



OAKLAND COMMUNITY COLLEGE®

Benchmarking and Key Performance Indicators

December 10, 2012

Prepared by:



College Brain Trust

**Mike Brandy
Dr. Diane Troyer
Consultants**

**Dr. George R. Boggs
Team Leader**

Executive summary

- *Revenue:*

While the revenue for each college in Michigan varies by locality and state funding system, it appears that OCC may have an opportunity to capture additional grant dollars as it ranks only mid-range when grant dollars per full-time equivalent student (FTES) are compared. When comparisons were made for revenue from investment returns per FTES, OCC was at the top of the benchmark districts, reflecting the relative size of its reserves and the money those reserves generate for the operating budget.
- *Expense:*

While total expense per FTES is a direct function of the revenue per student, there can be useful comparisons to how revenue is spent. The expense analysis below reflects the percentage of the budget spent on instruction, student services and instructional support. Using this comparison, OCC ranks 1st in student services expenditures, 3rd in instructional expense and 7th in instructional support expenses when compared to benchmark colleges.
- *Staffing:*

When total FTE faculty is reported to the federal Integrated Postsecondary Education Data System (IPEDS), OCC ranks low in the number of FTE faculty per 100 students compared to the benchmark districts. There may be a number of explanations for this, but most likely the ratio of full-time to adjunct instructors, the number of temporary and contract personnel employed and relative funding levels of the college all play a role in this ratio.

Within this staffing analysis of benchmark colleges, OCC is in third position for Administrative/managerial positions, sixth position for full-time faculty, and fifth position for other professional and non-professional staff.
- *Key Performance Indicators (KPIs):*

KPIs are the measurements that track the outcomes and effectiveness of the college's institutional priorities, which should be developed as part of the College's integrated planning. When well designed, KPIs reflect a clear score card for the College's priorities and strategies. They also act as a means of accountability for the College—from the Board of Trustees to individual departments. As noted in the CBT reviews, the Educational Master Plan (EMP), culture of evidence, data capacity, and integrated

planning systems have not yet been coordinated and are not focused on clear priorities for the improvement of student outcomes. Most directly, the current KPIs do not yet align with or provide accountability measurements for the EMP or other college planning. The CBT review suggests that the OCC KPIs should be significantly redesigned into a cohesive planning system driven by clear goals for student success. The OCC KPIs redesign would then be part of an integrated planning and institutional improvement system as reflected in national criteria for excellence such as the Baldrige Criteria for Performance Excellence.

- *KPI Comparisons with benchmark colleges.*
Because KPIs reflect an individual college's priorities for strategic improvement, direct comparisons with the benchmark colleges selected for this review are difficult. As a result, CBT reviewed the extent to which OCC is meeting its own stated goals as well as some standard comparisons of student outcomes with its peers. Overall, OCC is meeting its stated targets as measured by its KPIs on only three minor measures. On all major student success measures, including graduation rate, retention rate, and developmental education success, the College is not yet meeting its targets. A comparison with benchmark colleges indicates other colleges have similar patterns of success in these areas but in no area does OCC lead its peers in performance.

Task Overview

The purpose of this task was to develop a comparative analysis of benchmark colleges on a variety of issues under study. This section of the analysis focused on three areas of comparison: Revenue, Expense, and Staffing. The second part of this task was to provide a comparative analysis using KPIs. Based on the KPI analysis, recommendations are made to establish a framework for the reporting of information for future use by the College. This aspect of the CBT's work is closely aligned with a number of other tasks including Data Capacity, EMP, Program Review, Student Services, and Planning.

Findings/observations

I. EXPENSE COMPARISONS

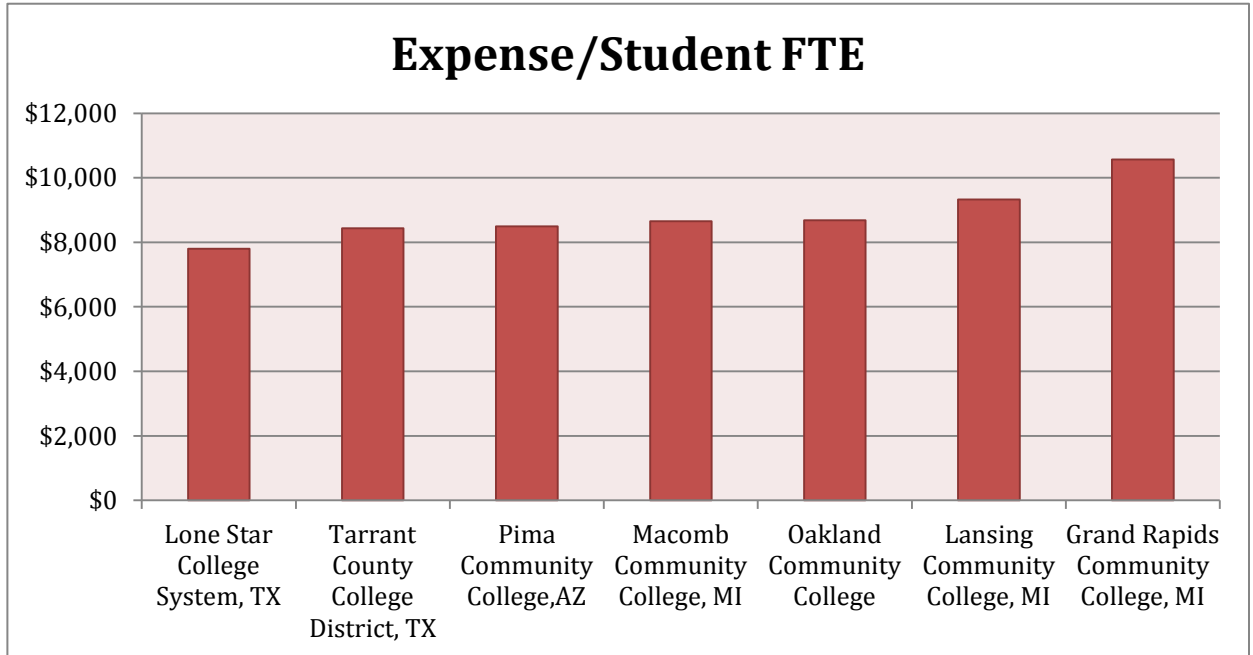


Chart One: OCC is above the median of core expenses per FTE.

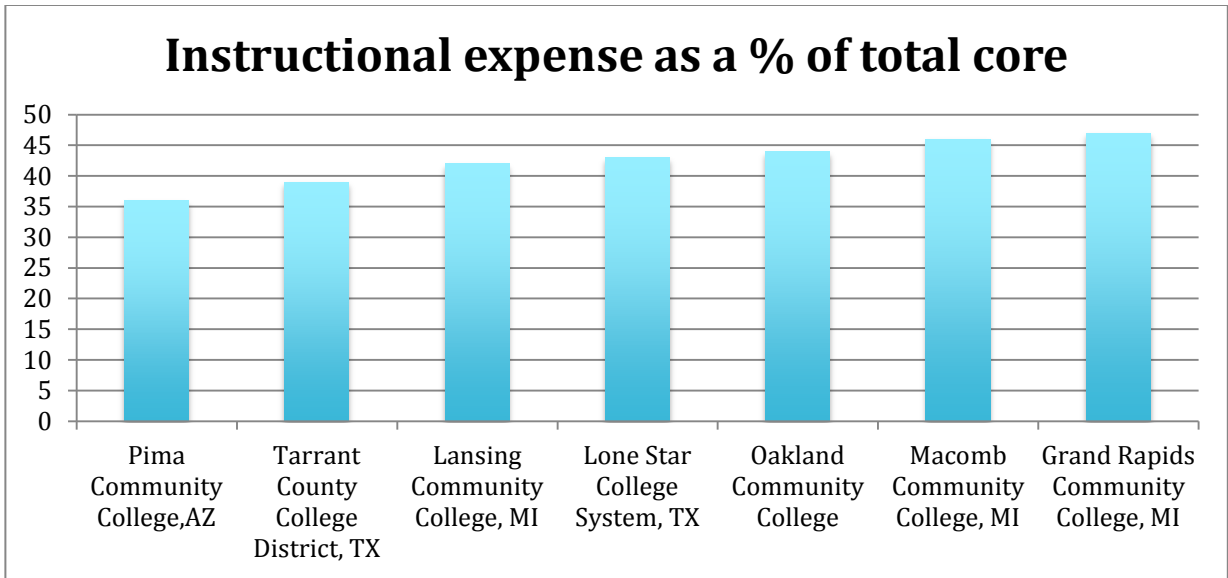


Chart Two: Instructional expenses are slightly higher than benchmark colleges as % of total expenses.

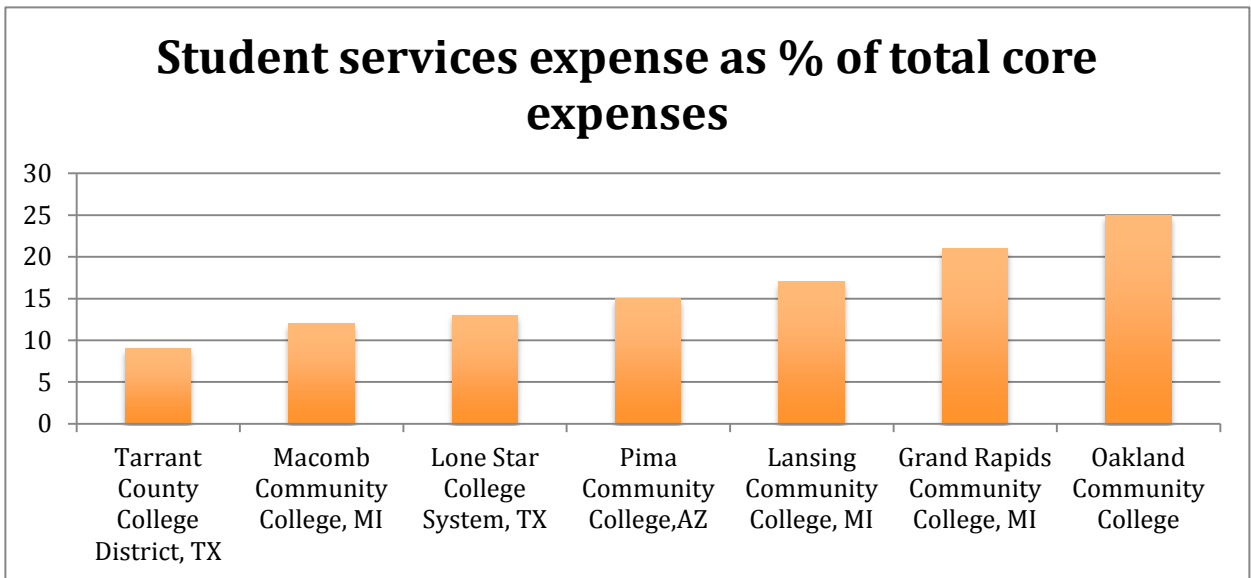


Chart Three: Student services expenses are the highest of all benchmark colleges as % of total expenses.

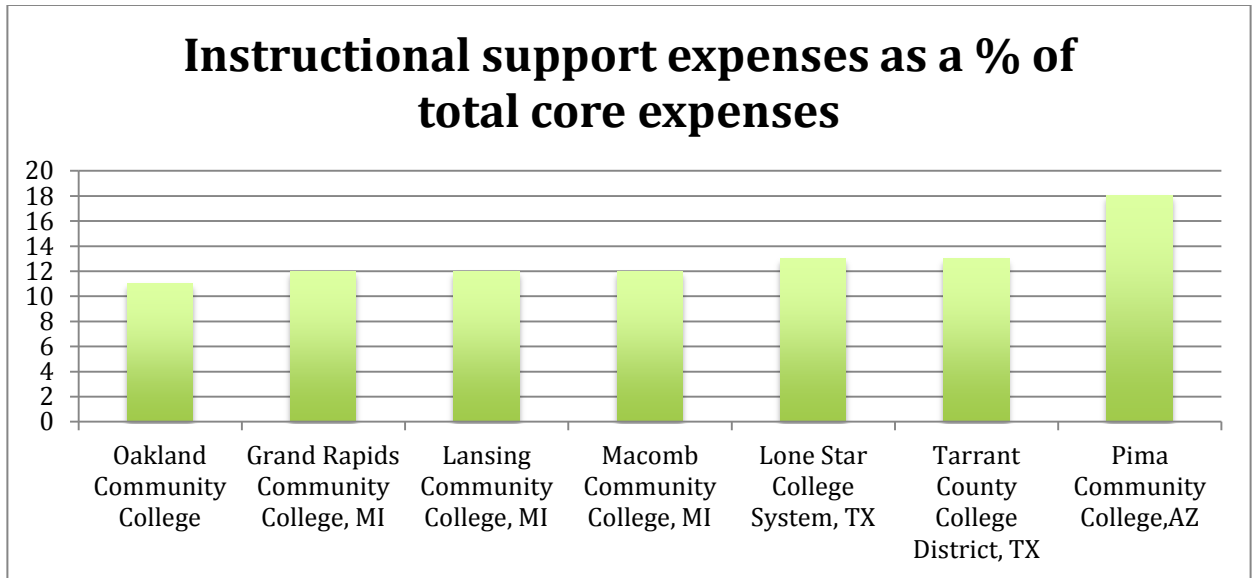


Chart 4: Instructional support expenses are the lowest of all benchmark colleges as % of total expenses.

II. REVENUE OBSERVATIONS

The charts below highlight some differences worth noting regarding revenue. The revenue per FTES varies somewhat between Michigan Community Colleges and rather dramatically as benchmark comparisons reach across to different states, particularly Arizona and Texas. It was apparent that, within Michigan, as can be seen on the table in the appendix, revenues from the tuition and fee category were the lowest among the benchmark Michigan colleges. Conversely, OCC revenues from local appropriations were the highest of the Michigan benchmark colleges.

With those general observations, two areas of revenue per student did offer valid comparisons among the benchmark colleges in all the states. These were as follows:

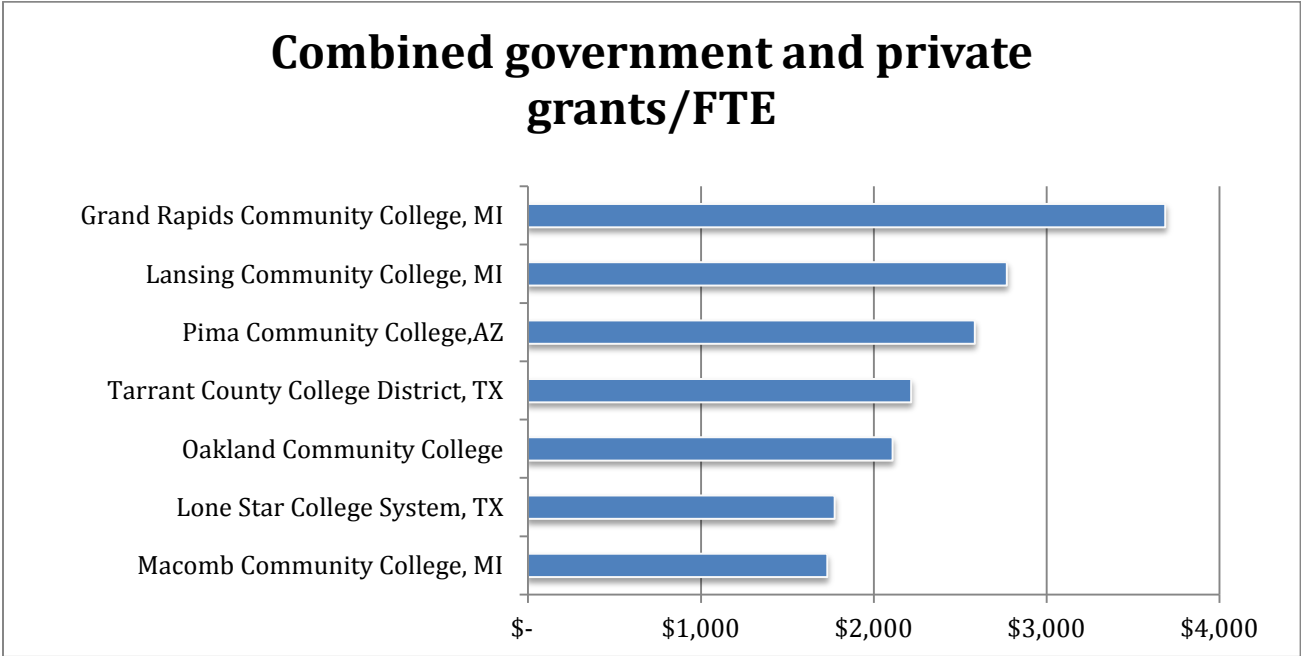


Chart 5: Four of the benchmark colleges generate more income from grants than OCC

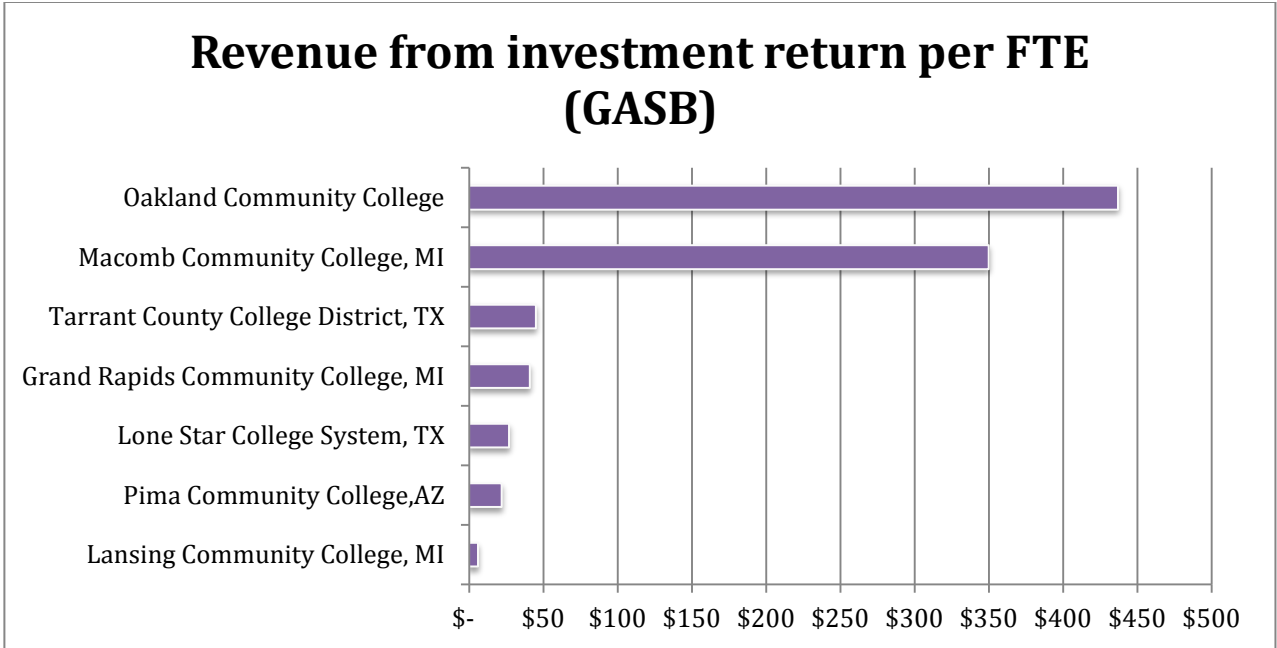


Chart 6: OCC generates more revenue from investments than any of the benchmark colleges

III. STAFFING

While staffing levels will vary in colleges depending on how well they are funded, comparative data can still be compiled to show relative ranking for staffing per student FTE among the benchmark colleges.

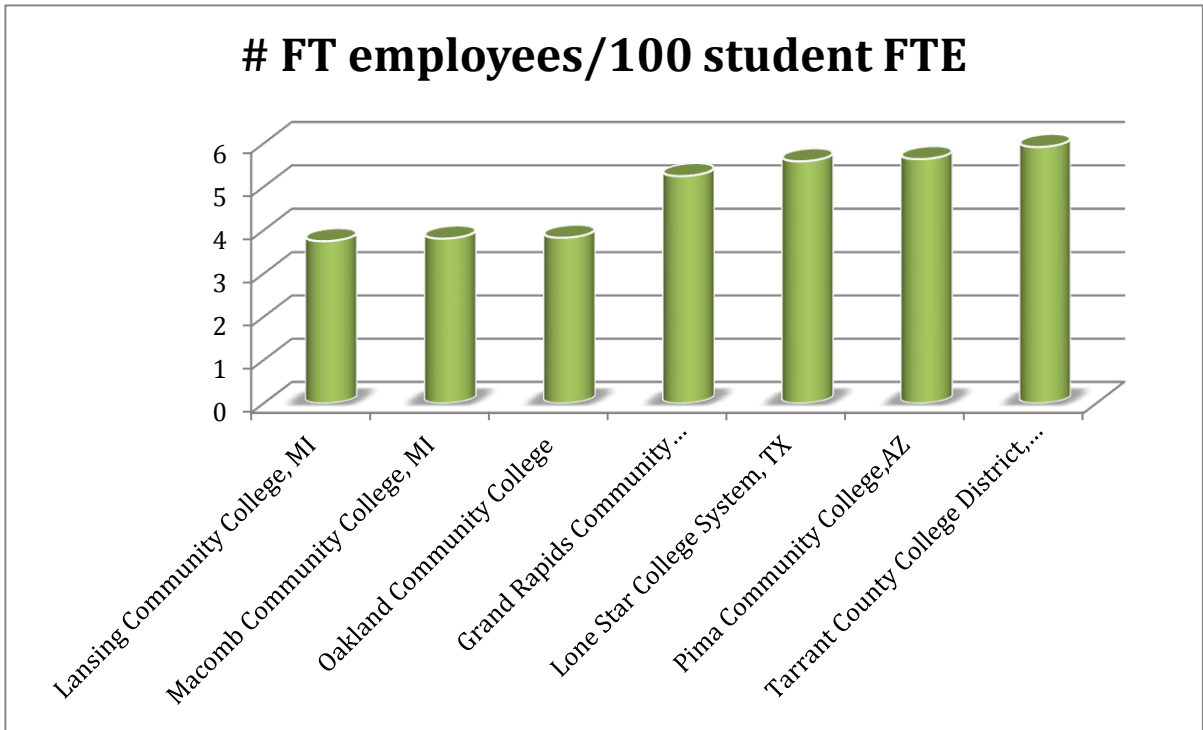


Chart 7: OCC has 3.83 Full Time employees per 100 students, among the lowest of benchmark colleges.

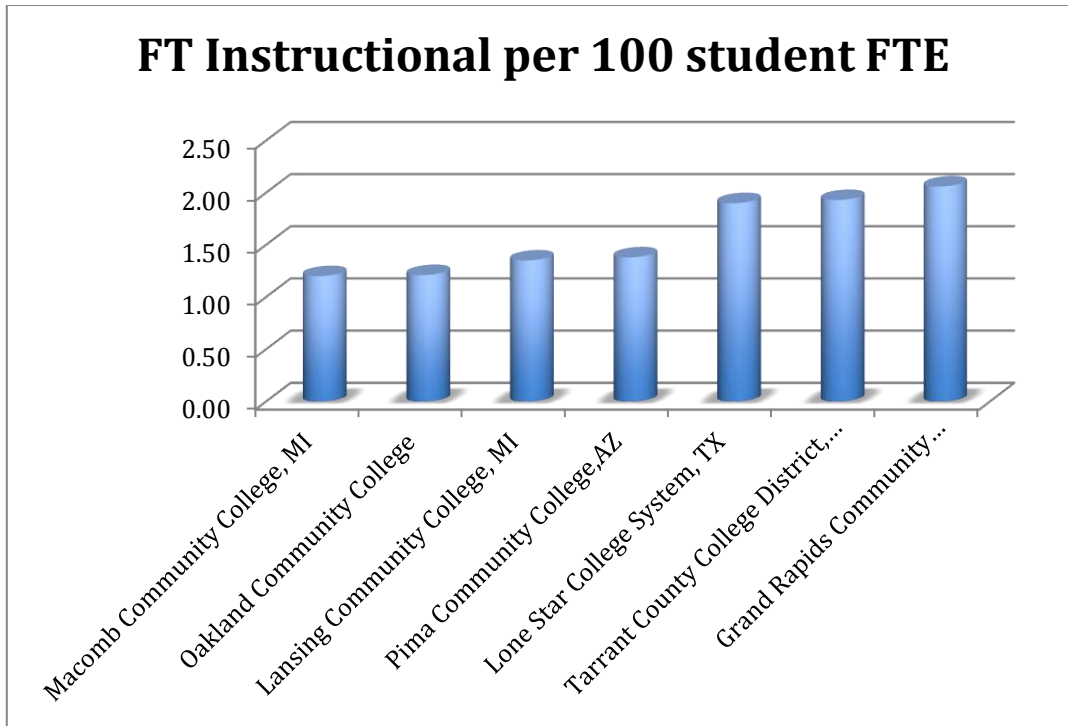


Chart 8: OCC has among the lowest number of FT Instructional staff per 100 students.

(This is influenced by the Full time/part time teaching ratio, class size and the number of temporary faculty)

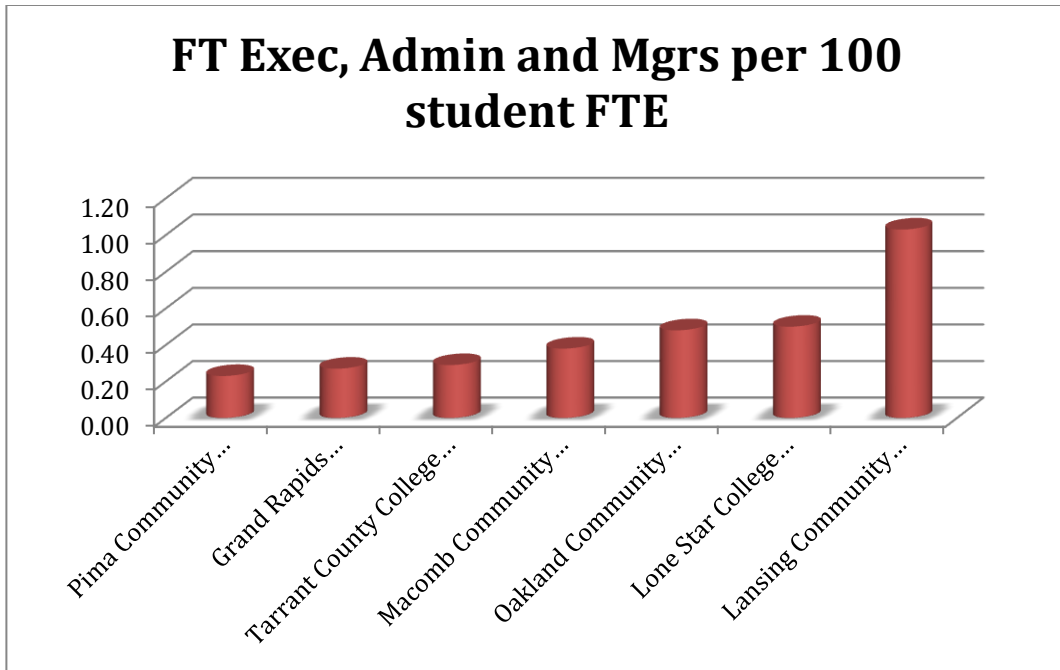


Chart 9: OCC is about average for the number of managerial staff per 100 students.

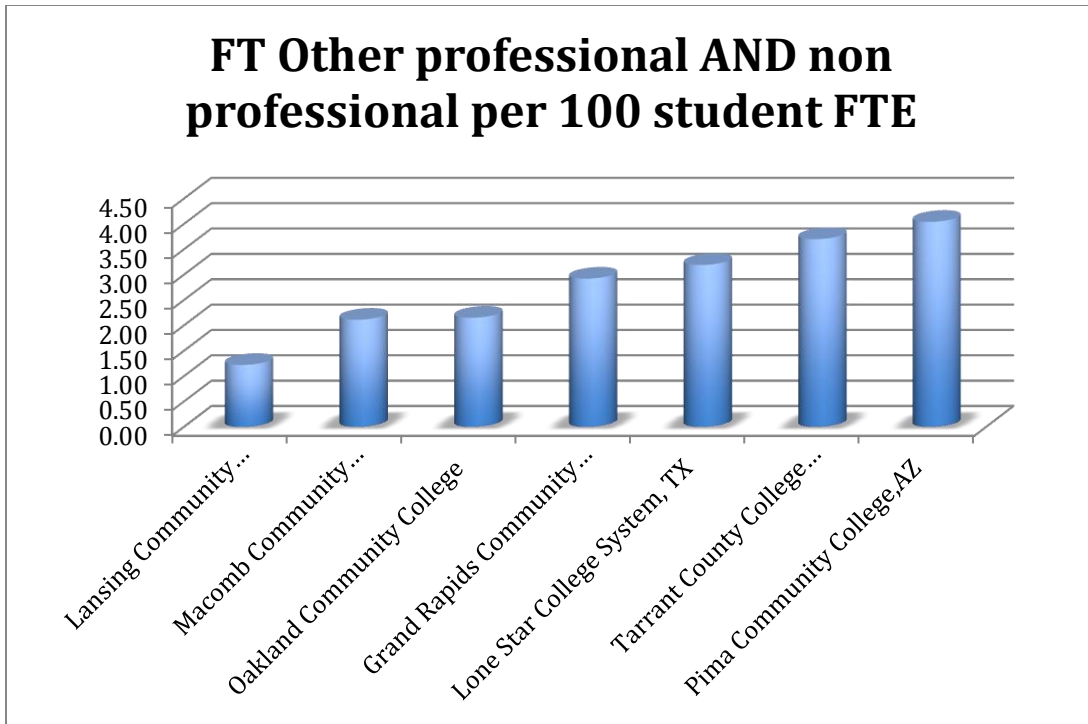


Chart 10: OCC is slightly below average for professional and non-professional staffing per 100 students.

IV. OCC Key Performance Indicators

1. The current OCC KPIs do not reflect a clear direction for the college's improvement of student outcomes, priorities for institutional improvement or alignment with the EMP or other planning components. KPIs should be the scorecard for the college's strategic goals for institutional improvement. Development of the KPIs should be closely incorporated into the college planning and accountability system. The OCC KPIs are organized around the themes of the strategic plan but do not reflect clear priorities for improvement of institutional performance as a result of system-wide planning. The KPIs should be the center of the internal accountability system that anchors planning. For example the Baldrige Education Criteria for Performance Excellence outlines the following steps for integrated action planning:
 - Action Plan Development
 - Action Plan Implementation
 - Resource Allocation
 - Workforce Plans
 - Performance Measures
 - Action Plan Modification

As stated in the Baldrige Criteria“what are your performance projections for both your short-and long-term planning time horizons? How does your projected performance on these measures or indicators compare with the projected performance of your competitors or comparable organizations? How does it compare with key benchmarks, goals and past performance? Are there current or projected gaps in performance and how will you address them?” (See appendix)

2. While OCC has KPI targets and measures, some of which are benchmarked with national organizations or with OCC-selected benchmark colleges, the current measures do not reflect a clear direction for institutional improvement. In particular, they are not designed to measure and provide institutional accountability for the EMP or other planning goals of the college. Even though the college does track completion (graduation), student progress (retention into the spring term and next fall), and course successes, the KPIs do not reflect clear direction for what improvement is being sought on these measures.

In a retreat held in the summer of 2012, the College Planning Council recommended revisions to the KPIs, but these revisions were not based on clear assessment of data nor a college-wide vision for the improvement of student outcomes. Those changes were not implemented because of the academic reorganization this fall. In CBT's work with the College, consultants learned that the Academic Leadership Team is in the process of revising the KPIs along with the EMP goals. This is an important first step toward the alignment of the strategic direction, desired improvement, clear actions, and a scorecard for accountability.

3. Many of the KPIs are not specific enough to provide clear data on which to base action. The measures in some cases provide only a partial picture of student performance. Some measures appear to reflect an individual assumption or goal but not in a way that provides institutional improvement. For example, the college measures the number of students in service learning, athletics, and cooperative education. It is not clear that the college has data showing that students who enroll in these activities have higher success or if that is the reason for the measurement. If the College had a clear goal to improve student success through higher engagement in extracurricular activities, a KPI could be developed around that goal with specific goals for improvement.

4. The targets selected for most of OCC's KPIs were not based on specific goals for college improvement or gaps the college seeks to fill in its overall performance. For example, the KPIs do not reflect any attention to student diversity or equity. In contrast, the Grand Rapids Community College (GRCC) Dashboard measures whether the college mirrors the service area in terms of minority representation. Its measurement of this KPI indicates that it enrolls a higher percentage of minorities than reflected in the county population.

Another example is provided by the KPIs related to developmental education. OCC measures the percent of developmental education students who successfully complete the next college level course and measure the course completion rates for

developmental education. It is not clear that the college has a goal to improve these rates or what the strategy for improvement includes. In addition, the developmental education measures do not take into account the OCC Achieving the Dream planning data that shows a steady increase in the percentage of OCC developmental students over the last five years. In contrast, GRCC measures the percentage of students placing into developmental education, and Pima Community College measures retention rates for different groups of students including developmental students to see whether they are progressing at different rates than the general population or specific groups. These distinctions show that Pima Community College and GRCC have specific goals for improving student outcomes (e.g., reducing the number of students in developmental education and seeking equity in outcomes for developmental students).

5. In some cases, OCC set a goal for a certain percentage of improvement, but these targets were not developed from clear strategies with a projected impact. With that caveat regarding the targets the College is using, it is clear that OCC is not meeting its stated goals. OCC's performance is lagging on most of the KPIs and particularly those related to student success. Of the forty-one KPI measures currently in place, the College met its target on only three measures:

- #1- Percent of programs with assessment plans,
- #21- Number of students participating in cooperative education and
- #28- High school penetration rate.

6. The College is not yet meeting its target on any of its KPIs related to student success. In some cases the performance is significantly below target. While it has been noted that the KPIs are not reflective of clear goals for student improvement, they are also not tied to modifying goals based on findings. One example is the 2010-2012 decline in one-year retention (KPI #10). Another example is the significant gap in performance related to student three-year completion (KPI #4). Neither of these KPI results is reflected in the recent EMP. KPI results showing these gaps in student outcomes should result in a goal or strategy to improve student retention. In an integrated planning system, the KPIs inform and provide direction for a college to revise its strategies and goals.

7. The performance measures related to student success indicate the College is not meeting its target. While the College should develop clearer strategic student success indicators for its KPIs, it should be noted that the following current student-success-related KPIs fall below expectation:

- KPI #2: Students who use the skills they learned at OCC in employment
- KPI #3: Transfer credits as a percentage of total credits earned
- KPI #4: Three-year completion rate
- KPI #5: Goal attainment
- KPI #9: Fall-to-winter retention rate
- KPI #10: One-year retention rate
- KPI #11: Developmental English student success in college English

- KPI #12: Developmental Math student success in college Math
- KPI #14: College-level course retention rate
- KPI #15: Developmental education completer success rate
- KPI#16: Developmental Math completer success rate
- KPI#21: Students Participating in Service Learning
- KPI#22: Students Participating in internships/cooperative education
- KPI#23: Community College Survey of Student Engagement (CCSSE) score for Active and Collaborative Learning
- KPI#24: CCSSE score for Student Effort
- KPI#25: CCSSE score for Support for learners

The College's last CCSSE survey was in 2009, and the new data for 2011 are not yet reflected. However, the college is using the CCSSE national and peer benchmarks to determine what students report in terms of their experiences at OCC. The use of these data will continue to be important in the revision of both student services and classroom engagement.

KPI#13, which measures the percentage of students using student services one or more times a year, is being met. It is difficult to determine just what that information provides, though, in the improvement of student success. Some colleges set goals to require that each new student see an advisor in the first semester or to create an academic plan. With a clear goal for advising, a KPI can be designed to measure the impact of that reform.

While these student-success-related KPIs should be revised to align with OCC's goals on student success, the performance trends of the current measures can be used to determine the direction for reform. It should be noted that KPIs #15 & #16 measure developmental education student success rates. These KPIs measure the success (C grade or better) of students who are enrolled at the end of the class. They do not reflect withdrawal rates for developmental students. For most colleges, developmental education success rates also include those students who do not remain to the end of the course; the OCC "completer" success rate does not provide a true picture of how many students failed to progress through the developmental course.

V. Comparisons with Benchmark Colleges

1. Most of the benchmark colleges do not have a comparable set of student success KPIs. Lansing Community College and Lone Star College System each have institutional and Student Effectiveness reports tracking a wide range of detailed student success measures. Pima Community College has a limited set of Student Success Indicators posted on its web site and Tarrant County Community College tracks several measures to state standards using multiple reports. Grand Rapids Community College has the most comparable KPIs in the GRCC Dashboard. (See Appendix.)

2. While most of the forty-one OCC KPIs are not comparable to specific KPIs at the benchmarked institutions, comparisons can be made on the major student success measures such as graduation and retention (fall-to-winter and fall-to-fall).

- **Graduation/Completion**

OCC graduation is tracked in KPI #4: Completion – three year. The OCC target is 23%, and current (2012) figures are 8.3%. This is a significant gap. GRCC Dashboard tracks this same measure with a target of 20.2% and an actual rate of 15.4%. While the methodology should be reviewed for comparability, it would appear that GRCC has a completion rate that is double that of OCC. Other benchmark colleges do not use the same data points for this measure.

As CBT consultant Jan Lyddon notes, while often criticized as unrepresentative of community college students, the IPEDS graduation rate is a starting point. The percentage of first-time, full-time, degree-seeking students who have graduated within 150% of the “normal” time to a degree is an indicator increasingly used by policy makers and others to gauge institutions’ effectiveness. Figure 1 depicts the graduation rates compared with the median of the six benchmark institutions identified by CBT. OCC’s graduation rate rose and, in three of the six years shown in the figure, was below the median rate. Of the benchmark colleges, Lansing Community College shows the highest at 15%, and Lone Star College System is the lowest at 7%. In part, these differences reflect the priority of transfer in Texas.

Graduation rates for part-time students are, understandably, lower than for full-time and stand at 4% for OCC. About two-thirds of OCC’s total enrollment attends part-time. This—coupled with the 8.3% completion rate for full-time, degree-seeking students—should be reflected in a strong goal to improve student completion and graduation in the EMP and academic planning priorities. To date, this has not occurred.

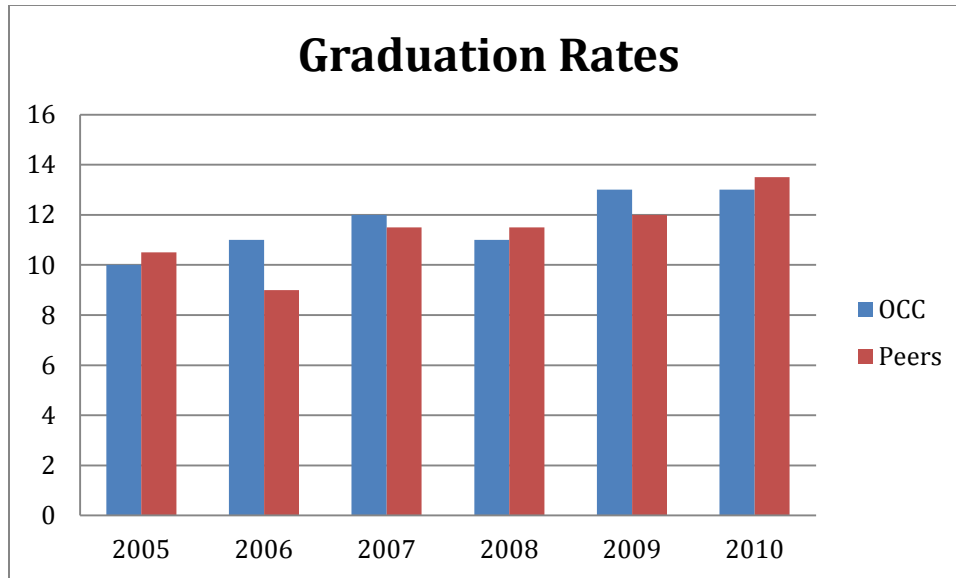


Figure 1

Peers: Grand Rapids CC, Lansing CC, Macomb CC, Lone Star CC Tarrant County CC, and Pima CC

- **Retention**
KPI #9 Fall-to-Winter:

The fall-to-winter retention is in the mid-range for OCC as compared to peers. However, Pima Community College tracks retention for types of students (developmental, workforce, transfer) and by student demographic (age, sex, and race) to determine differences in retention for various groups. Neither Lansing Community College nor Macomb Community College publishes this measure as a college indicator. As noted below, all of the colleges except Pima Community College have Fall-to-Spring or -Winter retention in the mid-70 percent range. For OCC, this would show that 27% of students do not re-enroll in the next semester.

Target	Current
Tarrant (No Target)	77%
Grand Rapids: 73%	74.2
OCC: 79.5%	73.2
Lone Star: 72%	71%
Pima: (No Target)	62.9%

KPI #10: Fall-to-Fall

Target	Current
Lone Star: 50%	57%
Grand Rapids: 63.7%	54.9%
OCC: 55.6%	47%
Tarrant (No Target)	46% first time/44% all
Pima (No Target)	43.1%

Clearly the large drop off in student progression for OCC and its peers occurs in students failing to return for the second fall. While both OCC and GRCC are not meeting their targets, 53% of students enrolling in Fall 2011 did not return to OCC in Fall 2012. What is not evident from the KPIs or EMP is the OCC strategy for improving student retention into the next year. Among other data, the college would need to know if there are differences by student group, e.g., whether developmental students are more likely not to return.

Analysis

The College identified the benchmark districts in consultation with CBT. There were three Michigan Community Colleges selected that were similar in size to OCC—Macomb Community College, Lansing Community College, and Grand Rapids Community College. In addition to these colleges, three colleges of similar size and with similar structures were selected from other states: Pima Community College, Arizona; Tarrant County College District, Texas; and Lone Star College System, Texas.

All community colleges are required to report standardized financial and staffing data to the National Center for Educational Statistics (NCES) using their Integrated Postsecondary Educational Data System (IPEDS) database (<http://nces.ed.gov/ipeds/>). Staffing data used in this report were posted for the 2010-11 academic year (the most recent reporting cycle), while fiscal data represents FY 2010, the most recent reporting cycle.

KPIs were reviewed in comparison to current college plans including the EMP. In addition, the stated college performance measures for benchmark colleges were reviewed. This included state reports and/or IPEDs results for some measures. The KPI design and development was reviewed using the Baldrige Criteria for Performance Excellence.

Recommendations

1. OCC should significantly re-design its Key Performance Indicators to reflect clear college-wide priorities for the improvement of student success. Those goals should be reflected in the EMP and other planning documents. The KPIs cannot be effectively revised without those first two components in place. The KPIs should be an integral part of a data-driven planning system. With the new academic structure and assignment of institutional planning to the Executive Director of Institutional Research, Quality and Planning, the College is well-positioned to re-design the college's Key Performance Indicators as an integral component of planning, evaluation and improvement. The Baldrige Criteria for Excellence provides a useful guide to the components of an integrated planning system that places KPIs at the heart of accountability and goal attainment.
2. As the actual KPIs are revised (or redeveloped), the targets should be driven by clear goals for student success based on the strategies that will be used to reach that goal. The college may set a goal to "double" graduation rates. But that goal can only be set if the planning system has identified a set of interventions that will directly impact graduation.
3. The college is urged to look at the AACC Voluntary Framework for Accountability (VFA) for measures that can be compared nationally but which also reflect the most accurate measures of student outcomes. The VFA (<http://www.aacc.nche.edu/Resources/aaccprograms/VFAWeb/default.asp>) utilizes cohort progression, which is tracking groups of students to see what their success is over time. In light of the college's high attrition from fall to fall, this would provide valuable information on actual performance of students. In addition, Nancy Shulock, Professor and Executive Director for the Institute for Higher Education Leadership and Policy at California State University, Sacramento, and others have identified Intermediate Measures that reflect the likelihood that students will complete. Some examples are earning a specific number of credits in the first year, completing 12 credits, completing a certificate, and completing developmental education in the first year. These measures are discussed more fully in CBT's report on Data Capacity. (See Appendix)
4. Once the KPI's are revised and integrated into the college-wide planning and accountability system, the display of the KPIs and progress toward them should be presented in a simple dashboard. One use of the KPI is to assure college-wide understanding of the College's goals, priorities and progress. These data should be displayed in a way that tells the story of what is being measured and how well the college is doing.
5. After the college completes the re-development of the KPIs as a part of the EMP and college priorities for student success, the process of benchmarking to other colleges can be reassessed.

Appendices

Original IPEDS data with a description of the IPEDS data element displayed in a table format from which each of the charts displayed was drawn.

OCC KPIs

Grand Rapids CC Dashboard

Intermediate Measures paper by Nancy Shulock

Voluntary Framework for Accountability documents (Brochure & Metrics Manual)