A 360 View: Building Culturally Responsive Data Literacy in Teacher Candidates

GACTE Fall 2022

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Branch Alliance for Educator Diversity

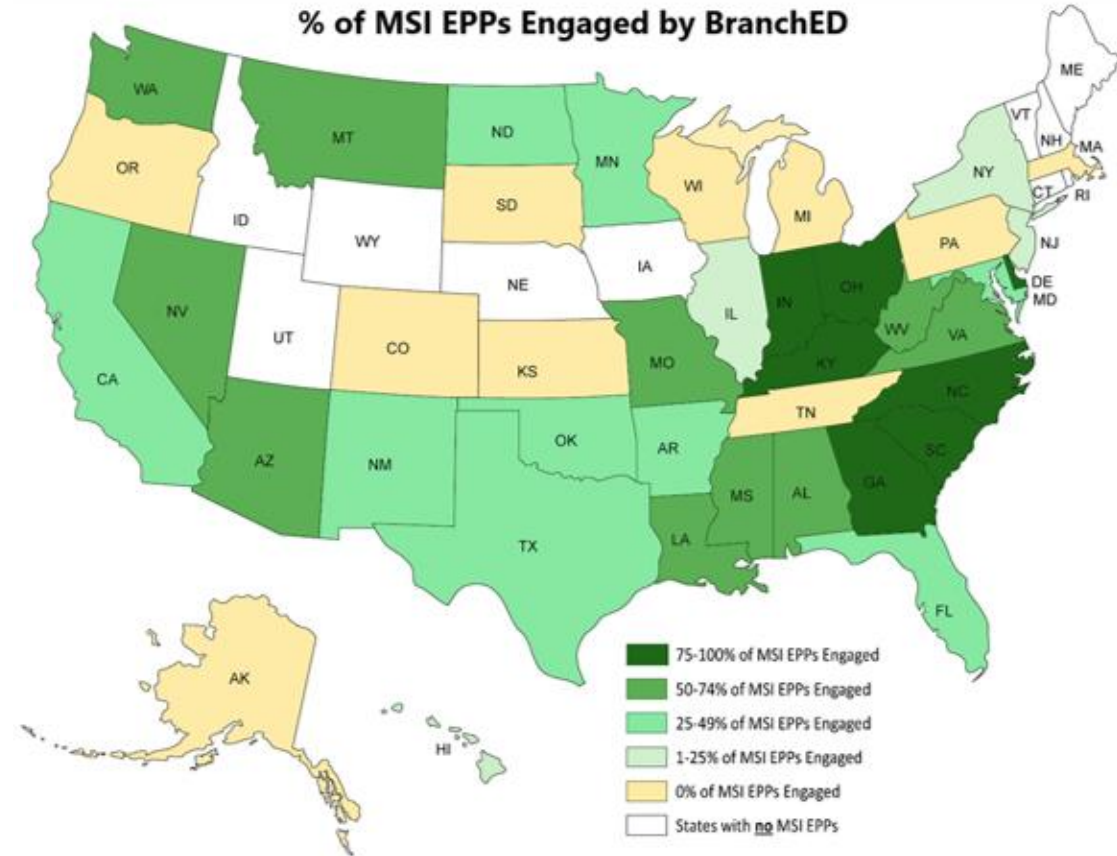REDEFINING QUALITY EDUCATOR PREPARATION

Our Vision

Highly Effective Diverse Educators for all Learners

Branch Alliance for Educator Diversity (BranchED) strengthens, grows, and amplifies the **impact** of educator preparation programs at minority serving institutions, with the broader goals of both **diversifying the teaching profession** and intentionally championing educational **equity** for all students.
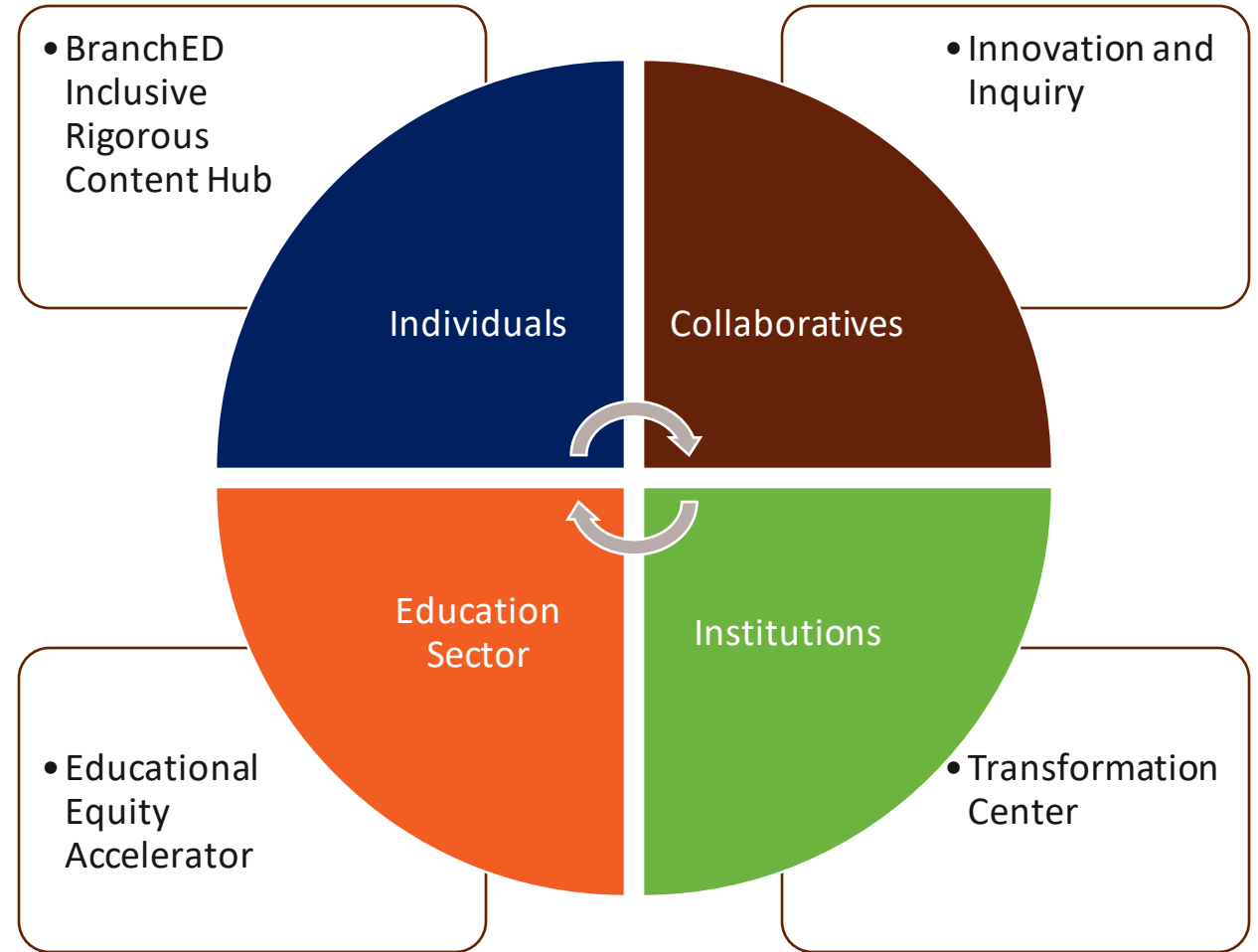
Engagement with BranchED

- To date, BranchED has engaged **204** educator preparation providers (EPPs) located across the country in **44** states and territories that prepare some **78,000** teacher candidates per year and graduate **24,823** teachers per year. These engagements have reached more than **820** faculty and leaders.

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% of MSI EPPs Engaged by BranchED

75-100% of MSI EPPs Engaged
50-74% of MSI EPPs Engaged
25-49% of MSI EPPs Engaged
1-25% of MSI EPPs Engaged
0% of MSI EPPs Engaged
States with no MSI EPPs

HOW WE DO IT

Session Goals

LEARN FROM OUR PEERS

NETWORK

ADD STRATEGIES TO OUR TOOLKIT

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Learning Objectives

1 Identify where data literacy is introduced, practiced, and demonstrated in your programs

2 Describe how Culturally and Linguistically Sustaining Pedagogy (CLSP) is implemented throughout your program
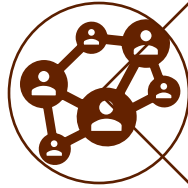
3 Detail the intersection of data literacy and CLSP known as Culturally Responsive Data Literacy (CRDL)

4 Plot a path to implement CRDL in your program

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Four Corners

- Ring Master
- Lion Tamer
- Trapeze Artist
- Clown
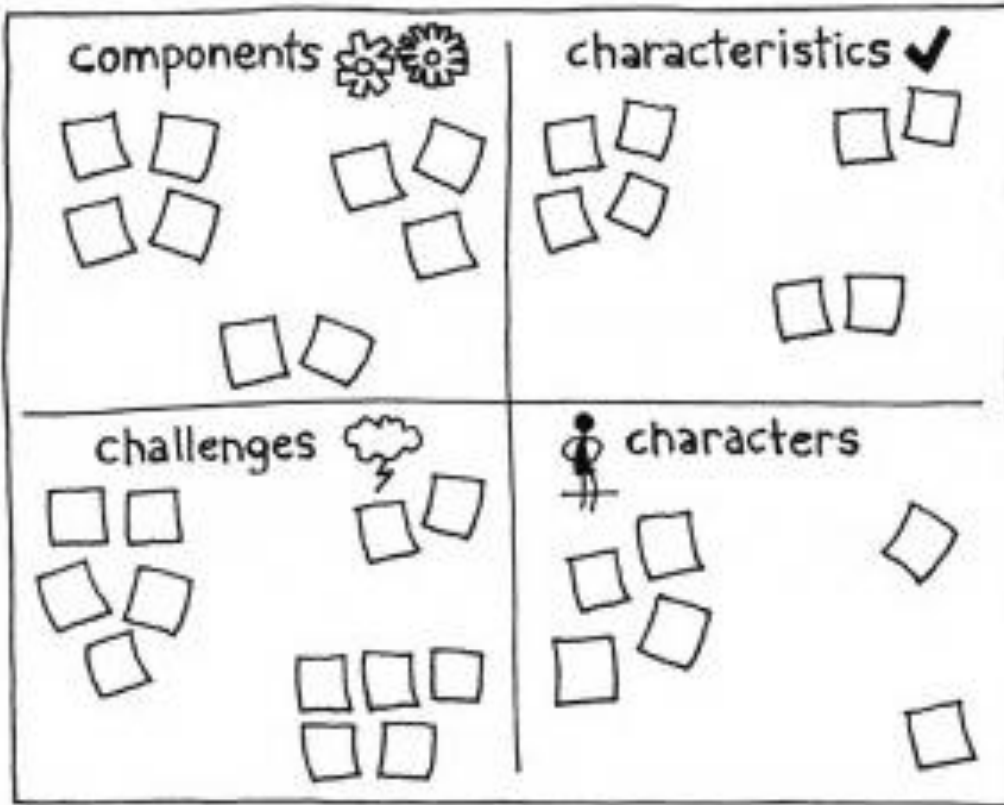
Gray, D., Brown, S., & Macanufo, J. 2010

The 4Cs

What is Data Literacy?
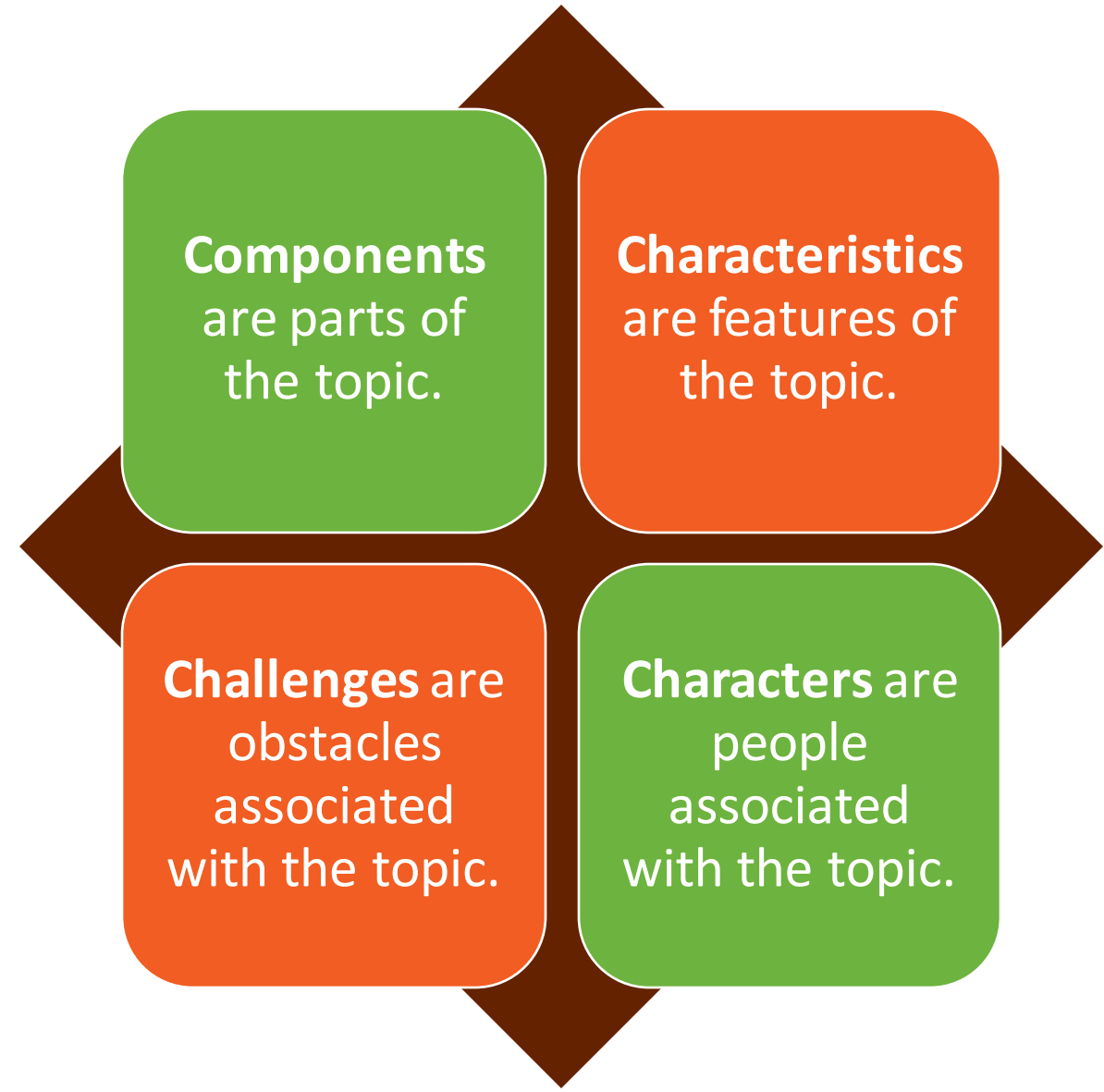
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Shared Understanding

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Components are parts of the topic.

Characteristics are features of the topic.

Challenges are obstacles associated with the topic.

Characters are people associated with the topic.

Process

- Each team is to collect information ab[...]c to Data Literacy.

- You will have **five minu[...]** [...]ation-gathering strategy.

- You will have [...] [...]ect the information.

- You [...] [...] to analyze and organize it.

YOU SHOULD COLLECT INFORMATION FROM AS MANY PEOPLE IN THE ROOM AS POSSIBLE!

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Share Out
___

Definitions

Data

Part of a continuum that moves from raw pieces of information ultimately to actionable knowledge that leads to a decision

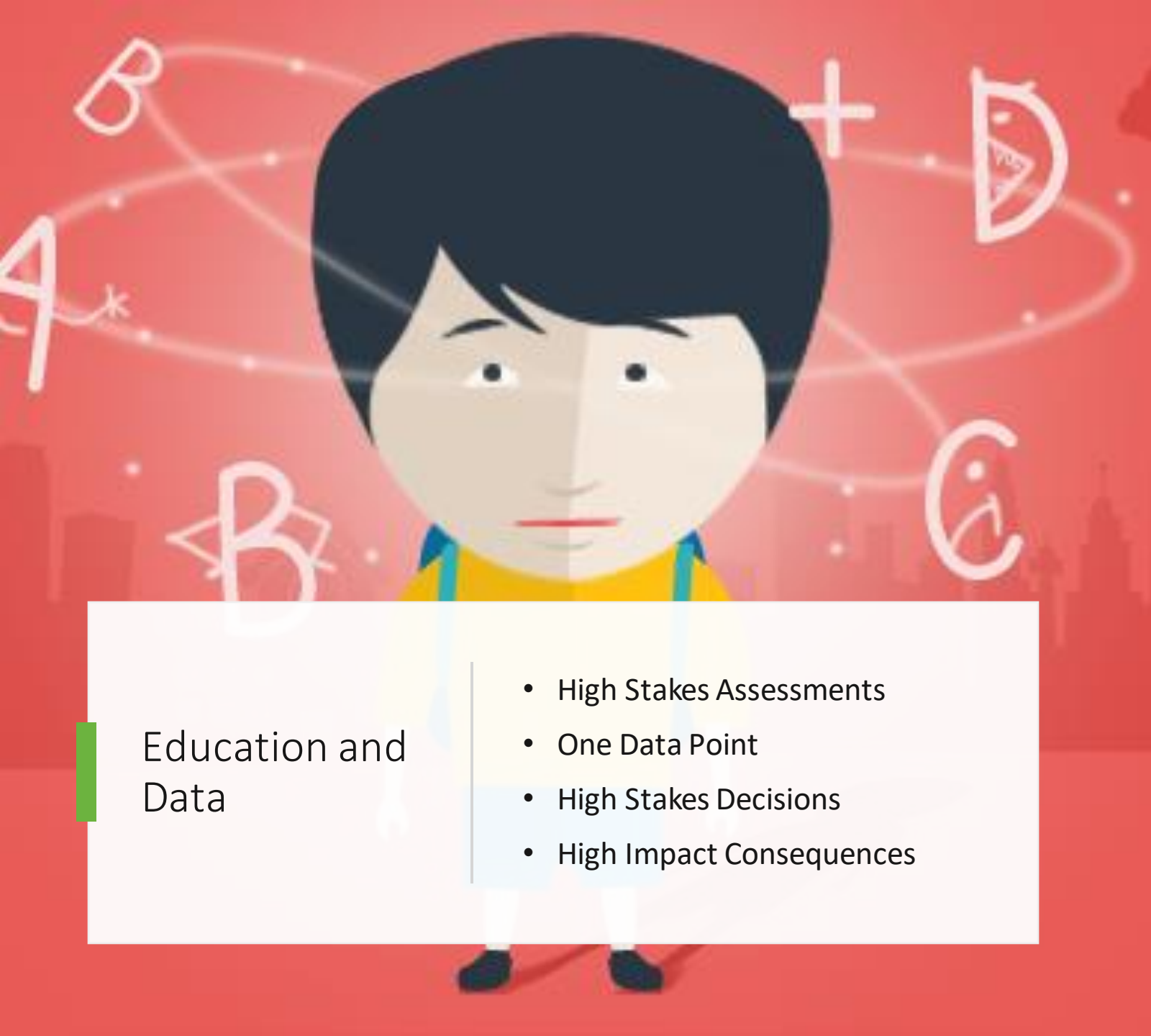Mandinach, Honey, et al., 2008; Mandinach & Gummer, 2016

Data-Driven Decision Making

Use of data or evidence to inform a decision

Data Literacy

The ability to transform information into actionable instructional knowledge and practices by collecting, analyzing, and interpreting all types of data

Education and Data

- High Stakes Assessments
- One Data Point
- High Stakes Decisions
- High Impact Consequences

Shifting the question away from "What will improve test scores?" to "What will deepen equity and excellence in our school?"

Swalwell et al., 2016

Data-Driven Reform and Deficit Thinking

- Efforts to promote data use should be grounded in an understating of:
  - Systemic Racism
  - Educator Biases
  - Using Data with Intentionality

  Bertrand & Marsh, 2021

- In the absence of high-quality data and technical assistance, "data may become misinformation or lead to invalid inferences"

  Marsh, Pane, & Hamilton, pg. 5

Non-Negotiables

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- Teacher Educators and Teachers take an inquiry stance and adopt the role of change agent.

- They:
  - have comprehensive, insightful understandings of equity and inequity relationships;
  - can critically question current accountability policy;
  - work for true equity-positive outcomes in their local school contexts
  - critically analyze data through an equity lens rather than using data to perpetuate the status quo.

Cochran-Smith & Lytle, 2001

Data Literacy Challenges

- Lack of confidence

- Feeling overwhelmed when presented with data

- Difficulty analyzing multiple data points or conducting deeper analysis of data

(Cowie & Cooper, 2017; Pierce & Chick, 2011)

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A Framework for Data Literacy

- **Continuously**
  - Using data as part of daily routines and on an ongoing basis, rather than as a one-time event
- **Effectively**
  - Using data to inform improved and tailored instruction and other practices for the purposes of improving student learning
- **Ethically**
  - Know and apply information with professionalism and integrity for intended uses only, and with consciousness of the need to protect student privacy
- **Access**
  - Know the multiple types of data available (including but not limited to assessment data), understand which data are appropriate to address the question at hand, and know how to access the possible sources of data

- **Interpret**
  - Analyze and synthesize data to make the information appropriate for addressing the given problem or question
- **Act**
  - Take relevant information and apply it to generate further questions and/or apply it to decision making appropriate to the given question
- **Communicate**
  - Share data points and the information synthesized from relevant data with stakeholders including parents, students, peers, principals, and other applicable, to generate further questions, inform decision making, or provide a better understanding of student learning. (p. 6)

Data Quality Campaign, 2014 pg. 6

Critical Data Literacy Skills for Teacher Candidates

- Skill 1

  Access and gather relevant data from available sources

- Skill 2

  Synthesize and analyze diverse data

- Skill 3

  Know about and use student-level and other types of data beyond assessment data

- Skill 4

  Understand how to use different types of data

- Skill 5

  Engage in a data-driven and cyclical inquiry process

- Skill 6

  Use data to tailor instruction to diverse groups of students

- Skill 7

  Use one's own data

- Skill 8

  Facilitate student understanding of data

- Skill 9

  Communicate about data with diverse internal and external stakeholders

- Skill 10

  Know about and be able to use data that are currently applicable for and relevant to practice

Data Quality Campaign, 2014 pg. 13

Small Group Discussion

- How are you developing your candidates' critical data literacy skills?
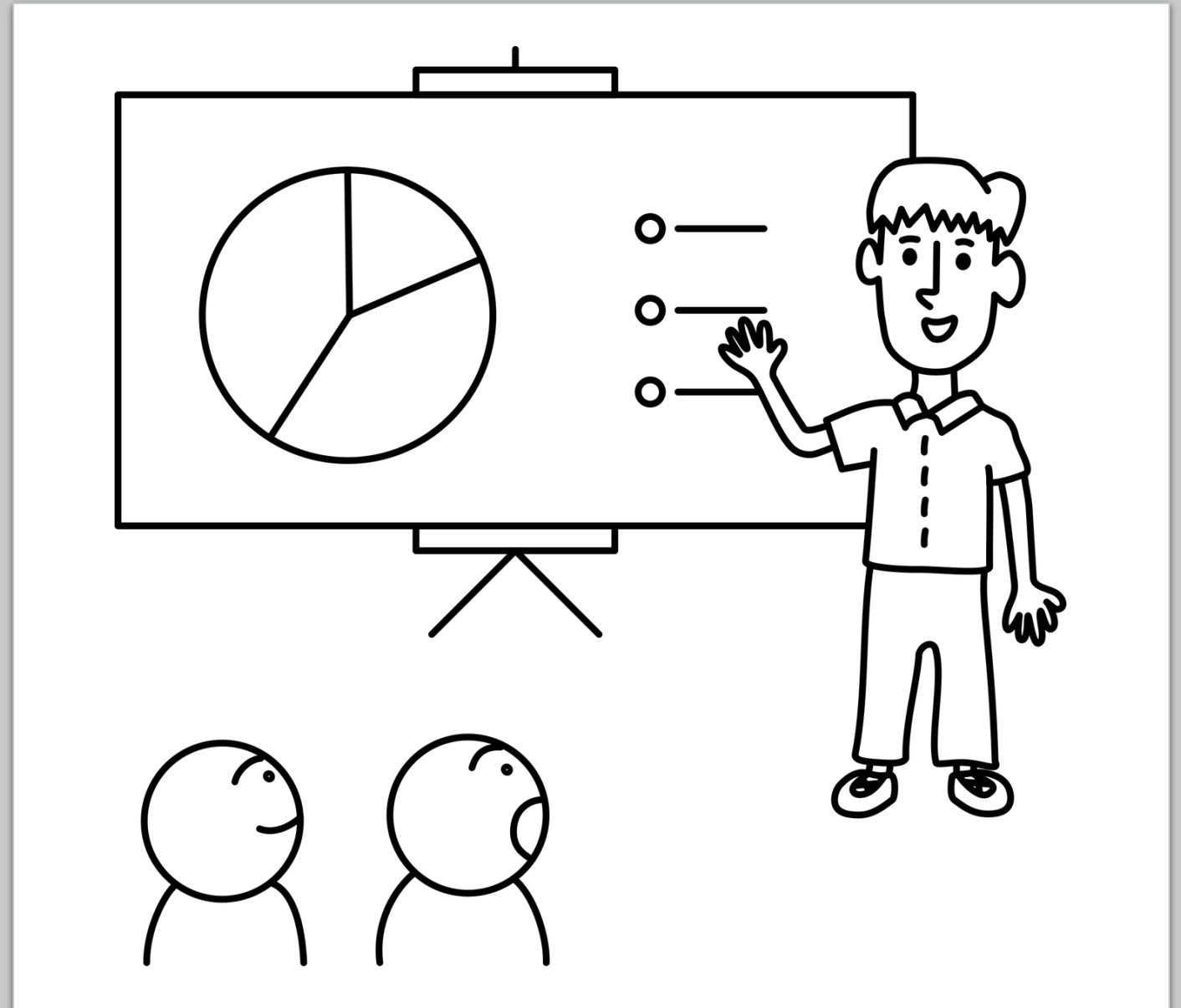
Shared Understanding

Culturally Responsive and Sustaining Pedagogy

What is CRSP?

The 4Cs
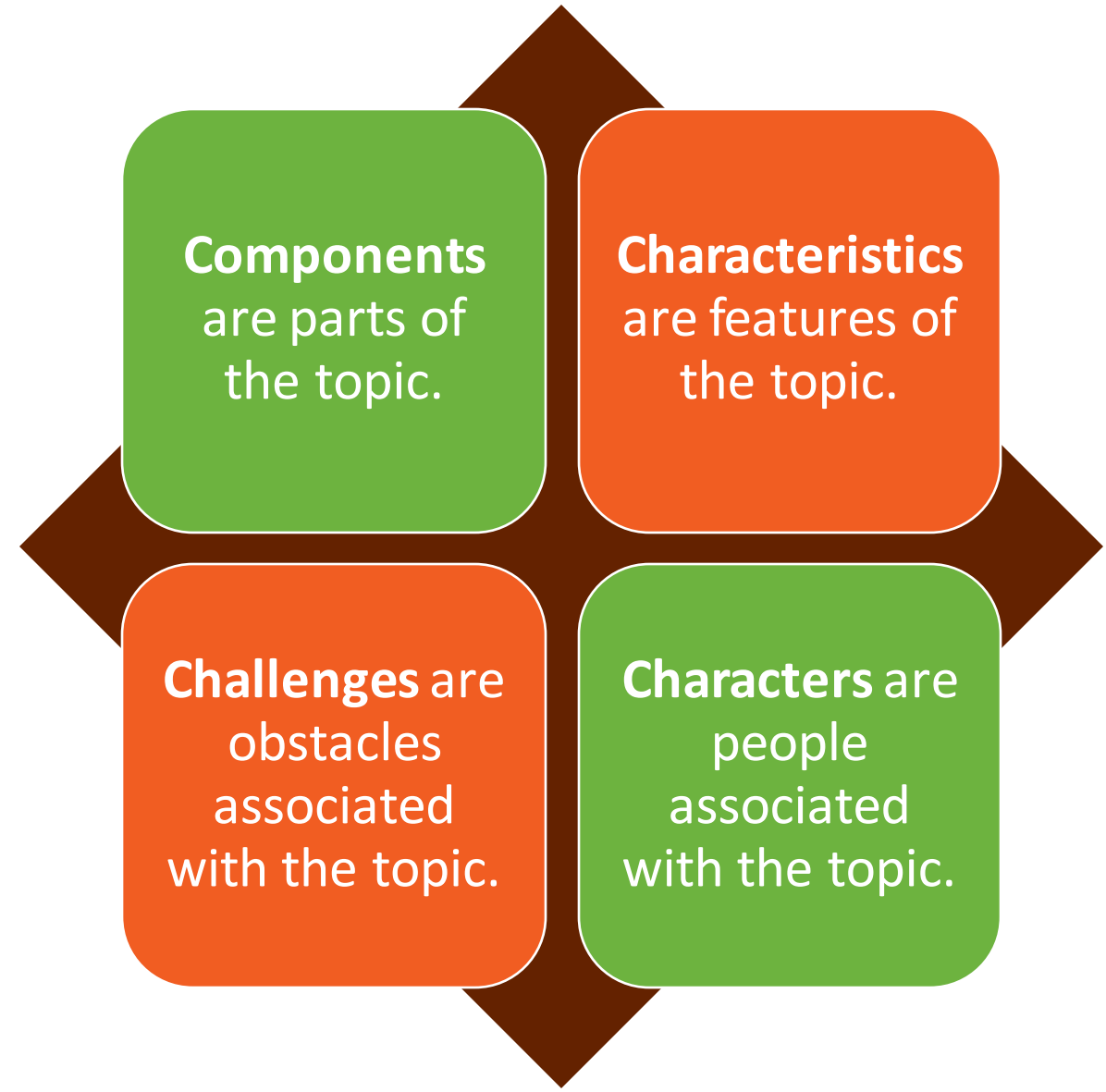
Process

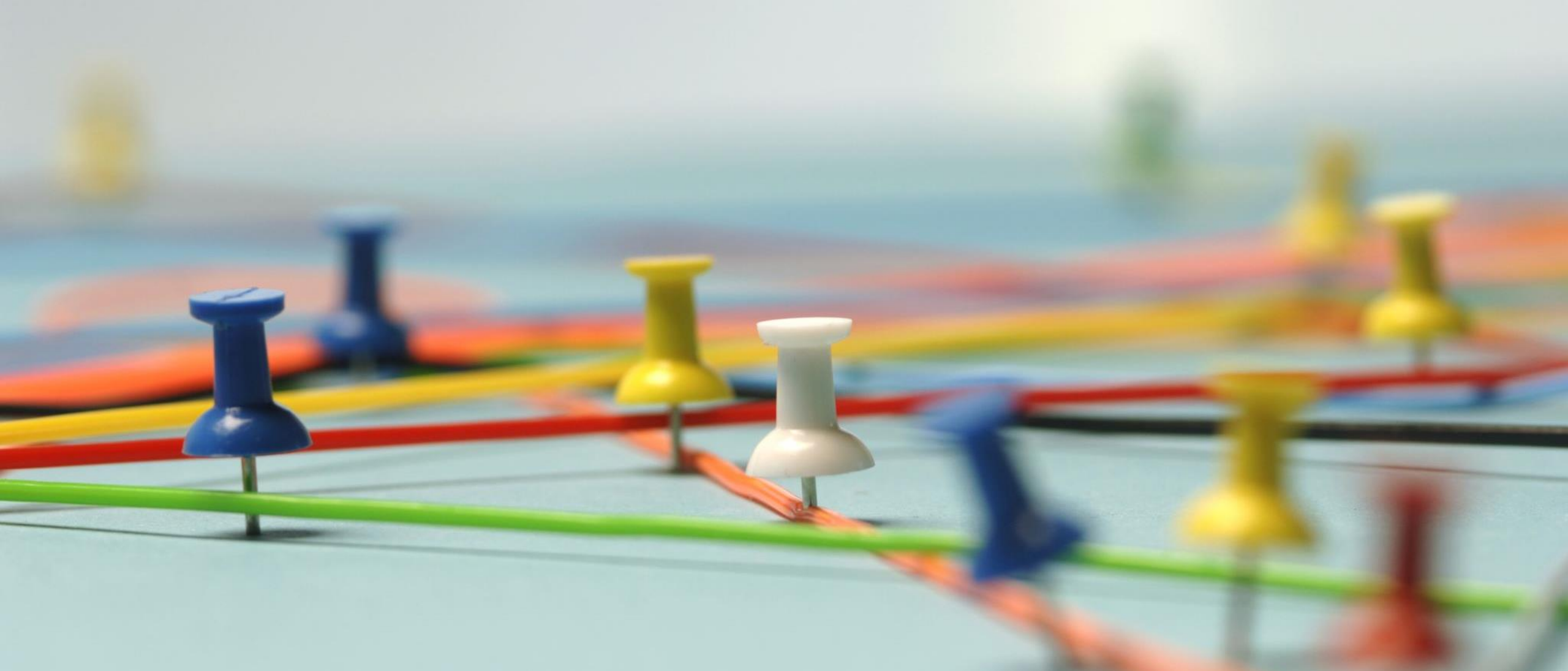- Each team is to collect information about ~~...~~ Data Literacy.

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Share Out

Framework for CRSP

Critically Reflective Practice

SELF

Our Autobiographies as Learners

STUDENTS

Our Students' Eyes

PEER

Colleagues Experiences

SCHOLARSHIP

Theoretical Literature

(Brookfield, 1995)

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https://resources.educatordiversity.org/
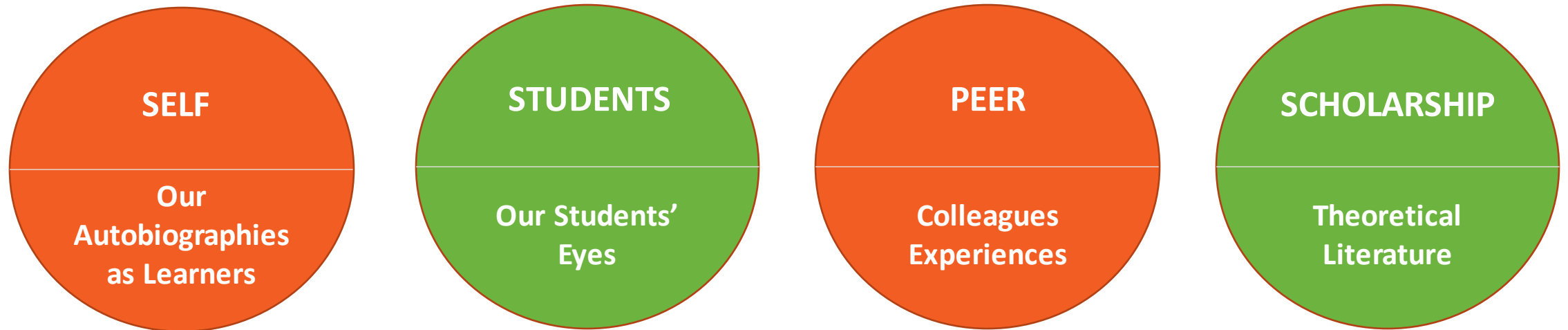
BranchED Resource Portal

Individually

CRSP

- A means for "unleashing the higher learning potentials of ethnically diverse students by simultaneously cultivating their academic and psychosocial abilities" while also seeking to "perpetuate and foster—to sustain—linguistic, literate, and cultural pluralism as part of schooling for positive social transformation and revitalization

Gay, 2018; Paris, 2017

Data Literacy

- The ability to transform information into actionable instructional knowledge and practices by collecting, analyzing, and interpreting all types of data

Mandinach, Honey, et al., 2008; Mandinach & Gummer, 2016

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Culturally Responsive and Sustaining Pedagogy (**_CR_**SP) **+** Data Literacy (**_DL_**) **=** Culturally Responsive Data Literacy (**_CRDL_**)
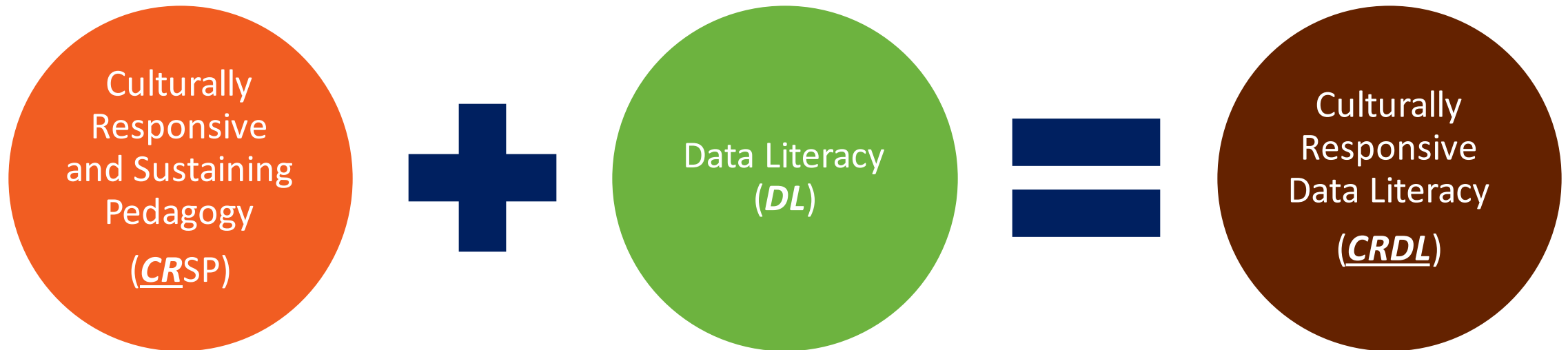
Improved educational outcomes for the district's PK12 students

CRDL

- Distinct from data literacy in that it:
  - takes particular note of students' context, background, interests, strengths, and surrounding information that may affect their performance and behavior
  - combines best practices in data literacy with culturally responsive and sustaining pedagogy
  - has the potential to encourage educators to balance diverse individual factors that include students' academic history and personal history with contextual factors that positively or negatively impact their lives

Mandinach 2021

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Supporting Educator Development of CRDL

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- Culturally Responsive Data Inquiry Orientation, which entails:
  - Seeking a **broad range of data sources** about **students as learners** in schools, **as humans with personal histories**, and as **children with unique experiences and identities**.
  - Identifying and interrogating **bias in analysis and interpretation** of the information they collect and **using those understandings** about students to design learning experiences, choose instructional materials, and implement appropriate interventions as necessary to **support student learning**.

Information Domains

Information Domains

Academic Performance and Schooling Experiences

Examples of these data include information about the student from formative and summative assessments, observations of student performance in classrooms and schools, documented and informal records of student interactions with peers and adults in school and student testimonies and perceptions, including experiences with bullying.

Personal Story and Experiences

Examples include information about the student's life outside of school, living conditions, access to healthcare, food, and transportation, traumatic experiences, and how they identify (i.e., sexual orientation, race, culture).

Examining and Interrogating Bias

This focus in this domain is on the teacher's continuous interrogation about their practice, how they see students and biases that influence their choices; what data to collect and how they interpret those data, as well as instructional materials and activities they implement. In this domain, the teacher is not collecting data but rather is questioning assumptions they may have as the make sense of data collected about students.

Critical Data Literacy Skills for Teacher Candidates

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Data Quality Campaign, 2014 pg. 13

Small Group Discussion

Putting it all Together

Plot the Path

Preparing Culturally Responsive Data Literate Teacher Candidates
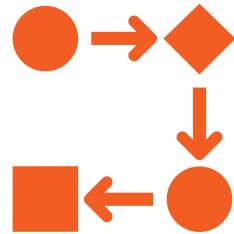
Think about the process (beginning to end)

Write down the steps in the process (one per post-it)

Post them on the wall

Gallery Walk

Explore other paths

Ask clarifying questions

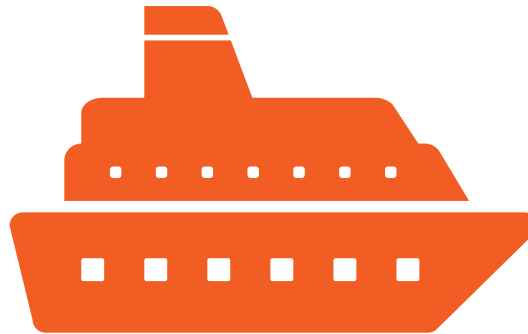Take ideas that would inform your own path

Whip Around

An AHA Moment…

Before We End…

- Your feedback is important to us
- Take part in our upcoming events
- Enjoy the river cruise!

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Drstevens-morgan@educatordiversity.org

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