**Data Shows Connection Between COA Library Collections Usage (Circulating Books) and Increased Student Success and Higher GPA – Fall 2017**

*Author: Jane McKenna, Head Librarian at College of Alameda,* *jmckenna@peralta.edu* *Institutional Researcher: Dominique Benavides, Peralta Community College District,* *dbenavides@peralta.edu*

**Overview**

Services that improve student success and GPA in community colleges are important not only to individual students' success but also to college planning and funding. This document provides the results of a data request carried out to explore whether use of the COA Library’s print collection by College of Alameda Students is associated with higher success rates and GPA than the institutional standard. The data was limited to the Fall 2017 semester and drew on demographic data from the District's enrollment system and instances of library book checkouts (Circulating Collection only, not textbooks) from the library's management system.

**The data shows a higher rate of Library book checkouts and success rate for equity-impacted groups (including Black/African American, Hispanic/Latino and low-income) in comparison to that same group in the general population in Fall 2017.**  Data indicates that checking out a COA Library book (from the Circulating Collection) is associated with a 10% higher student success rate (80% success for the Library Check-out Subgroup compared to 70% success for the College average) and a higher average GPA (2.90 GPA average for Library Check-out Subgroup compared to 2.81 GPA average for the College) compared to the institutional standard for the same semester (see below, Data Table 1 and Data Table 2).

**Data also indicates that checking out a COA Library book (from the Circulating Collection) is associated with a higher student success rate** for equity-impacted groups such as Black/ African Americans (57% success rate in general population for Fa2017, 81% success rate in Library Check-out Subgroup from Fall 2017), Hispanic/Latinos (65% success rate in general population for Fa2017, 74% success rate in Library Checkout Subgroup from Fall 2017), Low Income (69% success rate in general population for Fa2017, 79% success rate in Library Checkout Subgroup from Fall 2017), and DSPS (74% success rate in general population for Fa2017, 81% success rate in Library Checkout Subgroup from Fall 2017). **Data also showed higher rates of checkout of COA Library circulating books by equity-impacted groups such as Black/African Americans (23% of students checking out books in Fa2017, compared to 18% in general population in Fa2017) and low income students (81% of students checking out books in Fa2017, compared to 71% in general population in Fa2017) as compared to their make-up in the general population. (see below, Table 3).** Therefore, continuing support and improvement of library services is important part in serving the equity-impacted population at COA. Findings from this study suggest that the COA Library can contribute to the success of students by providing access to books that support the curriculum. It is interesting to note that this data was only for the circulating collection checkouts and does not include reserve textbooks checkouts. Reserve/textbooks checkout data will be gathered for a future study.

**TABLE 1 - Data** - **GPA Comparison between COA General Population vs. COA Library Checkout Subgroup (Fall 2017)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
| **College of Alameda** | **Average of Cumulative GPA, Fall 2017** |  |  | **COA Library Subgroup** | **Average of Cumulative GPA, Fall 2017** |  |
| 2.81 |  |  | 2.90 |  |

**Table 2 - Success Rate Comparison between COA General Population vs. Library Checkout Subgroup (Fall 2017)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **General Population (COA), Fall 2017** |  | **Library Checkout Subgroup (COA), Fall 2017** |
|  |  | **Categories** | **Census Enrollment** | **Success** | **Success Rate** | **Percentage Point Gap compared to Overall College Success Rate** |  |  | **Categories** | **Census Enrollment** | **Success** | **Success Rate** | **Percentage Point Gap compared to College Success Rate for same group in the General Population**  |
|  | Ethnicity | American Indian |  21  | 15 | 71% | 1% |  | Ethnicity | American Indian |  -  |  -  | n/a | n/a |
|  |   | Asian |  4,078  | 3215 | 79% | 9% |  |   | Asian |  158  |  129  | 82% | 2% |
|  | Black / African American |  2,213  | 1272 | 57% | -13% |  | Black / African American |  144  |  117  | 81% | 24% |
|  | Hispanic / Latino |  2,947  | 1922 | 65% | -5% |  | Hispanic / Latino |  137  |  102  | 74% | 9% |
|  | Pacific Islander |  93  | 55 | 59% | -11% |  | Pacific Islander |  -  |  -  | n/a |   |
|  | Two or More |  693  | 446 | 64% | -6% |  | Two or More |  36  |  29  | 81% | 17% |
|  | Unknown / NR |  381  | 281 | 74% | 4% |  | Unknown / NR |  19  |  17  | 89% | 15% |
|  | White |  1,709  | 1315 | 77% | 7% |  | White |  72  |  61  | 85% | 15% |
|  |   |   |   |   |   |   |  |   |   |   |   |   |   |
|  | Gender | Female |  6,621  | 4734 | 71% | 1% |  | Gender | Female |  363  |  313  | 86% | 15% |
|  |   | Male |  5,339  | 3670 | 69% | -1% |  |   | Male |  193  |  137  | 71% | 2% |
|  | Unknown |  175  | 117 | 67% | -3% |  | Unknown |  10  |  5  | 50% | -17% |
|  |   |   |   |   |   |   |  |   |   |   |   |   |   |
|  | Special Populations | Low\_Income |  9,067  | 6218 | 69% | -2% |  | Special Populations | Low\_Income |  466  |  368  | 79% | 10% |
|  |   | DSPS |  928  | 691 | 74% | 4% |  |   | DSPS |  67  |  54  | 81% | 7% |
|  | Foster\_Youth |  102  | 68 | 67% | -4% |  | Foster\_Youth |  16  |  9  | 56% | -11% |
|  | Veterans |  127  | 83 | 65% | -5% |  | Veterans |  -  |  -  | n/a | n/a |
|  | **Overall College Total** |  **12,135**  | **8521** | **70%** |   |  | **Fall 2017 Sub group - Total** |  **566**  |  **455**  | **80%** |  |

**Table 3 - Demographic Data – General Population compared to Library Checkout Subgroup (Fall 2017)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |
|  | **General Population (COA), Fall 2017** |  | **COA Library Subgroup, Fall 2017** |
|  |  | **Categories** | **All students** | **% to total**  |  |  | **Categories** | **Library Sub group** | **% to total**  | **Percentage Point Gap to the College Category** |
|  | Ethnicity | American Indian |  15  | 0% |  | Ethnicity | American Indian |  -  | 0% | 0% |
|  |   | Asian |  2,160  | 33% |  |   | Asian |  55  | 29% | -4% |
|  | Black / African American |  1,199  | 18% |  | Black / African American |  45  | 23% | 5% |
|  | Hispanic / Latino |  1,678  | 25% |  | Hispanic / Latino |  48  | 25% | 0% |
|  | Pacific Islander |  48  | 1% |  | Pacific Islander |  -  | 0% | -1% |
|  | Two or More |  339  | 5% |  | Two or More |  11  | 6% | 1% |
|  | Unknown / NR |  220  | 3% |  | Unknown / NR |  6  | 3% | 0% |
|  | White |  959  | 14% |  | White |  27  | 14% | 0% |
|  | Total |  6,618  | 100% |  | Total |  192  | 100% | n/a |
|  |   |   |   |   |  |   |   |   |   |   |
|  | Gender | Female |  3,683  | 56% |  | Gender | Female |  124  | 65% | 9% |
|  |   | Male |  2,823  | 43% |  |   | Male |  64  | 33% | -9% |
|  | Unknown |  112  | 2% |  | Unknown |  4  | 2% | 0% |
|  | Total |  6,618  | 100% |  | Total |  192  | 100% | n/a |
|  |   |   |   |   |  |   |   |   |   |   |
|  | Special Populations | Low\_Income |  4,689  | 71% |  | Special Populations | Low\_Income |  156  | 81% | 10% |
|  |   | DSPS |  422  | 6% |  |   | DSPS |  18  | 9% | 3% |
|  | Foster\_Youth |  61  | 1% |  | Foster\_Youth |  4  | 2% | 1% |
|  | Veterans |  73  | 1% |  | Veterans |  -  |   |   |
|  |  |  |  |  |  |  |  |  |  |  |

**Methods**

In Spring 2018, the Head Librarian used the Library Management System to generate a list of patron id numbers (this is different from patron barcode) for the last patron to checkout any circulating book in Fall 2017. The search criteria was as follows: Record type: Item with a search string of: item location equal to ebest OR item location equal to aezr OR item type equal to apb OR item location equal to acrc AND item last checked out between 08-15-2017 and 12-15-2017. The list was set to only display the patron id number. The Circulation Supervisor, using the list within the LMS, for each item on the list, right clicked on the patron id number (listed in the last patron field), opened Patron View Actions and selected last patron to check-out item, and copy and pasted the patron barcode into a new list. This new list provides us with the patron barcode (rather than the patron id number) which is needed by the institutional researcher to run success and demographic data. The Circulation Supervisor created a list of these patron barcodes (only for student records) and sent it to the Head Librarian. The Head Librarian sorted the barcode list in numeric order and then deleted the duplicate records. This list was given to the institutional researcher to run data on this Library Check-out Subgroup such as demographics, success rates, average GPI, etc. and also provide college averages in these areas as a comparison.