

Exploring the Use of Intrapersonal Competency Pre-Assessments and First-Person Narrative to Identify Wealth and Opportunities for Student Success Equity

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She/Her

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Land Acknowledgment

- We are all joining in this conference from lands that have been stewarded by indigenous people.
- Please take a moment to name them with honor in a very specific way. For me, I reside and work on lands that were stolen from the Caddo in 1841 when over 200 of their homes were burned by those colonizing the area.
- On Sept 29, 1843, The Bird's Fort treaty was signed by the surviving chiefs of the Delaware, Chickasaw, Waco, Tawakani, Keechi, Caddo, Anadahkah, Ionie, Biloxi, and Cherokee and the Republic of Texas
- Over the next 16 years, surviving members of these tribes were pushed into Western Oklahoma



Land Acknowledgment

- Today, descendants of the Caddo tribe, as well as the Delaware, Chickasaw, Waco, Tawakani, Keechi, Anadahkah, Ionie, Biloxi, and Cherokee have returned to this land to remind us to honor the land on which we live and work;
- to be wise stewards of the land; and
- to carry the wisdom of our ancestors within us.
- My aspiration: The *xinesi* - spiritual leader of the Caddo people - did not rule alone. They consulted with others in high-ranking positions and sought consensus; they led by example rather than by coercion; and their authority depended on their generosity.

Thank you to the Whole Team



SAN DIEGO STATE
UNIVERSITY



From University of Texas Arlington

Marilee Bresciani Ludvik

Kimshi Hickman

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Nasima Subedi

Haein Won

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Sandra Kahn

Nina Potter

Rey Monzon (In Memoriam)

Maureen Guarcello

Randy Timm

Lisa Gates

From UT Health Sciences Center:

Shiming Zhang

Student Learning and Development Science
Student Learning and Development Assessment
Connect Pre-Assessments with Student Success

Mini-Content
Reflection
Sharing
Resources

O V E R V I E W



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If standardized entrance tests are abandoned by all institutions of higher education, what could replace these tools?

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What evidence-based
criteria could be applied to
select these tools?

Reflection...

What would shift in our practice if we used standardized entrance tests to repair institutional inequities, rather than for gatekeeping/admissions or institutional ranking?

FIRST
things
FIRST

Let's Examine some Evidence...

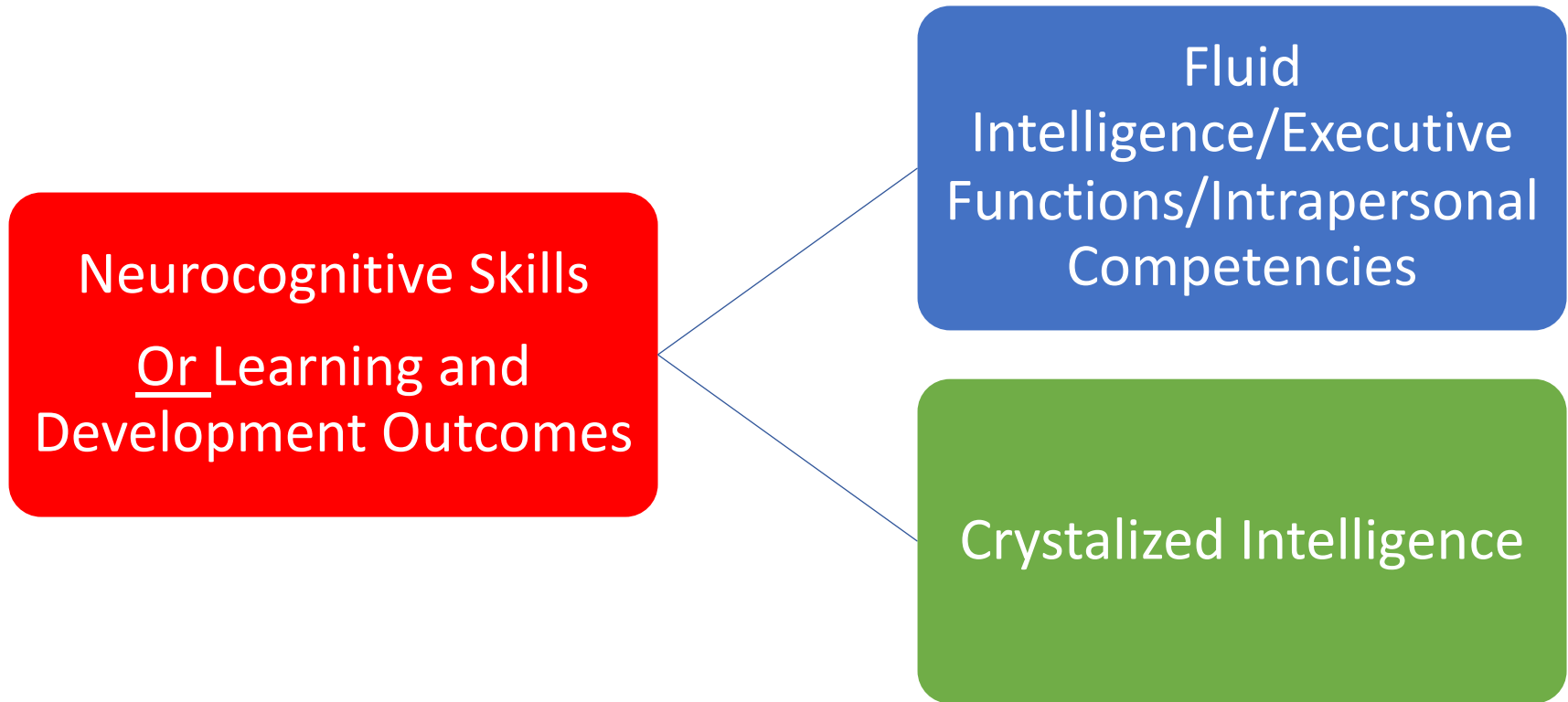
THEORETICAL CONTEXT SETTING

Learning and Development are inextricably intertwined

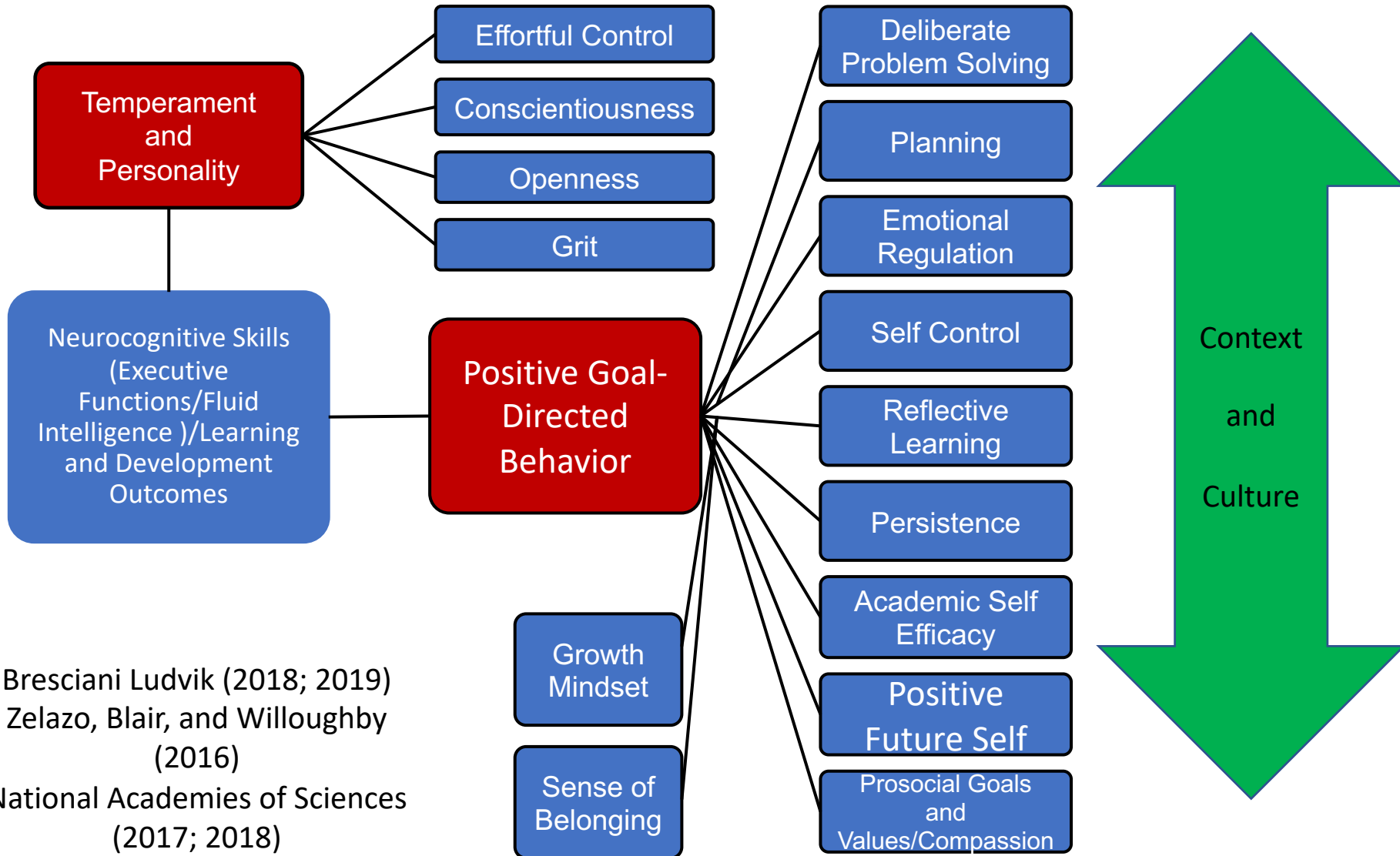
Student Learning Imperative, 1996

Learning and Development as Neurocognitive Skills

(Bresciani Ludvik, 2018; Zelazo, Blair, and Willoughby, 2016)



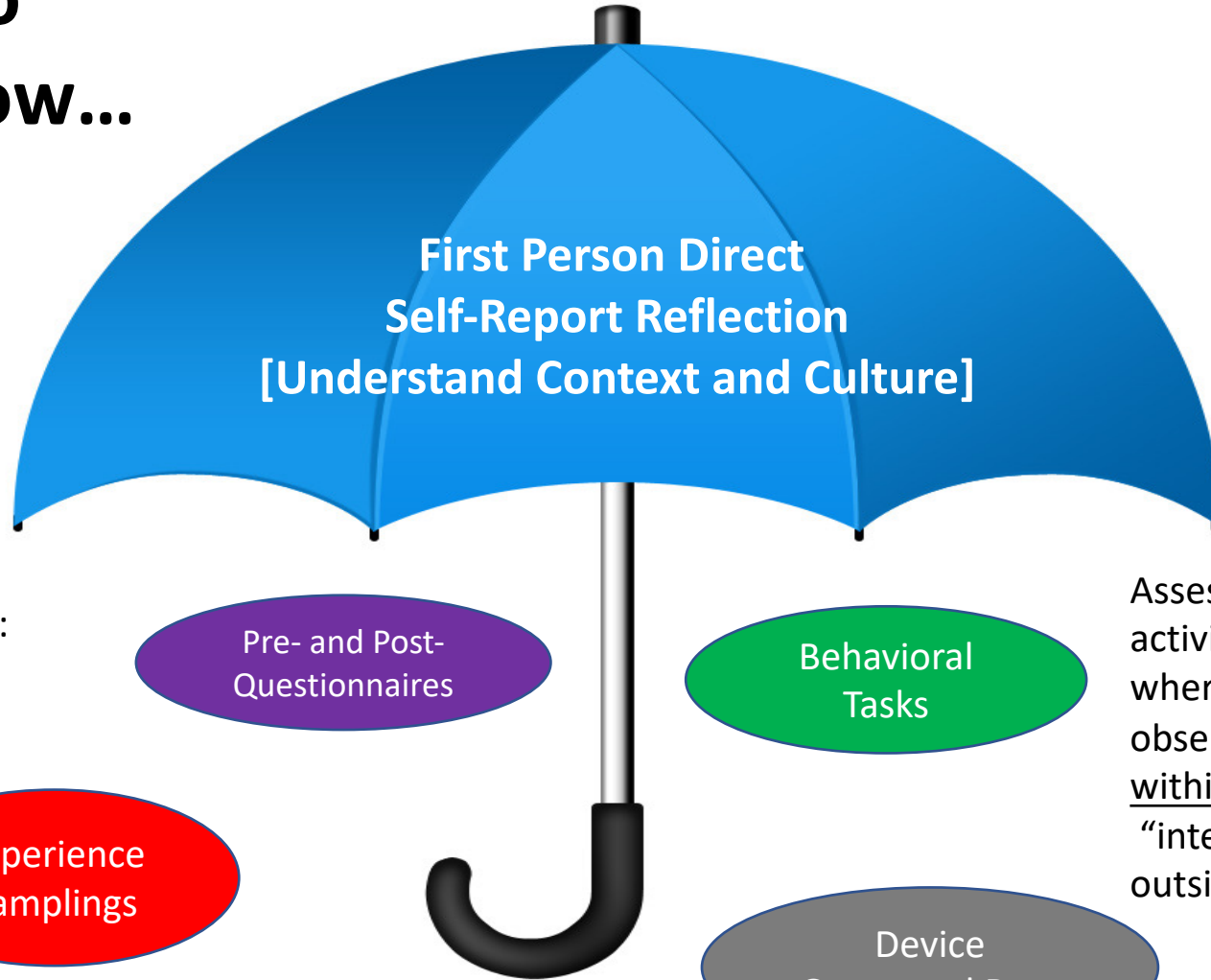
Malleable Fluid Intelligence/Executive Functions/IPC to Specific Learning and Development Outcomes



Bresciani Ludvik (2018; 2019)
Zelazo, Blair, and Willoughby
(2016)

National Academies of Sciences
(2017; 2018)

How Do We Know...



Examples include:
BAI; PSS; FFMQ;
MDCS, etc.

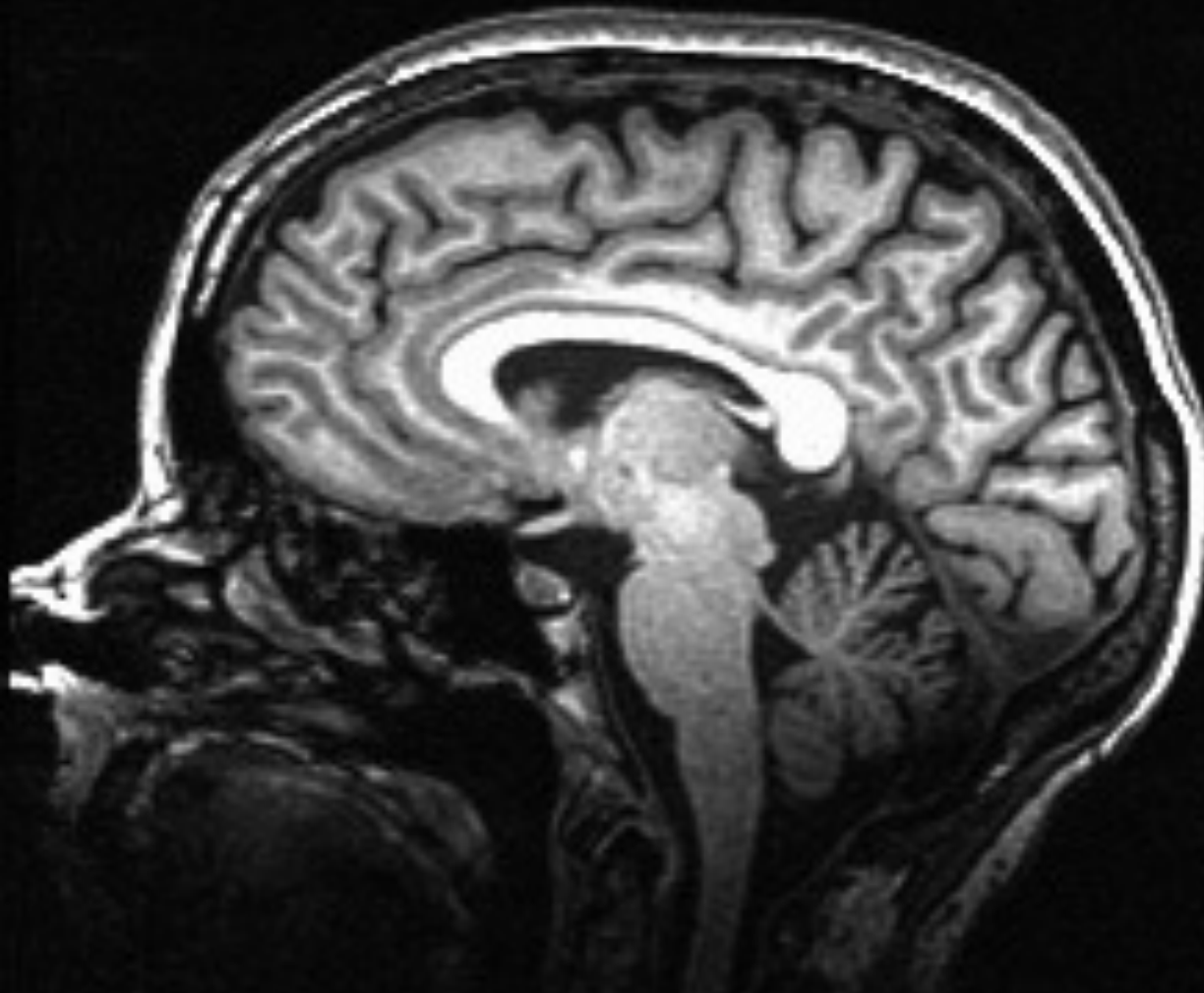
Assessed
activity/assignment
where behavior can be
observed either
within the designed
“intervention” or
outside of

Reflective Practice - Describe in detail where
emotion regulation was experienced –
within or outside the designed “intervention” and 360
observations

Not Applicable Here

(Bresciani Ludvik 2020)

NEUROPLASTICITY



Bresciani Ludvik, M.J.

**What ideas do you have for
standardized pre-assessments
now?**

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The University of Texas at Arlington
An open access, Research I, Urban HSI



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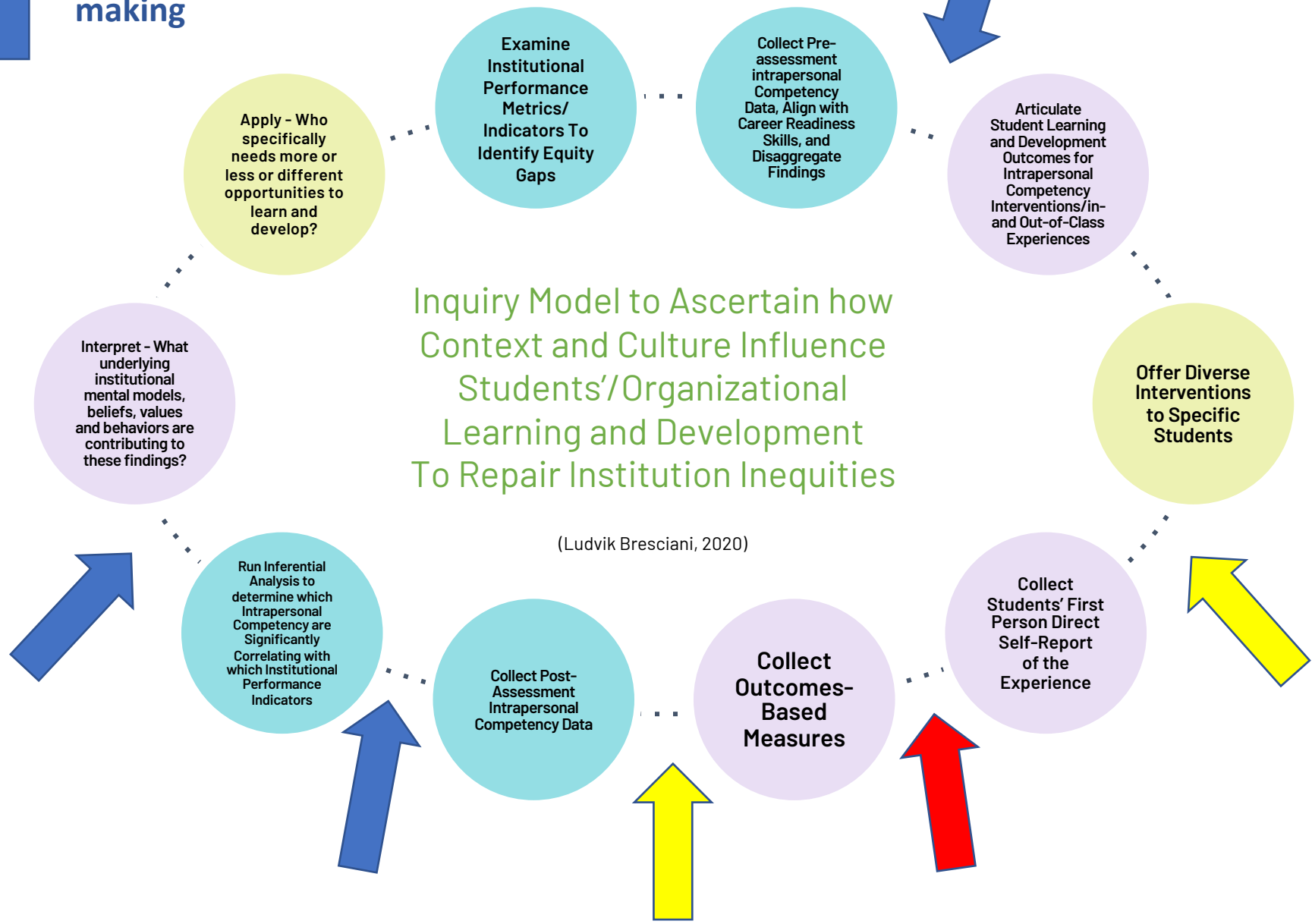
San Diego State University
Highly Selective, Research, Urban HSI

= Intended integration of first-person voice in evidence-based decision making



Inquiry Model to Ascertain how Context and Culture Influence Students'/Organizational Learning and Development To Repair Institution Inequities

(Ludvik Bresciani, 2020)



Apply - Who specifically needs more or less or different opportunities to learn and develop?

Examine Institutional Performance Metrics/ Indicators To Identify Equity Gaps

Collect Pre-assessment intrapersonal Competency Data, Align with Career Readiness Skills, and Disaggregate Findings

Articulate Student Learning and Development Outcomes for Intrapersonal Competency Interventions/in- and Out-of-Class Experiences

Offer Diverse Interventions to Specific Students

Collect Students' First Person Direct Self-Report of the Experience

Collect Outcomes-Based Measures

Collect Post-Assessment Intrapersonal Competency Data

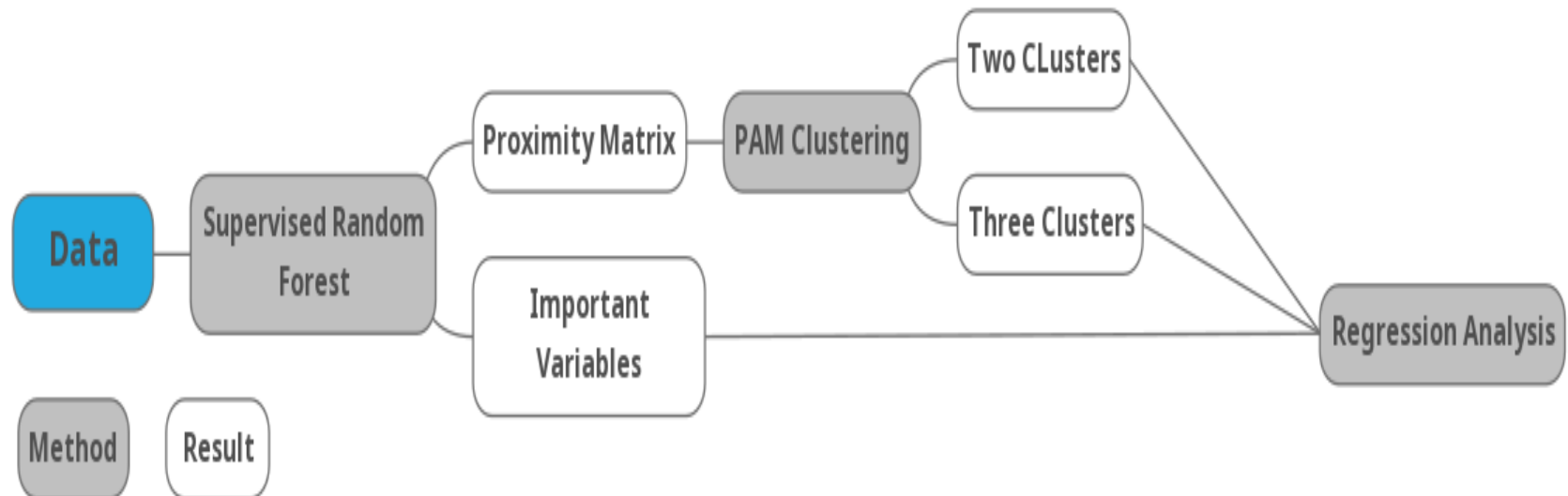
Run Inferential Analysis to determine which Intrapersonal Competency are Significantly Correlating with which Institutional Performance Indicators

Interpret - What underlying institutional mental models, beliefs, values and behaviors are contributing to these findings?

Purpose: What does it look like to utilize intrapersonal competency inventory scores as standardized entrance exams to repair institutional inequities?



Data Analysis Model All Credit to Shiming Zhang



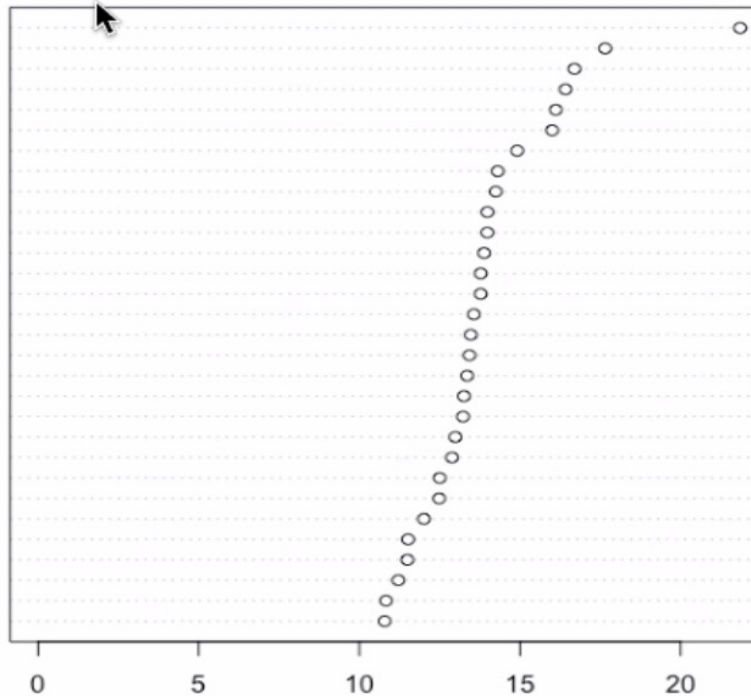
(Bresciani Ludvik, et al, In Press)

USEM 2019 Pre 2 Cluster Output

Importance of features

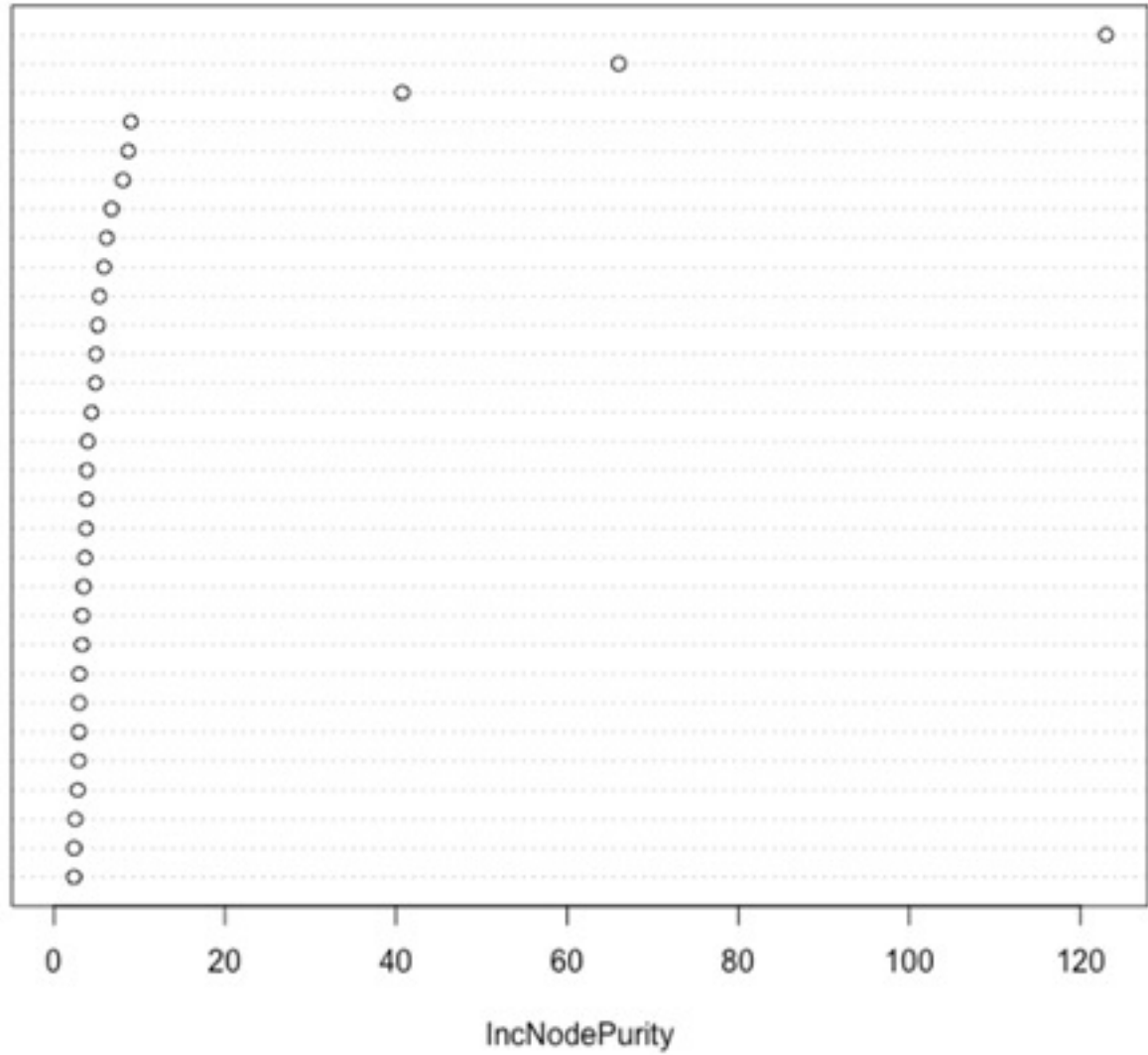
Unsupervised Random Forest-NoSAT

Term1_SIMSCollege_Desc
GPA_EOT_1
Incoming_GPA
SAT_CompConv
Pre_PWB_Total
Pre_PWB_Average
Pre_TGLQ_Total
Pre_TGLQ_Average
Pre_PWB_PL_Avg
Pre_SOB_PFS_Avg
Pre_SOB_Total
Pre_SOB_PPS_Avg
Pre_SOB_Average
Incoming_Units
Ethnic_NCES
Pre_PWB_Autonomy_Avg
Pre_PWB_EM_Avg
Pre_PSS_Total
Pre_PSS_Average
Pre_PWB_SA_Avg
Pre_PWB_PR_Avg
Pre_SCS_Total
Pre_PWB_PG_Avg
Pre_SCS_Average
Group1
Pre_SOB_PCC_Avg
Pre_SOB_PI_Avg
Pre_MAI_Regulation_Avg
Pre_MAI_Total
Pre_MAI_Average

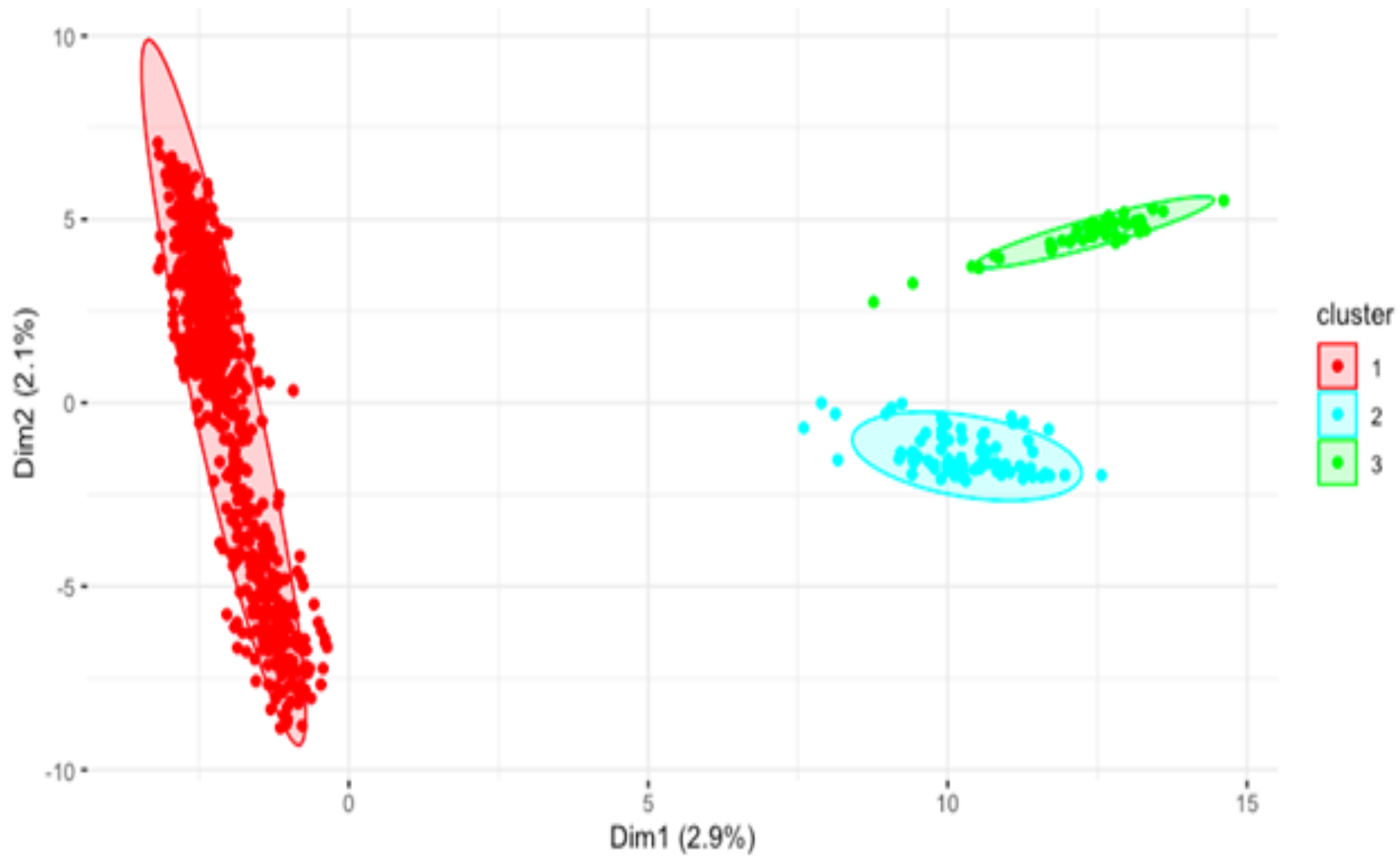


MeanDecreaseGini

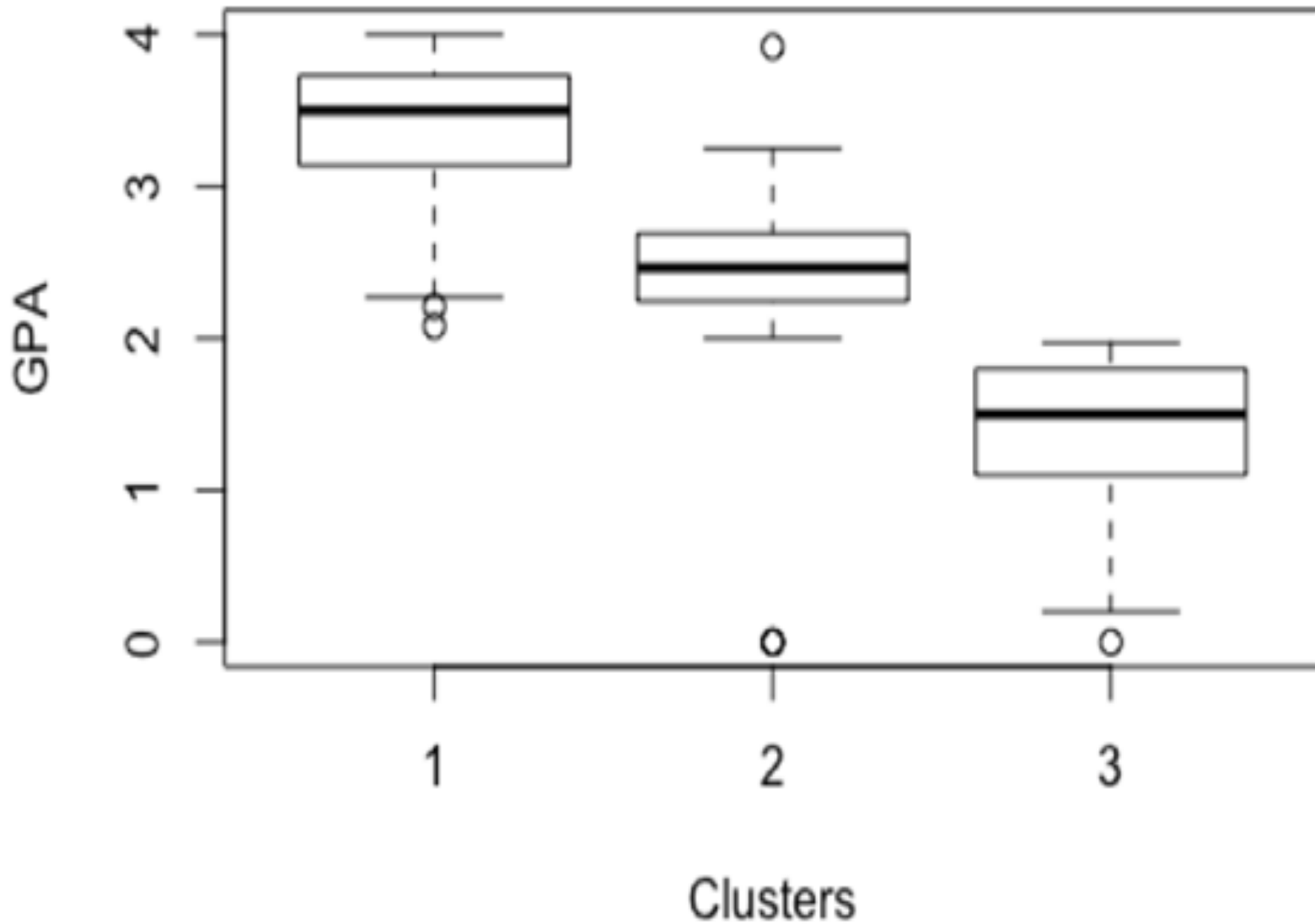
DFW
 Probation
 Incoming GPA
 Term1_SIMSCollege_Desc
 Incoming_Units
 Ethnic_NCES
 Post_PWB_EM_Avg
 Post_PWB_PL_Avg
 Post_PSS_Average
 Post_SOB_Average
 Post_PWB_PG_Avg
 Post_PWB_Average
 Post_TGLQ_Average
 Post_MAI_Knowledge_Avg
 Post_SOB_PCC_Avg
 Post_PWB_Autonomy_Avg
 Post_SOB_PPS_Avg
 Post_SOB_PFS_Avg
 Post_MAI_DK_Avg
 Post_MAI_Average
 Group1
 Post_PWB_PR_Avg
 Post_PWB_SA_Avg
 Compact
 Post_SCS_Average
 Post_MAI_Regulation_Avg
 Post_SOB_PI_Avg
 Persistence
 Post_SCS_CH_Avg
 Post_MAI_P_Avg



(Bresciani Ludvik, et al, In Press)



(Bresciani Ludvik, et al, In Press)

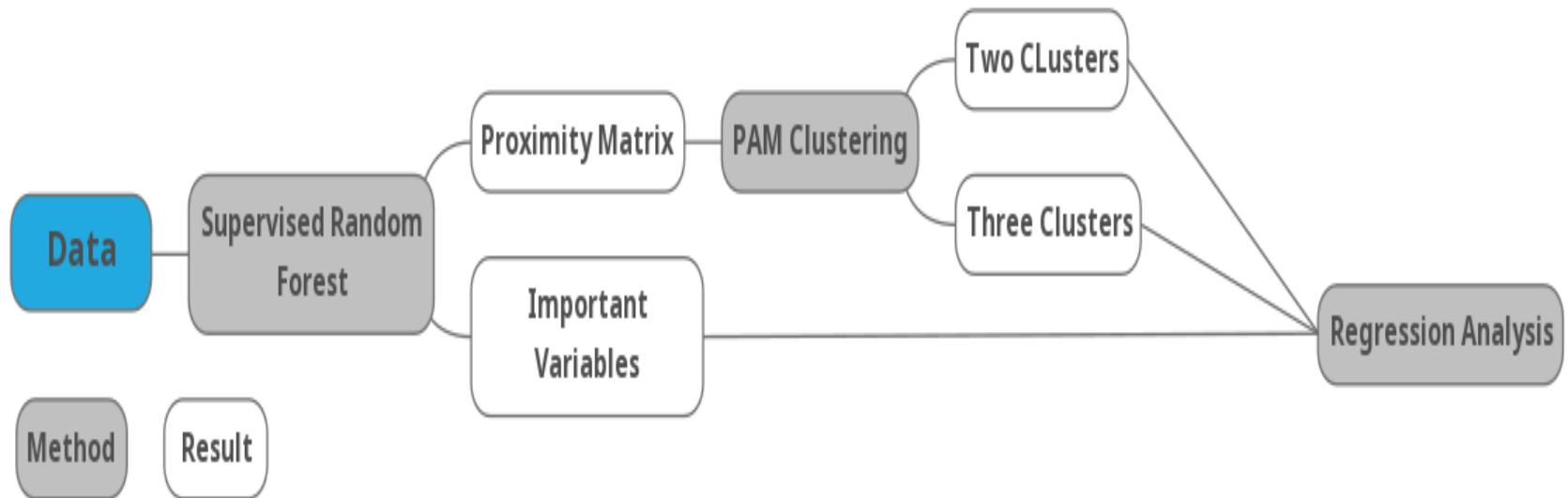


(Bresciani Ludvik, et al, In Press)

Next...

- Disaggregate the Clusters by Identities and other meaningful variables
- Search for Descriptive Differences
- And Significant Differences between

Credit to Shiming Zhang



Types of Decisions this Process has Informed



IMPROVED PROFESSIONAL
DEVELOPMENT FOR
INSTRUCTORS



IMPROVED FIRST-YEAR
STUDENT COURSE DESIGN



IMPROVED SUMMER-BRIDGE
DESIGN



IMPROVED IN-BETWEEN
TERM COMMUNICATIONS
WITH AND SUPPORT
SYSTEMS FOR STUDENTS



IMPROVED
COMMUNICATION ACROSS
THE COLLEGES AND
DIVISIONS TO CHANGE
POLICY AND PRACTICE TO
PROMOTE SUCCESS



IMPROVED ASSESSMENTS
AND LINKAGE OF THOSE TO
INSTITUTIONAL
PERFORMANCE INDICATORS

Questions and Comments?

Reflection Question:

In what context(s) might you want to integrate a process like this?

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Purpose: Can we quickly analyze first-person narrative to inform student success practitioner-based decisions that close equity gaps within the term that data is collected?



(Bresciani Ludvik, et al, 2022)



TextRank

Revealed a consistent set of themes for all students

LIWC

Reveled emotional tone by percentage responses

Lost detail of the richness of first-person Voice in analysis

Difficult to disaggregate by identities and intersection of identities to inform just-in-time practitioner-based decision-making for specific students

Diverse FTIC students completing an end-of-term open-ended question via Qualtrics (Urban HSI FTIC class)

Pre-Covid (fall 2019)

> 1,400 diverse students

LIWC – Predominantly positive experience; lower affiliation

significantly correlated with lower GPA

TextRank – concerns about work, time, and academic achievement; gave us semantically most-representative sentences that supported LIWC findings and gave more detail about student experience

During Covid (fall 2020)

>1,900 diverse students

LIWC – Predominantly negative experience; lower affiliation

significantly correlated with lower GPA

TextRank – concerns about work; and gave us semantically most-representative sentences that supported LIWC findings and gave more detail about student experience

(Bresciani Ludvik, et al, 2022)

Discussion

Helpful for summative discussion

Perhaps because of the prompt and the data collection point in time

Much quicker analysis than hand-coding
IF you have the folx with the capacity to
conduct this analysis quickly

We are left with lots of questions

(Bresciani Ludvik, et al, 2022)

Questions and Comments?

Reflection Question:

In what context(s) might you want to integrate a process like this?

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Immediate Questions

- How accessible are IPC assessment and NLP tools to student success practitioners who seek to gain actionable insights and provide interventions informed by the findings?
- Which IPC & NLP tools can be quickly learned and used by practitioners?
- What does it look like to use these tools on student data collected during the term?

Immediate Questions, 2

- What IPC & NLP tools can remain trustworthy as we disaggregate data by identities?
- What better ways are there to collect and analyze IPC & first-person student narrative to close equity gaps?
- What else are we missing/should we be asking?

Questions and Comments?

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Intrapersonal Competency Cultivation Research Team



<https://competencycultivation.uta.edu>



EQUITY-DRIVEN, HIGH ACHIEVEMENT

Assessment of Student Learning and Development

Marilee Bresciani Ludvik

With contributions from Marjorie Dorimé-Williams, Lara Evans, M
Brianna Lynn Kuhn, Valerie Nye, Bill Sayre, Caren Sax, Char
Andrea Vonny Lee, Stephen Wall, and Felix W

Bresciani Ludvik, M.J.

Deep Thank you to:
Stephen Schellenberg,
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Sandy Kahn, Rogelio Becerra
Songolo, Shiming Zhang,
Robyn Saiki, Rey Monzon
(May He Rest in Peace),
Caryl Montero Adams, Kara
Bauer, Lisa Gates, Rebecka
Harmata, Jeanne Stronach,
Anna Jost, and many, many
more...

OUTCOMES-

CLOSING ACHIEVEMENT GAPS IN- AND OUTSIDE

BASED

THE CLASSROOM WITH ALIGNMENT TO

PROGRAM

PREDICTIVE ANALYTICS AND PERFORMANCE METRICS

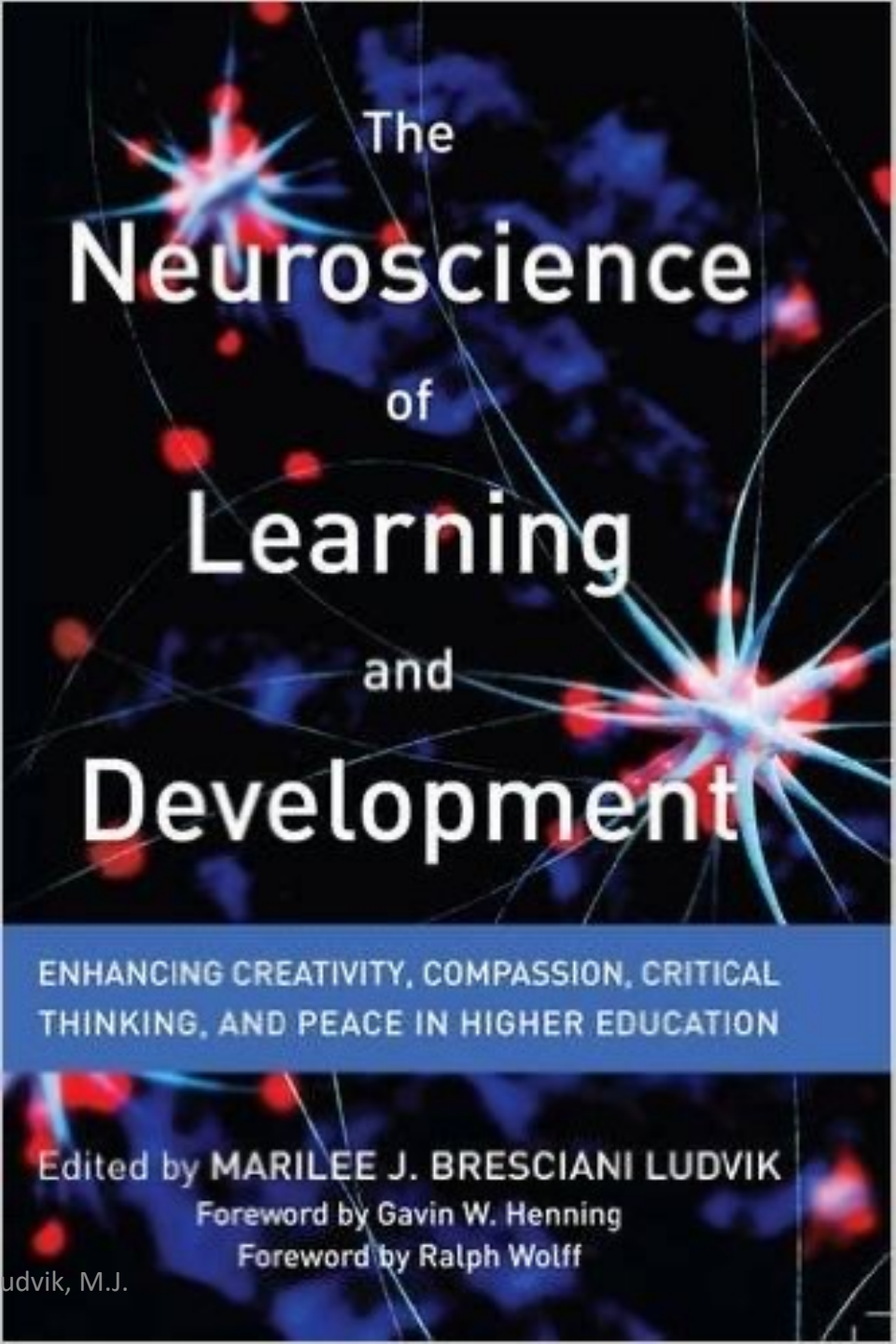
REVIEW

MARILEE BRESCIANI LUDVIK

Foreword by Ralph Wolff

Second Edition of *Outcomes-Based Academic and Co-Curricular Program Review*

Bresciani Ludvik, M.J.



The
Neuroscience
of
Learning
and
Development

ENHANCING CREATIVITY, COMPASSION, CRITICAL
THINKING, AND PEACE IN HIGHER EDUCATION

Edited by MARILEE J. BRESCIANI LUDVIK

Foreword by Gavin W. Henning

Foreword by Ralph Wolff