

# Student Success and Data Use



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INSTITUTE *for* EVIDENCE-BASED CHANGE

# Student Success and Data Use

Creating a culture of forward-thinking data use in educational institutions is imperative for students' success. The Institute for Evidence-Based Change (IEBC) has developed a series of workshops that demystify data use and empower faculty to identify patterns and insights in data that guide measurable improvements in student learning, persistence, and completion.

We know that there are many attitudes about data. When we do data use workshops, we often ask what kind of data user people think they are. Here are some of the responses we've received:

😱 I'm terrified – run Bambi run!

😞 I'm not a data person

😊 Wa-hoo, data yum

😐 I don't care – and neither should anybody else!

😊 I get the potential, but data doesn't help me do my job

Not to worry. IEBC brings together a keen understanding of human decision-making and the best in design thinking and data science to our work with partner institutions. The workshops are based on IEBC work with dozens of institutions across the country and all kinds of data users.

**Our current workshops include:**

1. **Data Use Demystified**
2. **The Psychology of Data Use**
3. **Types of Data and Their Uses**
4. **Analytics: Beyond Talking Smart**
5. **Human Judgment and Decision-Making**
6. **Organizational Habits Promoting Data Use**
7. **Continuous Improvement Continuously**
8. **Predictive Analytics: Leading and Lagging Indicators**
9. **Telling Your Story with Data**
10. **Winning Combinations: Qualitative and Quantitative Data and Their Uses**
11. **How to Integrate Data into a Meeting**

Each workshop helps participants gain confidence in data use, practice activities in groups and individually, and develop practical applications that apply to their unique work. Workshops can be combined and revised to match unique needs and time constraints.

Among the questions answered: How do you know what is the right information for your needs? Do you need a better way to introduce data?





## The Psychology of Data Use

### Who needs it:

Does the emphasis on data produce negative reactions in your institution? Do you need a better way to introduce and work through data? This workshop is for those who are either cynical about data, or are interested, but do not know how to act on the findings.

### What you get:

Developing a culture of data use requires an understanding of how human beings react to data. These reactions are expected because we have not learned the correct way to introduce and work through data. This workshop helps participants learn to present data in a way that enables data to be greeted as a helpful tool rather than viewed as a hammer to punish and blame. Using principles of psychology and neuroscience, participants will learn how to use data to generate a proactive discussion and work toward decision-making.

## Data Use Demystified

### Who needs it:

Data, data everywhere, but not a drop to help you improve? Administrators, faculty and staff are hungry for the right information at the right time to make the best decisions about policy and practice.

### What you get:

This workshop presents the IEBC Data Use Model and its unique components: Analytics, Human Judgment & Decision-Making, and Organizational Habits. By integrating the latest research in analytics, neuroscience, and organizational behavior, this session helps educational institutions organize around, and maximize their use of, information to inform policy and improve practice. Participants have the opportunity to reflect on their own institution's data use and misuse; and they engage in activities to immediately improve their organization's use of information.

## Types of Data and Their Uses

### Who needs it:

Do you know what type of data you have or that you need? What data are the strongest to make your point or what limitations are lurking behind the numbers? This workshop introduces an overview of different types of data that educators are expected to interpret or use to make decisions based on their role at their institutions.

### What you get:

Using non-technical language, this workshop highlights data that describes groups and those that show a relationship; data that shows students at one point in time (snapshot); and data that follows a group over time (cohort), including the strengths and limitations of each type. The workshop focuses on how to map your question of interest to relevant data, the usefulness of immediate data and historical data, and introduces some data presentation promising practices. Participants will gain a better understanding of what data means and which data is best to answer their specific questions.

## Analytics: Beyond Talking Smart



### Who needs it:

The Analytics: Beyond Talking Smart workshop is useful for any teacher, faculty member, staff, or administrator who wants to improve their ability to make the case with data to myriad educational stakeholders.

### What you get:

Analytics is one of the three essential components of the IEBC data use model—the other two being Human Judgment & Decision-Making and Organizational Habits. In this workshop, analytics is presented as the transformation of data into useful and useable information. Participants learn how to glean important information from large displays of data and how to present that information as actionable. The workshop also addresses the importance of simple presentation, issues of data quality, and how to capitalize on audience perspective. Participants engage in activities designed to improve their ability to make the case with data to myriad educational stakeholders.

## Human Judgment and Decision-Making

### Who needs it:

Human Judgment and Decision-Making is one of the three essential components of the IEBC data use model—the other two being Analytics and Organizational Habits. Data use terms such as “usable” and “actionable” are frequently bantered about, but data in and of itself is not usable or actionable. This workshop is for administrators, project directors, lead faculty and others who want to ensure that the information they are presenting is received in a way that leads to greater understanding and action.

### What you get:

This workshop helps participants learn how to maximize engagement of the receiver of data, leading them to making judgments that lead to decisions that are put in place. The workshop includes applications of psychology, neuroscience and behavioral economics to help the participants – educators, nonprofit organizations and others - learn better ways to engage the receiver of information.



## Organizational Habits Promoting Data Use

### Who needs it:

Does your institution manifest good habits and routines that lead to continuous improvement? Do you need to assess and update habits that better match the needs of students? A culture of continuous improvement requires reflection about how to break bad habits, and refine or grow good habits. This workshop is for educational leadership that has responsibility for coordinating faculty and staff work.

### What you get:

Organizational Habits is one of the three essential components of the IEBC data use model—the other two being Analytics and Human Judgment & Decision-Making.

This workshop introduces the concept of organizational habits and their impact on data use and decision-making in education. Organizations are made up of people and all people establish habits, good and bad, that affect how they live and learn. Organizations take on common habits established by the leadership, culture and individuals within an organization. Participants will understand the concept of organizational habits and begin reflecting upon those within their own institution, with a focus on habits related to using data. Participants will gain understanding about how to approach changing undesirable habits.



## Continuous Improvement Continuously



### Who needs it:

Do you know who is responsible for continuous improvement in your institution? This workshop is for institutions and institutional leaders that want to create a sustained effort to get better at getting better.

### What you get:

This workshop introduces the concept of the continuous program improvement cycle and its importance in creating a culture of inquiry and improvement, not just accountability, in our educational institutions. Continuous Improvement cycles focus on four stages of action and reflection. This workshop reviews promising practices related to these steps. Participants will identify existing efforts within their institutions and learn how to map gaps between what is intended and what is actually taking pace.



## Predictive Analytics: Leading and Lagging Indicators

### Who needs it:

Are faculty and administrators frustrated by poor graduation rate performance? Is the release of your institution's data frequently a barrage of bad news? This workshop is for institutions that want to be proactive and respond to data in time to make a difference for students.

### What you get:

This workshop introduces the concept of predictive analytics and identifies leading and lagging indicators and their use in education. While predictive analytics create algorithms that flag likely outcomes, "leading and lagging indicators" break data down even further to better understand the impact of educational programs, policies, and activities. This focus ensures the metrics used to track student progress and outcomes are relevant, measurable, and easily understood. Participants will engage in activities that help them identify and develop appropriate indicators for their work; consider the availability of data to support their identified indicators; and develop plans to disaggregate the data for key subpopulations of interest.

## Telling Your Story with Data

### Who needs it:

Is data presented to promote discussion about student progress and achievement difficult to understand, overly complicated, or, even worse, useless? You've heard "data tell a story," but you just can't see it. Those educators who want to strengthen their ability to tell a story with their data should attend this workshop.

### What you get:

The Telling your Story with Data workshop addresses how to identify the key stories to be gleaned from data and how to tell those stories effectively. Drawing upon IEBc's data use model—Integrating Analytics, Human Judgment & Decision-Making, and Organizational Habits—participants will learn how to turn data into information that is useful and useable. Learning more than the mere use of clever infographics, participants will practice identifying the story they want to tell and presenting it in ways, grounded in data, that ensure their message is understood and actionable.



## Winning Combinations: Qualitative and Quantitative Data



### Who needs it:

Do your stakeholders and decision makers overemphasize the numbers without understanding context? This workshop helps educators understand the rest of the story, revealed by combining quantitative and qualitative data. The workshop also introduces new tools for collecting qualitative information.

### What you get:

Quantitative data can tell us what happened, but we need qualitative data to understand why and how. In fact, some of the most compelling information can be conveyed in the voices of faculty, students, and others when combined with quantitative information. In this workshop, participants will learn the types of qualitative and quantitative data, when each is appropriate, and how they are best represented so the information is useful and useable.

## How to Integrate Data into a Meeting

### Who needs it:

Do you need to know how to successfully integrate data into meetings? If culture is to change around data use, data must be integrated in a deliberate, thoughtful way in day-to-day activities and meetings. This workshop is for all educators who chair meetings where data can and should be used to inform decision making.

### What you get:

Too often, faculty dread attending meetings where data is presented. This workshop teaches participants how to use data to support meeting agendas and how to ensure that meetings integrate data into decision making. The use of such techniques as priming, protocols for reviewing data, and group dynamics are discussed. Participants will develop their skills in conducting meetings that include data and learn how to establish the expectation that meetings will include data.





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IEBC is a nationally-recognized nonprofit organization helping education stakeholders use data and information to make informed decisions, improve practice and increase student success.

Learn more at [www.iebcnow.org](http://www.iebcnow.org)

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