

IOWA

Division of Student Life

GUIDE FOR DATA STORYTELLING

Data storytelling combines data, visuals, and narrative to communicate insights effectively and drive action. It involves focusing on key insights, using visual and narrative communication, and persuading the audience to act based on the analysis. This guide is designed to help staff create stories that go beyond just reporting outcomes. The goal is to make stories engaging, relatable, and impactful, showing the value of the work and the difference it makes.

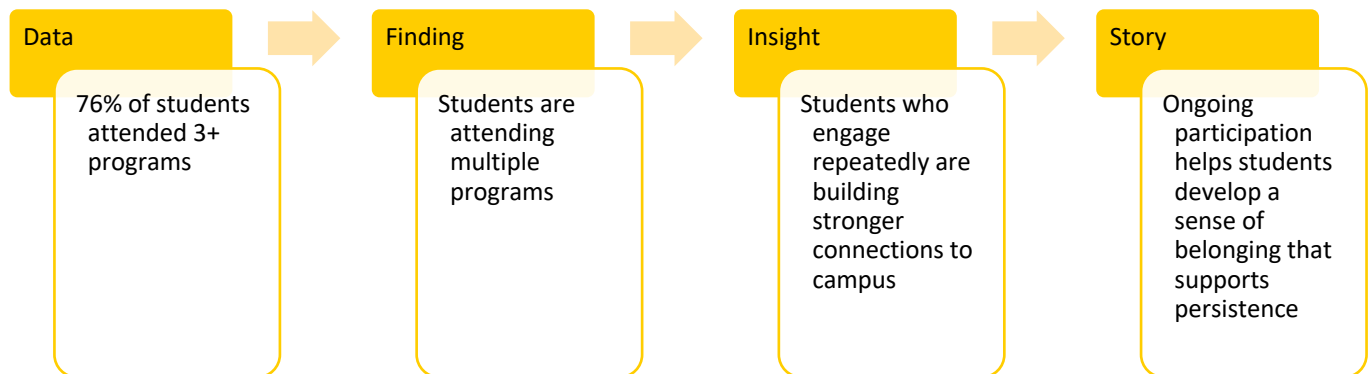
What is Storytelling & Why It Matters

Data storytelling is the process of transforming data into a meaningful message that helps an audience understand why the information matters. It goes beyond reporting facts by connecting data, context, and interpretation to reveal an insight and its significance.

A strong data story moves from data (what was observed), to a finding (what the data shows), to an insight (why it matters), and ultimately to a story (the broader meaning and potential impact). The goal is to help an audience understand the significance of the information and make informed decisions.

In Student Life, storytelling helps demonstrate student growth, program effectiveness, and institutional impact by combining quantitative evidence with student experiences, perspectives, and outcomes.

The progression from data to story can be illustrated as follows:



Selecting the Key Insight

Not every finding needs a story. Effective storytelling focuses on the insight that is most meaningful to the audience and most relevant to decision-making. When selecting a key insight, consider the following questions:

- What is surprising, important, or unexpected?
- What does the audience need to know or understand?
- What outcome, decision, or action could this information influence?
- How does the insight connect to organizational goals or student success?
- Why does this finding matter beyond the numbers?

Focus on the insight that best answers the question: "What is the most important thing my audience should remember?"

Types of Insights

Stories help make sense of different kinds of insights:

- **Complex insight:** A story can guide your audience to a more complete understanding of a complex problem into manageable chunks.
- **Controversial insight:** A story can embolden the audience to take responsibility for making a tough choice.

- **Costly insight:** A story can compel your audience to consider a high-cost solution by underscoring the high value.
- **Unpleasant insight:** A story can help convince the audience that even unwanted results are actionable.
- **Disruptive insight:** A story can encourage the audience to break with tradition if the upshot is valuable enough.
- **Unexpected insight:** A story can explain a prediction or intuition by offering an analysis and a solution.

The Storytelling Arc

1. **Setting & Hook:** Establish context for the situation, introduce people, share a striking fact or quote to capture the audience's attention
2. **Rising Insight:** Present supporting details such as challenges, opportunities, or discoveries backed by data that reveal deeper insights into the problem/opportunity
3. **Aha Moment:** Highlight the major discovery or central insight
4. **Solution, Impact, & Call to Action:** Outline potential options or recommendations that enrich the audience's knowledge and increase the likelihood of action

Elements of a Compelling Story

- **Foundation (Data):** organized, relevant insights tied to mission and goals
- **Scenery (Visuals):** images, charts, or graphics that build the scene
- **Structure (Narrative):** a message that flows logically and appeals to the audience

Data

Clean, organize, analyze, and interpret the data.

- Check personal biases
- Be curious and ask questions
- Know how your data connects to the mission, goals and strategies
- Understand where your data comes from

Visuals

Simplify the story, improve engagement, explain and enlighten the audience.

- Learn and apply visual perception principles
 - Use one chart per message
 - Highlight what matters
 - Remove unnecessary labels and clutter
 - Use accessible colors and sufficient contrast
 - Use direct titles that state the takeaway
 - Know your audience
 - Seek inspiration and ideas from others
 - Learn how to use your visualization tools effectively
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- Iterate and seek feedback on your design

Narrative

Convey the key points in a focused and structured way.

(hook → challenge → aha → solution → impact → call to action)

- Study narrative structure
- Identify your central point or main message
- Bring out the human aspects or elements
- Practice writing routinely to improve

Role of the Audience

Why Audience Matters in Data Storytelling

- Relevance: Tailor your message to your audience's needs and level of understanding.
- Engagement: Connect insights to what your audience cares about.
- Action: Build credibility and motivate informed decisions.

Types of Audiences in Higher Education

Administrators

- Focus on strategic implications and actionable insights
- Prefer executive summaries with clear connections to institutional goals

Faculty

- Value methodological rigor and research applications
- Appreciate insights that enhance teaching and research projects

Students

- Need simplified, accessible language and relatable examples
- Engage with interactive elements and personal relevance

External Stakeholders

- Respond to stories highlighting institutional impact and community benefits
- Value narratives that emphasize return on investment and alignment with their priorities

Key Elements of Audience-Centric Data Storytelling

Data

- Relevance: Choose metrics that resonate with your audience's interests and needs.
- Contextualization: Explain why the data matters and how it was collected.

Visuals

- Complexity: Adjust visualization complexity based on audience expertise.
- Engagement: Use interactive visualizations for diverse audiences.

Narration

- Emotional vs. Logical Appeal: Tailor your narrative to appeal to your audience's preferences (e.g., logical for experts, emotional for external stakeholders).
- Pacing and Focus: Vary your storytelling pace and focus based on audience priorities.

Common Storytelling Pitfalls

Many people know what good storytelling looks like but not what to avoid. Below are some common storytelling pitfalls:

- Leading with too much data
- Showing every chart you created
- Assuming the audience understands the context
- Focusing on activities instead of outcomes
- Burying the main insight
- Ending without a recommendation or next step

Quick Storytelling Checklist

- ✓ Identify your audience and their priorities
- ✓ Define the central message or insight
- ✓ Gather/organize data that supports the message
- ✓ Add human elements (quotes, anecdotes, student experiences)
- ✓ Select visuals that engage and promote understanding
- ✓ Follow the story arc (hook → challenge → aha → solution → impact → call to action)
- ✓ Review for clarity, logical flow, and tone
- ✓ Share, gather feedback, and revise
- ✓ Ask yourself the following question, "If my audience remembers only one thing from this story, what should it be?"

Example

Title: *Leading with Purpose: How Jordan Found His Voice Through Student Government*

Opening Hook: Jordan never imagined he'd be the one standing at the podium, addressing hundreds of students—but that moment changed everything.

The Challenge: Our 2024 student experience survey revealed that only 28% of students felt confident pursuing leadership roles.

The Response: The Emerging Leaders Institute was created to empower students like Jordan with the skills, mentorship, and confidence to lead. Through workshops, peer collaboration, and real-world projects, students learned to lead with authenticity.

The Impact: After completing the program, 92% of participants reported increased leadership confidence. Jordan ran for student government—and won. “This program helped me realize that leadership isn’t about being the loudest voice, but the most intentional one,” he said.

Broader Significance: Leadership development is at the heart of preparing students to shape their communities and careers. Programs like this ensure every student has the opportunity to lead.

Call to Action: With your support, we can expand leadership development opportunities to reach more students—helping them become the changemakers of tomorrow.