Engaging Campus Stakeholders in Data Dialogue and Action

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Overview of Presentation

- College Readiness Initiative
- Framework used to develop the data summit
- Design of the different data summit activities
- Outcomes from the data summit
- Lessons Learned
• 15 years in higher education, mainly focused on institutional effectiveness
  – Accreditation, Strategic Planning, Assessment, and Institutional Research
• Doctorate of Education in Educational Leadership
• Experience at 4-year public, 2-year community college, and 4-year catholic, private institutions
Learning Outcomes

• As a result of attending this presentation, participants will be able to:
  – Identify the steps needed to plan a collaborative, engaging event focused on data dialogues.
  – Articulate how the four activities of the data meaning-making protocol help participants practice data literacy skills.
  – Utilize the four activities of the protocol to design their own data dialogue summit/workshop
Introduction to Creighton University
<table>
<thead>
<tr>
<th>Founded</th>
<th>1878</th>
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</thead>
<tbody>
<tr>
<td>Type</td>
<td>4-year, Private, Catholic, Jesuit; Healthcare Focused</td>
</tr>
<tr>
<td>Awards Offered</td>
<td>Bachelor’s degree, Master’s degree, Professional degrees, Doctoral degrees</td>
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<tr>
<td>Located</td>
<td>Omaha, NE</td>
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<td>Phoenix, AZ</td>
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<tr>
<td>Student Population</td>
<td>8,735 (4,481 undergraduate)</td>
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<tr>
<td>Student-to-faculty ratio</td>
<td>11 to 1</td>
</tr>
<tr>
<td>Average First-year Class</td>
<td>1,000 students</td>
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First-year Student Profile (Fall 2021)

- ACT Score: 26.4 (64% submitted)
- High School GPA: 3.84
- Top of class: 36% are in top tenth percentile of graduating class
- First-generation: 12.4%
- Students of Color: 26.4%
- Majors: Arts & Sciences (62%), Business Administration (27%), Nursing (12%)
• 80% of students attended high school via all online (29%) or hybrid (51%), but 50% preferred all face-to-face

Purpose: Consider the impact of the pandemic on matriculating, first-year undergraduate students and provide recommendations to support their transition for fall 2021.
Assessment Instruments
Selected/Developed

ISSAQ
Measures attitudes, strategies and mindsets towards success in college

QANS
Measures mathematical reasoning skills

College Readiness Qualitative Survey
Measures the impacts of Covid-19 and basic readiness for college.
ISSAQ Assessment

• A non-cognitive assessment, developed by Dr. Ross Markle with DIA.
• Focuses on challenges and strengths of students, at an individual and aggregate level.
• Each of the constructs are mapped to on-campus resources and a resource hub is available to the campus.
Quantitative Assessment for New Students (QANS)

- An adaptive, customizable, multiple-choice assessment instrument focused on applied quantitative skills developed by Matt Brown with Earlham College.
- Initiated by Chemistry Department
- Purpose to gauge student preparedness for chemistry curriculum (advising resource)
- Expanded to all incoming first-year students (Taskforce)
- Based on the results, sub-scores were identified for the purposes of placement.
- High validity scores in comparing ACT and QANS scores.
College Readiness Qualitative Survey

Purpose: Open-ended question survey to assess the awareness of our incoming students and the impact that the pandemic has had on their personal and academic life from the perspective of our students and their families.

Developed internally by Director of Student Leadership

Response Rate:
- Students (73%)
- Families (46%)
College Readiness Qualitative Survey - Questions

- In what ways do you feel COVID has impacted your personal life?
- In what ways do you feel COVID has impacted your academic preparation for college?
- What top three worries or fears do you have about your freshman year?
- Give examples of how Creighton can help you transition to class.
Next Steps

• Administer the assessments and collect data (May-June)
• Analyze
  – QANS – Chemistry Department
  – ISSAQ – DIA
  – Qualitative Survey – Office of Student Leadership
• Design and Organize Data Summit (end of June)
  – Developed by Director of Institutional Research
  – Collaborative
  – Shared meaning-making
  – Activities that build upon each other
  – Development of action/interventions
Framework for Workshop – Data Literacy

• In a study by Qlik in 2018 on data literacy skills:
  – 24% of decision-makers reported being fully confident in their data literacy skills.
  – 32% of senior leaders are viewed as being data literate
  – 78% of decision-makers wanted to improve their data literacy skills

• 2018 National AIR Offices Survey, indicated senior leaders and administrators have higher data literacy skills than faculty, staff, and students:
  – Senior Leaders (70%), Administration (70%), Faculty (41%), Staff (31%), Students (9%)

• We saw this as an opportunity to frame workshop around data literacy skills
Data Literacy Skills

Reading Data  Working with Data  Analyzing Data  Communicate with Data

Source: Morrow, 2021
Resources Considered

- NSSE/CCSSE Prediction Exercises
- CCSSE Data Narrative Exercise
- NILOA’s Evidence-based Storytelling
- The Data-Driven Dialogue
Activities Mapped to Data Literacy Skills

- Reading Data
- Analyzing Data

Making Predictions
- Analyzing the Data

Identifying the Facts
- Communicating with Data

Visualizing the Story
- Working with Data

Deductions / Action
- Working with Data
Data Summit Schedule

• Introductions/Overview of the Day (10 minutes)
• Explanations of the Data Tools and Review Data Meaning-Making Protocol (10 minutes)
• Activity 1: Predictions (25 minutes)
  – Qualitative Results (5 minutes)
  – ISSAQ Result (10 minutes)
  – Report Out (10 minutes)
• Data Presentation
  – QANS (10 minutes) – Chemistry Faculty
  – Qualitative Assessment (15 minutes) – Director of Student Leadership
  – ISSAQ (35 minutes) – DIA
Workshop Schedule

• Activity 2: Identifying the Facts (100 minutes)
  – Qualitative Assessment (40 minutes)
    • Identifying the Facts (20 minutes); Report Out (20 minutes)
  – ISSAQ (60 minutes)
    • Identifying the Facts (40 minutes); Report Out (20 minutes)

• Activity 3: Visualizing our Student Story (45 minutes)
  – Develop Story/Visualization (30 minutes)
  – Present stories/visualizations (15 minutes)

• Activity 4: Deductions/Recommendations (50 minutes)
  – Deductions/Recommendations (35 minutes)
  – Report Out (15 minutes)

• Next Steps/Closing
Next Steps for Data Summit Planning

• Reviewed/Approved the schedule/protocol for the Summit by the College Readiness Taskforce
• Determined who should be involved
• The Data Summit would be facilitated by the Vice President of Student Life and Director of Institutional Research
• Discussed makeup of the groups
Design of Summit Activities
Predictions/Influences

Data literacy skill – Reading

Benefits of making predictions/identifying influences

• Learning pedagogical strategy (Brod, 2021)
• Identify surface assumptions before seeing the data (Wellman & Lipton, 2004)
• Identify biases groups may hold; similar to qualitative research (Creswell & Poth, 2018)
Predictions/Influences

- Provided with list of constructs/questions
- Each team worked together on predictions/influences
- They were given statement stems to help guide conversations
- Asked to identify why and biases associated with predictions
- 5 minutes: Qualitative assessment; 10 minutes: ISSAQ; Report Out
- Participants reminded to keep predictions in mind
Data Presented

- ISSAQ – mean scores for 12 constructs
- Qualitative Survey – 6 Themes for both parents and students
- QANS – breakout of subscores
Identifying the facts

- Data Literacy Skill – Analyzing data
- Individuals are asked to make observations of the data
- This focuses on the “what” of the data (Wellman & Lipton, 2004).
- Specific words are off-limits
- Participants are given statement stems again to guide conversations
- We focused on one assessment at a time and then reported out the top observations.
Design of Summit Activities – Visualizing the Story

Data Literacy Skills – Working with data and Communicating data

Opportunity to supply context, connections, insight, and interpretations

Purpose: Enhance understanding and provide experience to interact with and make sense of the data

The story and visualization is meant to explain the data and why it matters.
Visualizing the Story

Write narratives and develop visualization

Focused on type of story, the plot, the characters, the setting, and the conflict (NILOA, 2019)

Given complete freedom with their narrative and visualization

As an example of data visualizations, they were presented with “The Story of the Broad Street Pump”
The Jesuit League

- Introduction: Four Heroes
  + Declared Nursing Student
  + Student - Skilled at Juggling / Issaq
  + Calming Business Fellow / Tony Stark
  + Nursing Eye / Karen for Family and Children for the Future

- Rising Action / Catalyst
  + Massive Power Outages
  + Presence of a black hole

- Climax / Confront
  + Meteor
  + Heroes or split apart / learning that they are able to handle

- Resolution
  + Stay tuned
Deductions/Action

Data literacy skill – analyzing the data and working with the data

Deductions focused on explaining the “why”

Teams also identified interventions/ action focused on supporting our students
Action as a Result of Data Summit

Reconvened College Readiness Taskforce

Reviewed information/recommendations from Data Summit

Identified which recommendations we wanted to focus on

Developed an implementation plan, which was reviewed and approved by Provost
Action as a Result of Data Summit

• Implementation Plan
  – Increase Education
  – Enhance Campus Resources
  – Continue Analyzing Data and Future Data Collection
Lessons Learned

Participants really enjoyed design of the day

- One participant told us, “It was the most fun, boring activity she ever attended.”
- Another faculty wanted to use this as an activity in the classroom.

Have senior leadership support/buy-in

Provide templates with guiding questions/statement stems
Lessons Learned

- Identify a table facilitator in the planning phase
- Carefully select the data for the summit
- Keep groups small and with varying experiences
- Provide clear directions for each activity/phase
Lessons Learned

Student Perspective

Allow enough time for storytelling

Reorganized into five activities in the following order: predictions, identifying facts, deductions, data storytelling, action plans

Develop an implementation plan based on the actions identified in the summit
Q&A
References
