

## **ABSTRACT**

Ava McCoy, EQUITY IN EDUCATION: IMPACTS OF THE PROJECT I<sup>4</sup> PARTICIPATION

### **ON SCHOOL LEADER AND TEACHER PRACTICE**

Inequities in elementary school classrooms impact the quality of education for many students. It is important for teachers to understand how to structure their classroom to provide equitable access for each student and focus on the assets each student brings to the classroom. The purpose of this study is to create statements for Project I<sup>4</sup> participants to sort to understand which Project I<sup>4</sup> experiences were more significant on their ability to lead for equity. It will provide an opportunity to learn how school leaders learn and how they can change teacher practices to improve learning outcomes for all students. Q-methodology is used to assess the trends displayed by school leaders and educators with respect to the impacts their actions have on equity within the classroom.

EQUITY IN EDUCATION: IMPACTS OF THE PROJECT I<sup>4</sup> PARTICIPATION ON SCHOOL  
LEADER AND TEACHER PRACTICE

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## **INTRODUCTION**

*First, we acknowledge the realities of inequity that impact students in and out of school. It could be acknowledging that students of color have historically been treated differently at school. Or it can mean that their culturally different ways of learning are often mistaken for intellectual deficits. Often in an effort to be color-blind, some teachers downplay or trivialize subtle but persistent microaggressions directed at culturally and linguistically diverse students on a daily basis. For students, these situations cause stress and emotional pain. As an ally, we have to let them know they are not crazy. Inequity is real.*

Hammond, 2020, p. 92

Inequities in elementary school classrooms impact the quality of education for many students. When analyzing inequities in education, school leaders and educators often focus on the deficits of struggling students rather on the assets the students bring to school. Often school leaders and educators fall into the trap of blaming students and families for a lack of success in the classroom.

Academic discourse refers to the ways (speaking, writing, and thinking) in which students engage with curriculum content in the classroom. Many teachers create conditions for academic discourse in their classrooms but fail to ensure equitable access for all students. It is important for teachers to understand how to structure their classroom to provide equitable access for every student and value the assets each student brings with them. School leaders must develop equity stances for themselves and their teachers to increase access to quality education for every student.

## **BACKGROUND**

I was interested in the topic of equity in education and learned of a grant working with school leaders called Project I<sup>4</sup>, conducted by Dr. Matthew Militello in ECU's Department of Educational Leadership. After meeting with Matt (as Dr. Militello prefers to be called) and his team, I began the journey of understanding what Project I<sup>4</sup> was all about. This included building

relationships with the Project I<sup>4</sup> team, meeting participants (school leaders) in the program, observing online learning facilitated by the Project I<sup>4</sup> team, and working with the team to develop statements for an upcoming Q-study. Q-methodology is used to quantify subjectivity through ranking a series of qualitative statements. This technique was used by the project team to understand the most impactful parts of the Project I<sup>4</sup> experience for school leaders as leaders for equity. Next, I describe the Project I<sup>4</sup> professional learning experience for school leaders, provide an overview of my activities, and provide more details about Q-methodology.

Project I<sup>4</sup> is a grant-funded professional learning opportunity for school leaders. The experience begins with an intense Summer Learning Exchange (SLE) focused on building relational trust between participants and learning about evidence-based observation tools. Participants are provided books related to culturally responsive teaching and leading, conducting evidence-based observations, and academic discourse in mathematics (Appendix A). After the SLE, participants engage in virtual sessions to continue the work in their school setting. The experience includes leadership coaching in Equity-Centered Networked Improvement Communities (EC-NICs) with a leadership coach and 4-6 other school leaders. Participants receive both 1:1 coaching and team support as they set up their own EC-NIC at their site and practice evidence-based observations with their teachers. The Project I<sup>4</sup> experience has been offered to three cohorts of school leaders (Appendix B).

In Spring 2021, I focused on reading research about Q-methodology and understanding the work of the Project I<sup>4</sup> Team. First, I learned about Q-methodology from an article written by Matt and his colleagues and learned how Q-statements are developed (Militello et al., 2016). Q-methodology is described in further detail later in this paper.

Project I<sup>4</sup> participants read multiple books as a part of the one-year professional learning experience (Appendix A). I read a few of these books to understand the work the project team was engaging in with school leaders. Zaretta Hammond is the author of a book called *Culturally Responsive Teaching & The Brain*. This book was used to understand how a teacher can use culturally responsive instruction to close the achievement gap and increase rigor in classrooms. *Principles to Actions: Ensuring Mathematical Success for All* is a book that “describes the actions required to ensure that all students learn to become mathematical thinkers” (NCTM, 2014). The Project I<sup>4</sup> website was used to research the work already completed by Project I<sup>4</sup> and Cohort I, and to become familiar with the observation tools used by the school leaders when observing classrooms. Reference guides written by the Association for Supervision and Curriculum Development provided extra support in understanding the purpose of the observation tools and how they can promote equitable participation in the classroom. Next, I describe the purpose of the study and provide more information about Q-methodology.

### **PURPOSE OF THE STUDY**

The purpose of Project I<sup>4</sup> is to promote access and equity in education by supporting educational leaders in understanding the root causes of inequitable access for students and academic discourse in the classroom. The purpose of this study is to create statements for Project I<sup>4</sup> participants to sort to understand which Project I<sup>4</sup> experiences were more significant on their ability to lead for equity. Q-methodology utilizes factor analysis to group participants around shared perspectives. This data, when combined with other data collected throughout the study, will allow the project team to identify trends to understand the impacts of the Project I<sup>4</sup> participation on the way school leaders view themselves as leaders for equity.

An in-depth analysis of factors impacting inequities in education may provide evidence and facilitate conversations between school leaders and educators to increase equitable outcomes for students. The initial goal of this study is to understand different perspectives that emerged from Project I<sup>4</sup> participants.

## **RESEARCH QUESTION**

This question will be presented to participants: *To what extent did your Project I<sup>4</sup> experiences improve your ability as a Leader for Equity?* My honors project focused specifically on creating statements for participants to sort based on which experiences were most significant on their ability to lead for equity. The development of statements in a Q-study is an intensive process and triangulates data from the Project I<sup>4</sup> framework, research from literature, and responses from participants and coaches. Next, I provide more details about Q-methodology.

## **Q-METHODOLOGY**

The Project I<sup>4</sup> Team is utilizing Q-methodology to assess the trends displayed by principals and educators with respect to the impacts their actions have on equity within the classroom. Q-methodology is a multi-step assessment tool that utilizes data collection assessment to allow one to analyze the subjective thoughts of the participants. Participants of Project I<sup>4</sup> are asked to sort a collection of statements pertaining their experiences in Project I<sup>4</sup> from less significant to more significant. Participant input is obtained before, during, and after data collection. The data will be used to place participants into focus groups, called “families”, based on how they sorted the statements. Follow-up interviews with principals and/or teachers will be conducted for qualitative data collection purposes. Participants asked to participate in the Q-study included Project I<sup>4</sup> participants from Cohorts I and II (Appendix B).

## **Development of Q-Set**

In developing the collection of statements, “the Q researcher must develop a set of statements related to a particular object of inquiry or subject matter” (Militello et al., 2016). The collection of statements is referred to as the concourse and are collected from literature and interviews. The concourse is then, piloted, edited and combined to form the Q set, the final statements used in the Q sort.

To develop the statements in the Q-sort, input was received from Project I<sup>4</sup> coaches, instructors, and participants, the Project I<sup>4</sup> framework, and academic literature that pertained to the topic.

Coaches and participants were asked the following questions:

- (1) *What are the five most powerful take-aways (structures, experiences, content, etc.) from your work with Project I<sup>4</sup>?*
- (2) *Which Project I<sup>4</sup> practices have you most successfully implemented in your school or district (List of 1-5 things)?*

After compiling the ideas from coaches and participants, Project I<sup>4</sup> framework and academic literature there were a total of 266 statements. I was responsible for compiling a spreadsheet with all this data. I collaborated with the team to group the statements into clusters with a common theme such as academic discourse or culturally and linguistically responsive practices (CLRP). Statements were reviewed, revised, deleted, and combined to create 35 final statements for the Q-sort (Table 1). Key terms and language used in the statements are described further in Appendix C. Literature used to support statements are explained with examples below.

- Statement 21 reads “*Facilitating conversations with teachers focused on observational evidence*” and was supported by the following statement from Zweirs and Crawford, “but

teachers can learn through evidence-based observations, to better regulate access and increase rigor for student-centered evidence discourse” (Zweirs, Crawford, 2011).

- Statement 8 reads “*being a warm demander for teachers*” and was supported by the following statement from Hammond, “teachers as ally and warm demander.” (Hammond, 2015).
- Statement 4 reads, “*reframing challenges from deficit-based to an asset-focused lens*” and was supported by the following statement from the Equity Traps article, “reframe thinking about students, families, and communities from deficit-based to asset-based” (McKenzie & Scheurich, 2004).

### **Development of P-Set**

After the statements were finalized, the project team identified the P-set, the participants for the study. For this study, participants from Project I<sup>4</sup> Cohort I and Cohort 2 were invited to complete the Q-sort (Appendix B).

Table 1

*Elements of Project I<sup>4</sup> Q-Sample Statements*

Final Statements for Q-Study			
1	Facilitating the school-based EC-NIC.	19	Adopting an equity mindset for myself.
2	Practicing Dynamic Mindfulness.	20	Taking on a coaching stance with teachers.
3	Incorporating Community Learning Exchange axioms in my leadership practice.	21	Facilitating conversations with teachers focused on observational evidence.
4	Reframing challenges from deficit-based to an asset-focused lens.	22	Focusing on equitable academic discourse in classrooms.
5	Engaging with other school leaders in the EC-NIC.	23	Working with teachers to implement strategies to improve equitable academic discourse.
6	Receiving one to one coaching.	24	Using Project I <sup>4</sup> reflective processes to improve my practice.
7	Adopting an active anti-racist stance.	25	Using results from the CALL survey.
8	Being a warm demander for teachers.	26	Facilitating conversations focused on rigorous/ambitious math tasks.
9	Expanding work beyond the school-based EC-NIC.	27	Practicing classroom observational tools prior to observing teachers.
10	Using the Calling-on Tool.	28	Practicing conversations prior to working with teachers.
11	Using the Question Form Tool.	29	Using the Project I <sup>4</sup> agenda format to engage staff.
12	Using the Question Level Tool.	30	Recognizing a rigorous/ambitious math task.
13	Analyzing data from classroom observations.	31	Engaging in small group activities with school leaders during the Learning Exchanges.
14	Using protocols to cultivate relational trust with teachers.	32	Using equity-based literature to inform my practice.
15	Using strategies from the Effective Conversation Guide to engage teachers in collaborative conversations.	33	Engaging in protocols to analyze equity-based literature.
16	Watching my coach model Project I <sup>4</sup> protocols.	34	Experiencing personal narratives with other Project I <sup>4</sup> participants.
17	Facilitating CLRP strategies with the teachers.	35	Conducting classroom observations using selective verbatim notes.
18	Cultivating an equity mindset with teachers.		

## The Q-Sort

In a Q-sort, after the P-set is determined, participants are given the collection of statements and place them into a forced distribution. Usually this takes place in a face-to-face setting where participants are given statements on individual cards and sort the cards in a forced distribution grid. In this study, due to the continued Covid-19 restrictions, the project team shifted the Q-sort to an online program called Q-Method Software. A link to the Q-study was sent to participants in Cohorts I & II. Next, I describe the process participants go through to complete a Q-sort.

Participants are shown the statements individually and asked to sort them by designating statements as more significant, neutral, or less significant (thumbs up, neutral, or thumbs down) on their ability to be a leader for equity. From there, the statements are sorted into three piles. On the next screen, participants are asked to sort the statements into a forced distribution grid (Figure 1). Statements participants deem as more significant to their ability to lead for equity are placed under the +4 category, and statements less significant are placed under the -4 category. The Q-methodology is designed to understand the opinions and viewpoints of the participants and therefore, the Q-sort cannot be incorrectly sorted. For this study, the condition of sort was “To what extent did your experiences in Project I<sup>4</sup> improve your ability as a leader of equity?” Participants can move their statements around multiple times and without any time limit before submitting their final sort.

At this time eighteen participants have completed the sort. The project team has a goal of at least thirty participants thus data collection is still in progress. After the goal of participants is reached, the project team will meet to analyze the results of the sorts. “The goal of the analysis is to extract as many unique viewpoints as possible” (Militello et al., 2016).

Preliminary findings indicate that participants are interested in learning and valued opportunities to practice classroom observation skills to help teachers implement culturally responsive teaching strategies, building relational trust with teachers, and adopting an equity mindset and coaching teachers to do the same.

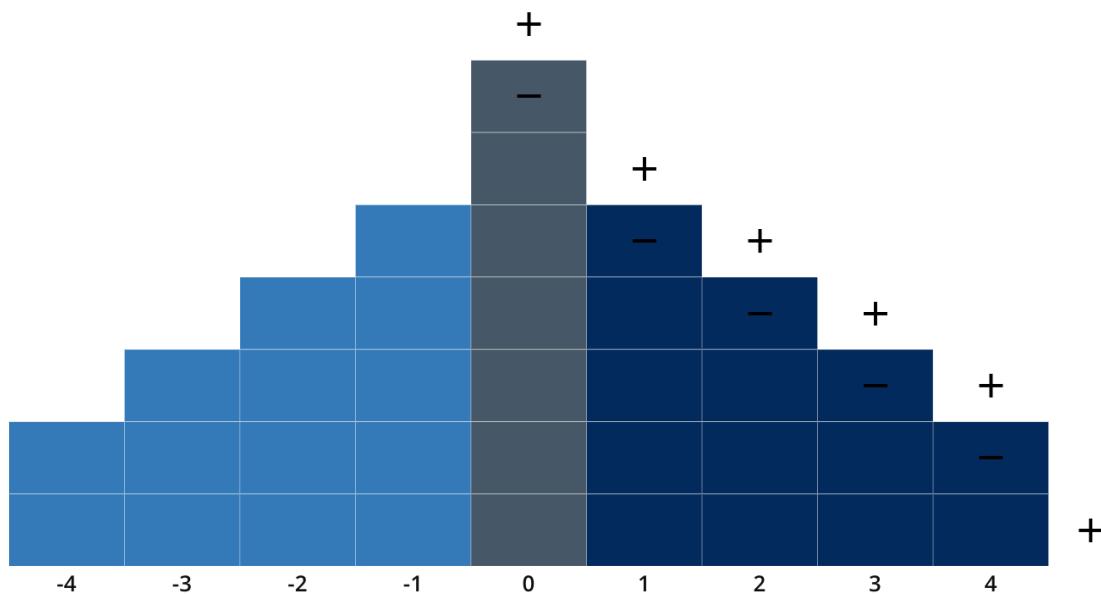


Figure 1. Q Sort distribution grid.

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## CLOSURE

The research compiled for this project will relay details regarding the work of the grant as well as the work of education, in general. Data will be collected, both quantitative and qualitative, to provide insights into the impacts of the Project I<sup>4</sup> participation on school leader and/or teacher practice, including the experiences more significant to participants. Focus group interviews will be conducted to further understand the results of the Q-study. The project team plans to display the findings of the quantitative (Q-methodology) and the qualitative (focus group interviews) data collection in an article. Future presentations of the findings could be presented at educational conferences or at recruitment events for the next iteration of the grant. Specifically for my study, I plan to communicate with the project team as they analyze results from the Q-sort. I will include the results of this analysis on my presentation at ECU's Research and Creative Achievement Week (RCAW) in Spring 2022.

The empirical research of this study provides an opportunity to understand how school leaders learn and how they can change teacher practices to improve learning outcomes for all students. It will bring insight to educators to understand how to structure their classroom to provide equitable access to every student. The research will show many unique viewpoints on equitable teacher practices in the classroom and could provide important outcomes for leaders and teachers in Eastern NC. The findings will impact educator practice because it will help school leaders and teachers implement classroom observational skills that are used to help implement culturally responsive teaching strategies and embrace an equity mindset.

This study has provided me with a deeper understanding of developing research questions, collecting data, and reporting findings. The research has broadened my knowledge of equitable practices in the classroom. Through my work with Project I<sup>4</sup>, I have learned how to

focus on student's assets rather than their deficits to support student success in the classroom. I have focused on looking at education through an equity lens. The research process has helped me to notice the root causes of inequitable access for students in the classroom and understand teacher practices that help school leaders and teachers lead for equity.

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## **APPENDIX A: PROJECT I<sup>4</sup> SUMMER LEARNING EXCHANGE BOOK LIST**

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## APPENDIX B: PROJECT I<sup>4</sup> PARTICIPANT SUMMARY

	<b>Participants   State</b>	<b>Gender</b>	<b>Ethnicity/Race</b>	<b>School Level</b>	
<b>Cohort I Completed</b>	<b>74 Participants</b> <b>2 STATES:</b> California: 26      North Carolina: 48	F: 50 M: 24	Asian: 9 Black/AA: 26 Two or more: 1 Pacific Islander: 1 White: 37	Elem: 38 Middle: 17 High: 8	Early College: 3 Other: 8 (ex. K-8)
<b>Cohort II Completed</b>	<b>67 Participants</b> <b>6 STATES:</b> Wisconsin: 6      Hawaii: 1 California: 12      Minnesota: 6 North Carolina: 36      Alaska: 6	F: 50 M: 17	Asian: 2 Hispanic/Latino: 8 Native Hawaiian: 1 Unknown: 4	Black/AA: 12 White: 40	Elem: 23 Middle: 18 High: 7
<b>Cohort III Finishing December 2021</b>	<b>72 Participants</b> <b>17 STATES:</b> Alaska: 4      Arkansas: 1      Florida: 2 California: 16      Arizona: 2      Georgia: 1 Massachusetts: 1      Minnesota: 1      Maine: 1 New Jersey: 1      New York: 5      Texas: 1 North Carolina: 32      New Mexico: 3      Wisconsin: 1 Pennsylvania: 1      Washington: 2	F: 52 M: 20	Asian: 4 Hispanic/Latino: 5 Black/AA: 24 Pacific Islander/HI Native: 1 White: 29 Two or more: 3 Unknown: 6		Elem: 27 Middle: 14 High: 17
<b>AMC On-going</b>	<b>32 Participants</b> California: 10 North Carolina: 22	F: 23 M: 9	Asian: 4 Black/AA: 14 Two or more: 1	White: 13	Early College: 3 Other: 7

## **APPENDIX C: KEY TERMS AND DEFINITIONS**

**EC-NIC**-Equity-Centered Networked Improvement Community (Bryk et al., 2010)

**Dynamic Mindfulness**-A practice used to begin Project I<sup>4</sup> sessions which utilizes Action, Breathing, and Centering practices.

**Community Learning Exchange Axioms**-The five core practices for a Community Learning Exchange (CLE) defined by Guajardo, et al. (2016). Project I<sup>4</sup> began with a Summer Learning Exchange grounded in CLE axioms.

**Warm demander**-A teacher who communicates personal warmth toward students while at the same time demands they work toward high standards (Hammond, 2015).

**Observation Tools**-Evidence based observation tools used by Project I<sup>4</sup> participants to collect evidence on these teacher practices: Calling-On, Question Form, Question Level ([Project I<sup>4</sup> website](#)).

**Conversation Guide**-A guide for effective post-observation, evidence-based conversations with teachers ([Linked here](#)).

**Equity Mindset**-The ability to look at school practices through an equity lens and to avoid equity traps (McKenzie & Scheurich, 2004).

**CALL Survey**-A Comprehensive Assessment of Leadership for Learning (CALL) survey developed by the Wisconsin Center for Education Products and Services. All participants in Cohort I & II gave this survey to their entire school staff twice (pre/post).

<https://www.leadershipforlearning.org/>

**Project I<sup>4</sup> Agenda Format**-An agenda format used by the Project team, modeled by the coach facilitator and coaches, and used by the participants in EC-NIC meetings ([Linked here](#)).