 15332.10 |
| | | L =Top Value (∑d/N) | -22.31 |
| | | M =Middle value | 4379.42 |
| | Σd | O =Bottom Value | 462.00 |
| 200 | N | P =Square root of M/O | 3.08 |
| t = | | T = (L/P) | -7.25 |
| $\int \Sigma_{a}$ | $d^2 - \frac{(\Sigma d)^2}{2}$ | ∞ = 0.05 | Critical T = 1.645 |
| 1/ | <u> </u> | | Significant |

| Classroom Sample | Semester | | Content Area Assessed | Number of P-12 Students | Post-SCORE (Y) | Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|--|--------------------------|-----------------------------------|-------------------|--------|--------------------------------|---------------------|
| | | | | V | N (N-1) | | T/Square Root of N = Effect | -1.545 |

| Classroom Sample | Semester | | Assessed | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-----------|--------------------------|----------------------|-------------------------------|-------------------|-----------------|---------------|---------------------|
| Classroom 432 | | 2019 | 1st Grade | Integrated Science | 31.50 | 19 | 75.40 | 43.90 | -43.90 | |
| Classroom 442 | | 2019 | 1st Grade | Integrated Science | 47.00 | 19 | 74.00 | 27.00 | -27.00 | 729 |
| Classroom 443 | | 2019 | 1st Grade | Integrated Science | 23.00 | 19 | 82.00 | 59.00 | -59.00 | |
| Classroom 462 | | 2019 | 1st Grade | Social Studies | 38.00 | 25 | 60.00 | 22.00 | -22.00 | 484 |
| Classroom 492 | | 2019 | 1st Grade | Mathematics | 62.00 | 21 | 90.00 | 28.00 | -28.00 | 784 |
| Classroom 512 | | 2019 | 1st Grade | Mathematics | 62.00 | 22 | 85.00 | 23.00 | -23.00 | 529 |
| - | Winter | 2019 | 1st Grade | Mathematics | 56.00 | 23 | 78.00 | 22.00 | -22.00 | 484 |
| Classroom 524 | | 2019 | 1st Grade | Mathematics | 48.80 | 22 | 65.90 | 17.10 | -17.10 | |
| Classroom 536 | Winter | 2019 | 1st Grade | Mathematics | 33.00 | 23 | 98.00 | 65.00 | -65.00 | 4225 |
| Classroom 545 | Fall | 2019 | 1st Grade | Mathematics | 54.00 | 22 | 70.00 | 16.00 | -16.00 | 256 |
| Classroom 565 | | 2019 | 1st Grade | Language Arts | 68.86 | 19 | 74.12 | 5.26 | -5.26 | 27.709696 |
| Classroom 569 | Fall | 2019 | 1st Grade | Mathematics | 25.00 | 21 | 97.00 | 72.00 | -72.00 | 5184 |
| Classroom 590 | Fall | 2019 | 1st Grade | Language Arts | 39.00 | 22 | 78.00 | 39.00 | -39.00 | 1521 |
| Classroom 595 | Fall | 2019 | 1st Grade | Mathematics | 61.00 | 20 | 95.00 | 34.00 | -34.00 | 1156 |
| Classroom 597 | Fall | 2019 | 1st Grade | Health | 38.00 | 26 | 92.00 | 54.00 | -54.00 | 2916 |
| Classroom 602 | Fall | 2019 | 1st Grade | Mathematics | 77.00 | 16 | 84.00 | 7.00 | -7.00 | |
| Classroom 609 | Fall | 2019 | 1st Grade | Language Arts | 80.00 | 21 | 95.00 | 15.00 | -15.00 | 225 |
| Classroom 610 | Fall | 2019 | 1st Grade | Language Arts | 46.00 | 24 | 84.00 | 38.00 | -38.00 | 1444 |
| Classroom 612 | Fall | 2019 | 1st Grade | Mathematics | 51.00 | 22 | 86.00 | 35.00 | -35.00 | 1225 |
| Classroom 613 | Fall | 2019 | 1st Grade | Mathematics | 59.50 | 21 | 90.60 | 31.10 | -31.10 | 967.21 |
| Classroom 617 | Fall | 2019 | 1st Grade | Mathematics | 45.00 | 39 | 91.00 | 46.00 | -46.00 | 2116 |
| Classroom 618 | Fall | 2019 | 1st Grade | Language Arts | 60.00 | 26 | 88.00 | 28.00 | -28.00 | 784 |
| Classroom 621 | Fall | 2019 | 1st Grade | Language Arts | 62.00 | 3 | 80.00 | 18.00 | -18.00 | 324 |
| Classroom 632 | Fall | 2019 | 1st Grade | Mathematics | 71.00 | 21 | 76.00 | 5.00 | -5.00 | |
| Classroom 635 | Fall | 2019 | 1st Grade | Mathematics | 42.00 | 14 | 72.00 | 30.00 | -30.00 | 900 |
| Classroom 636 | Fall | 2019 | 1st Grade | Integrated Science | 19.00 | 24 | 81.00 | 62.00 | -62.00 | 3844 |
| Classroom 637 | Fall | 2019 | 1st Grade | Integrated Science | 24.00 | 28 | 85.00 | 61.00 | -61.00 | 3721 |
| Classroom 643 | Fall | 2019 | 1st Grade | Social Studies | 67.06 | 17 | 68.24 | 1.18 | -1.18 | 1.3924 |

| Number of Tests | = | N |
|-----------------|---|----|
| | • | 28 |

Number of P-12 Students: Average % Improvement: 595

| "X-Y" or "ED": | "(X-Y)^2" or "ED^2" |
|-----------------------|---------------------|
| -904.54 | 39621.93 |
| L =Top Value (∑d/N) | -32.31 |
| M =Middle value | 10400.51 |
| O =Bottom Value | 756.00 |
| P =Square root of M/O | 3.71 |

| Classroom Sample | Semester | Year | Grade-Level Assessed | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-------------------------|--------------------------|--|-------------------------------|---------|------------------------|--------------------------------|---------------------|
| | | - | | | $t = \frac{N}{\sqrt{\Sigma N^2}}$ | | | | T = (L/P) | -8.71 |
| | | | | | $\int \Sigma d^2 - \frac{(\Sigma d)^2}{2}$ | | | <u>d)</u> ² | ∞ = 0.05 | Critical T = 1.645 |
| | | | | | / | / | Λ | <u> </u> | | Significant |
| | | | | | | V i | V (N-1) | | T/Square Root of N = Effect | -1.646 |

| Classroom | | | Grade-Level | Content Area | Pre- SCORE | Number of P-12 | Post-SCORE | "Y-X" | | |
|---------------|----------|------|-------------|--------------------|---------------|----------------|------------|--------|---------------|---------------------|
| Sample | Semester | Year | Assessed | Assessed | (X) | Students | (Y) | Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
| Classroom 450 | Winter | 2019 | 2nd Grade | Mathematics | 14.90 | 21 | 59.40 | 44.50 | -44.50 | 1980.25 |
| Classroom 451 | Winter | 2019 | 2nd Grade | Integrated Science | 62.60 | 22 | 92.40 | 29.80 | -29.80 | 888.04 |
| Classroom 483 | Winter | 2019 | 2nd Grade | Mathematics | 68.00 | 21 | 86.00 | 18.00 | -18.00 | 324 |
| Classroom 507 | Winter | 2019 | 2nd Grade | Mathematics | 56.00 | 22 | 94.00 | 38.00 | -38.00 | 1444 |
| Classroom 529 | Winter | 2019 | 2nd Grade | Mathematics | 54.00 | 22 | 83.00 | 29.00 | -29.00 | 841 |
| Classroom 531 | Winter | 2019 | 2nd Grade | Social Studies | 40.00 | 24 | 83.00 | 43.00 | -43.00 | 1849 |
| Classroom 568 | Fall | 2019 | 2nd Grade | Mathematics | 78.00 | 24 | 92.00 | 14.00 | -14.00 | 196 |
| Classroom 585 | Fall | 2019 | 2nd Grade | Language Arts | 62.26 | 22 | 87.88 | 25.62 | -25.62 | 656.3844 |
| Classroom 587 | Fall | 2019 | 2nd Grade | Social Studies | 50.00 | 19 | 80.00 | 30.00 | -30.00 | 900 |
| Classroom 591 | Fall | 2019 | 2nd Grade | Mathematics | 33.64 | 22 | 54.53 | 20.89 | -20.89 | 436.3921 |
| Classroom 600 | Fall | 2019 | 2nd Grade | Mathematics | 4.00 | 21 | 95.00 | 91.00 | -91.00 | 8281 |
| Classroom 603 | Fall | 2019 | 2nd Grade | Mathematics | 22.00 | 23 | 48.00 | 26.00 | -26.00 | 676 |
| Classroom 623 | Fall | 2019 | 2nd Grade | Mathematics | 60.38 | 18 | 80.60 | 20.22 | -20.22 | 408.8484 |
| Classroom 626 | Fall | 2019 | 2nd Grade | Integrated Science | 46.00 | 23 | 71.80 | 25.80 | -25.80 | 665.64 |

Number of P-12 Students: Average % Improvement: 302

| t | $-\frac{\sum d}{N}$ | |
|---|---|--|
| L | $-\frac{1}{\sqrt{\sum d^2 - \frac{(\sum d)^2}{N}}}$ | |
| | $\sqrt{N(N-1)}$ | |

| "X-Y" or "ED": | "(X-Y)^2" or "ED^2" |
|------------------------|---------------------|
| -455.83 | 19546.55 |
| L =Top Value (∑d/N) | -32.56 |
| M =Middle value | 4705.06 |
| O =Bottom Value | 182.00 |
| P = Square root of M/O | 5.08 |
| T = (L/P) | -6.40 |
| ∞ = 0.05 | Critical T = 1.645 |
| | Significant |
| T/Square Root of N = | |
| Effect | -1.711 |

| 01 | | | Overde Level | 0 | Pre- | Number | D 4 000DE | 1137 A/II | | |
|---------------|----------|------|--------------|--------------------|-------|----------|------------|-----------|---------------|---------------------|
| Classroom | | | | Content Area | SCORE | of P-12 | Post-SCORE | "Y-X" | | |
| Sample | Semester | | Assessed | Assessed | (X) | Students | (Y) | Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
| Classroom 502 | | 2019 | 3rd Grade | Mathematics | 57.50 | 24 | 83.30 | 25.80 | -25.80 | 665.64 |
| Classroom 505 | Winter | 2019 | 3rd Grade | Integrated Science | 57.50 | | 73.00 | 15.50 | -15.50 | 240.25 |
| Classroom 515 | Winter | 2019 | 3rd Grade | Social Studies | 87.00 | 31 | 93.00 | 6.00 | -6.00 | |
| Classroom 520 | Winter | 2019 | 3rd Grade | Language Arts | 55.00 | 22 | 72.00 | 17.00 | -17.00 | 289 |
| Classroom 528 | Winter | 2019 | 3rd Grade | Social Studies | 52.60 | 26 | 73.50 | 20.90 | -20.90 | 436.81 |
| Classroom 530 | Winter | 2019 | 3rd Grade | Mathematics | 55.00 | 19 | 67.00 | 12.00 | -12.00 | 144 |
| Classroom 567 | Fall | 2019 | 3rd Grade | Language Arts | 0.00 | 23 | 100.00 | 100.00 | -100.00 | 10000 |
| Classroom 581 | Fall | 2019 | 3rd Grade | Social Studies | 83.00 | 24 | 90.00 | 7.00 | -7.00 | 49 |
| Classroom 586 | Fall | 2019 | 3rd Grade | Social Studies | 24.00 | 24 | 78.00 | 54.00 | -54.00 | 2916 |
| Classroom 599 | Fall | 2019 | 3rd Grade | Social Studies | 15.00 | 24 | 97.00 | 82.00 | -82.00 | 6724 |
| Classroom 601 | Fall | 2019 | 3rd Grade | Mathematics | 25.00 | 23 | 85.00 | 60.00 | -60.00 | 3600 |
| Classroom 606 | Fall | 2019 | 3rd Grade | Language Arts | 96.00 | 24 | 96.00 | 0.00 | 0.00 | 0 |
| Classroom 611 | Fall | 2019 | 3rd Grade | Mathematics | 8.70 | 23 | 64.55 | 55.85 | -55.85 | 3119.2225 |
| Classroom 614 | Fall | 2019 | 3rd Grade | Social Studies | 37.50 | 28 | 80.00 | 42.50 | -42.50 | 1806.25 |
| Classroom 633 | Fall | 2019 | 3rd Grade | Mathematics | 14.00 | 10 | 82.00 | 68.00 | -68.00 | 4624 |
| Classroom 634 | Fall | 2019 | 3rd Grade | Integrated Science | 50.00 | 23 | 89.00 | 39.00 | -39.00 | 1521 |
| Classroom 638 | Fall | 2019 | 3rd Grade | Social Studies | 64.00 | 24 | 79.00 | 15.00 | -15.00 | 225 |
| Classroom 639 | Fall | 2019 | 3rd Grade | Social Studies | 0.00 | 20 | 90.00 | 90.00 | -90.00 | 8100 |
| Classroom 641 | Fall | 2019 | 3rd Grade | Integrated Science | 42.00 | 27 | 83.00 | 41.00 | -41.00 | 1681 |
| Classroom 642 | Fall | 2019 | 3rd Grade | Mathematics | 44.00 | 20 | 72.00 | 28.00 | -28.00 | 784 |
| Classroom 644 | Fall | 2019 | 3rd Grade | Language Arts | 30.00 | 13 | 65.00 | 35.00 | -35.00 | 1225 |

Number of P-12 Students: Average % Improvement: 38.79

| + | $-\frac{\sum d}{N}$ |
|---|--|
| L | $\int \sum d^2 - \frac{(\sum d)^2}{N}$ |
| | $\sqrt{\frac{N(N-1)}{N(N-1)}}$ |

| : | "X-Y" or "ED": | "(X-Y)^2" or "ED^2" |
|---|------------------------|---------------------|
| | -814.55 | 48186.17 |
| | L =Top Value (∑d/N) | -38.79 |
| | M =Middle value | 16591.33 |
| | O =Bottom Value | 420.00 |
| | P = Square root of M/O | 6.29 |
| | T = (L/P) | -6.17 |
| | ∞ = 0.05 | Critical T = 1.645 |
| | | Significant |
| | T/Square Root of N = | |
| | Effect | -1.347 |

| Classroom Sample | Semester | Year | Grade-Level Assessed | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-------------------------|-----------------------|----------------------|-------------------------------|-------------------|-----------------|---------------|---------------------|
| Classroom 439 | Winter | 2019 | 4th Grade | Integrated Science | 44.00 | 19 | 82.35 | 38.35 | -38.35 | • • |
| Classroom 457 | | 2019 | 4th Grade | Mathematics | 65.00 | 22 | 82.00 | 17.00 | -17.00 | 289 |
| Classroom 463 | | 2019 | 4th Grade | Physical Education | 71.00 | 28 | 89.00 | 18.00 | -18.00 | |
| Classroom 487 | Winter | 2019 | 4th Grade | Mathematics | 55.00 | 24 | 68.00 | 13.00 | -13.00 | |
| Classroom 525 | Winter | 2019 | 4th Grade | Integrated Science | 47.00 | 23 | 80.00 | 33.00 | -33.00 | 1089 |
| Classroom 526 | Winter | 2019 | 4th Grade | Mathematics | 52.50 | 19 | 69.00 | 16.50 | -16.50 | 272.25 |
| Classroom 527 | Winter | 2019 | 4th Grade | Language Arts | 57.00 | 24 | 72.00 | 15.00 | -15.00 | 225 |
| Classroom 537 | Winter | 2019 | 4th Grade | Mathematics | 28.00 | 22 | 71.00 | 43.00 | -43.00 | 1849 |
| Classroom 542 | Fall | 2019 | 4th Grade | Integrated Science | 59.00 | 22 | 86.00 | 27.00 | -27.00 | 729 |
| Classroom 544 | Fall | 2019 | 4th Grade | Mathematics | 58.00 | 26 | 67.00 | 9.00 | -9.00 | 81 |
| Classroom 580 | Fall | 2019 | 4th Grade | Mathematics | 53.00 | 27 | 73.00 | 20.00 | -20.00 | 400 |
| Classroom 583 | Fall | 2019 | 4th Grade | Mathematics | 14.00 | 27 | 96.00 | 82.00 | -82.00 | 6724 |
| Classroom 592 | Fall | 2019 | 4th Grade | Mathematics | 64.00 | 16 | 71.00 | 7.00 | -7.00 | 49 |
| Classroom 593 | Fall | 2019 | 4th Grade | Mathematics | 33.00 | 22 | 80.20 | 47.20 | -47.20 | 2227.84 |
| Classroom 605 | Fall | 2019 | 4th Grade | Mathematics | 50.00 | 28 | 82.00 | 32.00 | -32.00 | 1024 |
| Classroom 607 | Fall | 2019 | 4th Grade | Social Studies | 22.00 | 21 | 85.80 | 63.80 | -63.80 | 4070.44 |
| Classroom 608 | Fall | 2019 | 4th Grade | Mathematics | 54.00 | 21 | 83.00 | 29.00 | -29.00 | 841 |
| Classroom 616 | | 2019 | 4th Grade | Mathematics | 52.00 | 19 | 70.00 | 18.00 | -18.00 | 324 |
| Classroom 619 | Fall | 2019 | 4th Grade | Mathematics | 12.00 | 19 | 78.00 | 66.00 | -66.00 | 4356 |
| Classroom 620 | Fall | 2019 | 4th Grade | Mathematics | 51.70 | 23 | 63.40 | 11.70 | -11.70 | 136.89 |
| Classroom 624 | Fall | 2019 | 4th Grade | Mathematics | 13.00 | 24 | 70.37 | 57.37 | -57.37 | 3291.3169 |
| Classroom 625 | | 2019 | 4th Grade | Integrated Science | 32.00 | 25 | 67.00 | 35.00 | -35.00 | |
| Classroom 631 | Fall | 2019 | 4th Grade | Mathematics | 13.00 | 13 | 56.00 | 43.00 | -43.00 | 1849 |

| Number | of | Tests | = | N |
|--------|----|-------|---|----|
| | | | 2 | 23 |

511

Number of P-12 Students: Average % Improvement: 32.26

| + | | $\frac{\sum d}{N}$ |
|---|--------|-----------------------------------|
| | - 1 | $\sum d^2 - \frac{(\sum d)^2}{N}$ |

| "X-Y" or "ED": | "(X-Y)^2" or "ED^2" |
|------------------------|---------------------|
| -741.92 | 33016.46 |
| L =Top Value (∑d/N) | -32.26 |
| M =Middle value | 9084.06 |
| O =Bottom Value | 506.00 |
| P = Square root of M/O | 4.24 |
| T = (L/P) | -7.61 |
| ∞ = 0.05 | Critical T = 1.645 |
| | Significant |

| Classroom Sample | Semester | | Content Area Assessed | Number of P-12 Students | Post-SCORE (Y) | Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|--|--------------------------|-------------------------------|-------------------|--------|--------------------------------|---------------------|
| | | | | V I | N (N-1) | | T/Square Root of N = Effect | -1.587 |

| Classroom Sample | Semester | Year | Grade-Level Assessed | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-------------------------|--------------------------|----------------------|-------------------------------|-------------------|-----------------|---------------|---------------------|
| Classroom 429 | Winter | 2019 | 5th Grade | Integrated Science | 36.97 | 50 | 92.47 | 55.50 | -55.50 | 3080.25 |
| Classroom 433 | Winter | 2019 | 5th Grade | Mathematics | 71.00 | 25 | 90.00 | 19.00 | -19.00 | 361 |
| Classroom 435 | Winter | 2019 | 5th Grade | Integrated Science | 12.78 | | 83.11 | 70.33 | -70.33 | 4946.3089 |
| Classroom 436 | Winter | 2019 | 5th Grade | Music | 32.00 | 32 | 99.00 | 67.00 | -67.00 | 4489 |
| Classroom 459 | Winter | 2019 | 5th Grade | Mathematics | 2.30 | 13 | 55.00 | 52.70 | -52.70 | - |
| Classroom 467 | Winter | 2019 | 5th Grade | Music | 25.00 | 113 | 75.00 | 50.00 | -50.00 | |
| Classroom 476 | Winter | 2019 | 5th Grade | Mathematics | 27.00 | 24 | 42.00 | 15.00 | -15.00 | - |
| Classroom 488 | Winter | 2019 | 5th Grade | Social Studies | 1.94 | | 42.00 | 40.06 | -40.06 | 1604.8036 |
| Classroom 493 | Winter | 2019 | 5th Grade | Social Studies | 0.00 | 20 | 98.24 | 98.24 | -98.24 | 9651.0976 |
| Classroom 497 | Winter | 2019 | 5th Grade | Mathematics | 39.00 | 18 | 87.20 | 48.20 | -48.20 | 2323.24 |
| Classroom 509 | Winter | 2019 | 5th Grade | Language Arts | 42.00 | 15 | 78.30 | 36.30 | -36.30 | |
| Classroom 511 | Winter | 2019 | 5th Grade | Integrated Science | 52.00 | 25 | 77.00 | 25.00 | -25.00 | |
| Classroom 517 | Winter | 2019 | 5th Grade | Social Studies | 3.54 | | 13.61 | 10.07 | -10.07 | 101.4049 |
| Classroom 518 | Winter | 2019 | 5th Grade | Social Studies | 47.00 | 19 | 71.00 | 24.00 | -24.00 | 576 |
| Classroom 522 | Winter | 2019 | 5th Grade | Integrated Science | 31.00 | | 71.00 | 40.00 | -40.00 | |
| Classroom 543 | Fall | 2019 | 5th Grade | Social Studies | 33.00 | 24 | 60.00 | 27.00 | -27.00 | _ |
| Classroom 546 | Fall | 2019 | 5th Grade | Social Studies | 37.14 | 24 | 76.00 | 38.86 | -38.86 | 1510.0996 |
| Classroom 571 | | 2019 | 5th Grade | Integrated Science | 33.00 | 22 | 78.00 | 45.00 | -45.00 | |
| Classroom 574 | | 2019 | 5th Grade | Social Studies | 43.00 | 27 | 78.00 | 35.00 | -35.00 | 1225 |
| Classroom 579 | Fall | 2019 | 5th Grade | Language Arts | 31.00 | 21 | 62.00 | 31.00 | -31.00 | |
| Classroom 582 | Fall | 2019 | 5th Grade | Integrated Science | 51.00 | 24 | 97.00 | 46.00 | -46.00 | 2116 |
| Classroom 589 | Fall | 2019 | 5th Grade | Social Studies | 35.00 | 22 | 72.00 | 37.00 | -37.00 | 1369 |
| Classroom 594 | Fall | 2019 | 5th Grade | Mathematics | 17.00 | 22 | 87.00 | 70.00 | -70.00 | |
| Classroom 628 | Fall | 2019 | 5th Grade | Social Studies | 14.00 | 25 | 65.00 | 51.00 | -51.00 | |
| Classroom 645 | Fall | 2019 | 5th Grade | Language Arts | 14.00 | 19 | 27.00 | 13.00 | -13.00 | 169 |

| Number of Tests = N | Number of P-12 Students: | Average % Improvement: | "X-Y" or "ED": | "(X-Y)^2" or "ED^2" |
|---------------------|--------------------------|--------------------------------|-----------------------|---------------------|
| 25 | 673 | 41.81 | -1045.26 | 53783.18 |
| | | | L =Top Value (∑d/N) | -41.81 |
| | | | M =Middle value | 10080.45 |
| | | Σd | O =Bottom Value | 600.00 |
| | | | P =Square root of M/O | 4.10 |
| | t = | 1V | T = (L/P) | -10.20 |
| | $\int \Sigma_{\ell}$ | $d^2 - \frac{(\Sigma d)^2}{2}$ | ∞ = 0.05 | Critical T = 1.645 |

| Classroom Sample | Semester | Year | | Content Area Assessed | | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|---|--------------------------|---|-------------------------------|-------------------|-----------------|--------------------------------|---------------------|
| | | • | • | | - | | Λ | | | Significant |
| | | | | | | V i | N (N-1) | I | T/Square Root of N = Effect | -2.040 |

| | | | | | Pre- | Number | | | | |
|---------------|----------|------|-----------|--------------------|-------|----------|------------|--------|---------------|-------------------------------|
| Classroom | | | | Content Area | SCORE | of P-12 | Post-SCORE | "Y-X" | W. C. C | #/// NO A O # # # # T D A O # |
| Sample | Semester | | Assessed | Assessed | (X) | Students | (Y) | Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
| Classroom 430 | | 2019 | 6th Grade | Music | 5.00 | 23 | 6.00 | 1.00 | -1.00 | 1 |
| Classroom 431 | Winter | 2019 | 6th Grade | Mathematics | 18.60 | 14 | 91.40 | 72.80 | -72.80 | 5299.84 |
| Classroom 437 | | 2019 | 7th Grade | English | 48.00 | 62 | 92.00 | 44.00 | -44.00 | 1936 |
| Classroom 438 | | 2019 | 6th Grade | Social Studies | 22.00 | 129 | 94.00 | 72.00 | -72.00 | 5184 |
| Classroom 446 | | 2019 | 8th Grade | Mathematics | 21.00 | 24 | 90.00 | 69.00 | -69.00 | 4761 |
| Classroom 449 | | 2019 | 6th Grade | Social Studies | 46.00 | 34 | 78.00 | 32.00 | -32.00 | 1024 |
| Classroom 454 | Winter | 2019 | 6th Grade | Music | 68.00 | 37 | 88.00 | 20.00 | -20.00 | 400 |
| Classroom 460 | Winter | 2019 | 6th Grade | Music | 60.00 | 6 | 100.00 | 40.00 | -40.00 | 1600 |
| Classroom 465 | Winter | 2019 | 7th Grade | Music | 77.40 | 31 | 85.50 | 8.10 | -8.10 | 65.61 |
| Classroom 468 | | 2019 | 7th Grade | Mathematics | 30.00 | 61 | 72.00 | 42.00 | -42.00 | 1764 |
| Classroom 469 | | 2019 | 7th Grade | Music | 60.00 | 10 | 90.00 | 30.00 | -30.00 | 900 |
| Classroom 472 | Winter | 2019 | 8th Grade | Mathematics | 21.80 | 30 | 82.50 | 60.70 | -60.70 | 3684.49 |
| Classroom 473 | Winter | 2019 | 7th Grade | English | 83.70 | 86 | 92.30 | 8.60 | -8.60 | 73.96 |
| Classroom 481 | Winter | 2019 | 6th Grade | Mathematics | 7.00 | 23 | 65.00 | 58.00 | -58.00 | 3364 |
| Classroom 495 | Winter | 2018 | 6th Grade | Music | 66.00 | 77 | 86.00 | 20.00 | -20.00 | 400 |
| Classroom 498 | Winter | 2019 | 8th Grade | English | 23.00 | 19 | 65.30 | 42.30 | -42.30 | 1789.29 |
| Classroom 499 | Winter | 2019 | 6th Grade | Music | 50.00 | 23 | 90.00 | 40.00 | -40.00 | 1600 |
| Classroom 501 | Winter | 2019 | 6th Grade | Language Arts | 13.00 | 29 | 80.00 | 67.00 | -67.00 | 4489 |
| Classroom 504 | Winter | 2019 | 7th Grade | Social Studies | 51.90 | 27 | 70.40 | 18.50 | -18.50 | 342.25 |
| Classroom 513 | Winter | 2019 | 7th Grade | English | 35.00 | 21 | 57.00 | 22.00 | -22.00 | 484 |
| Classroom 523 | Winter | 2019 | 6th Grade | Language Arts | 32.70 | 22 | 64.60 | 31.90 | -31.90 | 1017.61 |
| Classroom 532 | Winter | 2019 | 8th Grade | Social Studies | 9.00 | 67 | 71.00 | 62.00 | -62.00 | 3844 |
| Classroom 538 | Winter | 2019 | 7th Grade | Music | 46.20 | 30 | 88.20 | 42.00 | -42.00 | 1764 |
| Classroom 540 | Winter | 2019 | 7th Grade | English | 74.00 | 43 | 93.00 | 19.00 | -19.00 | 361 |
| Classroom 548 | Fall | 2019 | 8th Grade | Social Studies | 32.00 | 28 | 78.00 | 46.00 | -46.00 | 2116 |
| Classroom 550 | Fall | 2019 | 8th Grade | Spanish | 29.86 | 82 | 77.81 | 47.95 | -47.95 | 2299.2025 |
| Classroom 553 | Fall | 2019 | 7th Grade | Social Studies | 32.00 | 26 | 83.00 | 51.00 | -51.00 | 2601 |
| Classroom 557 | Fall | 2019 | 8th Grade | Physical Education | 83.00 | 45 | 95.00 | 12.00 | -12.00 | 144 |
| Classroom 558 | Fall | 2019 | 8th Grade | English | 72.14 | 26 | 75.60 | 3.46 | -3.46 | 11.9716 |
| Classroom 560 | Fall | 2019 | 8th Grade | English | 49.00 | 61 | 74.50 | 25.50 | -25.50 | 650.25 |
| Classroom 564 | | 2019 | 6th Grade | Language Arts | 72.20 | 41 | 92.90 | 20.70 | -20.70 | 428.49 |
| Classroom 604 | Fall | 2019 | 7th Grade | Physical Education | 81.00 | 30 | 85.00 | 4.00 | -4.00 | 16 |
| Classroom 640 | Fall | 2019 | 6th Grade | Mathematics | 70.83 | 21 | 85.19 | 14.36 | -14.36 | 206.2096 |
| Classroom 646 | | 2019 | 7th Grade | Music | 76.60 | 36 | 89.24 | 12.64 | -12.64 | 159.7696 |

-1.592

| Classroom Sample | Semester | Year | Grade-Level Assessed | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-------------------------|--------------------------|----------------------|-------------------------------|-------------------|-----------------|--------------------------------|---------------------|
| | | | 34 | <mark>(</mark> | | 1321 | | 34.13 | -1160.51 | 54781.94 |
| | | | | | | | | | L =Top Value (∑d/N) | -34.13 |
| | | | | | | | | | M =Middle value | 15170.67 |
| | | | | | | | Σd | | O =Bottom Value | 1122.00 |
| | | | | | | | \overline{N} | | P =Square root of M/O | 3.68 |
| | | | | | t = - | | 500000 (315) | | T = (L/P) | -9.28 |
| | | | | | | $/ \Sigma_0$ | $d^2 - (\Sigma)$ | $d)^2$ | ∞ = 0.05 | Critical T = 1.645 |
| | | | | | | \ | Λ | <u> </u> | | Significant |
| | | | | | | V . | N(N-1) |) | T/Square Root of N = Effect | -1.592 |

| Classroom Sample | Semester | Year | Grade-Level Assessed | Content Area | Pre- SCORE (X) | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-------------------------|----------------|----------------------|-------------------------------|-------------------|-----------------|---------------------|---------------------|
| Classroom 434 | | 2019 | 11th Grade | Mathematics | 2.00 | 28 | 75.00 | 73.00 | -73.00 | 5329 |
| Classroom 441 | Winter | 2019 | 10th Grade | Social Studies | 40.00 | 90 | 75.00 | 35.00 | -35.00 | 1225 |
| Classroom 444 | Winter | 2019 | 11th Grade | Social Studies | 5.28 | 116 | 12.54 | 7.26 | -7.26 | 52.7076 |
| Classroom 445 | Winter | 2019 | 12th Grade | Music | 49.53 | 43 | 92.56 | 43.03 | -43.03 | 1851.5809 |
| Classroom 447 | Winter | 2019 | 10th Grade | Social Studies | 3.57 | 40 | 85.00 | 81.43 | -81.43 | 6630.8449 |
| Classroom 448 | | 2019 | 11th Grade | English | 49.50 | 20 | 67.30 | 17.80 | -17.80 | 316.84 |
| Classroom 452 | Winter | 2019 | 9th Grade | Earth Science | 40.00 | 11 | 72.00 | 32.00 | -32.00 | 1024 |
| Classroom 453 | | 2019 | 9th Grade | Social Studies | 19.00 | 32 | 77.00 | 58.00 | -58.00 | 3364 |
| Classroom 455 | | 2019 | 11th Grade | Economics | 55.00 | 21 | 88.00 | 33.00 | -33.00 | 1089 |
| Classroom 456 | Winter | 2019 | 10th Grade | Social Studies | 44.40 | 47 | 79.53 | 35.13 | -35.13 | 1234.1169 |
| Classroom 458 | Winter | 2019 | 10th Grade | Social Studies | 52.95 | 52 | 68.35 | 15.40 | -15.40 | 237.16 |
| Classroom 461 | Winter | 2019 | 9th Grade | Social Studies | 51.00 | 49 | 80.00 | 29.00 | -29.00 | 841 |
| Classroom 464 | Winter | 2019 | 9th Grade | English | 60.33 | 72 | 89.00 | 28.67 | -28.67 | 821.7796889 |
| Classroom 466 | Winter | 2019 | 9th Grade | English | 83.00 | 80 | 88.00 | 5.00 | -5.00 | 25 |
| Classroom 470 | | 2019 | 12th Grade | English | 70.00 | 36 | 94.00 | 24.00 | -24.00 | 576 |
| Classroom 471 | Winter | 2019 | 11th Grade | Chemistry | 60.86 | 23 | 80.43 | 19.57 | -19.57 | 382.9849 |
| Classroom 474 | Winter | 2019 | 10th Grade | English | 56.60 | 58 | 85.90 | 29.30 | -29.30 | 858.49 |
| Classroom 475 | | 2019 | 11th Grade | Mathematics | 30.16 | | 57.51 | 27.35 | -27.35 | 748.0225 |
| Classroom 477 | Winter | 2019 | 10th Grade | Social Studies | 27.00 | 64 | 78.00 | 51.00 | -51.00 | 2601 |
| Classroom 478 | Winter | 2019 | 9th Grade | Music | 20.00 | 53 | 85.00 | 65.00 | -65.00 | 4225 |
| Classroom 479 | | 2019 | 10th Grade | Music | 54.00 | 17 | 82.00 | 28.00 | -28.00 | 784 |
| Classroom 485 | Winter | 2019 | 10th Grade | German | 20.00 | 15 | 60.00 | 40.00 | -40.00 | 1600 |
| Classroom 486 | Winter | 2019 | 9th Grade | Biology | 49.00 | 118 | 76.00 | 27.00 | -27.00 | 729 |
| Classroom 496 | | 2019 | 10th Grade | Social Studies | 60.00 | 56 | 100.00 | 40.00 | -40.00 | 1600 |
| Classroom 506 | Winter | 2019 | 10th Grade | Mathematics | 46.50 | 85 | 81.00 | 34.50 | -34.50 | 1190.25 |
| Classroom 508 | | 2019 | 9th Grade | Music | 68.80 | 10 | 90.80 | 22.00 | -22.00 | 484 |
| Classroom 514 | | 2019 | 10th Grade | Chemistry | 33.70 | 29 | 76.70 | 43.00 | -43.00 | 1849 |
| Classroom 516 | Winter | 2019 | 12th Grade | Art | 25.00 | 25 | 62.00 | 37.00 | -37.00 | 1369 |
| Classroom 519 | | 2019 | 9th Grade | Health | 54.00 | 24 | 85.00 | 31.00 | -31.00 | 961 |
| Classroom 533 | | 2019 | 9th Grade | Social Studies | 41.81 | 126 | 72.43 | 30.62 | -30.62 | 937.5844 |
| Classroom 539 | Winter | 2019 | 9th Grade | English | 20.00 | 44 | 90.00 | 70.00 | -70.00 | 4900 |
| Classroom 541 | Winter | 2019 | 9th Grade | Social Studies | 34.00 | 109 | 42.00 | 8.00 | -8.00 | 64 |
| Classroom 547 | | 2019 | 10th Grade | English | 50.00 | 26 | 95.00 | 45.00 | -45.00 | 2025 |
| Classroom 549 | | 2019 | 11th Grade | Social Studies | 15.90 | 62 | 88.92 | 73.03 | - 4 5.00 | 5332.720875 |
| Classroom 551 | | 2019 | | Music | 25.00 | 23 | 75.00 | 50.00 | -73.03 | 2500 |
| | | 2019 | 10th Grade | Earth Science | 40.02 | 11 | 87.22 | 47.20 | -50.00 -47.20 | 2227.84 |
| Classroom 552 | | 2019 | 10th Grade | | 47.50 | 33 | 53.50 | 6.00 | | |
| Classroom 554 | | | 11th Grade | Mathematics | | 18 | | | -6.00 | 36 |
| Classroom 555 | | 2019 | 10th Grade | French | 28.00 | | 94.00 | 66.00 | -66.00 | 4356 |
| Classroom 556 | | | 9th Grade | Mathematics | 96.00 | 28 | 88.00 | -8.00 | 8.00 | 64 |
| Classroom 559 | rall | 2019 | 10th Grade | Spanish | 43.00 | 27 | 81.00 | 38.00 | -38.00 | 1444 |

| Classroom Sample | Semester | Voar | Grade-Level Assessed | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-------------------------|-----------------------|----------------------|-------------------------------|-------------------|-----------------|---------------|---------------------|
| Classroom 561 | | 2019 | 9th Grade | English | 20.25 | 55 | 55.75 | 35.50 | -35.50 | \ / |
| Classroom 562 | | 2019 | 11th Grade | Economics | 70.30 | | 93.00 | 22.70 | -22.70 | |
| Classroom 563 | | 2019 | 11th Grade | Mathematics | 41.00 | | 80.00 | 39.00 | -39.00 | |
| Classroom 566 | | 2019 | 10th Grade | English | 56.25 | | 76.25 | 20.00 | -20.00 | - |
| Classroom 570 | | 2019 | 9th Grade | Social Studies | 26.00 | 64 | 53.00 | 27.00 | -27.00 | 729 |
| Classroom 572 | Fall | 2019 | 10th Grade | Mathematics | 4.61 | 34 | 72.46 | 67.85 | -67.85 | 4603.6225 |
| Classroom 573 | Fall | 2019 | 11th Grade | English | 50.00 | 73 | 100.00 | 50.00 | -50.00 | 2500 |
| Classroom 575 | Fall | 2019 | 10th Grade | Music | 30.00 | 20 | 83.00 | 53.00 | -53.00 | 2809 |
| Classroom 576 | Fall | 2019 | 9th Grade | Art | 61.66 | 24 | 92.86 | 31.20 | -31.20 | 973.44 |
| Classroom 577 | Fall | 2019 | 10th Grade | English | 1.00 | 50 | 88.00 | 87.00 | -87.00 | 7569 |
| Classroom 588 | Fall | 2019 | 12th Grade | Art | 55.00 | 11 | 80.00 | 25.00 | -25.00 | 625 |
| Classroom 596 | Fall | 2019 | 11th Grade | Spanish | 13.20 | 25 | 46.40 | 33.20 | -33.20 | 1102.24 |
| Classroom 647 | Fall | 2019 | 9th Grade | Social Studies | 50.00 | 18 | 86.00 | 36.00 | -36.00 | 1296 |

Number of P-12 Students: Average % Improvement: 2327

| X-Y OF ED : | (X-Y)^2 OF ED^2 |
|------------------------|--------------------|
| -1965.73 | 93790.77 |
| L =Top Value (∑d/N) | -37.09 |
| M =Middle value | 20883.16 |
| O =Bottom Value | 2756.00 |
| P = Square root of M/O | 2.75 |
| T = (L/P) | -13.47 |
| ∞ = 0.05 | Critical T = 1.645 |
| | Significant |
| T/Square Root of N = | |
| Effect | -1.851 |

| + | $-\underline{\frac{\sum d}{N}}$ |
|---|---|
| L | $-\frac{1}{\sqrt{\sum d^2 - \frac{(\sum d)^2}{N}}}$ |
| | $\sqrt{\frac{N(N-1)}{N(N-1)}}$ |

| Classroom Sample | Semester | Year | Grade-Level Assessed | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-------------------------|-----------------------|----------------------|-------------------------------|-------------------|-----------------|---------------|---------------------|
| Classroom 430 | | 2019 | 6th Grade | Music | 5.00 | 23 | 6.00 | 1.00 | -1.00 | 1 |
| Classroom 436 | | 2019 | 5th Grade | Music | 32.00 | 32 | 99.00 | 67.00 | -67.00 | 4489 |
| Classroom 445 | Winter | 2019 | 12th Grade | Music | 49.53 | 43 | 92.56 | 43.03 | -43.03 | 1851.5809 |
| Classroom 454 | Winter | 2019 | 6th Grade | Music | 68.00 | 37 | 88.00 | 20.00 | -20.00 | 400 |
| Classroom 460 | Winter | 2019 | 6th Grade | Music | 60.00 | 6 | 100.00 | 40.00 | -40.00 | 1600 |
| Classroom 465 | Winter | 2019 | 7th Grade | Music | 77.40 | 31 | 85.50 | 8.10 | -8.10 | 65.61 |
| Classroom 467 | Winter | 2019 | 5th Grade | Music | 25.00 | 113 | 75.00 | 50.00 | -50.00 | 2500 |
| Classroom 469 | Winter | 2019 | 7th Grade | Music | 60.00 | 10 | 90.00 | 30.00 | -30.00 | 900 |
| Classroom 478 | Winter | 2019 | 9th Grade | Music | 20.00 | 53 | 85.00 | 65.00 | -65.00 | 4225 |
| Classroom 479 | Winter | 2019 | 10th Grade | Music | 54.00 | 17 | 82.00 | 28.00 | -28.00 | 784 |
| Classroom 495 | Winter | 2018 | 6th Grade | Music | 66.00 | 77 | 86.00 | 20.00 | -20.00 | 400 |
| Classroom 499 | Winter | 2019 | 6th Grade | Music | 50.00 | 23 | 90.00 | 40.00 | -40.00 | 1600 |
| Classroom 508 | Winter | 2019 | 9th Grade | Music | 68.80 | 10 | 90.80 | 22.00 | -22.00 | 484 |
| Classroom 516 | Winter | 2019 | 12th Grade | Art | 25.00 | 25 | 62.00 | 37.00 | -37.00 | 1369 |
| Classroom 538 | Winter | 2019 | 7th Grade | Music | 46.20 | 30 | 88.20 | 42.00 | -42.00 | 1764 |
| Classroom 551 | Fall | 2019 | 10th Grade | Music | 25.00 | 23 | 75.00 | 50.00 | -50.00 | 2500 |
| Classroom 575 | Fall | 2019 | 10th Grade | Music | 30.00 | 20 | 83.00 | 53.00 | -53.00 | 2809 |
| Classroom 576 | Fall | 2019 | 9th Grade | Art | 61.66 | 24 | 92.86 | 31.20 | -31.20 | 973.44 |
| Classroom 588 | Fall | 2019 | 12th Grade | Art | 55.00 | 11 | 80.00 | 25.00 | -25.00 | 625 |
| Classroom 646 | | 2019 | 7th Grade | Music | 76.60 | 36 | 89.24 | 12.64 | -12.64 | 159.7696 |

| Number of Tests = N | Number of P-12 Students: | Average % Improvement: |
|---------------------|--------------------------|------------------------|
| 20 | 642 | 34.25 |
| | | |

| "(X-Y)"2" or "ED"2" |
|---------------------|
| 29500.40 |
| -34.25 |
| 6041.21 |
| 380.00 |
| 3.99 |
| -8.59 |
| Critical T = 1.645 |
| Significant |
| |
| -1.921 |
| |

| Pre- Number | | | |
|---|--------|---------------|---------------------|
| Olarana and One da One da | | | |
| Classroom Grade-Level Content Area SCORE of P-12 Post-SCOR | | | |
| Sample Semester Year Assessed Assessed (X) Students (Y) | Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
| Classroom 437 Winter 2019 7th Grade English 48.00 62 92.00 | 44.00 | -44.00 | |
| Classroom 448 Winter 2019 11th Grade English 49.50 20 67.30 | 17.80 | -17.80 | |
| Classroom 464 Winter 2019 9th Grade English 60.33 72 89.00 | 28.67 | -28.67 | 821.7796889 |
| Classroom 466 Winter 2019 9th Grade English 83.00 80 88.00 | 5.00 | -5.00 | |
| Classroom 470 Winter 2019 12th Grade English 70.00 36 94.00 | 24.00 | -24.00 | 576 |
| Classroom 473 Winter 2019 7th Grade English 83.70 86 92.30 | 8.60 | -8.60 | |
| Classroom 474 Winter 2019 10th Grade English 56.60 58 85.90 | 29.30 | -29.30 | 858.49 |
| Classroom 480 Winter 2019 Kindergarten Language Arts 45.00 22 56.00 | 11.00 | -11.00 | 121 |
| Classroom 498 Winter 2019 8th Grade English 23.00 19 65.30 | 42.30 | -42.30 | 1789.29 |
| Classroom 500 Winter 2019 Kindergarten Language Arts 43.00 23 91.00 | 48.00 | -48.00 | 2304 |
| Classroom 501 Winter 2019 6th Grade Language Arts 13.00 29 80.00 | 67.00 | -67.00 | 4489 |
| Classroom 509 Winter 2019 5th Grade Language Arts 42.00 15 78.30 | 36.30 | -36.30 | 1317.69 |
| Classroom 513 Winter 2019 7th Grade English 35.00 21 57.00 | 22.00 | -22.00 | 484 |
| Classroom 520 Winter 2019 3rd Grade Language Arts 55.00 22 72.00 | 17.00 | -17.00 | 289 |
| Classroom 523 Winter 2019 6th Grade Language Arts 32.70 22 64.60 | 31.90 | -31.90 | 1017.61 |
| Classroom 527 Winter 2019 4th Grade Language Arts 57.00 24 72.00 | 15.00 | -15.00 | |
| Classroom 539 Winter 2019 9th Grade English 20.00 44 90.00 | 70.00 | -70.00 | |
| Classroom 540 Winter 2019 7th Grade English 74.00 43 93.00 | 19.00 | -19.00 | 361 |
| Classroom 547 Fall 2019 10th Grade English 50.00 26 95.00 | 45.00 | -45.00 | 2025 |
| Classroom 558 Fall 2019 8th Grade English 72.14 26 75.60 | 3.46 | -3.46 | 11.9716 |
| Classroom 560 Fall 2019 8th Grade English 49.00 61 74.50 | 25.50 | -25.50 | |
| Classroom 561 Fall 2019 9th Grade English 20.25 55 55.75 | 35.50 | -35.50 | 1260.25 |
| Classroom 564 Fall 2019 6th Grade Language Arts 72.20 41 92.90 | 20.70 | -20.70 | |
| Classroom 565 Fall 2019 1st Grade Language Arts 68.86 19 74.12 | 5.26 | -5.26 | 27.709696 |
| Classroom 566 Fall 2019 10th Grade English 56.25 52 76.25 | 20.00 | -20.00 | 400 |
| Classroom 567 Fall 2019 3rd Grade Language Arts 0.00 23 100.00 | 100.00 | -100.00 | 10000 |
| Classroom 573 Fall 2019 11th Grade English 50.00 73 100.00 | 50.00 | -50.00 | |
| Classroom 577 Fall 2019 10th Grade English 1.00 50 88.00 | 87.00 | -87.00 | |
| Classroom 579 Fall 2019 5th Grade Language Arts 31.00 21 62.00 | 31.00 | -31.00 | 961 |
| Classroom 585 Fall 2019 2nd Grade Language Arts 62.26 22 87.88 | 25.62 | -25.62 | 656.3844 |
| Classroom 590 Fall 2019 1st Grade Language Arts 39.00 22 78.00 | 39.00 | -39.00 | 1521 |
| Classroom 606 Fall 2019 3rd Grade Language Arts 96.00 24 96.00 | 0.00 | 0.00 | 0 |
| Classroom 609 Fall 2019 1st Grade Language Arts 80.00 21 95.00 | 15.00 | -15.00 | 225 |
| Classroom 610 Fall 2019 1st Grade Language Arts 46.00 24 84.00 | 38.00 | -38.00 | |
| Classroom 618 Fall 2019 1st Grade Language Arts 60.00 26 88.00 | 28.00 | -28.00 | |
| Classroom 621 Fall 2019 1st Grade Language Arts 62.00 3 80.00 | 18.00 | -18.00 | 324 |
| Classroom 630 Fall 2019 Kindergarten Language Arts 3.70 24 38.00 | 34.30 | -34.30 | |
| Classroom 644 Fall 2019 3rd Grade Language Arts 30.00 13 65.00 | 35.00 | -35.00 | 1225 |
| Classroom 645 Fall 2019 5th Grade Language Arts 14.00 19 27.00 | 13.00 | -13.00 | 169 |

| Classroom | | Grade-Level | | Pre- | Number | Post-SCORE | "Y-X" | | |
|-----------|----------|-------------|----------|------|----------|------------|--------|---------------|---------------------|
| | Semester | | Assessed | | Students | (Y) | Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |

Number of P-12 Students: Average % Improvement: 1339 30.93

| - | <u>Σd</u> N |
|------------------------------|---------------------------|
| $-\frac{1}{\sqrt{\sum d^2}}$ | $-\frac{(\Sigma d)^2}{N}$ |
| $\sqrt{N()}$ | N-1) |

| : | "X-Y" or "ED": | "(X-Y)^2" or "ED^2" |
|---|-----------------------|---------------------|
| | -1206.21 | 55264.21 |
| | L =Top Value (∑d/N) | -30.93 |
| | M =Middle value | 17957.94 |
| | O =Bottom Value | 1482.00 |
| | P =Square root of M/O | 3.48 |
| | T = (L/P) | -8.88 |
| | ∞ = 0.05 | Critical T = 1.645 |
| | | Significant |
| | T/Square Root of N = | |
| | Effect | -1.423 |

| Classroom Sample | Semester | Year | | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-----------|-----------------------|----------------------|-------------------------------|-------------------|-----------------|---------------|---------------------|
| Classroom 463 | Winter | 2019 | 4th Grade | Physical Education | 71.00 | 28 | 89.00 | 18.00 | -18.00 | 324 |
| Classroom 519 | Winter | 2019 | 9th Grade | Health | 54.00 | 24 | 85.00 | 31.00 | -31.00 | 961 |
| Classroom 557 | Fall | 2019 | 8th Grade | Physical Education | 83.00 | 45 | 95.00 | 12.00 | -12.00 | 144 |
| Classroom 597 | Fall | 2019 | 1st Grade | Health | 38.00 | 26 | 92.00 | 54.00 | -54.00 | 2916 |
| Classroom 604 | Fall | 2019 | 7th Grade | Physical Education | 81.00 | 30 | 85.00 | 4.00 | -4.00 | 16 |

| $\frac{\Sigma d}{N}$ | umber of Tests = N 5 | Number of P-12 Students: 153 | Average % Improvement 23.80 | |
|----------------------|-------------------------|---------------------------------|-----------------------------|-------------|
| f = | | t = | $\frac{\sum d}{N}$ | L N C |

| | L=Iop |
|--|-----------------|
| | M =Mid |
| Σd | O =Bott |
| | P =Squa |
| 1 | T = (L |
| $\int \Sigma d^2 - \frac{(\Sigma d)^2}{2}$ | $\infty = 0.03$ |
| $\Lambda / Zu - \overline{N}$ | |
| $\sqrt{\frac{N(N-1)}{N(N-1)}}$ | T/Squa |
| y 14 (14 ± 1) | Effect |

| "X-Y" or "ED": | "(X-Y)^2" or "ED^2" |
|-----------------------|---------------------|
| -119.00 | 4361.00 |
| L =Top Value (∑d/N) | -23.80 |
| M =Middle value | 1528.80 |
| O =Bottom Value | 20.00 |
| P =Square root of M/O | 8.74 |
| T = (L/P) | -2.72 |
| ∞ = 0.05 | Critical T = 1.645 |
| | Significant |
| T/Square Root of N = | |
| Effect | -1.217 |

| | | | | | Pre- | Number | | | | |
|---------------|----------|------|--------------|--------------|-------|----------|------------|--------|---------------|---------------------|
| Classroom | | | Grade-Level | Content Area | SCORE | of P-12 | Post-SCORE | "Y-X" | | |
| Sample | Semester | | Assessed | Assessed | (X) | Students | (Y) | Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
| Classroom 428 | Winter | 2019 | Kindergarten | Mathematics | 77.60 | 25 | 87.20 | 9.60 | -9.60 | 92.16 |
| Classroom 431 | Winter | 2019 | 6th Grade | Mathematics | 18.60 | | 91.40 | 72.80 | -72.80 | 5299.84 |
| Classroom 433 | Winter | 2019 | 5th Grade | Mathematics | 71.00 | 25 | 90.00 | 19.00 | -19.00 | 361 |
| Classroom 434 | Winter | 2019 | 11th Grade | Mathematics | 2.00 | 28 | 75.00 | 73.00 | -73.00 | 5329 |
| Classroom 446 | Winter | 2019 | 8th Grade | Mathematics | 21.00 | 24 | 90.00 | 69.00 | -69.00 | 4761 |
| Classroom 450 | Winter | 2019 | 2nd Grade | Mathematics | 14.90 | 21 | 59.40 | 44.50 | -44.50 | 1980.25 |
| Classroom 455 | Winter | 2019 | 11th Grade | Mathematics | 55.00 | 21 | 88.00 | 33.00 | -33.00 | 1089 |
| Classroom 457 | Winter | 2019 | 4th Grade | Mathematics | 65.00 | 22 | 82.00 | 17.00 | -17.00 | 289 |
| Classroom 459 | Winter | 2019 | 5th Grade | Mathematics | 2.30 | 13 | 55.00 | 52.70 | -52.70 | 2777.29 |
| Classroom 468 | Winter | 2019 | 7th Grade | Mathematics | 30.00 | 61 | 72.00 | 42.00 | -42.00 | 1764 |
| Classroom 472 | | 2019 | 8th Grade | Mathematics | 21.80 | 30 | 82.50 | 60.70 | -60.70 | 3684.49 |
| Classroom 475 | Winter | 2019 | 11th Grade | Mathematics | 30.16 | 22 | 57.51 | 27.35 | -27.35 | 748.0225 |
| Classroom 476 | Winter | 2019 | 5th Grade | Mathematics | 27.00 | 24 | 42.00 | 15.00 | -15.00 | 225 |
| Classroom 481 | Winter | 2019 | 6th Grade | Mathematics | 7.00 | 23 | 65.00 | 58.00 | -58.00 | 3364 |
| Classroom 482 | | 2019 | Kindergarten | Mathematics | 50.00 | 18 | 63.00 | 13.00 | -13.00 | 169 |
| Classroom 483 | | 2019 | 2nd Grade | Mathematics | 68.00 | 21 | 86.00 | 18.00 | -18.00 | 324 |
| Classroom 484 | | 2019 | Kindergarten | Mathematics | 56.00 | 15 | 76.00 | 20.00 | -20.00 | 400 |
| Classroom 487 | Winter | 2019 | 4th Grade | Mathematics | 55.00 | 24 | 68.00 | 13.00 | -13.00 | 169 |
| Classroom 490 | Winter | 2019 | Kindergarten | Mathematics | 46.90 | 23 | 54.76 | 7.86 | -7.86 | 61.7796 |
| Classroom 491 | Winter | 2019 | Kindergarten | Mathematics | 73.00 | 21 | 92.00 | 19.00 | -19.00 | 361 |
| Classroom 492 | | 2019 | 1st Grade | Mathematics | 62.00 | 21 | 90.00 | 28.00 | -28.00 | 784 |
| Classroom 494 | Winter | 2019 | Kindergarten | Mathematics | 57.00 | 23 | 82.00 | 25.00 | -25.00 | 625 |
| Classroom 497 | Winter | 2019 | 5th Grade | Mathematics | 39.00 | 18 | 87.20 | 48.20 | -48.20 | 2323.24 |
| Classroom 502 | Winter | 2019 | 3rd Grade | Mathematics | 57.50 | 24 | 83.30 | 25.80 | -25.80 | 665.64 |
| Classroom 503 | | 2019 | Kindergarten | Mathematics | 56.00 | 24 | 92.00 | 36.00 | -36.00 | 1296 |
| Classroom 506 | | 2019 | 10th Grade | Mathematics | 46.50 | 85 | 81.00 | 34.50 | -34.50 | 1190.25 |
| | Winter | 2019 | 2nd Grade | Mathematics | 56.00 | 22 | 94.00 | 38.00 | -38.00 | 1444 |
| Classroom 510 | | 2019 | Kindergarten | Mathematics | 38.00 | 23 | 43.00 | 5.00 | -5.00 | 25 |
| Classroom 512 | | 2019 | 1st Grade | Mathematics | 62.00 | 22 | 85.00 | 23.00 | -23.00 | 529 |
| Classroom 521 | | 2019 | 1st Grade | Mathematics | 56.00 | 23 | 78.00 | 22.00 | -22.00 | 484 |
| Classroom 524 | | 2019 | 1st Grade | Mathematics | 48.80 | 22 | 65.90 | 17.10 | -17.10 | 292.41 |
| Classroom 526 | Winter | 2019 | 4th Grade | Mathematics | 52.50 | 19 | 69.00 | 16.50 | -16.50 | 272.25 |
| Classroom 529 | Winter | 2019 | 2nd Grade | Mathematics | 54.00 | 22 | 83.00 | 29.00 | -29.00 | 841 |
| Classroom 530 | Winter | 2019 | 3rd Grade | Mathematics | 55.00 | 19 | 67.00 | 12.00 | -12.00 | 144 |
| Classroom 534 | Winter | 2019 | Kindergarten | Mathematics | 66.00 | 23 | 83.00 | 17.00 | -17.00 | 289 |
| Classroom 535 | | 2019 | Kindergarten | Mathematics | 93.42 | 20 | 93.75 | 0.33 | -0.33 | 0.1089 |
| Classroom 536 | Winter | 2019 | 1st Grade | Mathematics | 33.00 | 23 | 98.00 | 65.00 | -65.00 | 4225 |
| Classroom 537 | Winter | 2019 | 4th Grade | Mathematics | 28.00 | 22 | 71.00 | 43.00 | -43.00 | 1849 |
| Classroom 544 | | 2019 | 4th Grade | Mathematics | 58.00 | 26 | 67.00 | 9.00 | -9.00 | 81 |
| Classroom 545 | Fall | 2019 | 1st Grade | Mathematics | 54.00 | 22 | 70.00 | 16.00 | -16.00 | 256 |

| | | | | | Pre- | Number | | | | |
|------------------|---------|------|--------------|--------------|-------|----------|------------|--------|---------------|---------------------|
| Classroom | | | Grade-Level | Content Area | SCORE | of P-12 | Post-SCORE | "Y-X" | | |
| | emester | | Assessed | Assessed | (X) | Students | (Y) | Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
| Classroom 554 Fa | | 2019 | 11th Grade | Mathematics | 47.50 | 33 | 53.50 | 6.00 | -6.00 | 36 |
| Classroom 556 Fa | | 2019 | 9th Grade | Mathematics | 96.00 | 28 | 88.00 | -8.00 | 8.00 | 64 |
| Classroom 562 Fa | | 2019 | 11th Grade | Mathematics | 70.30 | 20 | 93.00 | 22.70 | -22.70 | 515.29 |
| Classroom 563 Fa | | 2019 | 11th Grade | Mathematics | 41.00 | 46 | 80.00 | 39.00 | -39.00 | 1521 |
| Classroom 568 Fa | | 2019 | 2nd Grade | Mathematics | 78.00 | 24 | 92.00 | 14.00 | -14.00 | 196 |
| Classroom 569 Fa | | 2019 | 1st Grade | Mathematics | 25.00 | 21 | 97.00 | 72.00 | -72.00 | 5184 |
| Classroom 572 Fa | | 2019 | 10th Grade | Mathematics | 4.61 | 34 | 72.46 | 67.85 | -67.85 | 4603.6225 |
| Classroom 580 Fa | | 2019 | 4th Grade | Mathematics | 53.00 | 27 | 73.00 | 20.00 | -20.00 | 400 |
| Classroom 583 Fa | | 2019 | 4th Grade | Mathematics | 14.00 | 27 | 96.00 | 82.00 | -82.00 | 6724 |
| Classroom 584 Fa | | 2019 | Kindergarten | Mathematics | 66.00 | 23 | 90.00 | 24.00 | -24.00 | 576 |
| Classroom 591 Fa | | 2019 | 2nd Grade | Mathematics | 33.64 | 22 | 54.53 | 20.89 | -20.89 | 436.3921 |
| Classroom 592 Fa | | 2019 | 4th Grade | Mathematics | 64.00 | 16 | 71.00 | 7.00 | -7.00 | 49 |
| Classroom 593 Fa | | 2019 | 4th Grade | Mathematics | 33.00 | 22 | 80.20 | 47.20 | -47.20 | 2227.84 |
| Classroom 594 Fa | | 2019 | 5th Grade | Mathematics | 17.00 | 22 | 87.00 | 70.00 | -70.00 | 4900 |
| Classroom 595 Fa | | 2019 | 1st Grade | Mathematics | 61.00 | 20 | 95.00 | 34.00 | -34.00 | 1156 |
| Classroom 600 Fa | | 2019 | 2nd Grade | Mathematics | 4.00 | 21 | 95.00 | 91.00 | -91.00 | 8281 |
| Classroom 601 Fa | | 2019 | 3rd Grade | Mathematics | 25.00 | 23 | 85.00 | 60.00 | -60.00 | 3600 |
| Classroom 602 Fa | all | 2019 | 1st Grade | Mathematics | 77.00 | 16 | 84.00 | 7.00 | -7.00 | 49 |
| Classroom 603 Fa | all | 2019 | 2nd Grade | Mathematics | 22.00 | 23 | 48.00 | 26.00 | -26.00 | 676 |
| Classroom 605 Fa | | 2019 | 4th Grade | Mathematics | 50.00 | 28 | 82.00 | 32.00 | -32.00 | 1024 |
| Classroom 608 Fa | all | 2019 | 4th Grade | Mathematics | 54.00 | 21 | 83.00 | 29.00 | -29.00 | 841 |
| Classroom 611 Fa | all | 2019 | 3rd Grade | Mathematics | 8.70 | 23 | 64.55 | 55.85 | -55.85 | 3119.2225 |
| Classroom 612 Fa | all | 2019 | 1st Grade | Mathematics | 51.00 | 22 | 86.00 | 35.00 | -35.00 | 1225 |
| Classroom 613 Fa | all | 2019 | 1st Grade | Mathematics | 59.50 | 21 | 90.60 | 31.10 | -31.10 | 967.21 |
| Classroom 616 Fa | | 2019 | 4th Grade | Mathematics | 52.00 | 19 | 70.00 | 18.00 | -18.00 | 324 |
| Classroom 617 Fa | all | 2019 | 1st Grade | Mathematics | 45.00 | 39 | 91.00 | 46.00 | -46.00 | 2116 |
| Classroom 619 Fa | all | 2019 | 4th Grade | Mathematics | 12.00 | 19 | 78.00 | 66.00 | -66.00 | 4356 |
| Classroom 620 Fa | | 2019 | 4th Grade | Mathematics | 51.70 | 23 | 63.40 | 11.70 | -11.70 | 136.89 |
| Classroom 622 Fa | | 2019 | Kindergarten | Mathematics | 61.90 | 23 | 89.00 | 27.10 | -27.10 | 734.41 |
| Classroom 623 Fa | all | 2019 | 2nd Grade | Mathematics | 60.38 | 18 | 80.60 | 20.22 | -20.22 | 408.8484 |
| Classroom 624 Fa | | 2019 | 4th Grade | Mathematics | 13.00 | 24 | 70.37 | 57.37 | -57.37 | 3291.3169 |
| Classroom 627 Fa | all | 2019 | Kindergarten | Mathematics | 77.00 | 17 | 84.00 | 7.00 | -7.00 | 49 |
| Classroom 629 Fa | all | 2019 | Kindergarten | Mathematics | 84.30 | 22 | 96.70 | 12.40 | -12.40 | 153.76 |
| Classroom 631 Fa | | 2019 | 4th Grade | Mathematics | 13.00 | 13 | 56.00 | 43.00 | -43.00 | 1849 |
| Classroom 632 Fa | | 2019 | 1st Grade | Mathematics | 71.00 | 21 | 76.00 | 5.00 | -5.00 | 25 |
| Classroom 633 Fa | | 2019 | 3rd Grade | Mathematics | 14.00 | 10 | 82.00 | 68.00 | -68.00 | 4624 |
| Classroom 635 Fa | | 2019 | 1st Grade | Mathematics | 42.00 | 14 | 72.00 | 30.00 | -30.00 | 900 |
| Classroom 640 Fa | | 2019 | 6th Grade | Mathematics | 70.83 | 21 | 85.19 | 14.36 | -14.36 | 206.2096 |
| Classroom 642 Fa | | 2019 | 3rd Grade | Mathematics | 44.00 | 20 | 72.00 | 28.00 | -28.00 | 784 |

| | lassroom | | | Crade Level | | Pre- | Number | Post-SCORE | "Y-X" | | |
|----|----------|----------|------|-------------|--------------|-------|----------|------------|--------|---------------|---------------------|
| C | lassroom | | | Grade-Level | Content Area | SCORE | 01 P-12 | POSI-SCORE | 1-7 | | |
| Si | ample | Semester | Year | Assessed | Assessed | (X) | Students | (Y) | Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |

Number of P-12 Students: Average % Improvement: 32.08

| : | "X-Y" or "ED": | "(X-Y)^2" or "ED^2" |
|---|-----------------------|---------------------|
| | -2534.68 | 119194.74 |
| | L =Top Value (∑d/N) | -32.08 |
| | M =Middle value | 37870.66 |
| | O =Bottom Value | 6162.00 |
| | P =Square root of M/O | 2.48 |
| | T = (L/P) | -12.94 |
| | ∞ = 0.05 | Critical T = 1.645 |
| | | Significant |
| | T/Square Root of N = | |
| | Effect | -1.456 |

| + | $-\frac{\sum d}{N}$ |
|---|---|
| | $-\frac{1}{\int \sum d^2 - \frac{(\sum d)^2}{N}}$ |
| | $\sqrt{\frac{N(N-1)}{N(N-1)}}$ |

| Classroom Sample | Semester | Year | | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|------------|-----------------------|----------------------|-------------------------------|-------------------|-----------------|---------------|---------------------|
| Classroom 485 | Winter | 2019 | 10th Grade | German | 20.00 | 15 | 60.00 | 40.00 | -40.00 | 1600 |
| Classroom 550 | Fall | 2019 | 8th Grade | Spanish | 29.86 | 82 | 77.81 | 47.95 | -47.95 | 2299.2025 |
| Classroom 555 | Fall | 2019 | 10th Grade | French | 28.00 | 18 | 94.00 | 66.00 | -66.00 | 4356 |
| Classroom 559 | Fall | 2019 | 10th Grade | Spanish | 43.00 | 27 | 81.00 | 38.00 | -38.00 | 1444 |
| Classroom 596 | Fall | 2019 | 11th Grade | Spanish | 13.20 | 25 | 46.40 | 33.20 | -33.20 | 1102.24 |

| Nullibel Of | 16212 - 14 | |
|-------------|------------|--|
| | 5 | |
| | | |

Number of P-12 Students: Average % Improvement: 45.03

| "X-Y" or "ED": | "(X-Y)^2" or "ED^2" |
|-----------------------|---------------------|
| -225.15 | 10801.44 |
| L =Top Value (∑d/N) | -45.03 |
| M =Middle value | 662.94 |
| O =Bottom Value | 20.00 |
| P =Square root of M/O | 5.76 |
| T = (L/P) | -7.82 |
| ∞ = 0.05 | Critical T = 1.645 |
| | Significant |
| T/Square Root of N = | |
| Effect | -3.498 |

| t | $-\underline{\frac{\sum d}{N}}$ |
|---|---|
| | $-\frac{1}{100} \sum_{n=1}^{\infty} \frac{(\sum d)^{2}}{N}$ |
| | $\sqrt{\frac{N(N-1)}{N(N-1)}}$ |

| Classroom Sample | Semester | Year | Grade-Level Assessed | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-------------------------|-----------------------|----------------------|-------------------------------|-------------------|-----------------|---------------|---------------------|
| Classroom 429 | | 2019 | 5th Grade | Integrated Science | 36.97 | 50 | 92.47 | 55.50 | -55.50 | , |
| Classroom 432 | | 2019 | 1st Grade | Integrated Science | 31.50 | 19 | 75.40 | 43.90 | -43.90 | |
| Classroom 435 | | 2019 | 5th Grade | Integrated Science | 12.78 | 27 | 83.11 | 70.33 | -70.33 | 4946.3089 |
| Classroom 439 | | 2019 | 4th Grade | Integrated Science | 44.00 | 19 | 82.35 | 38.35 | -38.35 | 1470.7225 |
| Classroom 440 | | 2019 | Kindergarten | Integrated Science | 60.40 | 20 | 98.40 | 38.00 | -38.00 | 1444 |
| Classroom 442 | Winter | 2019 | 1st Grade | Integrated Science | 47.00 | 19 | 74.00 | 27.00 | -27.00 | |
| Classroom 443 | Winter | 2019 | 1st Grade | Integrated Science | 23.00 | 19 | 82.00 | 59.00 | -59.00 | 3481 |
| Classroom 451 | Winter | 2019 | 2nd Grade | Integrated Science | 62.60 | 22 | 92.40 | 29.80 | -29.80 | 888.04 |
| Classroom 452 | Winter | 2019 | 9th Grade | Earth Science | 40.00 | 11 | 72.00 | 32.00 | -32.00 | 1024 |
| Classroom 471 | Winter | 2019 | 11th Grade | Chemistry | 60.86 | 23 | 80.43 | 19.57 | -19.57 | 382.9849 |
| Classroom 486 | Winter | 2019 | 9th Grade | Biology | 49.00 | 118 | 76.00 | 27.00 | -27.00 | 729 |
| Classroom 489 | Winter | 2019 | Kindergarten | Integrated Science | 68.00 | 26 | 89.67 | 21.67 | -21.67 | 469.4444444 |
| Classroom 505 | Winter | 2019 | 3rd Grade | Integrated Science | 57.50 | 20 | 73.00 | 15.50 | -15.50 | 240.25 |
| Classroom 511 | Winter | 2019 | 5th Grade | Integrated Science | 52.00 | 25 | 77.00 | 25.00 | -25.00 | 625 |
| Classroom 514 | Winter | 2019 | 10th Grade | Chemistry | 33.70 | 29 | 76.70 | 43.00 | -43.00 | 1849 |
| Classroom 522 | Winter | 2019 | 5th Grade | Integrated Science | 31.00 | 25 | 71.00 | 40.00 | -40.00 | 1600 |
| Classroom 525 | Winter | 2019 | 4th Grade | Integrated Science | 47.00 | 23 | 80.00 | 33.00 | -33.00 | 1089 |
| Classroom 542 | | 2019 | 4th Grade | Integrated Science | 59.00 | 22 | 86.00 | 27.00 | -27.00 | |
| Classroom 552 | Fall | 2019 | 10th Grade | Earth Science | 40.02 | 11 | 87.22 | 47.20 | -47.20 | |
| Classroom 571 | | 2019 | 5th Grade | Integrated Science | 33.00 | 22 | 78.00 | 45.00 | -45.00 | |
| Classroom 582 | | 2019 | 5th Grade | Integrated Science | 51.00 | 24 | 97.00 | 46.00 | -46.00 | 2116 |
| Classroom 615 | | 2019 | Kindergarten | Integrated Science | 29.52 | 21 | 87.14 | 57.62 | -57.62 | 3319.949161 |
| Classroom 625 | | 2019 | 4th Grade | Integrated Science | 32.00 | 25 | 67.00 | 35.00 | -35.00 | |
| Classroom 626 | | 2019 | 2nd Grade | Integrated Science | 46.00 | 23 | 71.80 | 25.80 | -25.80 | |
| Classroom 634 | | 2019 | 3rd Grade | Integrated Science | 50.00 | 23 | 89.00 | 39.00 | -39.00 | - |
| Classroom 636 | | 2019 | 1st Grade | Integrated Science | 19.00 | 24 | 81.00 | 62.00 | -62.00 | 3844 |
| Classroom 637 | | 2019 | 1st Grade | Integrated Science | 24.00 | 28 | 85.00 | 61.00 | -61.00 | |
| Classroom 641 | Fall | 2019 | 3rd Grade | Integrated Science | 42.00 | 27 | 83.00 | 41.00 | -41.00 | 1681 |

| Number of Tests = N | Number of P-12 Students: | Average % Improvement: | "X-Y" or "ED": | "(X-Y)^2" or "ED^2" |
|---------------------|--------------------------|------------------------|-----------------------|---------------------|
| 28 | 741 | 39.47 | -1105.24 | 49050.64 |
| | | | L =Top Value (∑d/N) | -39.47 |
| | | | M =Middle value | 5424.00 |
| | | Σd | O =Bottom Value | 756.00 |
| | | | P =Square root of M/O | 2.68 |

N

| Classroom Sample | Semester | Year | Grade-Level Assessed | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | ` ' | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-------------------------|--------------------------|--|-------------------------------|---------|------------------------|--------------------------------|---------------------|
| | • | - | | | $t = \frac{1}{\int \sum d^2 - \frac{(\sum d)^2}{\int \sum d^2}}$ | | | | T = (L/P) | -14.74 |
| | | | | | | | | <u>d)</u> ² | ∞ = 0.05 | Critical T = 1.645 |
| | | | | | $\sqrt{\frac{2u-N}{N}}$ | | | <u></u> | | Significant |
| | | | | | | y | N (N-1) | | T/Square Root of N = Effect | -2.785 |

| Classroom 438 Winter 2019 6th Grade Social Studies 22.00 129 94.00 72.00 -72.00 Classroom 441 Winter 2019 10th Grade Social Studies 40.00 90 75.00 35.00 -35.00 Classroom 444 Winter 2019 10th Grade Social Studies 5.28 116 12.54 7.26 -7.26 Classroom 447 Winter 2019 10th Grade Social Studies 3.57 40 85.00 81.43 -81.43 Classroom 449 Winter 2019 6th Grade Social Studies 46.00 34 78.00 32.00 -32.00 Classroom 453 Winter 2019 9th Grade Social Studies 19.00 32 77.00 58.00 -58.00 Classroom 456 Winter 2019 10th Grade Social Studies 52.95 52 68.35 15.40 -15.40 Classroom 461 Winter 2019 9th Grade Social Studies 51.00 <th>^2" or "ED^2" 5184 1225 52.7076 6630.8449 1024 3364 1234.1169 237.16 841</th> | ^2" or "ED^2" 5184 1225 52.7076 6630.8449 1024 3364 1234.1169 237.16 841 |
|--|--|
| Classroom 438 Winter 2019 6th Grade Social Studies Social Stud | 5184 1225 52.7076 6630.8449 1024 3364 1234.1169 237.16 841 |
| Classroom 438 Winter 2019 6th Grade Social Studies 22.00 129 94.00 72.00 -72.00 Classroom 441 Winter 2019 10th Grade Social Studies 40.00 90 75.00 35.00 -35.00 Classroom 444 Winter 2019 11th Grade Social Studies 5.28 116 12.54 7.26 -7.26 Classroom 447 Winter 2019 10th Grade Social Studies 3.57 40 85.00 81.43 -81.43 Classroom 449 Winter 2019 6th Grade Social Studies 46.00 34 78.00 32.00 -32.00 Classroom 450 Winter 2019 9th Grade Social Studies 19.00 32 77.00 58.00 -58.00 Classroom 456 Winter 2019 10th Grade Social Studies 52.95 52 68.35 15.40 -15.40 Classroom 461 Winter 2019 9th Grade Social Studies 51.00 <th>5184 1225 52.7076 6630.8449 1024 3364 1234.1169 237.16 841</th> | 5184 1225 52.7076 6630.8449 1024 3364 1234.1169 237.16 841 |
| Classroom 441 Winter 2019 10th Grade Social Studies 40.00 90 75.00 35.00 -35.00 Classroom 444 Winter 2019 11th Grade Social Studies 5.28 116 12.54 7.26 -7.26 Classroom 447 Winter 2019 10th Grade Social Studies 3.57 40 85.00 81.43 -81.43 Classroom 450 Winter 2019 6th Grade Social Studies 46.00 34 78.00 32.00 -32.00 Classroom 453 Winter 2019 9th Grade Social Studies 19.00 32 77.00 58.00 -58.00 Classroom 456 Winter 2019 10th Grade Social Studies 44.40 47 79.53 35.13 -35.13 Classroom 467 Winter 2019 10th Grade Social Studies 52.95 52 68.35 15.40 -15.40 Classroom 467 Winter 2019 1st Grade Social Studies 38.00 <th>1225 52.7076 6630.8449 1024 3364 1234.1169 237.16 841</th> | 1225 52.7076 6630.8449 1024 3364 1234.1169 237.16 841 |
| Classroom 444 | 52.7076 6630.8449 1024 3364 1234.1169 237.16 841 |
| Classroom 447 Winter 2019 10th Grade Social Studies 3.57 40 85.00 81.43 -81.43 Classroom 449 Winter 2019 6th Grade Social Studies 46.00 34 78.00 32.00 -32.00 Classroom 453 Winter 2019 9th Grade Social Studies 19.00 32 77.00 58.00 -58.00 Classroom 456 Winter 2019 10th Grade Social Studies 44.40 47 79.53 35.13 -35.13 Classroom 458 Winter 2019 10th Grade Social Studies 52.95 52 68.35 15.40 -15.40 Classroom 461 Winter 2019 9th Grade Social Studies 51.00 49 80.00 29.00 -29.00 Classroom 462 Winter 2019 1st Grade Social Studies 38.00 25 60.00 22.00 -22.00 Classroom 477 Winter 2019 1st Grade Social Studies 19.4 | 6630.8449 1024 3364 1234.1169 237.16 841 |
| Classroom 449 Winter 2019 6th Grade Social Studies 46.00 34 78.00 32.00 -32.00 Classroom 453 Winter 2019 9th Grade Social Studies 19.00 32 77.00 58.00 -58.00 Classroom 456 Winter 2019 10th Grade Social Studies 44.40 47 79.53 35.13 -35.13 Classroom 458 Winter 2019 10th Grade Social Studies 52.95 52 68.35 15.40 -15.40 Classroom 461 Winter 2019 9th Grade Social Studies 51.00 49 80.00 29.00 -29.00 Classroom 462 Winter 2019 1st Grade Social Studies 38.00 25 60.00 22.00 -22.00 Classroom 477 Winter 2019 1oth Grade Social Studies 27.00 64 78.00 51.00 -51.00 Classroom 488 Winter 2019 5th Grade Social Studies 0.00 <td>1024 3364 1234.1169 237.16 841</td> | 1024 3364 1234.1169 237.16 841 |
| Classroom 453 Winter 2019 9th Grade Social Studies 19.00 32 77.00 58.00 -58.00 Classroom 456 Winter 2019 10th Grade Social Studies 44.40 47 79.53 35.13 -35.13 Classroom 458 Winter 2019 10th Grade Social Studies 52.95 52 68.35 15.40 -15.40 Classroom 461 Winter 2019 9th Grade Social Studies 51.00 49 80.00 29.00 -29.00 Classroom 462 Winter 2019 1st Grade Social Studies 38.00 25 60.00 22.00 -22.00 Classroom 477 Winter 2019 1oth Grade Social Studies 27.00 64 78.00 51.00 -51.00 Classroom 488 Winter 2019 5th Grade Social Studies 1.94 18 42.00 40.06 -40.06 Classroom 493 Winter 2019 5th Grade Social Studies 0.00 | 3364 1234.1169 237.16 841 |
| Classroom 456 Winter 2019 10th Grade Social Studies 44.40 47 79.53 35.13 -35.13 Classroom 458 Winter 2019 10th Grade Social Studies 52.95 52 68.35 15.40 -15.40 Classroom 461 Winter 2019 9th Grade Social Studies 51.00 49 80.00 29.00 -29.00 Classroom 462 Winter 2019 1st Grade Social Studies 38.00 25 60.00 22.00 -22.00 Classroom 462 Winter 2019 1oth Grade Social Studies 38.00 25 60.00 22.00 -22.00 Classroom 488 Winter 2019 1oth Grade Social Studies 1.94 18 42.00 40.06 -40.06 Classroom 498 Winter 2019 5th Grade Social Studies 0.00 20 98.24 98.24 -98.24 Classroom 504 Winter 2019 5th Grade Social Studies 51.90 <td>1234.1169 237.16 841</td> | 1234.1169 237.16 841 |
| Classroom 458 Winter 2019 10th Grade Social Studies 52.95 52 68.35 15.40 -15.40 Classroom 461 Winter 2019 9th Grade Social Studies 51.00 49 80.00 29.00 -29.00 Classroom 462 Winter 2019 1st Grade Social Studies 38.00 25 60.00 22.00 -22.00 Classroom 477 Winter 2019 10th Grade Social Studies 27.00 64 78.00 51.00 -51.00 Classroom 488 Winter 2019 5th Grade Social Studies 1.94 18 42.00 40.06 -40.06 Classroom 493 Winter 2019 5th Grade Social Studies 0.00 20 98.24 98.24 Classroom 496 Winter 2019 7th Grade Social Studies 51.90 27 70.40 18.50 -18.50 Classroom 515 Winter 2019 3rd Grade Social Studies 87.00 31 | 237.16 841 |
| Classroom 461 Winter 2019 9th Grade Social Studies 51.00 49 80.00 29.00 -29.00 Classroom 462 Winter 2019 1st Grade Social Studies 38.00 25 60.00 22.00 -22.00 Classroom 477 Winter 2019 10th Grade Social Studies 27.00 64 78.00 51.00 -51.00 Classroom 488 Winter 2019 5th Grade Social Studies 1.94 18 42.00 40.06 -40.06 Classroom 493 Winter 2019 5th Grade Social Studies 0.00 20 98.24 98.24 -98.24 Classroom 496 Winter 2019 10th Grade Social Studies 60.00 56 100.00 40.00 -40.00 Classroom 504 Winter 2019 7th Grade Social Studies 51.90 27 70.40 18.50 -18.50 Classroom 515 Winter 2019 3th Grade Social Studies 87.00 | 841 |
| Classroom 462 Winter 2019 1st Grade Social Studies 38.00 25 60.00 22.00 -22.00 Classroom 477 Winter 2019 10th Grade Social Studies 27.00 64 78.00 51.00 -51.00 Classroom 488 Winter 2019 5th Grade Social Studies 1.94 18 42.00 40.06 -40.06 Classroom 493 Winter 2019 5th Grade Social Studies 0.00 20 98.24 98.24 -98.24 Classroom 496 Winter 2019 10th Grade Social Studies 60.00 56 100.00 40.00 -40.00 Classroom 504 Winter 2019 7th Grade Social Studies 51.90 27 70.40 18.50 -18.50 Classroom 515 Winter 2019 3rd Grade Social Studies 87.00 31 93.00 6.00 -6.00 Classroom 518 Winter 2019 5th Grade Social Studies 47.00 | |
| Classroom 477 Winter 2019 10th Grade Social Studies 27.00 64 78.00 51.00 -51.00 Classroom 488 Winter 2019 5th Grade Social Studies 1.94 18 42.00 40.06 -40.06 Classroom 493 Winter 2019 5th Grade Social Studies 0.00 20 98.24 98.24 -98.24 Classroom 496 Winter 2019 10th Grade Social Studies 60.00 56 100.00 40.00 -40.00 Classroom 504 Winter 2019 7th Grade Social Studies 51.90 27 70.40 18.50 -18.50 Classroom 515 Winter 2019 3rd Grade Social Studies 87.00 31 93.00 6.00 -6.00 Classroom 517 Winter 2019 5th Grade Social Studies 3.54 24 13.61 10.07 -10.07 Classroom 528 Winter 2019 3rd Grade Social Studies 52.60 | |
| Classroom 488 Winter 2019 5th Grade Social Studies 1.94 18 42.00 40.06 -40.06 Classroom 493 Winter 2019 5th Grade Social Studies 0.00 20 98.24 98.24 -98.24 Classroom 496 Winter 2019 10th Grade Social Studies 60.00 56 100.00 40.00 -40.00 Classroom 504 Winter 2019 7th Grade Social Studies 51.90 27 70.40 18.50 -18.50 Classroom 515 Winter 2019 3rd Grade Social Studies 87.00 31 93.00 6.00 -6.00 Classroom 517 Winter 2019 5th Grade Social Studies 3.54 24 13.61 10.07 -10.07 Classroom 518 Winter 2019 5th Grade Social Studies 47.00 19 71.00 24.00 -24.00 Classroom 528 Winter 2019 2nd Grade Social Studies 40.00 | 484 |
| Classroom 488 Winter 2019 5th Grade Social Studies 1.94 18 42.00 40.06 -40.06 Classroom 493 Winter 2019 5th Grade Social Studies 0.00 20 98.24 98.24 -98.24 Classroom 496 Winter 2019 10th Grade Social Studies 60.00 56 100.00 40.00 -40.00 Classroom 504 Winter 2019 7th Grade Social Studies 51.90 27 70.40 18.50 -18.50 Classroom 515 Winter 2019 3rd Grade Social Studies 87.00 31 93.00 6.00 -6.00 Classroom 517 Winter 2019 5th Grade Social Studies 3.54 24 13.61 10.07 -10.07 Classroom 518 Winter 2019 5th Grade Social Studies 47.00 19 71.00 24.00 -24.00 Classroom 528 Winter 2019 2nd Grade Social Studies 40.00 | 2601 |
| Classroom 496 Winter 2019 10th Grade Social Studies 60.00 56 100.00 40.00 -40.00 Classroom 504 Winter 2019 7th Grade Social Studies 51.90 27 70.40 18.50 -18.50 Classroom 515 Winter 2019 3rd Grade Social Studies 87.00 31 93.00 6.00 -6.00 Classroom 517 Winter 2019 5th Grade Social Studies 3.54 24 13.61 10.07 -10.07 Classroom 518 Winter 2019 5th Grade Social Studies 47.00 19 71.00 24.00 -24.00 Classroom 528 Winter 2019 3rd Grade Social Studies 52.60 26 73.50 20.90 -20.90 Classroom 531 Winter 2019 2nd Grade Social Studies 40.00 24 83.00 43.00 -43.00 Classroom 533 Winter 2019 8th Grade Social Studies 9.00 | 1604.8036 |
| Classroom 504 Winter 2019 7th Grade Social Studies 51.90 27 70.40 18.50 -18.50 Classroom 515 Winter 2019 3rd Grade Social Studies 87.00 31 93.00 6.00 -6.00 Classroom 517 Winter 2019 5th Grade Social Studies 3.54 24 13.61 10.07 -10.07 Classroom 518 Winter 2019 5th Grade Social Studies 47.00 19 71.00 24.00 -24.00 Classroom 528 Winter 2019 3rd Grade Social Studies 52.60 26 73.50 20.90 -20.90 Classroom 531 Winter 2019 2nd Grade Social Studies 40.00 24 83.00 43.00 -43.00 Classroom 532 Winter 2019 8th Grade Social Studies 9.00 67 71.00 62.00 -62.00 Classroom 533 Winter 2019 9th Grade Social Studies 41.81 | 9651.0976 |
| Classroom 515 Winter 2019 3rd Grade Social Studies 87.00 31 93.00 6.00 -6.00 Classroom 517 Winter 2019 5th Grade Social Studies 3.54 24 13.61 10.07 -10.07 Classroom 518 Winter 2019 5th Grade Social Studies 47.00 19 71.00 24.00 -24.00 Classroom 528 Winter 2019 3rd Grade Social Studies 52.60 26 73.50 20.90 -20.90 Classroom 531 Winter 2019 2nd Grade Social Studies 40.00 24 83.00 43.00 -43.00 Classroom 532 Winter 2019 8th Grade Social Studies 9.00 67 71.00 62.00 -62.00 Classroom 533 Winter 2019 9th Grade Social Studies 41.81 126 72.43 30.62 -30.62 | 1600 |
| Classroom 515 Winter 2019 3rd Grade Social Studies 87.00 31 93.00 6.00 -6.00 Classroom 517 Winter 2019 5th Grade Social Studies 3.54 24 13.61 10.07 -10.07 Classroom 518 Winter 2019 5th Grade Social Studies 47.00 19 71.00 24.00 -24.00 Classroom 528 Winter 2019 3rd Grade Social Studies 52.60 26 73.50 20.90 -20.90 Classroom 531 Winter 2019 2nd Grade Social Studies 40.00 24 83.00 43.00 -43.00 Classroom 532 Winter 2019 8th Grade Social Studies 9.00 67 71.00 62.00 -62.00 Classroom 533 Winter 2019 9th Grade Social Studies 41.81 126 72.43 30.62 -30.62 | 342.25 |
| Classroom 517 Winter 2019 5th Grade Social Studies 3.54 24 13.61 10.07 -10.07 Classroom 518 Winter 2019 5th Grade Social Studies 47.00 19 71.00 24.00 -24.00 Classroom 528 Winter 2019 3rd Grade Social Studies 52.60 26 73.50 20.90 -20.90 Classroom 531 Winter 2019 2nd Grade Social Studies 40.00 24 83.00 43.00 -43.00 Classroom 532 Winter 2019 8th Grade Social Studies 9.00 67 71.00 62.00 -62.00 Classroom 533 Winter 2019 9th Grade Social Studies 41.81 126 72.43 30.62 -30.62 | 36 |
| Classroom 518 Winter 2019 5th Grade Social Studies 47.00 19 71.00 24.00 -24.00 Classroom 528 Winter 2019 3rd Grade Social Studies 52.60 26 73.50 20.90 -20.90 Classroom 531 Winter 2019 2nd Grade Social Studies 40.00 24 83.00 43.00 -43.00 Classroom 532 Winter 2019 8th Grade Social Studies 9.00 67 71.00 62.00 -62.00 Classroom 533 Winter 2019 9th Grade Social Studies 41.81 126 72.43 30.62 -30.62 | 101.4049 |
| Classroom 528 Winter 2019 3rd Grade Social Studies 52.60 26 73.50 20.90 -20.90 Classroom 531 Winter 2019 2nd Grade Social Studies 40.00 24 83.00 43.00 -43.00 Classroom 532 Winter 2019 8th Grade Social Studies 9.00 67 71.00 62.00 -62.00 Classroom 533 Winter 2019 9th Grade Social Studies 41.81 126 72.43 30.62 -30.62 | 576 |
| Classroom 531 Winter 2019 2nd Grade Social Studies 40.00 24 83.00 43.00 -43.00 Classroom 532 Winter 2019 8th Grade Social Studies 9.00 67 71.00 62.00 -62.00 Classroom 533 Winter 2019 9th Grade Social Studies 41.81 126 72.43 30.62 -30.62 | 436.81 |
| Classroom 532 Winter 2019 8th Grade Social Studies 9.00 67 71.00 62.00 -62.00 Classroom 533 Winter 2019 9th Grade Social Studies 41.81 126 72.43 30.62 -30.62 | 1849 |
| Classroom 533 Winter 2019 9th Grade Social Studies 41.81 126 72.43 30.62 -30.62 | 3844 |
| | 937.5844 |
| Classroom 541 Winter 2019 9th Grade Social Studies 34.00 109 42.00 8.00 -8.00 | 64 |
| Classroom 543 Fall 2019 5th Grade Social Studies 33.00 24 60.00 27.00 -27.00 | 729 |
| Classroom 546 Fall 2019 5th Grade Social Studies 37.14 24 76.00 38.86 -38.86 | 1510.0996 |
| Classroom 548 Fall 2019 8th Grade Social Studies 32.00 28 78.00 46.00 -46.00 | 2116 |
| Classroom 549 Fall 2019 11th Grade Social Studies 15.90 62 88.92 73.03 -73.03 | 5332.720875 |
| Classroom 553 Fall 2019 7th Grade Social Studies 32.00 26 83.00 51.00 -51.00 | 2601 |
| Classroom 570 Fall 2019 9th Grade Social Studies 26.00 64 53.00 27.00 -27.00 | 729 |
| Classroom 574 Fall 2019 5th Grade Social Studies 43.00 27 78.00 35.00 -35.00 | 1225 |
| Classroom 578 Fall 2019 Kindergarten Social Studies 64.00 15 88.00 24.00 -24.00 | 576 |
| Classroom 581 Fall 2019 3rd Grade Social Studies 83.00 24 90.00 7.00 -7.00 | 49 |
| Classroom 586 Fall 2019 3rd Grade Social Studies 24.00 24 78.00 54.00 -54.00 | 2916 |
| Classroom 587 Fall 2019 2nd Grade Social Studies 50.00 19 80.00 30.00 -30.00 | 900 |
| Classroom 589 Fall 2019 5th Grade Social Studies 35.00 22 72.00 37.00 -37.00 | 1369 |
| Classroom 598 Fall 2019 Kindergarten Social Studies 39.00 22 72.00 33.00 -33.00 | |
| Classroom 599 Fall 2019 3rd Grade Social Studies 15.00 24 97.00 82.00 -82.00 | |
| Classroom 607 Fall 2019 4th Grade Social Studies 22.00 21 85.80 63.80 -63.80 | 1089 |
| Classroom 614 Fall 2019 3rd Grade Social Studies 37.50 28 80.00 42.50 -42.50 | 1089 6724 |
| Classroom 628 Fall 2019 5th Grade Social Studies 14.00 25 65.00 51.00 -51.00 | 1089 |

| Classroom Sample | Semester | Year | | Content Area Assessed | Pre- SCORE (X) | Number of P-12 Students | Post-SCORE (Y) | "Y-X" Change | "X-Y" or "ED" | "(X-Y)^2" or "ED^2" |
|---------------------|----------|------|-----------|-----------------------|----------------------|-------------------------------|-------------------|-----------------|---------------|---------------------|
| Classroom 638 | Fall | 2019 | 3rd Grade | Social Studies | 64.00 | 24 | 79.00 | 15.00 | -15.00 | 225 |
| Classroom 639 | Fall | 2019 | 3rd Grade | Social Studies | 0.00 | 20 | 90.00 | 90.00 | -90.00 | 8100 |
| Classroom 643 | | 2019 | 1st Grade | Social Studies | 67.06 | 17 | 68.24 | 1.18 | -1.18 | 1.3924 |
| Classroom 647 | Fall | 2019 | 9th Grade | Social Studies | 50.00 | 18 | 86.00 | 36.00 | -36.00 | 1296 |

Number of P-12 Students: Average % Improvement: 38.73

| "X-Y" or "ED": | "(X-Y)^2" or "ED^2" |
|------------------------|---------------------|
| -1703.98 | 89886.68 |
| L =Top Value (∑d/N) | -38.73 |
| M =Middle value | 23897.31 |
| O =Bottom Value | 1892.00 |
| P = Square root of M/O | 3.55 |
| T = (L/P) | -10.90 |
| ∞ = 0.05 | Critical T = 1.645 |
| | Significant |
| T/Square Root of N = | |
| Effect | -1.643 |

| t | $-\frac{\sum d}{N}$ |
|---|---|
| | $-\frac{1}{\sqrt{\sum d^2 - \frac{(\sum d)^2}{N}}}$ |
| | $\sqrt{N(N-1)}$ |