Data: A Four-Letter Word for Middle Leadership

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Rachel Antrobus
Rebecca Wong

Strengthening Student Success Conference
October 2019
What is Leading from the Middle?

Leadership development through project-based learning for transformative change.
Creating a Data-Informed Culture in Community Colleges
A New Model for Educators

Brad C. Phillips and Jordan E. Horowitz

Leading From the Middle
theRPgroup
An Introduction to Data Culture and Literacy
If Data was Water...
Reflection

• What does your college do well related to data/evidence?
• How do you think the culture can be enhanced?
What are the Essential Elements of a Robust Data Culture?

1. Allocation of funding necessary to support data and inquiry
2. Systematic use data within decision-making structures/processes
3. Data is readily available
4. Active professional development opportunities
Why use Evidence?

- Increase access to classes
- Enhance students’ engagement with the campus
- Increase success in barrier courses
- Completion of milestones
- Completion of educational goal
- Equity across outcomes
Data Literacy and Action Framework
(adapted from Phillips & Horowitz, 2017)
Getting Started: Inquiry

1. Initial Inquiry
   Operational definition

2. Consider the specificity of the question
   For the entire college? Specific instructional program? Instruction method? Transfer-level? Academic year or term?

3. Location of Information
   Is the information **publicly available**?
Activity 1 (Handout) – Using Data Mart

1. Complete steps 1 & 2
   » Remember to uncheck all Course Status options and update the dashboard
   » Export to Excel

2. Examine output
   » What are the findings telling us?
   » Is this all we need to make a decision about how to better support students?
   » What is missing?

3. Reconsider initial inquiry
   » Consider the specificity of the initial inquiry
   » Data disaggregation
Activity 2 (Handout) – Using **Data Mart**

1. Continue with the Success & Retention dashboard
   » Limit output to just non-DE courses
   » Remember to uncheck all Course Status options and update the dashboard
   » Select Ethnicity under Demographic Options
   » Export to Excel

2. Examine output
   » What are the findings telling us? What is contributing to retention/success findings? Contributing to lack thereof?
   » Is this all we need to make a decision about how to better support students?
   » What is missing?

3. What constitutes a meaningful difference?
   » Overview of Disproportionate Impact
Introduction to Disproportionate Impact (DI): PPG

• DI: When one subgroup of students attains an outcome at a rate that is substantially lower than a benchmark rate
  – Example: Differences between subgroups groups may suggest that one group has greater access to support services than others

<table>
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<tr>
<th>Ethnic Group</th>
<th>Cohort Outcome</th>
<th>Outcome Count</th>
<th>Success Rate (Per Group)</th>
<th>Success Rate (Overall)</th>
<th>Point Gap Index</th>
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Source: Fullerton College’s 2014-2015 Student Equity Plan
The Disproportionate Impact (DI) Calculator

Three Method DI Calculator

Please enter the cohort and outcome counts into the Yellow Cells.

Percentage Point Gap Index (PPG): The Margin of Error value (MOE) is used to determine the presence of DI using the Point Gap Method. Values lower than the corresponding MOE are reflective of disproportionate impact.

Note (PPG): For cohorts of 800 or more, a PPG value of -3.00 or lower is also indicative of disproportionate impact. Cohort counts equal to or greater than 800 will be in bold.

80% Index: Values less than 80% are generally considered to reflect disproportionate impact (i.e., pink highlighted cells).

Proportionality Index (PI): Values less than 0.85 are generally considered to reflect disproportionate impact (i.e., pink highlighted cells).

Minimum Equity Number: The minimum equity values reflect the minimum number of students that would need to successfully complete for the group to no longer be identified as disproportionately impacted.

Maximum Equity Number: The maximum equity values reflect the total number of students that would need to successfully complete for the group’s completion rate to be equal to that of all groups (i.e.,

<table>
<thead>
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<th>Cohort Name</th>
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Making Data Actionable

Triangulation

Disaggregation
Triangulation

Quantitative Data

Qualitative Data

Literature
We started with F17 Data from the DI tool

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<thead>
<tr>
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<td>0.21</td>
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Mean SR: 70.69

Reference Group SR (Highest SR): 80.00
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**Mean SR:**

- **70.59**

**Reference Group SR (Highest SR):**

- **80.00**
Then what?

- We could **disaggregate** by program/course, or **disaggregate** by term to identify potential patterns
- We could **triangulate** with other data sets (e.g., Launchboard, local data)
- We could **triangulate** with qualitative data (e.g., RP Group’s Student Voice)
- We could **triangulate** with **literature** to better understand the matter
- We could look for “brightspots” in the data of who is doing well and try to better understand those groups (case study approach)
Identifying Interventions

• Are there existing interventions to address the problem/focus area?
  
  – To what extent are they founded in empirical work?
    • Existing literature
    • Viable case studies
  
  – What is the specificity of the intervention(s)?
    • Can it be adapted to meet local needs?
What does the Literature say about it?

• Let’s Review Some Literature – **Activity 3**
• **Repository of Interventions**
• Read/Review an article and then answer…

• What are 2-3 key takeaways from the article that could help inform your work?
Implementing Interventions: RASIC Matrix

- **Introduction to intervention implementation**: Do the expected implementers have the skills, resources, and supports they need?

### RASIC Matrix (adapted from Phillips & Horowitz, 2017)

<table>
<thead>
<tr>
<th>Activities</th>
<th>Person/Group A</th>
<th>Person/Group B</th>
<th>Person/Group C</th>
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*Note. R = Responsible; A = Approves; S = Supports; I = Informed; C = Consulted*
Example Implementation Approach: CHC’s Equity Plan

- **Goal (Focus Area):** Increase completion of Transfer-level math/English among disproportionately impacted groups
- **Objective 1:** Create clear pathways to promote teaching and success
  - Activity 1: Re-number math courses
  - Activity 2: Explore scheduling patterns to promote acceleration
- **Objective 2:** Create a research agenda to analyze/understand disproportionate impact
  - Activity 1: Conduct class surveys to understand the link between course content and student outcomes
Implementing Interventions: RASIC Matrix

- Introduction to intervention implementation: Do the expected implementers have the skills, resources, and supports they need?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Chairs</th>
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<th>Pres’s Cabinet</th>
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Activity 4
Identifying & Implementing an Intervention

• 1) Identify an intervention. What evidence do you have to substantiate your approach?
• 2) Develop activities that are required to implement the intervention.
• 3) Complete a RASIC Matrix to help determine if you have the skills, resources, and supports needed.
What is Data Coaching?
What is a Data Coach?

An education leader who collaborates with others in cultivating a culture in which data are used continuously, collaboratively, and effectively to improve teaching and learning (RP Group, 2019)

Defining Characteristics:

- Helps others make sense of data and develop evidence-based strategies to effect change
- Leads collaborative, collegial, and courageous data-informed discussions
- Remains respectful and understanding that levels of data literacy vary among stakeholders
How Can Coaching Benefit Your College?

Supports Guided Pathways and Equity
Helps to collect and visualize data that characterize the core barriers for student success
Collaboratively uses student data to design and implement specific aspects of Guided Pathways reform
Helps stakeholders disaggregate data and identify potential equity gaps
How Can Coaching Benefit Your College

Guided Pathways and Equity
Facilitates challenging and sensitive dialogue about equity gaps
Helps stakeholders understand the individual and institutional beliefs and behaviors that contribute to inequitable outcomes
Supports the identification of specific actions stakeholders can take to strengthen equitable outcomes
What is a “coaching” question?

- Open-ended (don’t lead to a yes or a no response)
- Experience-based (ie. What do you see? What stands out to you?)
- Solicits creative thinking (ie. What do you think it going on here?)
- Encourages inquiry not rabbit holes (ie. How can we move past the methodology and talk about what we see?)
- Moves towards agreement and action (ie. What can we all agree on? What do we want to do next? What else do we need to know?)
Data Coaching in Action: Santa Monica College

**Purpose:** Broaden access to and use of student completion data across multiple college departments

**Compensation:** All coaches were given a stipend for their time ($1,000 each, with the possibility of an additional $500 for special presentations and projects).

**Activities:** Led coaching workshops, worked one-on-one with department chairs, delivered FLEX day presentations, and co-authored data coaching support resources with the Office of Institutional Research (OIR).
Data Coaching in Action: Santa Monica College

**Training**: LaunchBoard, SMC Tableau, and Chancellor’s Office Data Mart

Practiced addressing different coaching scenarios they might encounter when working with program participants

**Ongoing Support**: Coaches received a data coaching handbook and access to online coaching resources and data sources on the Canvas learning management system.

**Next Steps**: Guided Pathways emphasis (e.g., labor market and career information)
Would data coaching be welcomed at your college? Why/Why not?

How could you get data coaching started at your college?

For colleges using a data coaching approach, what have been the primary challenges to data coaching?
Congratulations! Now Put Your Evidence to Work!