DRIVING SUCCESS VFA Summary Report: Leading Indicators of Success and Student Outcomes for Community Colleges MPH 160 100



Executive Summary

The Voluntary Framework of Accountability (VFA) is the principal institutional accountability and improvement framework for community colleges with measures defined to encompass the full breadth of the community college mission and the diversity of students' goals and educational experiences. The American Association of Community Colleges (AACC) operates a web-based portal for community colleges to submit, analyze, and display their VFA data. In 2018, more than 200 colleges participated in the VFA. This document is intended to provide a sample of results from the 2018 collection cycle.

Key results from this report include:

- The median student completion/persistence rate for the VFA participating colleges was 52.7%. In other words, half of the colleges had 52.7% or more of their students who started in the fall of 2011 earn a credential by 2017, transfer to another institution by fall of 2017, or be still enrolled in their sixth academic year.
- Student outcomes and leading indicators of student outcomes varied by race and ethnicity.
 For most outcomes, White students had higher median rates than did Hispanic or African American students. Median success rates for African American students tended to be lower than White or Hispanic students with the exception of transfer rates, where African American students had the highest median transfer rate relative to White or Hispanic students.
- Data suggest a relationship between the leading indicators collected in the VFA and 6-year outcomes collected in the VFA. Colleges with higher rates on the leading indicators tended to have higher rates on 6-year outcomes.

The data provided in this report are intended to provide an overview of some of the data included in the VFA, and the opportunities it can provide community colleges in understanding student progress and outcomes.

This report presents data from the colleges participating in the VFA. It is intended to provide an overview of the range of results on selected student progress and outcome metrics that the VFA collects. The data are not intended to provide a comprehensive picture of all community colleges, nor a complete representation of all the data collected through the VFA. Rather, it is intended to highlight some of the results for those colleges who have elected to participate in the VFA for the 2018 participation year.

What is the VFA?

The VFA is the principal institutional accountability and improvement framework for community colleges with measures defined to encompass the full breadth of the community college mission and the diversity of students' goals and educational experiences.

Beginning in 2009, AACC, in collaboration with the Association of Community College Trustees and the College Board, began the development of the VFA. More than 60 community college leaders guided the 18-month development of the VFA resulting in the release of more appropriate measures than traditional accountability measures. The VFA gauges student progress and outcomes including pre-collegiate preparation (such as developmental education and Adult Basic Education), academic progress and momentum points, completion and transfer measures, and workforce outcomes for career and technical education. AACC subsequently developed a process for colleges to submit and display these data for internal institutional improvement purposes and for external accountability.

Traditional accountability measures in higher education do not adequately measure the unique mission of community colleges. For example, measures may exclude part-time students or non-credit career and technical students who are a key part of community colleges' mission. In light of the inadequacy of existing measures, the VFA provides community colleges with a significantly improved ability to assess their performance, identify areas for improvement, and demonstrate their commitment to their academic mission.

The VFA is continually working to ensure that the measures collected effectively provide meaningful data for community colleges. For example, since the inception of the VFA, community colleges have been evolving the way developmental need is assessed, and how developmental coursework is delivered; therefore, the VFA refined the collection of developmental progress metrics. In recent years, many colleges have been participating in implementing structured or guided pathways in their institutions. AACC, along with several partner organizations, launched the AACC Pathways Project, which has been using leading indicator measures to track student progress. These measures have been incorporated into the VFA.

One set of measures provided in the VFA are outcomes of a cohort of new students at the end of 6 academic years. All of the students in this cohort will fall into one of nine mutually exclusive categories:

Student Outcomes at the End of 6 Years

- Bachelor's Degree: reporting college awarded bachelor's degree
- Associate Degree: reporting college awarded associate degree
 - o Transfer after receipt of degree
 - o No Transfer after receipt of degree
- Certificate: reporting college awarded a formal award (certificate)
 - o Transfer after receipt of award
 - o No Transfer after receipt of award

- Transfer, No Award: transferred to another post-secondary institution without earning a formal award at the reporting college
- Still Enrolled: still enrolled during the sixth academic year
- Left, No Award: not enrolled during the sixth academic year o Earned ≥ 30 college-level credits at reporting institution o Earned < 30 college-level credits at reporting institution

By collecting these nine separate outcomes, colleges are able to better understand a wide range of student outcomes, and better document outcomes of students. Unlike most measures of outcomes, the VFA allows colleges to document all transfers—not only transfers for students who did not earn a credential. For the purposes of this analysis, we will create metrics by combining these outcomes in a variety of ways.

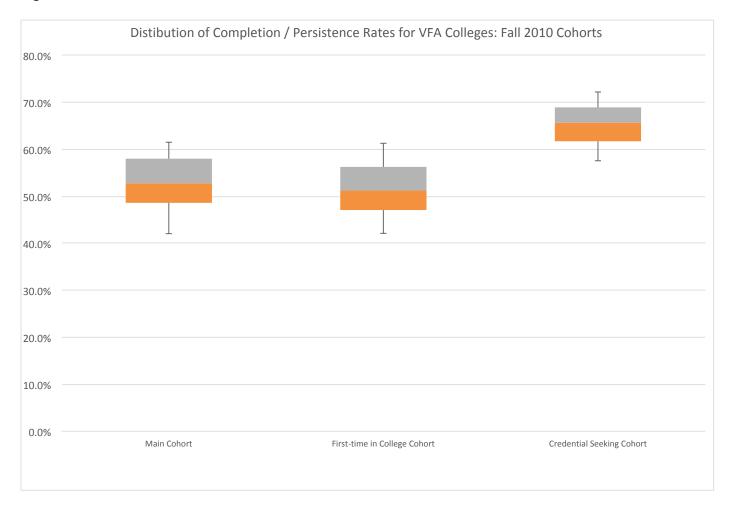
Six-Year Outcomes

The VFA was developed to provide community colleges with better metrics, more appropriate to their missions and the students they serve. The 6-year outcomes provide colleges an opportunity to examine outcomes for students 6 years after entering their institution. Six years provides more opportunities for students who do not enroll full time or continuously to attain their goals, yet not so long that it becomes policy irrelevant. As noted above, the VFA provides a range of outcomes that colleges can examine to understand what happened to an incoming cohort of students 6 years later.

For analytical purposes, several of these outcomes will be combined to give a sense of the range of outcomes for students at the colleges participating in the VFA. While creating a combined metric is illustrative, outcomes of students at individual colleges will be best understood by exploring the component parts of the summary metrics. The first metric reported here is completion/persistence for the incoming cohort. This metric is calculated by counting all students who either earned a credential at the reporting college, transferred to another college, or were still enrolled at the reporting college at the end of 6 years. Therefore, it consists of completion at the college, or persistence either at the college or by transfer.

As shown in Figure 1, the median completion/persistence rate for VFA participating colleges for all students who began in the fall of 2011 (VFA Main Cohort¹) was 52.7%. In other words, half of the colleges had completion/persistence rates above 52.7% for their main cohort of students. The figure also demonstrates that there was some variability across colleges on this measure. For example, the range between the bottom 10% (bottom decile) and top 10% (top decile) on the completion/persistence rate was 42.0% for the bottom decile and 61.5% for the top decile.

Figure 1²



One challenge when measuring community college student outcomes is that not all students who enroll actually intend to earn a credential. The VFA collects a separate cohort of incoming students who are identified as the Credential Seeking Cohort. These are students whose behavior indicates that they are attending with the intention of earning a credential. Figure 1 shows that the median completion/persistence rate after 6 years for these students (65.6%) is higher than for all students who began in the fall of 2011 (Main Cohort).

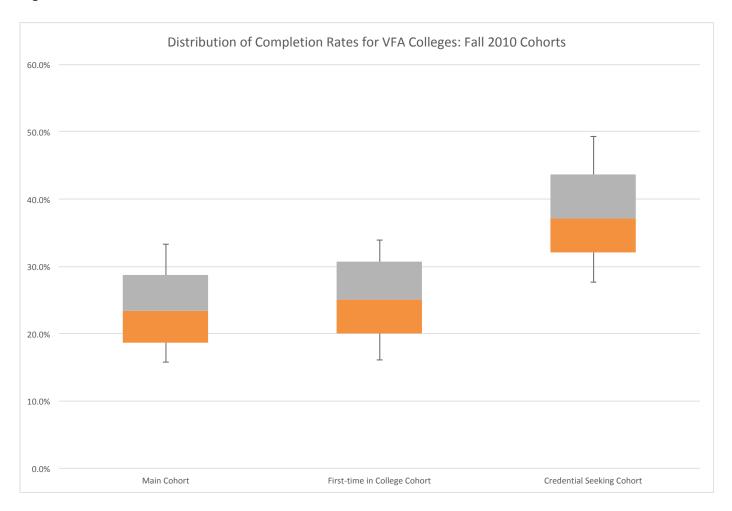
The VFA also collects data on one final cohort type, the First-time in College (FTIC) Cohort, which consists of students whose first enrollment in postsecondary education following high school is at the college. The median completion/persistence rate across the colleges for this cohort is slightly lower (51.1%) than the VFA Main Cohort (all students).

The completion/persistence rate includes students who complete a credential, students who transfer without a credential, and students who are still enrolled. To better understand student outcomes after 6 years, the data are broken out into some of the component parts. The first data represented (see Figure 2) are the percent of students who earned a credential at the college by the end of 6 years (completion rate). The median VFA college completion rate for the VFA Main

²See appendix 1 for a guide to interpreting the Box and Whisker Plots presented in this report.

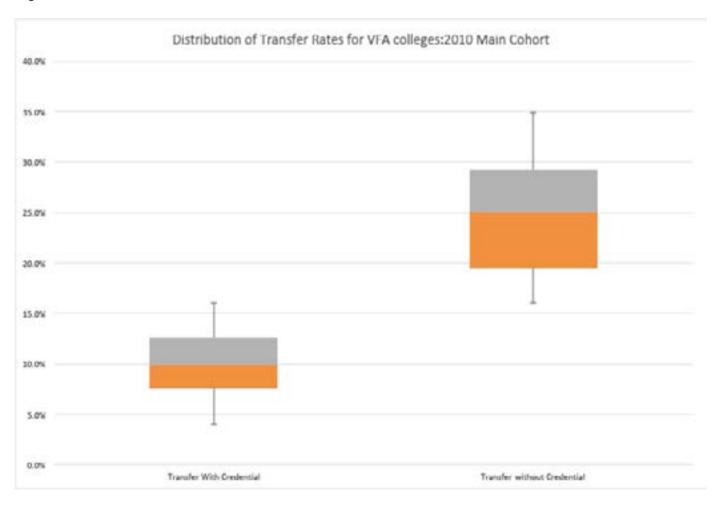
Cohort was 23.3%, with the range of the bottom decile of colleges being 15.8% and the top decile of colleges at 33.2%. This range of completion rates reflects the different policy environments for VFA colleges in which some states provide incentives to attain a credential prior to transfer while other states do not. When limiting the analysis to the Credential Seeking Cohort, there is a clear increase in the rate of completions across all colleges with the median rate at 37.2% and 10% of the colleges nearly at or above 50% completion rates.

Figure 2



The VFA also captures the rate of students who transfer to another postsecondary institution. The data are reported in a way that allows colleges to differentiate students who transfer out after earning a credential, and those who transfer out without a credential (see Figure 3). For the VFA Main Cohort, the median transfer rate without a credential is one in four (25.0%), while the median transfer rate with a credential is nearly one in 10 students (9.9%), which translates into a median of 35.9% overall transfer rate. The median transfer rate without a credential is similar for the FTIC cohort (22.1%) and Credential Seeking Cohort (23.1%); however, the transfer with credential rate is higher for the Credential Seeking Cohort (16.2%).

Figure 3



Leading Indicators

The outcomes of students after 6 years provides a rich understanding of the long-term outcomes of students who entered an institution; however, 6 years is a long time to wait to see the impact of institutional changes, and the extent that they are influencing student outcomes. Therefore, colleges need earlier indicators of student success that can be used to evaluate how well students are achieving their goals. The Community College Research Center (CCRC) has been one of the leading organizations looking into the value of leading or early indicators, and suggests that these can be productive in indicating longer term community college student success.³ Leading indicators have been incorporated into the AACC Pathways initiative, and CCRC continues to explore the value of these measures.

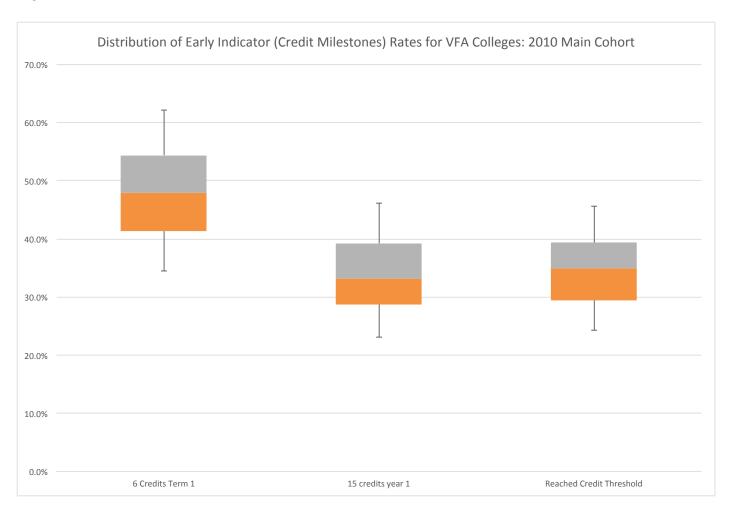
The VFA incorporated a variety of early or leading indicators of success in the original metric development, and augmented them in the most recent data collect cycle with measures used in the AACC Pathways initiative. This report will not present all of the measures, but will highlight a few of the measures. The VFA collects these measures for the 6-year cohort, as well as for more

³ See Jenkins, D. & Bailey, T. (2017) *Early Momentum Metrics: Why They Matter for College Improvement*. (CCRC Research Brief No. 65). New York, NY: Columbia University, Teachers College, Community College Research Center. https://ccrc.tc.columbia.edu/publications/early-momentum-metrics-college-improvement.html

recent cohorts of students. This report will limit the findings to the 2011, 6-year cohort to illustrate the relationship between the progress and early indicator measures and the 6-year outcomes.

Figure 4 shows the distribution of VFA college outcomes for a variety of credit threshold measures. The median rate of students in the VFA Main Cohort who earned six or more credits in the first term was 47.9%, while the median rate of students in the VFA Main Cohort who earned 15 or more credits in the first year was 33.2%. Both of these rates are below the median 6-year completion/persistence rate (52.7%) shown in Figure 1 for the VFA Main Cohort. Many students who attend community college do not attend full time, and measures need to be sensitive to this issue. The Reached Credit Threshold metric is defined to measure different levels of credits attained at the end of 2 years, based on whether students started full time or part time their first term. Using this metric, the median rate for the VFA Main Cohort was 35.0%.⁴ These metrics provide colleges a set of indicators at the first term, the end of the first year, and the end of the second year to gauge how well students are progressing toward credential completion or transfer.

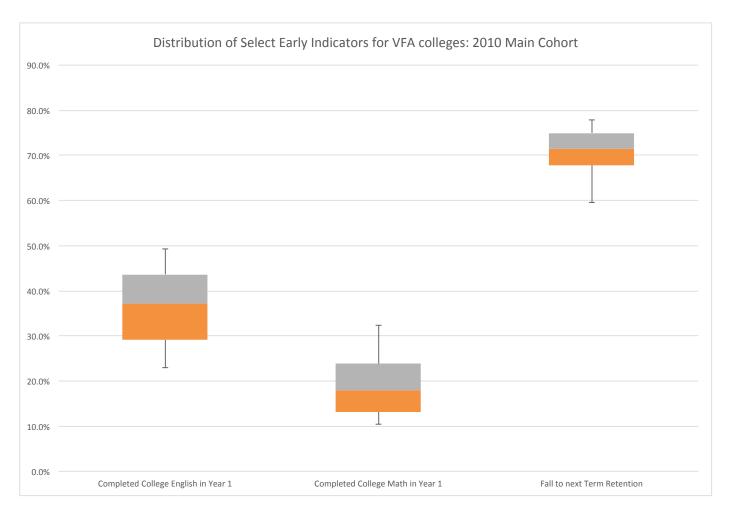
Figure 4



³ Students who began their first term full time need to earn 42 credits by the end of 2 academic years, and students who began their first term part-time need to earn 24 credits by the end of 2 academic years to meet the Reached Credit Threshold definition.

Other areas that CCRC has identified as important leading indicators are whether students complete college-level English and college-level math in the first year. Figure 5 provides data on the median rates of VFA colleges on these two metrics: 37.2% was the median rate of students completing a college-level English class in the first year, and 17.9% was the median rate for completing college-level math.

Figure 5



Finally, the VFA looks at another early persistence metric: fall-to-next-term retention rates. As shown in Figure 5, half of the VFA colleges had fall-to-next-term retention rates of 71.4% or higher; 90% of the colleges had fall-to-next-term retention rates above 59%.

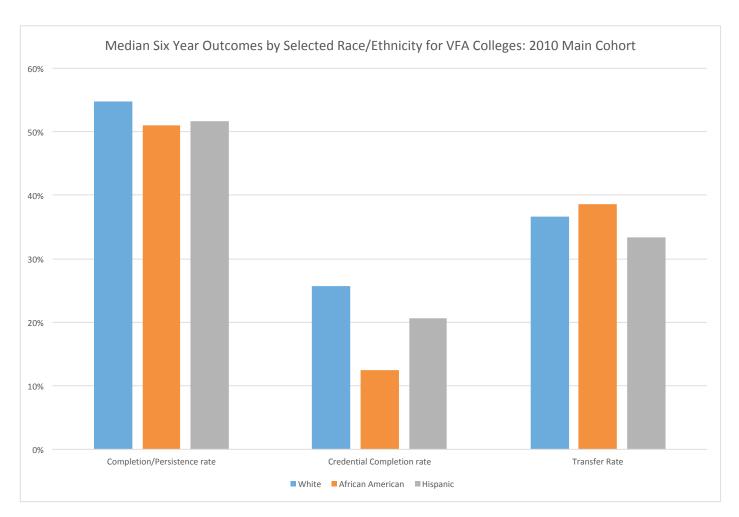
Achievement Gaps

Community colleges serve diverse populations. The VFA collects disaggregated data across several student characteristics to help colleges better understand how well they are serving these diverse populations. Student characteristics colleges can use in the VFA are gender, racial/ethnic background, age, first-term enrollment status, level of developmental need at entrance, and whether or not the student received a Pell Grant during his or her enrollment at the college.

This report will begin to explore one of those disaggregation: the racial/ethnic background of the students. For this report, we will examine the progress and outcome metrics of the three largest racial/ethnic groups reported in the VFA: White, Hispanic, and Black/African American students.

The data reported for the 2017 collection cycle indicated differences in the median completion/persistence rate for the VFA Main Cohort. The median rate was 54.7% for White students, 51.3% for Hispanic students, and 50.9% for African American students (see Figure 6). In other words, Hispanic and African American students were less likely than White students to have either graduated, transferred, or still be enrolled after 6 years.

Figure 6

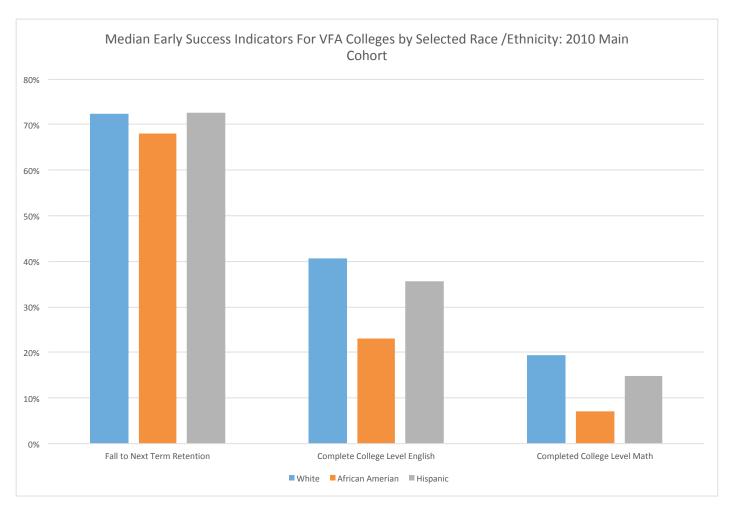


When looking at the separate components of the 6-year rates, there are differences in the pattern among the different groups. The median rate for students earning a credential at the colleges was 25.5% for White students, 20.1% for Hispanic students, and 12.3% for African American students. However, the transfer rate (with or without a credential) was 36.6% for White students, 33.0% for Hispanic students, and 38.4% for African American students. In other words, African American students were least likely to have earned a credential, but most likely to have transferred over the 6-year period.

To better understand these outcomes, the progress and early indicator measures can help colleges understand early differences that may lead to different 6-year outcomes and achievement gaps.

The median fall-to-next-term retention rates, shown in Figure 7, were 72.4% for White students, 72.7% for Hispanic students, and 67.9% for African American students, indicating African American students were less likely to return in the fall term than were Hispanic or White students.

Figure 7



AACC's Pathways Project has developed a series of first-year metrics that are useful to indicate students' path toward likely success. These indicators show that even in the first year there are significant gaps in outcomes across race/ethnicity. For example, the median rate for students passing an English course in their first year was 40.3% for White students, 36.2% for Hispanic students, and 23.6% for African American students. Median rates for passing math in the first year were lower for all groups at 19.4% for White students, 14.9% for Hispanic students, and 7.1% for African American students. Early evidence from the Guided Pathways initiative suggests that passing both English and math in the first year are strongly related to positive student outcomes in the college⁵.

⁵Jenkins, D. and Bailey, T. (2017). Early Momentum Metrics: Why they Matter for College Improvement. New York, NY: Columbia University, Teachers College, Community College Research Center.

Relationship Between Leading Indicators and Outcomes

In order to get a better understanding of the relationship between the leading indicators and the 6-year outcomes, a correlational analysis was conducted using the colleges as the unit of analysis.

All colleges with sufficient data to calculate the AACC Pathways Key Performance Indicators (KPIs) and 6-year outcomes (N = 172) were included in the analysis. A simple Pearson correlation was conducted to ascertain the relation between leading indicators in a college (AACC Pathways KPIs) with the 6-year outcomes in the college. The analysis reveals that there is a significant relationship between many of the leading indicators and the 6-year outcomes.

As shown in Table 1, colleges that had higher rates for students completing six or more credits in term 1, or 15 or more credits in year 1, also tended to have higher completion/persistence rates and credential completion rates for the same cohort at the end of year 6. Colleges with a higher percentage of students reaching the credit threshold by the end of year 2 were also more likely to have higher rates of completion/transfer and are much more likely to have higher credential completion rates.

Table 1

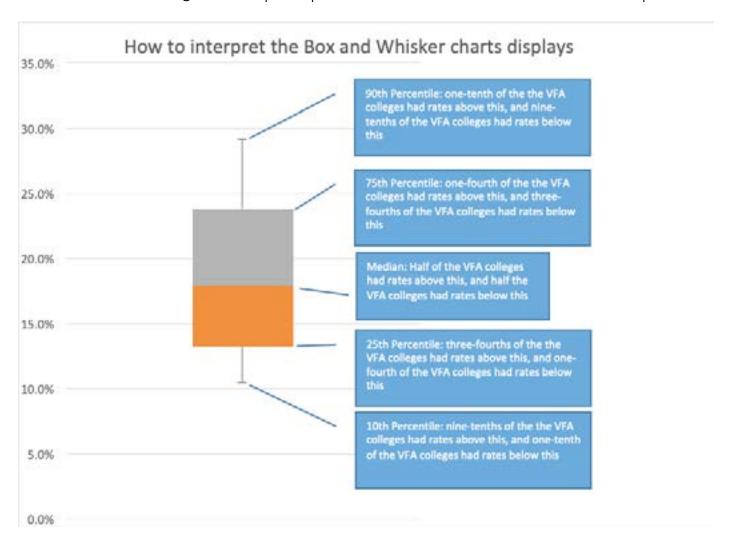
Correlation between VFA Colleges for Select Early Indicators and Select Six-Year Outcomes: 2011 Main Cohort

Six Year Outcome	Earned 6 Credits Term 1	Earned 15 Credits Year 1	Reached Credit Threshold	Completed College English	Completed College Math
Persistence/Completion Rate	0.518 **	0.532 **	0.575 **	0.453 **	0.437 **
Credential Completion Rate	0.549 **	0.639 **	0.777 **	0.378 **	0.531 **
Transfer Rate (with or without credential)	0.211 **	0.193 *	0.207 **	0.305 **	0.142
*p < .05; ** p < .01					

Early indicators were less related to transfer rates, with the exception of completing college English in the first year. Colleges that had higher rates of students completing college English in the first year were somewhat more likely to have higher transfer rates (with or without a credential). Completing college-level math was related to credential completion and completion/persistence rates.

Appendix 1

The chart below is designed to help interpret the Box and Whisker charts used in this report.



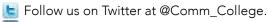
In this example, 90% of the colleges had rates above 10.4%, 75% had rates above 13.2%, half the colleges had rates above 17.9%, 25% of colleges had rates above 23.8%, and 10% of the colleges had rates above 29.1%,

Conclusion

The Voluntary Framework of Accountability provides colleges with a rich source of data for measuring and tracking student progress and outcomes. This report shows the importance of looking at a variety of measures to understand how well colleges are serving the educational goals of their students. In addition, it highlights the importance of disaggregating data to investigate and identify achievement gaps for different student populations. Finally, it provides additional support for the value of using the AACC Pathways KPIs as leading indicators for student outcomes.

This report is a publication of the American Association of Community Colleges.

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