2010 UH System Academic Advisors Workshop
Windward Community College, Kaneohe, HI

THESE DATA ARE SPEAKING TO US:
FOCUSING ON DATA FOR CHANGE IN
ACADEMIC ADVISING
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UNIVERSITY OF UTAH
Learning Outcomes – Data Analysis

- Build advising community through assessment process
  - Understand the advising systems at various institutions
  - Understand student populations throughout system
- Define data-driven decision-making
- Define assessment as multiple measures
- Understand tools for data analysis
- Communicate strategies to report results of assessment to stakeholders
- Learn tools to organize and prioritize activities based on assessment data
- Learn theoretical models for change
- Appreciate that assessment is continuous (just like learning)
- Network with HI System colleagues
Data Driven Decisions - Definition

- Decisions may be informed by multiple types of data. These include:
  - **Input data** (expenditures or demographics)
  - **Process data** (quality of learning or advising)
  - **Outcome data** (retention and/or graduation rates)
  - **Satisfaction data** (opinions from educational community)

- Raw data are collected, organized, and discussed within a scope or parameter
- Analysis and summarization yield *information*
- Synthesize to produce *Actionable Knowledge*

Conceptual Framework of Data-Driven Decision Making in Education

- Types of data
  - Input
  - Process
  - Outcome
  - Satisfaction

- Information

- Actionable knowledge

- Types of decisions
  - Set and assess progress toward goals
  - Address individual or group needs
  - Evaluate effectiveness of practices
  - Assess whether client needs are being met
  - Reallocate resources in reaction to outcomes
  - Enhance processes to improve outcomes
Components

- **Measurement Tools**: the medium for gathering data about learning. Tools include surveys, rubrics, focus groups, interviews, observations, etc.

- **DATA Sources**
  - Local and National Tools
  - Advising Office, Institutional Analysis, Institutional Partners

- **Analysis**: reviewing data from multiple measures to assess learning.

- **Change**: what happens based on assessment.
# QUICK REVIEW
Gathering Evidence – Measurement of Student Learning

<table>
<thead>
<tr>
<th>Direct</th>
<th>Indirect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written exams</td>
<td>Surveys &amp; questionnaires</td>
</tr>
<tr>
<td>Portfolios</td>
<td>Rubrics</td>
</tr>
<tr>
<td>Reflective essays (personal statements)</td>
<td>Focus Groups</td>
</tr>
<tr>
<td>Direct observation</td>
<td>Interviews</td>
</tr>
<tr>
<td>Performance on case study</td>
<td>Retention &amp; graduation rates</td>
</tr>
<tr>
<td>Pretest/posttest</td>
<td></td>
</tr>
</tbody>
</table>
Analysis of DATA
Key Questions

- What are these data informing (SLO’s, advising process, retention, etc.)
- What are these data suggesting?
  - Policies and practice are achieving desired outcomes.
  - Policies and practices need improvement/enhancement to achieve desired outcomes.
  - Policies and practices need to be retooled to achieve desired outcomes.
- What policies and practices are feasible to continue, tweak, retool within your campus culture?
  - Resources?
  - Authority?
  - Institutional structure?
Types of DATA and source/DDDM

- **Input data** (expenditures or demographics)
  - Institutional Research Office/Demographic Elements of a Survey
- **Process data** (quality of learning or advising)
  - Survey, Rubric, Focus Group, Pre & Post Test
- **Outcome data** (retention and/or graduation rates)
  - Institutional Research Office
- **Satisfaction data** (educational community)
  - Survey, Rubric
Input Data – Demographics of Students

**Age**

- 22 or younger - 81%
- 22 to 25 - 10%
- 26 to 29 - 5%
- 30 and older - 4%

- What is this telling you?
- What else do you need?
# Outcome Data – Institutional Retention

<table>
<thead>
<tr>
<th>Class</th>
<th>2ndyr</th>
<th>4thyr</th>
<th>6yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>61.1%</td>
<td>25%</td>
<td>17%</td>
</tr>
<tr>
<td>2003</td>
<td>62.2</td>
<td>23%</td>
<td>17%</td>
</tr>
<tr>
<td>2004</td>
<td>64.2</td>
<td>20%</td>
<td>18%</td>
</tr>
<tr>
<td>2005</td>
<td>64.1</td>
<td>26%</td>
<td>14%</td>
</tr>
<tr>
<td>2006</td>
<td>60.2</td>
<td>23%</td>
<td>16%</td>
</tr>
</tbody>
</table>

- What does this tell you?
- Is it complete? Do you need more?
**Process or Satisfaction Data**

**Surveys**

- Methods to gain understanding from a survey
  - Assign a point value and average the responses with point value
  - Look at % that are satisfied or agree vs. the % that are dissatisfied or disagree
  - Focus on results for a particular variable or population

- Descriptive Statistics – focuses on collecting, summarizing, and presenting a set of data
  - Mean: The balance point in a set of data that is calculated by summing the observed numerical values in a set of data and then dividing by the number of values involved. (average)
  - Median: The middle value in a set of data that has been ordered from lowest to highest value.
  - Mode: The value in a set of data that appears most frequently
Satisfaction/Need: GE & Univ. Req

How greatly have you NEEDED advising for: Understanding what courses and requirements I need to complete for general education and university requirements for my degree.

<table>
<thead>
<tr>
<th>Responses (%)</th>
<th>Extremely Needed</th>
<th>Somewhat Needed</th>
<th>Somewhat Not Needed</th>
<th>Extremely Not Needed</th>
<th>Responses (#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses (%)</td>
<td>38.95</td>
<td>37.80</td>
<td>15.12</td>
<td>8.14</td>
<td>1,905</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Extremely Needed</th>
<th>Satisfied</th>
<th>Unsatisfied</th>
<th>Extremely Unsatisfied</th>
<th>Never Received Any Advice</th>
<th># Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Needed</td>
<td>27.90</td>
<td>48.11</td>
<td>15.36</td>
<td>5.93</td>
<td>2.70</td>
<td>742</td>
</tr>
<tr>
<td>Somewhat Needed</td>
<td>20.42</td>
<td>60.56</td>
<td>10.42</td>
<td>1.67</td>
<td>6.94</td>
<td>720</td>
</tr>
<tr>
<td>Somewhat Not Needed</td>
<td>15.97</td>
<td>62.85</td>
<td>5.56</td>
<td>1.39</td>
<td>14.24</td>
<td>288</td>
</tr>
<tr>
<td>Extremely Not Needed</td>
<td>13.55</td>
<td>34.84</td>
<td>1.29</td>
<td>1.94</td>
<td>48.39</td>
<td>155</td>
</tr>
<tr>
<td>Totals</td>
<td>22.10</td>
<td>53.96</td>
<td>10.87</td>
<td>3.31</td>
<td>9.76</td>
<td>1905</td>
</tr>
</tbody>
</table>

- Needed at 76%
- Satisfaction at 76%
- Unsatisfied at 14%
- Never Received Any Advice at 10%
Satisfaction/Need: Class Schedule

Need – 66%
Satisfaction at 70%
Unsatisfied at 15%
Never Received Any Advice at 14%
Process or Satisfaction Data

**Rubrics**

- One way to evaluate data from a rubric
  - The % of students that fit into each degree of performance for each criterion.

- Another way to evaluate data from a rubric
  - develop a score range to see what the numerical average is for each criterion point.
    - • Excellent = 4
    - • Competent = 3
    - • Needs More Info = 2
    - • Not Aware = 1
  - This could be tracked longitudinally to establish a benchmark
Rubric – Withdrawal (732)
Completed by advisor after appointment

What are the % of students in each degree of performance for the first criterion – explaining withdrawal?

What is the mean (average) degree of performance on students communicate withdraw deadline?

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Degrees of Performance</th>
<th>Excellent</th>
<th>Competent</th>
<th>Needs More Info</th>
<th>Not Aware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student explains what a withdraw will do to academic record.</td>
<td></td>
<td>32 students</td>
<td>100 students</td>
<td>250 students</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4%</td>
<td>14%</td>
<td>34%</td>
<td>49%</td>
</tr>
<tr>
<td>Student communicates withdraw deadline.</td>
<td></td>
<td>320</td>
<td>250</td>
<td>70</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>Average is 3.09 on 4.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student explains how to withdraw from a course.</td>
<td></td>
<td>300</td>
<td>210</td>
<td>82</td>
<td>140</td>
</tr>
<tr>
<td>Student explains how to withdraw if the deadline is missed. (Late withdrawal policy.)</td>
<td></td>
<td>17</td>
<td>60</td>
<td>37</td>
<td>618</td>
</tr>
</tbody>
</table>
• “We have good advisors in X dept. They are very good at sending out reminders about class registration, tuition, etc. . . . We can drop in and get help . . . That easier than having an appt.

• “They aren’t helpful in determining what I could handle, maybe taking 3000 level classes this semester is a little much or change it around. And no one suggested I should get tutoring.”

• “She helps me a lot. I had transfer credit from Germany, and that was difficult because no one seemed to really know what they were doing, but she constantly followed up on things for me and got me the credits I needed. I truly appreciate her help.”

• “I went to the advisor to ask questions about studying abroad. She suggested that I not do that because I would delay my graduation.”

What does this tell you?

Is it complete? Do you need more?
Reviewing Data - Who

- Who will be involved in review?
  - Committee
  - Advisors
  - Campus Partners
  - Students
Reviewing Data – How Presented

- How will data be presented to the review team?
  - Quantitative (numbers) by measurement tool
    - Survey, Rubric, Institutional Data
  - Qualitative (words) by measurement tool
    - Focus Group, Open-ended question on Survey
  - Handouts, PowerPoint slides
Reviewing Data – Reference Points

- Longitudinal Data – Trend lines
  - % of students who . . .

- Benchmark against peers
  - Within institution or system
  - Nationally based on institutional type or advising model

- Benchmark against peers in national tools
  - Compare data to anonymous peers
## Example of Trend

### University College Prescriptive Advising Survey
**Results 2003-04 through 2005-06**
**Date:** June 26, 2006 - DRAFT

<table>
<thead>
<tr>
<th>Question</th>
<th>2003-04</th>
<th>2004-05</th>
<th>2005-06</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1016 (included</td>
<td>683 (all</td>
<td>748 (all</td>
</tr>
<tr>
<td></td>
<td>walk-in)</td>
<td>appts.)</td>
<td>appts.)</td>
</tr>
<tr>
<td>Generate and interpret a DARS?</td>
<td>83% (gen)</td>
<td>82%</td>
<td>85.4% (both)</td>
</tr>
<tr>
<td></td>
<td>84 (read)</td>
<td>81%</td>
<td></td>
</tr>
<tr>
<td>Build a class schedule?</td>
<td>81%</td>
<td>89.7%</td>
<td>94.7%</td>
</tr>
<tr>
<td>Register using the CIS page?</td>
<td>92.6%</td>
<td>89%</td>
<td>92%</td>
</tr>
<tr>
<td>How to find registration time on CIS?</td>
<td>84.1%</td>
<td>83.3%</td>
<td>87.5%</td>
</tr>
<tr>
<td>Understood the GE requirements?</td>
<td>99%</td>
<td>95.9%</td>
<td>98.1%</td>
</tr>
<tr>
<td>Understood the Bachelor degree requirements?</td>
<td>92%</td>
<td>87.9%</td>
<td>90.4%</td>
</tr>
<tr>
<td>Understood the withdrawal policy?</td>
<td>76.1%</td>
<td>74.7%</td>
<td>79.4%</td>
</tr>
<tr>
<td>Understood the CR/NC policy?</td>
<td>68%</td>
<td>63.2%</td>
<td>66.1%</td>
</tr>
<tr>
<td>Understood the probation policy?</td>
<td>N.A.</td>
<td>94.2%</td>
<td>95.2%</td>
</tr>
<tr>
<td>Major declaration policy?</td>
<td>72% (fall)</td>
<td>72.6%</td>
<td>75%</td>
</tr>
<tr>
<td>Received a major sheet?</td>
<td>56% (fall)</td>
<td>78.6%</td>
<td>70.7%</td>
</tr>
<tr>
<td>Thought the major sheet was helpful in understanding requirements for the major?</td>
<td>70.9%</td>
<td>84.2%</td>
<td>84.2%</td>
</tr>
</tbody>
</table>
Reporting Results - Who

• Administration: President, Provost, various committees
  – via annual report, strategic plan, white paper, Web sites, etc.
• Faculty: all faculty, curricular committees, faculty advisors
  – via performance reviews, annual reports, strategic plans, Web sites, etc.
• Students: all students, student advisees, student senate, student groups
  – via newsletters, annual reports, Web sites, etc.
• Budgeting entities
  – via annual reports, budget requests, Web sites, etc.
• Accreditors
  – via self-studies, accreditation reports, Web sites, etc.
Analysis Tools

- SPSS or SAS to “crunch the numbers”
- Nudist or Atlas TI to look for patterns in qualitative data
- Tools for data collection provides analysis (for example, Student Voice)
Analysis of DATA

- Brainstorm
  - What are these data informing?
  - What are these data suggesting about practice?
  - What are these data suggesting about policy?

- Be Creative and True to these Data

- What is missing for future assessment processes?
Tool to Organize – 4 Quadrant Grid

*Value to X axis
*Value to Y axis
*Where do your activities fall?
## Example of 4 Quadrant Grid

**An effective way of communicating**

### Implementation Time: 6 months or more

- Develop ways to be more purposeful in explaining various parts of the degree for educational connections and purposes to be apparent. (Less checklist orientation)
- Make sure that websites are up to date
- Collaboration between UAAC and ASUU to develop organized ways to outreach to students to increase understanding about advising (myths, DARS)

### Resources: Few

- Share results with campus community
- Section in Undergraduate Bulletin to clarify role of advisor, when to see advisor, referrals
- Share comments from students with colleges
- Develop a college level sort to allow colleges to identify adjustments to advising in their areas

### Implementation Time: Less than 6 months

- The image of advising - PR campaign to inform students what advisors do and share positive stories.

### Resources: Many

- Campus-wide Advising Conference (Annual Event)
Reporting Results – How?

- PowerPoint Presentation
- Flyers
- Posters
- In future requests for assessment
- FACEBOOK, TWITTER, Website
Let’s Practice

- You will be given a problem set
  - SLO, institutional type, basic demographics, survey results, rubrics results, student comments, & institutional data
- Review the problem set with your team members
- Answer:
  - What do you know about student learning and satisfaction?
  - What other data would inform your question?
  - What tools or resources would you develop to collect additional data?
  - What institutional or national tools would you request?
  - Based on these data, are there any activities in advising that you would consider changing in the short-term?
- Make a list of possible enhancements & changes
- What is missing for future assessment processes?
- Be Creative and True to these Data
At the end of the day, assessment of academic advising is all about…

- developing consensus around collective expectations about student learning that should occur in advising
- gathering evidence in order to understand student learning resulting from academic advising
- using this evidence to support improvements in academic advising that will contribute to improvements in learning
Tools for Change - Theories

- John Kotter’s 8 Stages of Change
- Taylor Cox’s Change Model
Stage 1: Establishing A Sense of Urgency

*Help others see the need for change and the importance of acting immediately*

- Examining the market and competitive realities
- Identifying and discussing crises, potential crises, or major opportunities

  **In higher education . . .**

- Accreditation
- State Legislature
- Strategic Plan
- Resource Allocation
Stage 2: Creating the Guiding Coalition

Making sure there is a powerful group guiding the change – one with leadership skills, credibility, effective communication, authority, analytical skills and a sense of urgency.

- Putting together a group with enough power to lead the change
- Getting the group to work together like a team

In higher education . . .

- Advising organizations
- Campus partners
- Senior administration
Stage 3: Developing A Vision and Strategy

*Clarifying how the future will be different from the past, and how you can make that future a reality.*

- Creating a vision to help direct the change effort
- Developing strategies for achieving that vision

In higher education . . .

- Strategic plans
- Collaborations
- Leadership
Stage 4: Communicating the Change Vision

Making sure as many individuals as possible understand and accept the vision and the strategy.

- Using every vehicle possible to constantly communicate the new vision and strategies
- Having the guiding coalition role model the behavior expected of employees

In higher education . . .

- People like Academic Senate or Advisor Committee
- Initiate assessment plan and report to many
Stage 5: Empowering Broad-Based Action

Removing as many barriers as possible so that those who want to make the vision a reality can do so.

- Getting rid of obstacles
- Changing systems or structures that undermine the change vision
- Encouraging risk taking and nontraditional ideas, activities, and actions

In higher education . . .

- Resources
- Information and initial data – something is happening so join the movement
- Keep communicating
Stage 6: Generating Short Term Wins

Creating some visible, unambiguous successes as soon as possible.

- Planning for visible improvements in performance, or “wins”
- Creating those wins
- Visibly recognizing and rewarding people who made the wins possible

In higher education . . .

- DATA/Action for institutional reports
- Action now
- Acknowledge those involved
Stage 7: Consolidating Gains and Producing More Change

*Pressing harder and faster after the first successes*

- Using increased credibility to change all systems, structures and policies that don’t fit together and don’t fit the transformation vision
- Hiring, promoting, and developing people who can implement the change vision
- Reinvigorating the process with new projects, themes, and change agents

**In higher education . . .**

- Visual change (new publications and activities)
- Professional Development for staff & faculty (national speaker)
- Advertising what is next (survey, rubric, common vision)
Stage 8: Anchoring
New Approaches in the Culture

*Holding on to the new ways of behaving to make sure they succeed, until they become strong enough to replace old traditions.*

- Creating better performance through customer- and productivity-oriented behavior, more and better leadership,
- Articulating the connections between new behaviors and organizational success
- Developing means to ensure leadership development succession

**In higher education . . .**
- Connecting advising to institutional mission (advising is teaching)
- Communicating assessment at organizational orientations
- Connecting institutional improvements to advising through assessment tools/data
The Assessment Cycle - Continues

What has changed that you want to monitor?

What data did you not have in the last cycle? Can you gather it this time?

Timeline
Outcomes from this program

<table>
<thead>
<tr>
<th>AM – Tools for Data Gathering</th>
<th>PM – Data for Analysis &amp; Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build advising community through assessment process</td>
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<td>Understand the advising systems at various institutions</td>
<td>Understand the advising systems at various institutions</td>
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<td>Understand student populations throughout system</td>
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</tr>
<tr>
<td>Understand the elements of assessment</td>
<td>Define data-driven decision-making</td>
</tr>
<tr>
<td>Understand the cycle of assessment</td>
<td>Define assessment as multiple measures</td>
</tr>
<tr>
<td>Understand Programmatic Learning Objectives and Student Learning Outcomes</td>
<td>Understand tools for data analysis</td>
</tr>
<tr>
<td>Understand and develop a survey</td>
<td>Communicate strategies to report results of assessment to stakeholders</td>
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<td>Understand and develop a rubric</td>
<td>Learn tools to organize and prioritize activities based on assessment data</td>
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<td>Understand a focus group</td>
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<td>Network with HI system colleagues</td>
<td>Appreciate that assessment is continuous (just like learning)</td>
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Assessment Cycle

- Learn, Grow, and Change to Impact Student Learning & Success
- Involve everyone – Team Assessment
  - Your staff and students
  - Don’t forget to share and discuss with your colleagues that are here today.
- Be open – never fear exchanging lenses
- Be aware of your resources
- Read
- Utilize the work of others (with permission)
- Don’t let perfection stop your process!
2010 Conference Committee

- Kenoa Delacruz – Hawai‘i CC
- Willow Aureala – Hawai‘i CC
- Erica Balbag-Gerard – Honolulu CC
- Gemma Williams – Kapi‘olani CC
- Candy Hochstein – Leeward CC
- Crystal Alberto – Maui CC
- Patti Chong – Windward CC
- Lokelani Kenolio – Windward CC
- Jodilyn Kunimoto – UH Hilo
- Maile Sing – UH Hilo
- Ruth Bingham – UH Manoa
- Lisa Wong – UH Manoa
- Joanne Itano – UH System
- Suzi Johnston – UH System
Assessment Gifts

- Today – the opportunity to work collectively to impact student success in Hawai’i
- The name of a colleague not at your institution who will be your assessment buddy
- An assessment survival pack
Mahalo!

- Questions
- Contact Information
  - Sharon A. Aiken-Wisniewski, PHD
  - E-mail: saiken@uc.utah.edu
  - Telephone: 801/581-7787

ENJOY YOUR ASSESSMENT PROCESS!