

How To Integrate Data Into Program and Service Area Plans



SAN DIEGO MESA COLLEGE
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The Big Data Question



- “Analyze the enrollment and productivity data and/or the Point of Service Data provided by the Office of Instructional Services, Resource Development, and Research (or data you supply), and then identify the program’s and service area’s (offering courses) strengths and challenges. Based on this analysis, what steps would you take to maintain the identified strengths and what steps would you take to correct the identified challenges?” (2009 Program Review Handbook, p. 15).

Service Area Internal Data



- Data collected internally by Student and Administrative Services may be integrated into Service Area Plans
 - San Diego Mesa College's Student Services Annual Report, 2008-2009
 - ✦ Every piece of data in this report can be integrated in at least one way into its respective service area's Program Review plan
 - ✦ Copy and paste! Copy and paste! And then, contextualize!

Point-of-Service Surveys



- **Point-of-Service Surveys**
 - Comprehensive Report: Results may be generalized to the population and used for planning and decision-making.
 - Executive Summary: Results may be generalized to survey respondents only and should be used with that caution in mind.
 - Item Analysis: Results should be used only as a pilot for future POS surveying.

Accreditation Surveys



- Employee Perception Survey and Student Satisfaction Survey
 - Findings may be generalized to the larger employee / student populations
 - Findings and Conclusions include many references to items directly related to Administrative and Student Services
 - Appendix D comprises verbatim comments from employees and students

CCSSE



- Community College Survey of Student Engagement administered in Spring, 2007
 - Several items pertain directly to Student Services Areas
 - Results may be accessed via the CCSSE web site (www.ccsse.org), a scheduled visit to the Office of Instructional Services, Resource Development and Research, or the CCSSE Research Briefs on the Mesa IR web site (www.sdmesa.org/institutional-research)

Useful Formulas and Calculations, Part 1 of 2



- Average/mean =

Total # of observations / # of observances

- Useful for summarizing large amounts of data, esp. when you collect the data regularly, e.g., average dollars disbursed per month during Fall 2008 term = (Total dollars for Fall 2008 / # of months in Fall 2008) = average \$x.xx dollars disbursed per month in Fall 2008. Then, you can compare the average \$ disbursed per month in Fall 2008 vs. that of Fall 2009, which provides a succinct summary of dollars disbursed per month in Fall 2008 vs. Fall 2009. Also useful for calculating average number of contacts per full-time staff member in your service area.

Useful Formulas and Calculations, Part 2 of 2



- Percent Change in Growth or Decline =
$$((\text{recent figure} - \text{past figure}) / \text{past figure}) * 100$$
 - Useful for comparing rates of growth (or decline) between your service area and that of the College, esp. when it is not an exact matched comparison, e.g., comparing the percent change in growth, or rate of increase, in the number of contacts made or dollars disbursed between Fall 2007 and Fall 2008 v. the percent change in growth, or rate of increase, in College enrollment between Fall 2007 and Fall 2008. Then you can see whether your service area's growth “outpaces” that of the College.

A People's History



- Program / Service Area plans
 - Living documents
 - Historical evidence
- No money does not mean no planning... It calls for *better* planning

Outcomes & Productivity Data



Terms & Definitions



- Please refer to the Productivity 101 PowerPoint handout for terms and definitions

The Parameters



- Two years / four primary terms of data
- Includes census classes ONLY, i.e., excludes tutoring, positive attendance, etc.
- End-of-term data
- Program-level data (course-level data available upon request)
- Derived from SDCCD Information Systems

Outcomes (Retention & Success)



- Change over time
- EQUITABLE outcomes across student characteristics
- Benchmark comparisons using College rates as points of reference
- NOTE: Student Equity Reports are on the District Research [web site](#))
- Retention rate = $(\text{All valid enrollments EXCEPT letter grade W} / \text{All valid enrollments}) * 100$
- Success rate = $(\text{Letter grades A, B, C, or P} / \text{All valid enrollments}) * 100$
- Note: Enrollment = # of students enrolled as of first census

Comparing Data



- Apples to apples and oranges to oranges
 - E.g., Fall to fall and spring to spring
- When all else fails, fruit to fruit
 - E.g., Rate of growth from fall to fall and spring to spring in your program/discipline versus the college
 - Use same parameters wherever possible
 - Note the limitations of your data comparison

Data Caveats



- **Small numbers**
 - E.g., American Indian student population
- **Artificial changes**
 - E.g., effects of course numbering changes on Basic Skills figures

Paul-icies and Procedures (dedicated to Professor Sykes)



- “Is it statistically significant?”
 - Retention and success of populations over time: Apply time-series perspective – separate random variation (“noise”) from nonrandom variation?
 - ✦ Tends to apply to long time series
 - Nonrandom variation, i.e., statistical significance, does not necessarily mean you have a policy-relevant issue
 - Program can collectively decide on an appropriate “effect size”
 - Success and retention are student learning indicators – they indicate that student learning may or may not be happening. Classroom assessment, or student learning assessment, will demonstrate the actual occurrence, nature, and depth of learning

Multiple Measures



- Examine multiple measures/indicators in concert with each other
 - “Look at enrollment in relation to #CRNS and WSCH in relation to FTEF, in other words, WSCH/FTEF, commonly referred to as “load”, which is used to calculate the %525 benchmark, examined in the context of student retention and success with consideration of the % Contract FTEF comparing fall to fall and spring to spring over the most recent two years, or four primary terms”

Enrollment & #CRNs



- From fall to fall and spring to spring, is the overall College enrollment increasing or decreasing? And at what rate? (+/-%▲)
- How about compared to enrollment in your program? (+/-%▲)
- And is your #CRNs increasing or decreasing?
- If you divide enrollment / #CRNs to calculate the average class size for each term, and compare fall to fall and spring to spring, what is happening to the average class size?
- Keeping the above in mind, what is happening to the retention and success rates?

The Mother-Load



- From fall to fall and spring to spring, is the WSCH/FTEF, commonly referred to as “load,” increasing or decreasing?
- Also, how close to 100 is your %525 goal, which = $((\text{WSCH}/\text{FTEF}) / 525) \times 100$?
- And how close to, or far from, 75% is your % Contract FTEF?

Data ~~Insertion~~ Integration



- Know that there are 3 ways to use data in your program plan (think, real estate)
 - Integration, integration, integration
- Remember, you can also supply your own data, e.g., internally collected data and/or SLO assessment data

My 2 Cents



- Look at data in the context of what is happening in your program / service area, the college, and the greater community
- Remember, data don't drive



Program Plan Preparation

Identifying Strength & Challenges



- Identify program strengths based on the data provided
 - Discuss factors that may have contributed to program / service area strengths
- Identify program challenges based on the data provided
 - Discuss factors that may have contributed to program / service area challenges

Program / Service Area Goals



- G = Grounded In...
- E = Evidence,
- T = To boot!

- S = Specific
- M = Measurable
- A = Attainable
- R = Realistic
- T = Time-bound