



Data Capacity & Culture of Evidence

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# **Executive Summary**

Diane Troyer completed the review of the OCC Data Capacity with the assistance of multiple CBT team members. The review and subsequent recommendations focus on the effective application of data and clear evidence in strategic decision-making, planning, and college processes and operations. CBT found that, while the College has an excellent resource in the Office of Institutional Research (IR), the full capacity of that resource is not being utilized. While extensive data are collected and displayed, the data collection and dissemination is not focused on student success and a clear priority for improving outcomes including graduation. This will require clear direction from the College leadership as well as a shift toward college-wide engagement with student success data. A system for college-wide planning (academic, resource, and strategic) that carefully examines and applies data is not yet in place. The recommendations included in this report provide a framework for fully implementing a culture of evidence that values effective data collection, application of evidence in decision-making, and employee engagement and training in the use of data.

#### **Task Overview**

The analysis and recommendations regarding OCC's data capacity relate to the ability of the College to make decisions based on evidence and to integrate a culture of evidence into college systems. Specifically, the charge to CBT was to assist the College in the design and Phase I implementation of a strategy to enhance the College's data capacity, to work with OCC to identify data needs or gaps, to build or enhance the current data base and systems used to analyze data and track student progress, and to initiate training for staff in the application of data to inform decisions. This work is intended to be the first step in the College's goal of implementing systemic improvements to assure that data and evidence are strategically applied to college decisions. This phase of the work is intended to provide an analysis and recommendations for action over the next two years.

# Findings/observations

The OCC data capacity was examined through the lens of the Chancellor's goal to enhance the College's culture of evidence and assure data-driven strategic decisions. Data capacity *per se* is not at issue. The Office of Institutional Research is fully capable of producing the data necessary for institutional planning and operations. However, the College has not applied data in a systemic way in planning and strategic decision-making. Furthermore, the College data collection is not focused on student success and the improvement of student outcomes. With that frame in mind, the following findings, observations, and recommendations look at both the data capacity—particularly the Office of Institutional Research—as well as the systemic application of those resources in planning and decision-making.



1. **Office of Institutional Research**: As is the case with most community college IR functions, the Office of Institutional Research was originally designed for compliance and the generation of reports necessary for funding and government requirements for data. The Office has also taken on the role of responding to multiple levels of requests from across the, including preparation for Board and Administrative reports, research questions from individual departments and faculty, and the communication of key data to the college at large.

The OCC Office of Institutional Research is well resourced with capable staff and a well-qualified Executive Director. The Executive Director is strongly oriented toward an internal "customer-service" frame for the office with a goal of responsiveness for both college-wide and targeted IR needs. She also has a lot of experience with the national framework for student success reform through her work as a Data Coach for Achieving the Dream (ATD). That national network and access to national research is focused on cohort tracking and nationally recognized student success methodologies and benchmarks.

- 2. **Organizational Changes:** The organizational changes implemented in the Fall of 2012 will positively position IR for a more assertive role in enhancing the College's culture of evidence, particularly in the area of integrated planning and data-based decision-making. The organizational changes to the scope of duties included an upgrade of the position of Director of IR to Executive Director and the addition of the responsibility of planning and quality. The Executive Director reports to the Vice Chancellor for Academic and Student Affairs and participates as a member of the Academic Leadership Team (ALT). While in some organizations the placement of IR directly under the Chancellor is desirable, the Executive Director's ability to assist in the development of a culture of evidence and a data-driven student success agenda will be enhanced by her participation on the ALT and the addition of planning to the role of the IR Executive Director.
- 3. **IR Scope in Planning:** Because of the fundamental part research and data must play in an integrated planning system, this alignment of scope is a positive move. Prior to the reorganization, the responsibility for college-wide planning, particularly *integrated systems* for planning, were not clearly delineated. This is particularly unfortunate in light of the College's goal to redesign its approach to and application of planning to align with nationally recognized performance excellence models such as the Baldridge Criteria. Currently, there are components missing from the approach and implementation of planning within OCC. In particular, the College must strategically apply data to the assessment of gaps in performance, shifts in



the environment, changes in demographics, and student needs. It also must commit to ongoing analysis of institutional strengths, weaknesses, threats, and opportunities. These tasks will require a shift in the role of the IR and planning functions to assure that strategic institutional analysis drives institutional reform. CBT further discusses the role of integrated planning systems in its report on alignment of planning, program review, and budget allocation..

- 4. **Vision for Student Success:** While IR can support a vision of success, it cannot create the vision. The finalization of Educational Master Plan will add clarity to the next steps, but, the EMP has not been developed from a strong evidence frame or an analysis of student outcomes and gaps in progress. While the College produced disaggregated cohort-tracked student progress data for Achieving the Dream, it was applied to a very limited population. Efforts such as these need to be organized and coordinated systematically if the College is to articulate a clear vision for student success and set evidenced-driven goals for the improvement of student outcomes. That vision will be critical for providing direction for the EMP; for the key performance indicators (KPIs); for data collection and analysis; and for strategic academic, policy, and fiscal decisions in support of student success.
- 5. **Application of data to planning:** While the College has extensive data resources in its Office of Institutional Research and has access to a wide range of reports showing gaps in student success, the application of that data to high-level decision-making and priorities for change is not a routine practice within the College. There are a several examples of this gap worth noting:
  - The College Key Performance Indicators (KPIs) show a number of student outcomes gaps, but the College has not used the data to OIR improve the outcomes. For example, Fall-to-Fall retention for degree-seeking students is 47%, and developmental math student success in gateway math is 59%. In both cases, the scores are significantly below target and have dropped since 2010. And yet, there is no college-wide goal (e.g., in the EMP) to analyze the causes or to determine which students may be at particular risk for attrition or lack of success in developmental math.
  - While the College utilized disaggregated cohort success data for the ATD initiative, that framework has not been applied C-wide to determine gaps in student performance and to orient academic planning and systemic improvement toward the enhancement of



student outcomes. The ATD team recommended that orientation be required for new students and integrated assessment preparation be offered to reduce the numbers of students placed in low levels, but that did not occur. Nor has the College used the data to propose a college-wide agenda for academic reform. The ATD framework is a helpful tool in developing a college's culture of evidence only if the data produced is internalized, built into the college decision-making system, and applied at scale college-wide.

- O Data showing increased numbers of students placing in developmental education has not been used to plan for academic schedules nor for accelerated alternatives to move students successfully and effectively on to college level. Nor has the College addressed the lack of a prerequisite system to assure students have the appropriate literacy and numeracy skills for success.
- As noted in the section on Program Review, the College now has the beginning of a process for in-depth program analysis. This analysis should be widely communicated and used as the basis for program enhancement or other decisions related to program need, currency, and viability. The program review process has not yet evolved into one that integrates the results of program data analysis into a plan for assigning resources to programs found to need improvement.
- The College Planning Council (CPC) and other planning bodies have not routinely analyzed trend and progression data in the development of planning recommendations. The role of the CPC is currently under review in light of recent organizational changes, but presently it does not have a clear charge or function.
- The CBT report on the Educational Master Plan (EMP) identifies the lack of the systematic application of data in the planning for the EMP. The College is now in the process of prioritizing EMP Strategies based on a deeper analysis of data related to the goals reflected in the EMP. With a data-driven process for developing future plans, it would be expected that the EMP and other planning systems should have a much stronger emphasis on differences in student performance by student group (e.g., age, sex, income, campus, high school, etc.) and a clear plan to reduce the gaps in success for individual groups and the student body as a whole.



- 6. Administrative decision-making: The College has not put into place a clearly defined decision-making structure that utilizes recommendations from administrative meetings (e.g., Deans Council, Academic Leadership Team, Cabinet) and that requires the presentation of relevant data for recommendations and decisions. With the recent reorganization in the academic and student services area and the appointment of college-wide deans, the College has the opportunity to put a data-based decision-making model in place.
- 7. Reactive vs. proactive: The Office of IR is staffed and organized to provide responsiveness to college requests for research and information. While reports are prepared on systematic timelines for many recurring needs (e.g., program review, state reporting, board reports, enrollment reports), the responsiveness framework has caused the Office to be more reactive than proactive. Because of the expectation that IR will respond to all needs from the college community, it is difficult to prioritize the highest-level needs without seeming to fall short of expectations of individual users. The Executive Director is implementing a number of positive steps to shift to a proactive role by producing, communicating, and encouraging the application of data. These steps include the appointment of an IR Advisory Committee to assist the Office in identifying data, display formats, and communication strategies to encourage the application of data. This issue is further discussed below.
- 8. **Automation:** Some of the operations within IR are manual and not part of an agreed-upon system and calendar of institutional priorities. A number of reports are manually generated, and that may include some KPI reports and program review data. It also appears that, once the program review data is produced, it is further manipulated in a database within Institutional Effectiveness. Some of these functions might be automated to allow IR and IE staff to shift toward the more proactive and strategic information required for integrated planning. The IT system enhancements under consideration with Ellucian may provide the ability to shift many of these IT and/or manual data pulls directly to users (e.g., deans and departments).
- 9. **Data Collection:** The College has not shifted to college-wide cohort progression tracking to measure student success, nor set clear college-wide goals on student outcomes by which to measure improvement. These deficits are reflected in the data that is collected and shared with stakeholders at all levels. The data collection system must shift to a clear focus on student outcomes to provide the blueprint for improvement. There are a number of measures for student success that could form the basis of an accountable student success vision, including intermediate measures of



student completion such as those developed by Nancy Shulock and the cohort methodology being used for the American Association of Community College's Voluntary Framework for Accountability (VFA). (See appendix) Using the consensus definitions developed by the VFA, the College could apply the analysis of cohort progression toward an examination of the larger picture of student success.

While it may be possible to determine how various groups of students (by campus, by income, by race or ethnicity/by high school/by age/by sex/by intent/by program) progress through the College, the College does not routinely produce, nor do academic leaders request, the analysis of student progression for the purpose of decision-making. Assuring that the necessary data is being collected and disseminated requires that the academic leadership seek that analysis in planning for academic reform.

- 10. **Data integrity:** The Office of Institutional Research has identified the need to improve processes for comprehensive data interpretation by strengthening consistent interpretation of data, reviewing protocols for campus interpretation of data, and establishing common definitions and exceptions to assure data integrity across the College.
- 11. **Dissemination and Engagement:** It is critical that college leaders and the college community at large engage, understand, and apply that information in decisions regarding the operation of the College, from scheduling to resource allocation. The Office of Institutional Research is improving the processes by which information is disseminated and applied by users, including academic leaders. However, there are currently limited forums available for sharing data. The College senate meetings have not proven to be an effective vehicle because of restrictions on time (10 minutes) and lack of priority on the senate agenda. While IR can provide dissemination to leadership groups (Deans Council, Cabinet, etc.) and via the InfoMart, it is important that data be presented and then discussed by the users. The College's data capacity will be of little value unless the users answer the question, "So what?" once they are exposed to and understand the gaps in student progression.

The Executive Director of Institutional Research, Quality and Planning has developed a plan to implement an Institutional Research Advisory Committee. This is a positive move and will enhance IR's proactive leadership position.

12. **Training and Professional Development:** While making available the right data for decision-making is important, most colleges find that that access



must be coupled with a formal training program to develop both general and super users of the available data. In particular, the college professional development plan in support of a stronger culture of evidence should prepare users both to understand and to apply data. It also should support, as an institutional expectation, the College's larger vision of the incorporation of data into planning systems, proactive assessment of the environment, and the discipline necessary to assure decisions are supported by data. This process has begun with the development by IR of the "Got Data? (Now what do I do with it?)" workshop. This workshop is planned to be launched in the Spring of 2013 and will be open to all interested staff.

- 13. Achieving the Dream Core Team recommendations: It is unfortunate that the College entered ATD during a time when a 2-year cycle was offered. It has since been determined that two years is not sufficient to see the systemic change required to reach scale and impact. The College's core team did, however, provide a carefully developed plan to support the wider deployment of data and to support an internalization of the culture of evidence. These recommendations include:
  - A **Fall 2012 Data Summit** to present the findings of ATD and comparisons of OCC data and progress with other colleges. This was to include breakout groups and a review of disaggregated data by demographic variables and areas of importance to the College.
  - Develop a mandatory Professional Development and Training Center course on "How to Use Data" to help explain data elements and provide examples of how data might be used in decision-making.
  - Ongoing "Stat Chats" conducted on each campus with IR staff throughout the academic year to reach staff and faculty directly and to facilitate conversations about data interpretation and data needs.

Because of the reorganization, the Data Summit and Stat Chats have not yet been implemented, but, as noted above, the "Got Data" workshop is under development for Spring 2013.

These recommendations are noted because it is evident that the ATD Core Team understands the elements of an effective culture of evidence and its impact on student success. The Core Team also made several recommendations regarding the improvement of student success that as yet have not been embraced for college-wide action. The strategy teams and core team were effective in collecting, analyzing, and applying data to



understand targeted student populations and the design of strategies. However, that analysis and application toward student reform did not progress beyond the ATD teams to college-wide understanding and application.

## **Analysis**

The challenges OCC faces in enhancing its data capacity is similar to many, if not most, community colleges. There are two major shifts in data trends within colleges that impact OCC. First, community college data systems and institutional research functions are designed primarily as compliance systems to provide the necessary data to governmental and accreditation agencies. Because of the history of funding systems for community colleges being based on seat-time or enrollment, colleges have traditionally organized IR functions around the reporting of this required information. It is only in the last five years that colleges and, increasingly, government and policy makers have realized that the emphasis on enrollment and snapshots of enrollment and demographics do not tell the story of what happens to students as they move through the institution. Research from the Community College Research Center and others has concluded that, in fact, there are significant gaps in student performance if student progression and enrollment patterns are analyzed. This shift in emphasis from "who is present on the first day?" to "who completes the course with a C or better, progresses to the next term and completes a credential?" is a major change for how data and institutional research function within a community college.

The second factor is the shift away from anecdotes and assumptions about who students are, what they need, and what happens to them toward clear analysis of fact. Increasingly, colleges are being challenged by policy-makers, foundations, funders, and government to be accountable for outcomes ranging from developmental education success to graduation rates. When an unbiased eye analyzes these rates of success for OCC or peer colleges, we find that they are unacceptably low. Yet colleges have not routinely analyzed the progression of students and applied that knowledge to implement reform.

Reform requires a process of engaging the college in the development of a systemic application of a culture of evidence. OCC has a number of advantages in moving toward the goal of a data capacity designed to support that culture. It has an exceptionally staffed Office of Institutional Research led by a highly qualified and engaged administrator. The Office is well positioned to influence and provide leadership for the systemic application of data that would reflect an effective culture of evidence. Institutional Research develops a range of reports and presentations for the Board of Trustees and leadership/governance groups on the campus. These reports are clear and accurate but do not reflect a comprehensive picture of student progression nor the means of applying that analysis.



That enhanced data capacity will require change not only in the Office of Institutional Research but in college operations, including meeting protocols for leadership groups (Deans Council, Cabinet, Committees); the application of data in planning systems; decision-making of all types (academic and fiscal); and collegewide engagement in understanding and applying data.

While IR has developed sound systems to respond to the needs of a wide range of users across the College, it should take a more proactive role in the future. This role will include changes and improvements in the type of data collected and analyzed and the data disseminated across the College, training for users at all levels, and the integration of evidence in planning throughout the institution. Institutional Research will need to engage the College leadership in the development and analysis of data sets that assist the College in identifying gaps in student performance, unpacking enrollment patterns, and examining differences by location and demographics in order to set the agenda for reform and overall improvement of student outcomes as measured by graduation. The recommendations below provide the initial steps necessary to reach the goal of an effective system for the strategic application of data toward decision-making.

**Recommendations:** The CBT recommendations are organized around the four functions assigned for the Data Capacity component of this work.

# 1. Enhance college data capacity and culture of evidence

- 1.1. The College should implement clear meeting protocols for all decision-making or recommending bodies (e.g., Academic Leadership Team, Cabinet, Deans Council, and college planning entities such as EMP and CPC) that include the evidence that should accompany any higher-level requests (e.g., to the Vice Chancellor for review and decision Academic and Student Affairs or the Chancellor). Requests for decision or approval should not proceed without the evidence required. This discipline will set the expectation by college leadership that decisions, resources, approval of reform, or other change will require clear analysis of evidence to support the recommendation. The leadership team should establish a clear expectation for follow-up data on all decisions. These decisions should also be subject to an accountability system that establishes a review of impact (particularly for decisions regarding changes in student programming or policy) to examine the data regarding results of the decision.
- 1.2. The College leadership should develop and articulate a clear vision for student success that will provide direction and focus for the culture of



evidence. Without this clear vision, the emphasis on student progression and direction for reform will lack the clarity necessary to support decisions. This vision should provide the framework for the adoption of the key measures for determining student and college success.

- 1.3. The Office of Institutional Research should employ focus groups of users at all levels and locations to assist in improving data collection, display, access, and application for decisions. This should include an analysis of the culture of evidence and gaps in consistent application.
- 1.4 As discussed in the CBT report on integrated planning, the College must design and implement a process to systematically apply evidence and student progression analysis in the development of strategic, academic, and resource planning cycles. This should be a first priority for the IR Executive Director to carry out the newly assigned responsibility for planning. The Executive Director should seek out best practice in integrated planning systems for community colleges to help shape processes and planning protocols.
- 1.5 As data is provided, presented, analyzed, and applied by leadership and planning groups, the College must be willing to engage in "courageous conversations," as the ATD system frequently recommends to colleges. The College must be willing to display differences by student group or location, have honest conversations about the differences in student outcomes, and use that information to take bold action for reform. Academic planning should be evaluated based on a clear assessment of student need and gaps in success, including enrollment and progression patterns.
- 1.6 Indicators are not driven by a strong vision for student success, are not aligned with the EMP or strategic planning priorities, do not capture college progress on many of the nationally benchmarked student success measures, and do not employ cohort tracking to measure outcomes. The KPIs should be re-developed to support the culture of evidence and clear priorities arising from evidence-based planning. As the KPIs are more directly integrated into planning and evaluation, they will support a full system of integrated planning backed up by evidence, particularly student need and student progress.
- 1.7 The Achieving the Dream institutional change model based on student cohort progression data would provide the College with many of the components of the culture of evidence it seeks to enhance. The College should re-evaluate its participation in the ATD initiative and its ability to provide a framework for change across the College. By reassigning



leadership for ATD under the Vice Chancellor for Academic and Student Services, the model for change and scale could build on the work already in place and expand the recommendations to all campuses. The College could choose to request a new coaching team for a "re-set" to start the work with fresh eyes and new leadership within the College. If the College chooses not to continue with its ATD work, the full implementation of the data approach with disaggregated cohort tracking should be a priority.

# 2. Data needs and gaps

- 2.1. The College should develop a process for comprehensive disaggregated cohort tracking to assess student progress, barriers, and opportunities. This may require a shift in data collection protocols and systems but will form the basis for evidenced-based academic decisions.
- 2.2. While the College has a wide range of data available and accessible, it should develop a mechanism to apply data directly to planning and the improvement of operations. This data should be regularly analyzed, discussed, and applied in the improvement of enrollment management. College-wide data should indicate the gaps and qualitative data such as that provided by the Community College Survey of Student Engagement (CCSSE), which can be used to drill down into the causes and solutions.
- 2.3. The current KPIs should be revised to align directly with the College's evidence-driven goals to improve student outcomes. The current KPIs do not have these characteristics. KPI's should align with and support college-wide planning priorities, including those in the EMP. It will also be important to align the KPIs with national data definitions such as the AACC's Voluntary Framework for Accountability's cohort tracked measures. An excellent example of metrics (KPIs) aligned directly with a student outcomes-focused Academic Plan is seen in the Broward Community College Plan. (See appendix)
- 2.4. The College should identify intermediate measures for tracking student progress, such as credit accumulation, developmental education, first-year success, and gateway courses. (These measures are described more fully in a Jobs for the Future (JFF) publication, "Taking the Next Step: The Promise of Intermediate Measures for Meeting Postsecondary Completion," by Jeremy Offenstein and Nancy Shulock. See Appendix)
- 2.5. Institutional Research should evaluate the areas in which common definitions and report formats and data definitions should be tightened.



The College must confirm the common formats for reporting and identify any differences across the campuses that may impact data integrity.

- 2.6. The Executive Director of IRQ&P should move ahead to implement an internal IR advisory board to identify measures and create broader awareness and engagement by internal stakeholders. Some of the areas the College should examine for inclusion into a clear data display include:
  - Retention (cohort, disaggregated, course for all attempters, term to term, etc.) including who retains and who leaves.
  - Developmental education progress by disaggregated cohort to determine who completes, who leaves, when, and why. From this information, the College should analyze policy barriers and determine policy or academic interventions.
  - Goal attainment, including the implementation of a process to increase accuracy of goal/major (recapture each registration) and add transfer and workforce success.
  - Disaggregation by all demographics but also by those factors important to the environment of OCC, including differences by region, college, and high school.
  - Credential completion analysis, including degree and certificate completion. This data should include an analysis of the extent to which programs are aligned with intermediate certificates (stackable credentials) to allow intermediate completion points and more accurate accounting of student progression and accomplishment.

# 3. Build a data base and system to analyze data and track student progress

- 3.1. With the data base capacity in place, the College should design a system of reports based on input from college leaders, focus groups, and the advisory council. This system should be based on comprehensive cohort tracking disaggregated by student group, location, and other factors determined by the College. This allows the College to identify loss points along the student experience to determine where and when to intervene with academic or student service reform.
- 3.2. Institutional Research should examine best practice in the display of reports to provide clear graphic display of the critical information. These reports should be designed to support on-going academic, fiscal, and strategic planning. A clear set of powerful dashboards accessible widely and presented at key college meetings will enhance the culture of evidence and assure that evidence is considered as decisions are made. Examples are included in the Appendix of this report including the Grand



Rapids display of the KPIs as a Dashboard, the Indiana State Dashboard and the Ivy Tech Progress Report. All of these examples provide clear display of progress.

- 3.3. Data collection must be reprioritized to provide a clear alignment of planning and evidence. While compliance and required reporting cannot be sidelined, the College must be proactive in identifying student progression data that will drive the College forward. The plan by IR to provide quarterly reports to the college community can be utilized to support this goal.
- 3.4. The College should integrate process and standards for program review to include disaggregated student success and should engage the College community and stakeholders in the review of the measures for success and flags for review.

# 4. Staff training in application of data to inform decision-making

- 4.1. Institutional Research should develop a college-wide communication, dissemination, and training plan that identifies the strategies, information, and approach for wide understanding and engagement with data. That strategy may include the recruitment of a group of campusbased "internal data coaches" who are super-users and who can help departments and individuals with data understanding and application. Many colleges have effectively used this approach, including Central Piedmont Community College in North Carolina.
- 4.2. College planning and leadership groups should all engage in data workshops to review protocols and expectations for the examination of data in decision-making. The use of data should be clear in the charge to future planning groups, including expectations for any recommendations arising from their work. The College should consider a standard format for the presentation of recommendations by recommending or decision-making bodies.
- 4.3. Many colleges have found that a college-wide "Data Summit" is an excellent vehicle to launch a shift toward a strong expectation for evidence and data at the heart of decisions. A Data Summit (or Student Success Summit as many colleges frame them) would convene college faculty and staff around 2-3 major gaps in performance and include breakout groups for direct engagement with questions around the data. The ATD Core Team recommended and CBT also recommends that OCC



convene a college-wide Data Summit be held no later than Fall 2013. Planning for this summit should not be limited to IR but should include the Advisory Committee ALT and other leadership groups. A number of ATD Leader Colleges hold annual summits on student success and some include external stakeholders as well (public schools and business partners). Some excellent examples are Patrick Henry Community College, South Texas College, Tallahassee Community College, Broward Community and the Community College of Vermont. Examples of Data Summits are included in the appendix.

- 4.4. The College should integrate data on key indicators (based on student progression) at each leadership meeting (Cabinet, ALT, Deans Council).
- 4.5. The College should create a system of ongoing stakeholder engagement in setting standards for and analyzing data to inform decisions.
- 4.6. As a part of the education and training process, the College should broadly share a standard set of data displayed by dashboard or other creative graphic display that includes a summary of student progression, barriers or gaps in performance, and areas for priority action. (See appendix)

# Appendix:

- I. Dashboard Examples
  - 1. Reaching Higher: Strategic Initiatives for Higher Education in Indiana- State Level Dashboard for Indiana (2010)
  - 2. Changing Lives: Ivy Tech Community College Progress Report, May 2012
  - 3. Grand Rapids Community College Dashboard
- II. Metrics Examples
  - 1. Voluntary Framework for Accountability Overview
  - 2. Voluntary Framework for Accountability Metrics Manual
  - 3. Taking the Next Step: The Promise of Intermediate Measures for Meeting Postsecondary Completion," by Jeremy Offenstein and Nancy Shulock
  - 4. Broward Community College Strategic Plan
- III. Data Summit Example
  - 1. South Texas College Student Success Summit Agenda (2012)

# Creating a Culture of Evidence at Oakland Community College Submitted by: Nancy Showers, Executive Director of Institutional Research, Quality & Planning February 2014

## **Background**

Oakland Community College is a richly-resourced institution in many critical areas. In relation to data resources, the College has numerous assets. The Office of Institutional Research (OIR) (now the Office of Institutional Research, Quality & Planning (OIRQ&P)) has been well-staffed by dedicated professionals for over 20 years. While it originally included a Director leading part-time college interns, it has grown to a staff of over twenty, including three Research Analysts with terminal degrees and a Data Collection Center whose key purpose is to collect primary data through telephone interviews.

Over the years, the College's needs and demands for data have grown and reshaped. As higher education institutions focus more on student learning outcomes, student success and performance metrics, the office's research requests reflected these new areas of interest. In addition, the college joined the national Achieving the Dream (ATD) national network in 2010. The focus of this initiative is to review disaggregated cohort data to design interventions that address specific student achievement gaps. In contrast to reporting 'snapshots' of data (e.g., how many students enrolled in a given fall term), the use of longitudinal data sets allows an institution to see how students are progressing and succeeding through their college experience.

#### Importance of Creating a Culture of Evidence

As data become more important in driving decisions, the need for an institutional culture shift becomes pressing. Anecdotal evidence can no longer be used an impetus for making key decisions. The College must carefully consider data in determining organizational direction and use of critical resources. And, the use of resources related to data needs to be carefully considered.

As cited in the College Brain Trust (CBT) report, "Data Capacity and Culture of Evidence" (December 2012):

. . . while the College has an excellent resource in the Office of Institutional Research (OIR), the full capacity of that resource is not being utilized. "

This shift in organizational 'thinking' requires that colleges make data use a priority. Colleges are moving toward a culture shift that can be characterized by use of evidence and inquiry. There are a wide array of definitions of culture of evidence and inquiry. This concept also provides a portion of the framework for the Achieving the Dream initiative, as it is cited as one of the five Principles of Institutional Improvement:

**Use of evidence to improve programs and services.** The college establishes processes for using data about student progression and outcomes to identify achievement gaps among student groups, formulates strategies for addressing the gaps identified and improving student success overall, and evaluates the effectiveness of those strategies.

The use of data is not only important in decision-making, but a process to measure, analyze and improve organizational performance is an integral component in this goal. As cited in the Baldrige 2011-12 Criteria for Performance Excellence:

Measurement, Analysis and Knowledge Management (category 4) are critical to the effective management of your organization and to a fact- based knowledge-driven system for improving performance and competitiveness.

# Key Concepts in Developing a Culture of Evidence at OCC

Oakland Community College has identified five critical components in creating a culture of evidence:

- A culture that elevates evidence and inquiry ensuring that there is an institutional commitment to make this a priority
- Systemic use of data to drive decisions institutionalizing processes to assure that data are a driving determinant in making key decisions
- Put data into the hands of users making sure processes to provide those individuals needing access to key data to make decisions are in place
- Conduct specific analyses answering important questions responding to research requests to guarantee that resources are available to conduct analyses to support the most critical questions
- Consistently informs and drives planning and budgeting processes creating processes
  that include the consistent use of data to determine plans and how resources will be
  allocated

#### **Accomplishments to Date**

Monthly Publication of newswIRthy – Since February of 2010, a monthly IR newsletter has been produced for the College community. The intent and purpose of this newsletter is to provide a scan of relevant local, state and national articles regarding current events in higher education and community colleges. In addition, a second page of the newsletter includes information from internal and external research reports, updates about accountability metrics and other pertinent research findings. A consistent look and format makes this newsletter easily readable and understood. We have received positive feedback about this publication over the years, and the archived newsletters (available on our website) provide a comprehensive historical reference for pertinent information and research over the last several years.

<u>Data Summit</u> – OCC conducted the first Data Summit in September of 2013. This event included an overview of performance metrics at the state and national levels by keynote speaker, Chris Baldwin, Executive Director of the Michigan Student Success Center, an overview of a creating a culture of evidence and breakout sessions. During the breakout sessions, tables were provided with data sets and asked to review the data and answer key questions about these sets. Group leaders then shared their initial data-based findings and additional data needs with the larger group. Pre- and post-surveys were administered to identify current data usage within OCC and satisfaction with the data summit.

Key findings from the pre-survey included:

- Most respondents said that their official source for data is the Office of IRQ&P and their website; the next most frequently reported source is Colleague.
- When asked how often they utilize the IRQ & P website, the majority of respondents said they sought data 'several times throughout the year', followed by 'several times per month.'
- The top three data needs, according to those surveyed, are student demographics, enrollment data and completion rates.
- Based on the several response selections (expert, know enough to be dangerous, kinda, sorta know my way around, novice), most rated themselves as a data user as 'kinda, sorta know my way around.'
- When asked what one *word* they would use to describe data usage at OCC, there were some positive words, but notably some areas for improvement were the majority opinion.
  - Extensive/getting better/growing/helpful
  - o Inconsistent/sporadic/scattered

- o Confusing/unfocused/difficult
- Lacking/needed/hidden/incomplete
- o Underused/underutilized

Key findings from the post-survey included:

- Respondents said the main reason they attended the summit was to learn how to acquire data and gain more information about how to use data.
- The majority of attendees (94%) were satisfied with the relevance of information presented and the understandability of the information presented (97%).
- Ideas for future data summits included reviewing college-wide, discipline-specific data and completion rates, discussion of the consequences of not action on data and providing information beforehand to aid in preparation of discussion.

#### **IR Research Project Process**

We continue to utilize a systematic process to address the majority of our research requests. The flow of this process is initiated by a college staff member filling out a Research Request Form that is received by the Executive Director. The most critical piece of information provided on this request is articulation of how the research will be used to support decision-making at OCC. Once the request has been reviewed, it is forwarded to a Research Analyst or Research Assistant who completes a Research Project Proposal, outlining agreed-upon terms such as a research goal, methodology and timing. Once the requestor signs off on this process, the research is conducted and a consistently formatted report, presentation or other agreed-upon deliverable is prepared. Once the project is completed, the requestor receives an IR Feedback Survey to help provide feedback about quality, timeliness and other key factors about the research project.

# **Draft of KPI metrics aligned with the EMP**

A draft set of metrics was developed to quantity the EMP (Academic Leadership) and provide a foundational measurement tool for Board level (vision) and Cabinet level (student success) goals. Using the Voluntary Framework for Accountability (VFA), these metrics will help the College become more proficient in understanding their progress in areas of importance such as community need, persistence/retention and vocational education. Once the definition for student success is finalized, a broader conversation about these draft measures will ensue.

#### Data Capacity and Culture of Evidence Plan\*

# Goal I: Enhance the culture of evidence and application of data to decisions

#### Winter Data Summit to initiate meaningful conversation around data sets

This event is tentatively scheduled for March 21, 2014 and titled the D3 Summit (Data Driven Decisions). After review of survey input from the first data summit and discussion about how to move the culture of evidence forward, IRP&Q is hosting this summit where various real and sample scenarios where data would be used to aid in decision-making will take place. The vignettes will be presented by a topic expert and discussions will ensue by groups of participants. The report out will include the groups' sharing their key discussion points and what they deem as critical data to help make informed decisions.

WHY this is important: We received very positive feedback from our initial data summit
and the need to continue conversations about data usage at OCC is still a priority. In an
effort to keep momentum going in increasing the culture of evidence at OCC, continued
use of open forums to discuss data are critical. The content of this summit is based on
direct feedback from attendees of the fall event.

• Individual Responsible: Nancy Showers

• Date: March 2014

#### PDTC Workshop based on principles of Data Summit

Develop a 2-hour PDTC workshop to introduce brief overview of national/state accountability metrics, the IRP&Q website and dialogues about data needs at OCC.

• WHY this is important: There is a growing need, validated by the pre- and post-survey results from the Data Summit, for better understanding of availability of data and how to use data by the college community. This course will provide an overview of accountability requirements and what data are currently available through IRQ&P. An integral component in this workshop will be an open discussion about what additional data sets are needed and what decisions these data will support.

Individual Responsible: Mark Woods

Date: Workshop content by May 2014 for Summer and Fall 2014 workshops

<sup>\*</sup>See accompanying grid with more details about timing and accountability.

#### **Data-Based Decision-Making Model**

This model will be comprised of a set of key questions to be used when major decisions are being considered at OCC. It will include consideration of data to support the decision(s), alignment with college priorities and the EMP, as well as budgeting process.

• WHY this is important: A critical component in developing a culture of evidence is assuring that decisions are based on data. This framework will provide a sound foundation for this to occur on a systematic basis. This will be developed and piloted by Chancellor's Cabinet for implementation and future use at all levels of the institution.

• Individual Responsible: Nancy Showers

• Date: July 2014

Goal II: Make college community aware of current and ongoing internal and external research, particularly related to academics

# **College-Wide Research Forums**

These forums will consist primarily of presentations by internal and external researchers to present findings related to community college issues, with time allotted for questions and discussion.

WHY this is important: There is a thirst for academic and substantive research results within the college community. A plethora of research exists and is being conducted about issues pertinent to OCC. One such research project is a collaborative project with OCC, Macomb, Washtenaw, Alpena, Jackson and Wayne with the University of Michigan to understand wage earnings of OCC students based on unemployment wage data. This research will benefit the college community greatly through better comprehension of real earnings by our students, as opposed to those self-reported by students through the Graduate Follow-up Survey.

• Individual Responsible: Nancy Showers

Date: June 2014

# Goal III: Simplify display of data for stakeholders

#### <u>Determine Best Practice Software Needed for Data Display</u>

Investigate and implement software and tools to make information and data more accessible and interactive by the college community. One such solution was offered in the summative

proposal by Ellucian for a data warehouse and dashboard package called CROA. After conversations with OCC's Vice Chancellor of Information Technologies, Bob Montgomery, it became evident that a decision on this proposal is not imminent. Therefore, the IRQ&P office has researched other such tools and is strongly considering piloting a tool known as Tableau for this purpose. The possibilities are promising in making data display much more interesting and interactive for the OCC community.

 WHY this is important: It is imperative that the Office of IRQ&P take a leadership role in data display and availability. Not only was this cited as a priority by the CBT, but this need has been validated formally through survey feedback and informally through conversations within the College.

• Individual Responsible: Mark Woods

• Date: September 2014

# College Stakeholder Focus Groups for Feedback About Display of Data

The presentation and use of data within the College community has been under scrutiny and a growing need for better usage and understandability of data is evident. Focus groups will be conducted with cross-representation of all employee groups, community members and students to better gauge their data needs and understanding.

WHY this is important: Feedback from the College community about how data are
displayed and used is critical in promoting a true Culture of Evidence at OCC. By
canvassing key data users and employee groups about potential displays and interactive
models, IRQ&P will be both promoting a culture of evidence and gathering valuable
feedback about presentation, display and ways of communicating data and information
in a meaningful way.

• Individual Responsible: Nancy Showers

Date: October 2014