


Engaging Campus Stakeholders in Data Dialogue and Action

Kristin Buscher, Ed.D.

July 28, 2022

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

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- 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

Creighton

UNIVERSITY

Founded	1878
Type	4-year, Private, Catholic, Jesuit; Healthcare Focused
Awards Offered	Bachelor's degree, Master's degree, Professional degrees, Doctoral degrees
Located	Omaha, NE Phoenix, AZ
Student Population	8,735 (4,481 undergraduate)
Student-to-faculty ratio	11 to 1
Average First-year Class	1,000 students



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%)

College/Creighton Readiness



Challenge: National study on impact of covid (Maguire & Associates, 2021):

- 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.

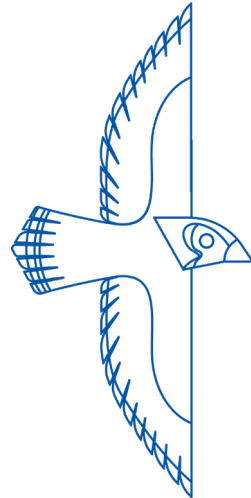
ISSAQ Assessment

- 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.

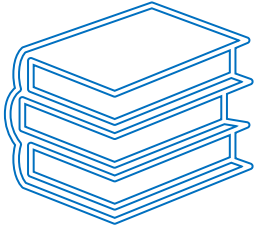
Next Steps

- 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

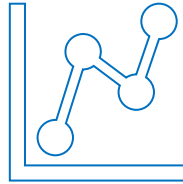
Framework for Workshop – Data Literacy

- 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

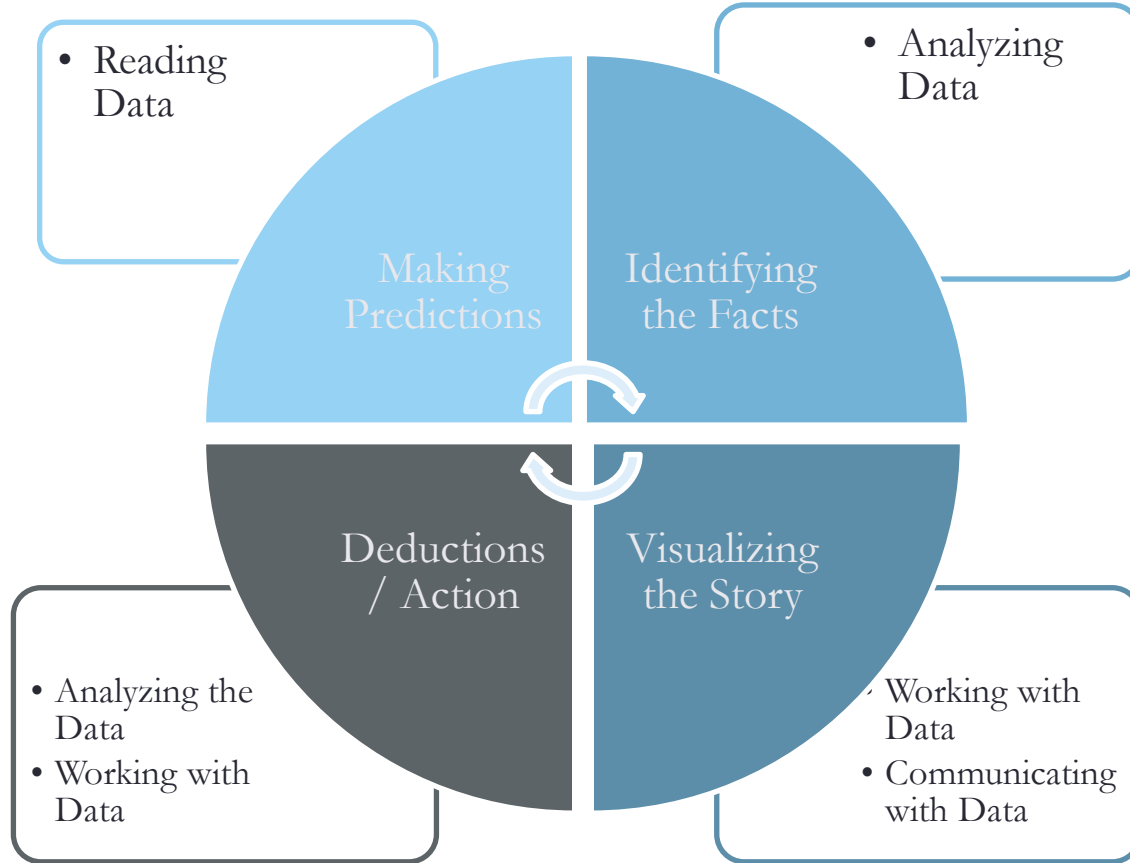


NILOA's Evidence-
based Storytelling



The Data-Driven
Dialogue

Activities Mapped to Data Literacy Skills



Data Summit Schedule

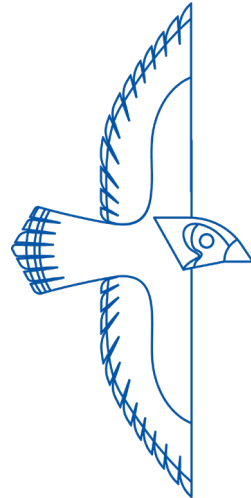
- Introductions/Overview of the Day (10 minutes)
- Explanations of the Data Tools and Review Data Meaning-Making Protocol (10 minutes)
- Activity 1: Predictions (25 minutes)
 - Qualitative Results (5 minutes)
 - ISSAQ Result (10 minutes)
 - Report Out (10 minutes)
- Data Presentation
 - QANS (10 minutes) – 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 the 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.**

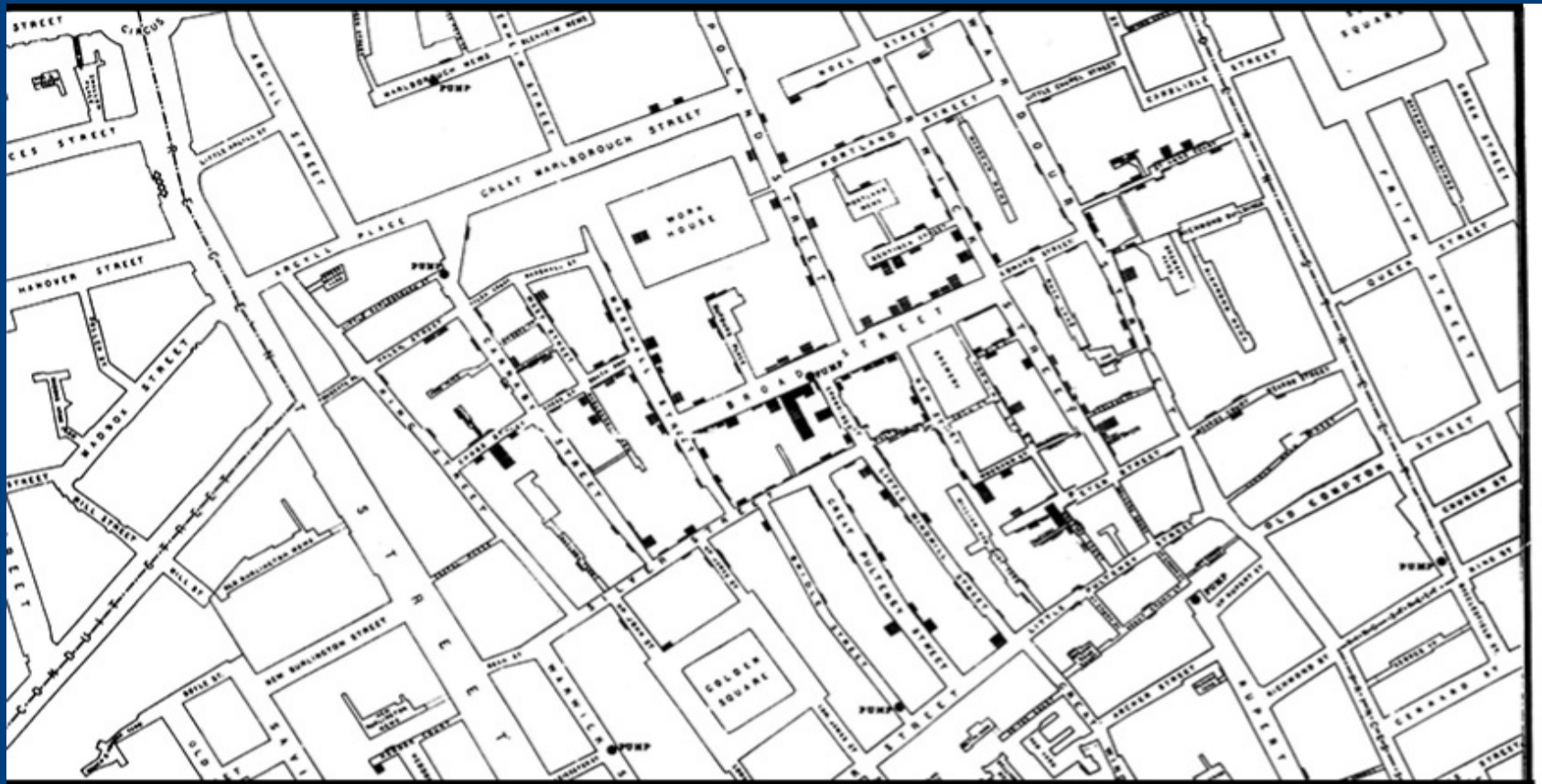
Visualizing the Story

Write narratives and develop visualization

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

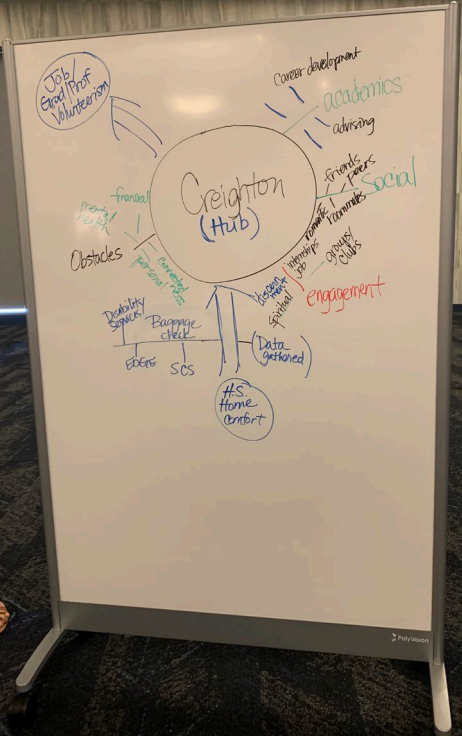
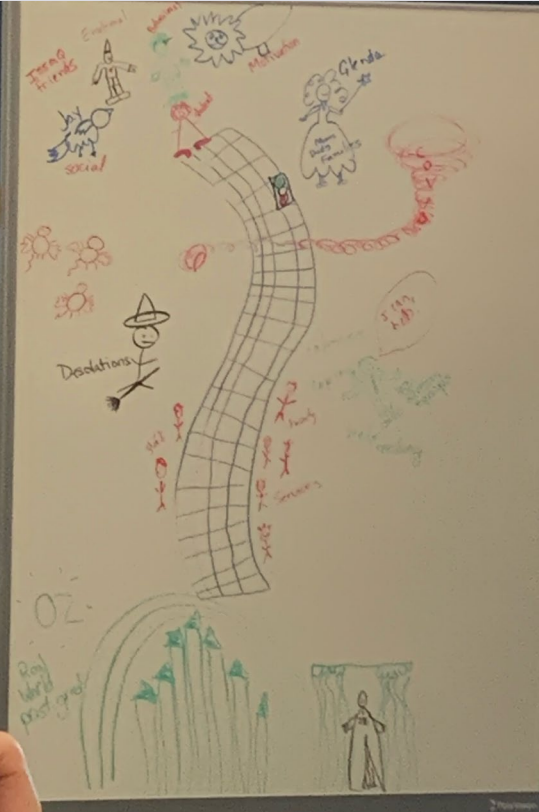
Given complete freedom with their narrative and visualization

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



The Jesu+ League

- Introduction - Four Heroes
 - + Dedicated Nursing Student
 - + Student - Skilled at Juggling / Issaq
 - + Calming Business Fellow
 - + Nurturing Eye / Cares for Family and concerned for the future
- Rising Actions / Catalyst
 - + Massive Power Outages
 - + Presence of a black hole
- Climax / Conflict
 - + Meteor
 - + Heroes are split apart / unsure 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

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