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## ABSTRACT

A study was conducted at Golden West College in
California using data from the state-report management information system files to analyze course completion and course success data from fall 1991, 1992, and 1993. In addition to identifying trends, the study made comparisons among ethnic groups, between males and females, and between persons for whom English is the primary language and those with another primary language. Study findings show: (1) the overall success rate was $66 \%$ in credit/degree-applicable (CDA) courses, $72.4 \%$ in credit/non-degree-applicable (CNA) courses; (2) retention rates were $79.8 \%$ in CDA courses and $84.8 \%$ in CNA courses; (3) Asian students had the highest success rate in CDA courses for each of the fall terms; (4) female students generally had higher success and retention rates than males; and (5) students whose first language was other than English had higher success and retention rates than their native English-speaking counterparts. The college has an obligation to examine reasons for differential rates of success or retention to incorporate them into the Student Equity Pian. It is appropriate to focus on factors such as preparedness, motivation, study skills, and demands on time when discussing demographic variables and educational outcomes. Twelve tables present the date. (KP)


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# Retention and Success Rates By Course Category, Year, and Selected Student Characteristics at Golden West College 

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November 1994

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# Retention and Success Rates, By Course Category, Year, and Selected Student Characteristics at Golden West College 

Steven Isoni々, Ph.D.

## Background

In an effort to promote success for all students, community colleges in California, in accordance with the Student Equity Policy adopted by the Board of Governors and added to Title 5 of the California Code of Regulations, are required to develop, adopt, and implement individual Student Equity Plans. According to guidelines developed by the statewide Academic Senate, the emphasis is on truly making a difference rather than merely developing a plan:
"There is now a mandate in Title 5 to do a student equity plan. However, the more urgent reason is that the state's economic and social future depends on integrating all ethnic groups into the mainstr?am. The community colleges have an important part to play in that task, because most of the students from historically underrepresenied groups who are in college in the state are at community colleges." (Academic Sonate, California Community Colleges, 1993).

At the core of the equity pian are statements about goals relating primarily to the following five indicators: access, retention, degree and certificate completion, ESL and Basic Skills course completion, and transfer. Further, in accordance with the equity mandate, these indicators are to be analyzed with respect to the following target groups: American Indians/Alaskan Natives, Asian/Pacific Islanders, African-Americans, Hispanics, persons with disabilities, and women. Research regarding student equity and institutional barriers that might affect student access and success should serve as the foundation upon which the goals of the Student Equity Pları is to be developed.

The present report examines data from three successive Fall terms--1991, 1992, and 1993 to address one of the indicators--course completion. This multi-year approach allows for an evaluation of the stability of any effects found, as well as identification of trends which may exist. The report also focuses on comparisons among ethnic groups, between males and females, and between persons for whom English is the primary language and those with another primary language. The primary language dimension was included because of its possible relevance to preparedness which might be reflected in indices of success and retention. The dimensions of comparison are course completion (retention) rates and course success rates. Course success was included as an outcome in this analysis because, unlike retention which merely indicates whether the student completed the course, success reflects the level/quality of performance in the course. Analyses involving disabled students will be addressed in a separate report. Across-term indices such as persistence and goal completion will also be addressed separately. Finally, the issue of access is also not addressed in this report.

## Method

## Procedure.

The analyses were based on data from the Fall 1991, Fail 1992, and Fall 1993 semester MIS data files accessed via SPSS-X system files created by the CCCD Research Office. Data from the Student Basic (SB), Enroliment (SX), and Course Basic (CB) data files were combined for the analyses. Excerpts from the mainframe system files were downloaded for analysis with SPSS-Windows. Percentages were based on counts that represent number of enrollments, and therefore are not unduplicated. An individual student would contribute data for each course enrollment during a given term. The MIS Enrollment file, by definition,
contains information for students who received some official enrollment grade. As such, data for students who dropped a course prior to the deadline to avoid a transcript entry are not . included in the analysis. The crosstabs procedure was used to produce the 2 -way breakdowns between student characteristic (ethnicity, gender, and primary language category) and outcorne indicator (success and retention). Chi-square tests for independence were conducted and are presented in a supplement to this report which is available upon request.

Some caution must be exercised when comparing group retention and success rates. In some cases, a rate may be based upon a very small number of students and therefore the value is likely to be unstable. Nevertheless, since the focus of equity analyses is intergroup comparison, all rates are listed in the tables, regardless of sample sizes. As a guide to the reader, however, those rates which are based on fewer than 50 students are indicated with asterisks in the Tables which appear in the Appendix.

## Definitions.

"Success Rate" is defined as the number of success grades divided by the total number of grades, i.e.. ( $\mathrm{ABCCr} / \mathrm{ABCDFNcW}$ ). Note that Cr (credit) is considered a success; Nc (non-credit) and W (withdrawal) are considered unsuccessful. "Retention Rate" is defined as the number of completion grades divided by the total number of grades, i.e., (ABCDFCrNc/ABCDFCrNcW). As such, retention rate is synonymous with completion rate, and it is the complement of withdrawal rate (i.e., retention rate and withdrawal rate sum to $100 \%$ ). Note that according to this definition, D, F, and Nc grades are considered "retained" grades. Incomplete (I) codes for grade were not included in the analyses. The course grade (variable SX04 from the MIS enrollment file) was used as the basis for determining success and retention rate, in the calculations just described. It should be noted
that these analyses do not bear on the issue of the meaning of the grades. Quiestions about the validity of the grades, associated standards, consistency of application, etc., while fundamentally important, are not addressed by this analysis.

Student demographic/background information was obtained from the SB (Student Basic) MIS data file. Three SB variables were used: SB04 (Gender), SB05 (Student Ethnicity), and SB07 (Student [Primary] Language). The codes and associated labels contained in the MIS data element dictionary were used. For SB05, major ethnic groupings included Asian, African-American, Filipino, Hispanic, American Indian/Alaskan Native, Other non-White, Pacifić Islander, White non-Hispanic, and Unknown/Decline to state. For SB07 the codes are English, not English, and Unknown/Uncollected.

Although a curriculum-wide analysis would lend itself to statements about student success and retention, it would also ignore important differences among courses, therefore, more homogeneous categories of courses were used for the analyses. These course categorizations were based on information from CB (Course Basic) MIS variables. Two CB variables were celected for categorizing courses offered at GWC: CB04 and CB11. According to the current edition of the MIS Data Element Dictionary, the variable CBO4 (Course credit status) indicates whether a course is credit, degree applicable; credit, not degree applicable; or non-credit. Cbi (Course classification code) classifies courses according to their prin lary objective. Only 5 of the 9 available codes for CB11 are represented in the GWC curriculum: Liberal Arts and Sciences, Developmental Preparatory, Personal Development, Parenting and Family Support, and Occupational Education. Among these five, only Liberal Arts and Sciences and Occupational Education have sufficient enrollments to allow for any meaningful comparisons, and therefore only these categories were used from variable CB11.

Finally, many summary statements in the Results and Discussion sections below make reference to the " $86 \%$ threshold". This refers to a value that is $80 \%$ of the rate (success or retention) of the highest group. This is the classic definition of disproportionate impact used by the Equal Employment Opportunity Commission (EEOC) for employee selection (Uniform Guidelines, 1978), and has been adopted by the California Community Colleges Chancellor's Office for use in disproportionate impact analyses in assessment/placement of students. It is a reasonable "rule of thumb" for evaluating differential rates of success and retention and was used in that way in this report.

It is possible to conduct tests of statistical significance (Chi-square test, given the categorical data) to evaluate the differences between groups. This test largely addresses the issue of ru peatability of an effect--whether the difference is reliable. Effects which are reliable are those which are either large (and meaningful/important) or based on large samples (and not necessarily meaningful/important). As such, trivial between-group differences which are based on large samples can be statistically significant. Chi-square tests were performed to test the statistical significance of the differences among student groups (3 dimensions) for each of the three terms analyzed, for each of the four groupings of courses, and for each criterion (success or retention). As noted, since statistical significance does not necessarily imply importance, the results of the chi-square analyses must be interpreted with great caution (e.g., Dar, Serlin \& Omer, 1994; Delucchi, 1983). These analyses, along with the sample sizes upon which the rates are based appear in a supplement to this report which is available upon request.

## Results

## Ethnicity.

Success. As can be seen in Table 1, Asian students have had the highest success rate in credit, degree-applicable courses for each of the past three Fall terms, with specific values ranging from a low of $65.9 \%$ to a high of $68.4 \%$ (all Tables appear in the Appendix). Each of the other student ethnic groups had rates of success that were within $80 \%$ of the highest rate for a given year, with the exception of African-American students for each of the three years under investigation, and Pacific Islander students for Fall 1991 and Fall 1993 only. Asian students also had the highest success rates in credit/non-degree applicable courses for each of the years analyzed. For this category of courses, other ethnic groups had success rates that often fell below the $80 \%$ threshold. Indeed, the success rates for non-Asian groups were below the critical level for both Fall 1992 and Fall 1993. It should be noted, however, that many of these rates are based on small numbers of students and therefore considerable caution should be usad in forming generalizations regarding success in credit/degree-nondegree applicable courses. Additionally, these differences may be artifacts attributable to differential rates of enrollment in specific creditinon-degree applicable courses which use different grading criteria.

The highest rate of success in courses identified as Liberal Arts and Sciences was attained by Asian students (65.9\% in Fall 1991, to a high of $68.2 \%$ in Fall 1993, as depicted in Table 2). The rates for African-American sludents for each of the three years was below the critical $80 \%$ threshold. In Fall 1993, the rates for Native American/Alaskan Native and Pacific Islander students were also below the $80 \%$ value. Additionally, in Fall 1901, the Pacific

Islander student success rate was below the threshold. In Fall 1991, White students had the highest success rate (73.3\%) in Occupational Education courses; for Fall 1992 and Fall 1993 the highest rate was attained by Filipino students ( $75.2 \%$ and $79.6 \%$, respectively). Only Pacific Islander students (for each of the three Fall terms) and African-American students (Fall 1993 only) had rates that fell below the $80 \%$ level.

Retention. The analysis of retention rates by ethnicity in credit/degree-applicable courses for the three successive Fall terms, summarized in Table 3, revealed general comparability among ethnic groups. Only one val':e, that for Pacific Islander students in Fall 1991, fell below the $80 \%$ threshold. Interestingly, the group that had the highest rate was different for each of the three years--Asians in Fall 1991 (79.9\%), Whites in Fall 1992 (78.3\%), and Filipinos (81.3\%) in Fall 1993. In credit courses which are not degree-applicable, Asian siudents exhibited the highest success rate among the ethnic groups for each of the three years examined. Curiously, whereas the retention rate for Asian students in these courses increased markedly from Fall 1991 to Fall 1993 (from $72.9 \%$ to $91.1 \%$ ), the opposite trend emerged for other groups. Each of the other ethnic groups had at least one year in which its retention rate was below the $80 \%$ level. Again, however, a good degree of caution is warranted since many of the values are based on few students and these rates may reflect differential enrollment patterns in courses from specific departments.

Retention in Liberal Arts and Sciences courses was somewhat comparable among ethnic groups for each of the three Fall terms analyzed (see Table 4). Filipino stuaents had the highest retention rates in both Fall 1991 (79.6\%) and Fall 1993 (80.4\%); Native AmericaniAlaskan Native students had the highest rate in Fall 1992 (77.2\%). In Occupational Educational courses, retention rates were again comparable among ethnic groups, with the highest rate attained by White students in each of the three years (these values ranged from
$83.0 \%$ to $85.6 \%$ ). The only exception to the general comparability in retention rates across ethnic groups was for Pacific Islander students whose retention rate fell below $80 \%$ of the top group each of the three Fall terms.

Gender.
Success. Female students generally have higher success rates than do male students among the courses in the categories examined for this report, an effect that held for each of the three Fall terms analyzed and in credit/degree-applicable courses and credit/non-degreeapplicable courses, as well as Liberal Arts and Sciences. In Occupational Education courses female students had higher success rates than males in Fall 1992 and Fall 1993, however males were more successful than females in Fall 1991. It should be noted, however, that in all cases, the success rate for male students was well within the critical $80 \%$ range. These analyses are all summarized in Tables 5 and 6.

Retention. The rates of retention in credit/degree-applicable courses do not differ notably between females and males. In credit/degree-applicable courses, the rates were slightly higher for female students in Fall of 1992 and Fall of 1993, whereas males had a slightly higner retention rate in Fall of 1991. None of these is below the critical difference level. Females consistently had higher retention rates in credit/non-degree applicable courses (see Table 7). Also, in Liberal Arts and Sciences courses, female students consistently had higher retention rates, although the rates for male students were well above the $80 \%$ threshold. Finally, in Occupational Education courses, the differences between retention rates 1..: males and females was negligible, and the direction of the difference is not consistent (Table 8 depicts these percentages).

## Primary Lanquage

Success. Students whose records in the District database indicate that their primary language is one other than English have success rates in credit/degree-applicable courses which exceed the success rates for students for whom English is the primary language. This difference was found in each of the three Fall terms examined, however the rate associated with native English speakers for each term is within the $80 \%$ of the higher value associated with non-native English speakers (Table 9). Non-native speakers of English succeeded at a higher rate than their native English speaking counterparts in credit/non-degree applicable courses in each of the three years. Non-native English speakers also had a higher success rate in Liberal Arts and Sciences courses in each year; the reverse pattern is true, however, in Occupational Education courses--native English speakers succeed at higher rates in inese courses (see Table 10). None of these differences exceed the $80 \%$ threshold, however.

Retention. Students for whom English is not the primary language have slightly higher retention rates than their primary-English counterparts in credit/degree-applicable courses. The difference is in the same direction for credit/non-degree applicable courses but it has increased somewhat from Fall 1991 ( $75.9 \%$ compared to $74.1 \%$ ) to Fall 1993 (90.7\% compared to $71.8 \%$ ). These results are depicted in Table 11.

The direction of the difference is the same for Liberal Arts and Sciences courses--nonnative English speakers have greater retention rates, an effect found for each of the Fall terms examined. Finally, native English speakers show higher retention rates in Occupational Education courses for each year analyzed. None of the differences in retention was of sufficient magnitude to exceed the $80 \%$ critical difference threshold, however (see Table 12).

## Summary of the Chi-Square Analyses.

In cases of bivariate distributions of categorical data, the chi-square test indicates whether the two dimensions are reliably independent (Siegel, 1956). Reliability in this case is a function of effect size (actual difference between rates) and sample size. Stated differently, the chi-square test would indicate statistical significance if there is either a large effect, a large sample, or both. For most of the comparisons made in this study the samples were quite large. As such, not surprisingly, most of the chi-square tests indicated a high degree of statistical significance, regardless of the effect size. That is, despite the tendency for comparability in rates of success and retention as determined by direct examination of rates, the vast majority of chi-square tests indicated statistical significance.

Those cases where the chi-square was not statistically significant nearly always involved extremely small effects (differences between rates), typically related to gender differences. An example of this is the gender difference in the case of retention in credit/degree-applicable courses in Fall of 1991. The retention rate for males was 78.6, compared to 78.4 for females. Despite the very large sample size in this case (minimum expected frequency was nearly 4,000 ), the difference between these rates was not statistically significant. Even the distoriing tendency of large sample chi-square tests was not able to overcome such a trivial difference. The fact that the chi-square test can be misleading is further evidenced in the case of gender differences in retention rate for the following Fall. In Fall 1992, females were retained at a rate of $78.8 \%$, compared to $76.6 \%$ for males. Although that difference is clearly neither meaningful nor important, the chi-square test indicated that it is highly statistically significant $\left[X_{(1)}^{2}=25.59, p<.000001\right]$. Results of the 72 chi-square tests are presented, for interested readers, in the supplement to this report which is available upon request.

## Discussion

As noted above, group differences, while fairly consistent, were generally not very large. Some exceptions were found in the case of ethnicity, however. These tended to involve relatively low rates for African-American and Pacific Islander students. As such, it is appropriate for GWC to begin to consider reasons for the relatively lower success and retention rates for these groups of students. Altiough African-American and Pacific Islander students account for a fairly small percentages of the total student population at GWC, their performance, as indicated by the analyse= presented in this report, warrant some concern. The GWC Student Equity Plan sheuld be modified or extended to include specific goals for African-American and Pacific Islander students and this change should be accompanied by discrete action.

Ethnicity, per se, although a salient social variable, is not a cause of academic performance. How, then, to explain group differences of the sort reported above? Other more relevant variables which may correlate with ethnicity such as preparedness, motivation level, study skills, and competing demands on time, are educationally important and likely mediate the relationship between group membership and outcomes (Isonio, 1992). Factors such as these can be addressed--skills of initially unprepared students can be remediated; initially unmotivated students can become motivated regarding their education and develop clear goals; a person can learn how to be a good student. In short, whenever evidence for group differences is found, it should be followed with an effort to understand which factors of this type are responsible for the differences and action should be undertaken to address them. Conclusions from cursory examinations of names or faces are doomed to be wrong, and they
deflect the focus from a discussion of relevant factors such as preparedness (what it is, how to measure it, how to address it) to problemmatic generalizations ahout group differences.

Also, it should be reiterated that the results reported here are based on summaries of actual indices of performance. Grade information from state-reported MIS files was used to define success and retention. As described, with few exceptions, analyses based on these official records show more comparability than differences among groups, and where differences were found, they tended to be minimal (within the $80 \%$ level) favoring females, Asians, and ESL students. Nevertheless, other "realities" in the form of perceptions and expectations about group differences may exist. Beliefs that certain groups of students defined by ethnicity or primary language are generally unprepared and constitute a "problem" for the college warrant examination, perhaps more for what they reflect about the believer than for the value of the assessment of students. Reinforcement of false generalizations can result in their becoming widespread, a phenomenon termed the "false consensus effect" (Gilovich, 1991). The solution is simple--at all times, the focus should be on individual student preparedness levels.

The EEOC disproportionate impact approach adopted for the present analyses is probably the most appropriate way to assess the issue of equity since it emphasizes differences between groups. That is, to the extent that equity exists, inputs (e.g., access, opportunity, resource distribution, feeling welcomed) and outcomes (e.g., retention, ccurse success, persistence, goal attainment) would be generaily comparable for all groups of students. The " $80 \%$ rule" helps to determine whether there are notable intergroup differences. If the values on a particular index differ greatly across groups (as when some lower values are below $80 \%$ of the highest value), then an inequity exists. This strength, however, is a also a weakness in at least one sense. Since $\cdot$ ' is possible for all groups to have comparable
retention and success rates, but for these rates to also be generally below an acceptable level, the $80 \%$ rule alone may not be adequate. What is needed is a consideration of what rates are "acceptable" and at what point they become "unacceptable". Stated differently, even if groups do not differ in success rate, the overall rate of success may be lower than that judged minimally acceptable. Also, even if differences are not below the $80 \%$ level but nevertheless are consistent (over time), they may represent an area of concern. It is not fair/equitable to expect a group of students to be satisfied with consistently being a "close second" even if they consistently are within the critical range.

Finally, it should be clear that the analyses reported here do not bear on the issue of the meaning of the grades, per se. Questions about the meaning of the grades, associated standards, consistency of application, and so forth, while critical, are not addressed by the current analysis. The negative implications of instructor grading variability on assessment validation is well documented (e.g., Boesn \& Birdsall, 1993; Rasor \& Barr, 1993). Its role in any study, including the present one, which completely relies on grades as the outcome variable, cannot be denied.

## Summary

Golden West College student course completion and success rates for the Fall terms in 1991, 1992, and 1993 were analyzed using data extracted from state reported MIS datafiles.

Comparisons were made among students on the dimensions of ethnicity, gender, and primary language category for credit/degree-applicable courses and credit/non-degree-applicable courses. Analyses are also presented for Liberal Arts and Sciences courses and Occupational Education courses.

The EEOC model for evaluating disproportionate impact (the " $80 \%$ rule") was adopted. It is particularly appropriate for evaluating group differences. However, it does not address the issue of minimally acceptable levels of retention or success. In any case, it tends to be less subject to distortion than tests of statistical significance.

The overall success rate in credit/degree-applicable courses was $66.0 \%$ in Fall 1993; in credit/non-degree-applicable courses the rate was $72.4 \%$ that term. Retention rates for those categories of courses were $79.8 \%$ and $84.8 \%$, respectively, that term.

Asian students had the highest success rate in credit/degree-applicable courses for each of the past Fall terms. With the exception of African-American and Pacific Islander students, other ethnic groups had success rates that were within the critical range.

Female students generally had higher success and retention rates over the three terms examined, with the only exception being Occupational Education courses in which no clear trend emerged.

- Students whose first language was one other than English had both higher success and retention rates than their native English-speaking counterparts in each of the categories of courses examined; but differences tended to be within the critical range.

The college has an obligation to examine reasons for differential rates of success or retention when such evidence is found. Responses to these differences should be incorporated into the college Student Equity Plan.

Factors such as preparedness levels, motivation, study skills, and demands on time likely mediate relationships between group membership defined by background/demographic variables and educational outcomes. It is appropriate for the discussion tn focus on factors such as these rather than on group differences, per se.

Finally, although the analyses do not address issues of the meaning of grades, associated standards, and consistency of application, their role cannot be denied.

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## A P PENDIX

Table 1 through Table 12 depict success and retention rates by course category, year, and the student characieristics of ethnicity, gender, and primary language category. These Tables are presented in this appendix on pages 17 through 28. The counts on which the rates are based are presented in a supplement to this report which is available upori request. That supplement also presents the results of Chi-Square tests of independence, which relates to the statistical significance of the findings.

Table 1
Success Rate in Credit/Degree-Applicable and Credit/Non-Degree-Applicable Courses by Ethnicity and Year

| Ethnicity Term: | Credit/Degree-App |  |  | Credit/Non-Degree |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { F91 } \\ & \% \end{aligned}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ | $\begin{aligned} & \text { F91 } \\ & \% \end{aligned}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ |
| Asian | 66.9 | 65.9 | 68.4 | 59.5 | 77.1 | 81.4 |
| African-American | 50.9 | $\underline{52.0}$ | 50.3 | 43.8* | 31.8* | 33.3* |
| Filipino | 61.8 | 60.4 | 67.8 | 48.4* | 58.8* | 35.7* |
| Hispanic | 58.2 | 56.2 | 58.4 | 55.0 | 52.2 | 47.6 |
| Native American/AK Nat. | 60.5 | 59.0 | 56.9 | 50.0* | 35.7* | 47.1* |
| Pacific Islander | 41.5 | 53.9 | $\underline{52.8}$ | 57.1* | 25.0* | 40.0* |
| White | 63.7 | 63.2 | 67.0 | 55.1 | $\underline{52.0}$ | 49.9 |
| Total | 63.3 | 62.7 | 66.0 | 56.7 | 69.3 | 72.4 |

Note: Asterisks indicate that the rate is based on fewer than 50 studen's. Underlined values are less than $80 \%$ of the highest rate for that term. Categories such as unknown, uncollected, and decline to state are not listed in the body of the Table, but do contribute to the Total values.

Table 2
Success Rate by Course Category, Ethnicity, and Year

Course Category: Liberal. Arts \& Sciences Occupational. Educ.

| Ethnicity Term: | $\begin{aligned} & \text { F91 } \\ & \% \end{aligned}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{array}{r} \Gamma 93 \\ \% \end{array}$ | $\begin{aligned} & \text { F91 } \\ & \% \end{aligned}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Asian | 65.9 | 64.7 | 68.2 | 70.1 | 68.0 | 69.6 |
| African-American | 43.9 | 50.0 | 47.3 | 70.2 | 63.7 | 57.5 . |
| Filipino | 59.6 | 57.1 | 66.2 | 72.3 | 75.2 | 79.6 |
| Hispanic | 55.6 | 53.3 | 55.0 | 64.2 | 63.4 | 68.4 |
| Native American/AK Nat. | 59.7 | 56.5 | $\underline{52.1}$ | 67.0 | 65.9 | 71.9 |
| Pacific Islander | 42.1 | 54.7 | $\underline{50.3}$ | 41.7 | 45.9* | 58.5* |
| White | 60.4 | 60.1 | 64.2 | 73.3 | 73.0 | 76.1 |
| Total | 60.6 | 60.0 | 63.9 | 71.2 | 70.6 | 73.1 |

Note: Asterisks indicate that the rate is based on fewer thian 50 enrolments. Underlined values are less than $80 \%$ of the highest rate for that term. Categories such as unknown, uncollected, and decline to state are not listed in the body of the Table, but do contribute to the Total values.

Table 3
Retention Rate in Credit/Degree-A.pplicable and Credit/Non-Degree-Applicable
Courses by Ethnicity and Year

| Ethnicity Term: | Credit/Degree-App |  |  | Credit/non-Ligree |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { F91 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ | $\begin{aligned} & \text { F91 } \\ & \% \end{aligned}$ | $\begin{aligned} & \text { F92 } \\ & \% \end{aligned}$ | $\begin{aligned} & \text { Fy3 } \\ & \% \end{aligned}$ |
| Asian | 79.9 | 78.0 | 79.6 | 72.9 | 89.9 | 91.1 |
| African-American | 70.5 | 70.8 | 73.6 | 87.5* | 63.6* | 66.7* |
| Filipino | 79.5 | 78.0 | 81.3 | 87.1* | 76.5* | 71.4* |
| Hispanic | 75.6 | 74.3 | 76.8 | 75.7 | 73.7 | 67.5 |
| Native American/AK Nat. | 77.3 | 77.8 | 75.9 | 75.0゙* | 71.4* | 76.5* |
| Pacific Islander | 63.6 | 69.7 | 69.3 | 85.7* | 50.0* | 40.0* |
| White | 78.9 | 78.3 | 80.7 | 72.0 | 74.5 | 66.9 |
| Total | 78.6 | 77.7 | 79.8 | 73.9 | 84.8 | 84.8 |

Note: Asterisks indicate that the rate is based on fewer than 50 enrollments. Underlined values are less than $80 \%$ of the highest rate for that term. Categories such as unknown, uncollected, and decline to state are not listed in the body of the Table, but do contribute to the Total values.

Table 4
Retention Rate by Course Category, Ethnicity, and Year

| Course Category: | Liberal | Arts \& Sciences |  | Occupational. Educ. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ethnicity Term: | $\begin{aligned} & \text { F91 } \\ & \% \end{aligned}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ | $\begin{array}{r} \text { F91 } \\ \% \end{array}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{aligned} & \Gamma=93 \\ & \% \end{aligned}$ |
| Asian | 79.3 | 77.1 | 79.0 | 80.9 | 79.8 | 81.1 |
| African-American | 66.8 | 69.0 | 71.3 | 80.1 | 77.4 | 79.5 |
| Filipino | 79.6 | 75.8 | 80.4 | 79.2 | 83.2 | 86.0 |
| Hispanic | 74.2 | 72.9 | 74.3 | 78.5 | 78.0 | 83.7 |
| Native American/Ais Nat. | 76.3 | 77.2 | 72.7 | 81.6 | 78.6 | 84.9 |
| Pacific Islander | 64.5 | 73.0 | 69.0 | 61.7 | 54.1 | 65.9* |
| White | 77.3 | 76.7 | 79.0 | 83.7 | 83.0 | 85.6 |
| Total | 77.2 | 76.2 | 78.3 | 82.3 | 81.5 | 84.2 |

Note: Asterisks indicate that the rate is based on fewer than 50 enrollments. Underlined values are less than $80 \%$ of the highest rate for that term. Categories such as unknown, uncollected, and decline to state are not listed in the body of the Table, but do contribute to the Total values.

Table 5
Success Rate in Credit/Degree-Applicable and Credit/Non-Degree-Applicable
Courses by Gender and Year

| Gender | Credit/Degree-App |  |  | Creait/Non-Degree |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \text { Term: }{ }^{\circ} \mathrm{F91} \\ \% \end{array}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{aligned} & \text { F93 } \\ & \% \end{aligned}$ | $\begin{array}{r} \text { F91 } \\ \% \end{array}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ |
| Male | 62.8 | 60.8 | 63.4 | 52.5 | 64.8 | 68.5 |
| Female | 63.9 | 64.6 | 68.3 | 60.6 | 72.9 | 74.4 |
| Total | 63.3 | 62.7 | 66.0 | 56.7 | 69.3 | 72.4 |

Table 6
Success Rate by Course Category. Gender, and Year

| Course Category: | Liberal | Arts 8 | \& Sciences | Occupational. Educ. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender Term: | $\begin{array}{r} \text { F91 } \\ \% \end{array}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{aligned} & \text { F93 } \\ & \% \end{aligned}$ | $\begin{gathered} \text { F91 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ |
| Male | 59.4 | 57.9 | 60.5 | 72.5 | 69.7 | 72.1 |
| Female | 61.9 | 62.1 | 66.7 | 69.9 | 71.5 | 74.2 |
| Total | 60.6 | 60.0 | 63.9 | 71.2 | 70.6 | 73.1 |

Table 7
Retention Rate in Credit/Degree-Applicable and Credit/Non-Degree Applicable
Courses by Gender and Year

|  | Credit/Degree-App |  |  |  | Credit/Non-Degree |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Gender | Term: <br> F91 <br> $\%$ | F92 <br> $\%$ | F93 <br> $\%$ | F91 <br> $\%$ | F92 <br> $\%$ | F93 <br> $\%$ |  |
| Male | 78.6 | 76.6 | 78.9 | 70.5 | 82.7 | 84.3 |  |
| Female | 78.4 | 78.8 | 80.4 | 77.2 | 86.6 | 84.3 |  |
| Total | 78.5 | 77.7 | 79.8 | 73.9 | 84.8 | 84.8 |  |

Table 8
Retention Rate by Course Category. Gender, and Year

| Course Category: | Liberal | Arts \& Sciences |  | Occupational. Educ. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender Term: | $\begin{gathered} \text { F91 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F91 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ |
| Male | 76.9 | 74.9 | 76.7 | 83.0 | 81.1 | 84.7 |
| Female | 77.4 | 77.5 | 79.5 | 81.4 | 82.0 | 83.4 |
| Total | 77.2 | 76.2 | 78.3 | 82.3 | 81.5 | 84.2 |

Table 9
Success Rate in Credit/Degree-Applicable and Credit/Non-Degree Applicable
Courses by Primary Language Category and Year

| Primary Language | Credit/Degree-App |  |  |  | Credit/non-Degree |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Term: | $\begin{aligned} & \text { F91 } \\ & \% \end{aligned}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ | $\begin{array}{r} \text { F91 } \\ \% \end{array}$ | $\begin{aligned} & \text { F92 } \\ & \% \end{aligned}$ | $\begin{aligned} & \text { F93 } \\ & \% \end{aligned}$ |
| English |  | 60.7 | 61.1 | 64.7 | 54.7 | 54.8 | 53.0 |
| Not English |  | 67.4 | 67.9 | 69.3 | 58.2 | 76.2 | 82.0 |
| Total |  | 63.3 | 62.7 | 66.0 | 56.7 | 69.3 | 72.4 |

## $\because 6$

Table 10
Success Rate by Course Category, Primary Language Category, and Year

| Course Category: | Liberal | Arts | \& Sciences | Occupational. Educ. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Primary Language Term: | $\begin{aligned} & \text { F91 } \\ & \% \end{aligned}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ | $\begin{aligned} & \text { F91 } \\ & \% \end{aligned}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ |
| English | 57.2 | 58.0 | 62.0 | 70.3 | 71.0 | 73.6 |
| Not English | 68.1 | 67.5 | 69.4 | 65.8 | 67.9 | 70.5 |
| Total | 60.6 | 60.0 | 63.9 | 71.2 | 70.6 | 73.1 |

Table 11
Retention Rate in Credit/Degree-Applicable Courses by Primary Language
Category and Year

| Primary Language | Credit/Degree-App |  |  |  | Credit/Non-Degree |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Term: | $\begin{aligned} & \text { F91 } \\ & \% \end{aligned}$ | $\begin{aligned} & \text { F92 } \\ & \% \end{aligned}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ | $\begin{aligned} & \text { F91 } \\ & \% \end{aligned}$ | $\begin{aligned} & \text { F92 } \\ & \% \end{aligned}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ |
| English |  | 77.0 | 77.1 | 79.3 | 74.1 | 77.5 | 71.8 |
| Not English |  | 80.6 | 79.3 | 80.5 | 75.9 | 88.4 | 90.7 |
| Total |  | 78.6 | 77.7 | 79.8 | 73.9 | 84.8 | 84.8 |

Note: Asterisks indicate that the rate is based on fever than 50 enrollments. Underlined values are less than $80 \%$ of the highest rate for that term. Categories such as unknown, uncollected, and decline to state are not listed in the body of the Table, but do contribute to the Total values.

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$$

Table 12

Retention Rate by Course Category, Primary Language Category, and Year

| Course Category: | Liberal. Arts \& Sciences |  |  | Occupational. Educ. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Primary Language Term: | $\begin{aligned} & \text { F91 } \\ & \% \end{aligned}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ | $\begin{aligned} & \text { F91 } \\ & \% \end{aligned}$ | $\begin{gathered} \text { F92 } \\ \% \end{gathered}$ | $\begin{gathered} \text { F93 } \\ \% \end{gathered}$ |
| English | 75.3 | 75.4 | 77.6 | 81.4 | 81.9 | 84.6 |
| Not English | 81.0 | 79.0 | 80.1 | 79.3 | 79.9 | 81.9 |
| Total | 77.2 | 76.2 | 78.3 | 82.3 | 81.5 | 84.2 |

