How to Increase Data Democracy and Develop a Culture of Inquiry within Faculty and Staff

Redwood City, CA
History

Previously data requests were submitted to the research office as part of annual program review.

We'll grow old waiting.

— Gabriel Garcia Marquez —
Development of Data Dashboard

- ARGOS reporting system
- District IT contracted Ellucian to design Data Dashboard System
- A consultant supports modifications and maintenance of the system
- System is continuously updated and fine-tuned based on feedback from users.
Training

• Controlled by the Office of Planning, Research and Institutional Effectiveness (PRIE office)

• Two levels of access – most common is without student ID numbers, more restrictive includes student ID numbers.

• To use the Dashboard, all persons are required to have received training
Training

• Trainings have occurred during Flex days, division meetings, cabinet meetings, inquiry project meetings, and professional development events. To-date, about 90 faculty, staff and administrators have been trained in the use of the Data Dashboard.

• User manual, training handouts and examples of research questions can be found on the Canada College PRIE Data Dashboard website.
Information available from the Dashboard

• Enrollment patterns
• Interactive enrollment real time
• Course retention and success
• Cohort progression
• Degrees and certificates awarded
• Demographic information for students – gender and ethnicity
• Persistence
• Program participation (Banner tags)
ACES Inquiry groups

ACES = Academic Committee for Equity and Success: merger of Basic Skills and Student Equity committee

- Equity Funds prompted:
  - new activity ($$)
  - Renewed focus on data-driven practice
  - Collaboration between Instruction, Student Services
  - Emphasis on design, assessment, leadership

- Data dashboard empowered this process
Inquiry as the Engine: ACES Professional Learning

Planning Process: Program Plans College Plans

Structured Practitioner Inquiry

Institution Learns, Student Success Improves, Outcomes move toward Equity

Exchange Between Practitioners and College, District, The Field, Society

https://youtu.be/-T8ZZMtKr8Y

Equity and Success Projects Prezi
Improving math success for STEM majors

Trig (MATH 130) → Precalculus (MATH 222) → Calculus (MATH 251)

Fast Track to Calculus (MATH 225) → Calculus (MATH 251)

Use Dashboard to compare success in these two pathways

1. Identify cohorts – Spring ‘13 and ’14
2. Overall Comparison - Track progress of all students through Calculus (Math 251)
3. Equity Lens - examine data by ethnicity and/or gender
Identify Cohorts – Course Progression
Separate Cohorts – Choose a section

Extract the list of students in that section

Right-click on the list, choose Copy All
Comparison – Extract List of Students

Paste student info into an Excel Spreadsheet

Do this process for each section
• Copy the list of enrolled students
• Copy the list of those students who successfully completed Calculus
• Analyze student data in Excel
Equity – Analyze by subgroups

Do this process for each cohort:

• Tally grade distribution by ethnicity
• Use Excel Charts to understand the data
Equity – Analyze by subgroups

Math 130 Grades - White Students

Try pie charts for largest groups

Compare within a cohort

In Math 130 -- How do grades of White students compare to grades of Hispanic students?
Examples of use of the Data Dashboard – A2B

The A2B (Associate’s to Bachelors) program has utilized Data Dashboard to:

• Generate data for programming purposes in a timely manner
• Provide time sensitive intervention to students (connections to counselors, tutors, and other support services)
Examples of use of the Data Dashboard – A2B (cont)

- Identify students’ enrollment status to guide our outreach and follow-up efforts
- Evaluate data to further tailor and improve our student support services
Examples of use of the Data Dashboard – Proactive registration

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<tr>
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<th>Spring 2015</th>
<th>Fall 2015</th>
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<tbody>
<tr>
<td>Participated in the Proactive Registration event</td>
<td>129</td>
<td>372</td>
</tr>
<tr>
<td>Registered for Summer 2015</td>
<td>42 %</td>
<td>99%</td>
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<tr>
<td>Registered for Summer &amp; Fall 2015</td>
<td>32 %</td>
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</tr>
<tr>
<td>Registered for Fall</td>
<td>65%</td>
<td></td>
</tr>
<tr>
<td>Not Registered</td>
<td>24 %</td>
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</tr>
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</table>
Disaggregated Data

Proactive Registration Fall 2015
Looking ahead

• Continue to get more faculty and staff trained and using the Data Dashboard
• Encourage individual faculty and staff using the Dashboard to examine equity issues in their classes and programs
• Improve performance of the Dashboard
• Automatic reporting