Exploring Relationships between Standards-based Training, Instructional Practices, and Learner Outcomes

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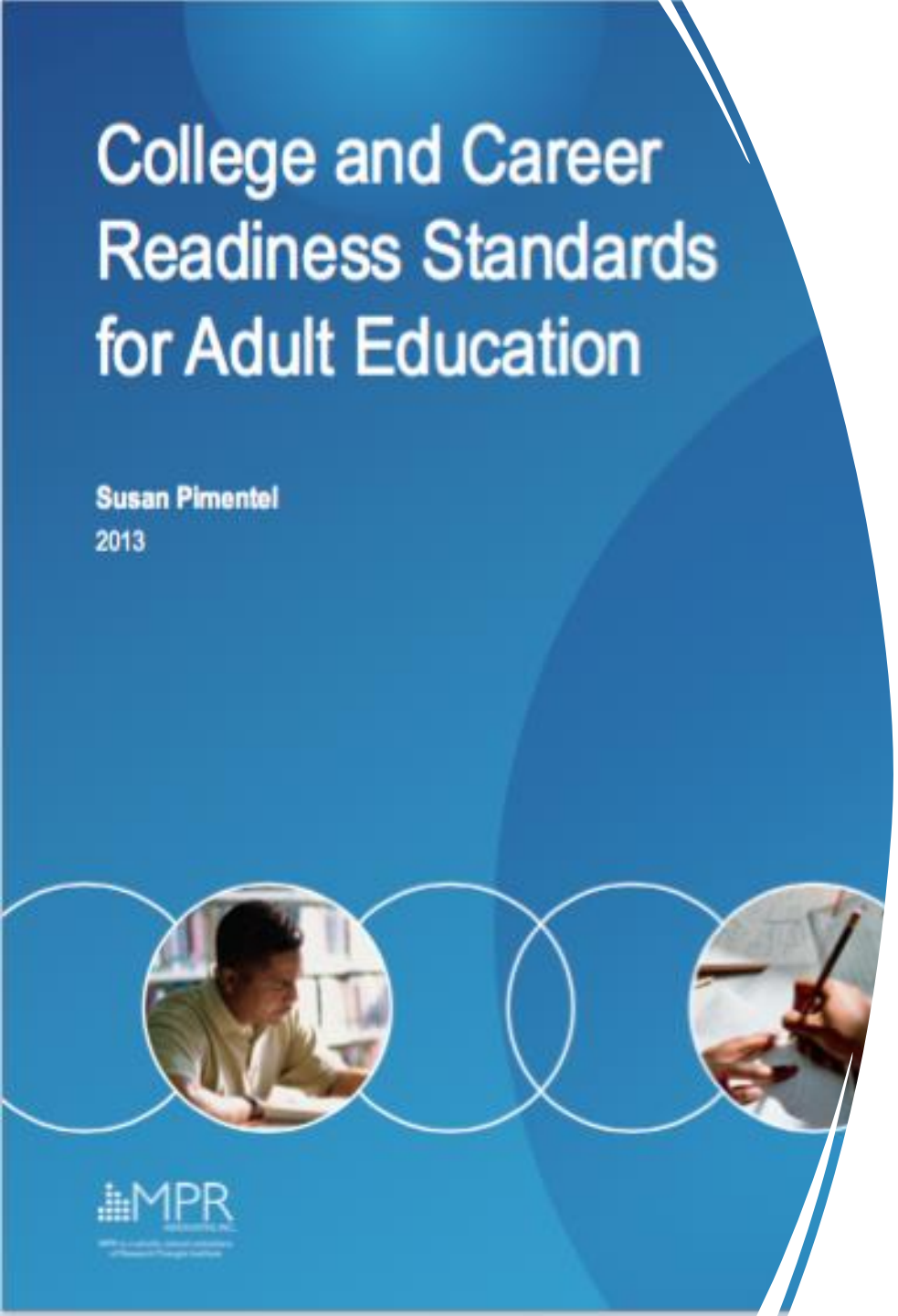
Agenda

- Study synopsis & context
- Research questions
- Methodology & data
- Data analysis
- Discussion & implications



Study Synopsis

Process: We are exploring a methodology to examine relationships between PD, instructional practices, and learner achievement.

In our exploration of the relationships between CCRS trainings, instructional practice, and learner achievement, preliminary findings show that, for the year analyzed,

- the teacher group who participated in CCRS PD had higher MSG rates and higher EFL gains than the overall teacher population; and
- teachers who participated in more of our CCRS PD (3 and more) utilized a wider variety of instructional practices than teachers who participated in fewer trainings (1 or 2).

Background: Rationale for the Study

The context

- Low MSG rates for the 2018-2019 year
- Increased focus on standards-based instruction, including large-scale CCRS PD offerings
- Limited data on (and limited capacity to explore) how CCRS trainings relate to instructional practices

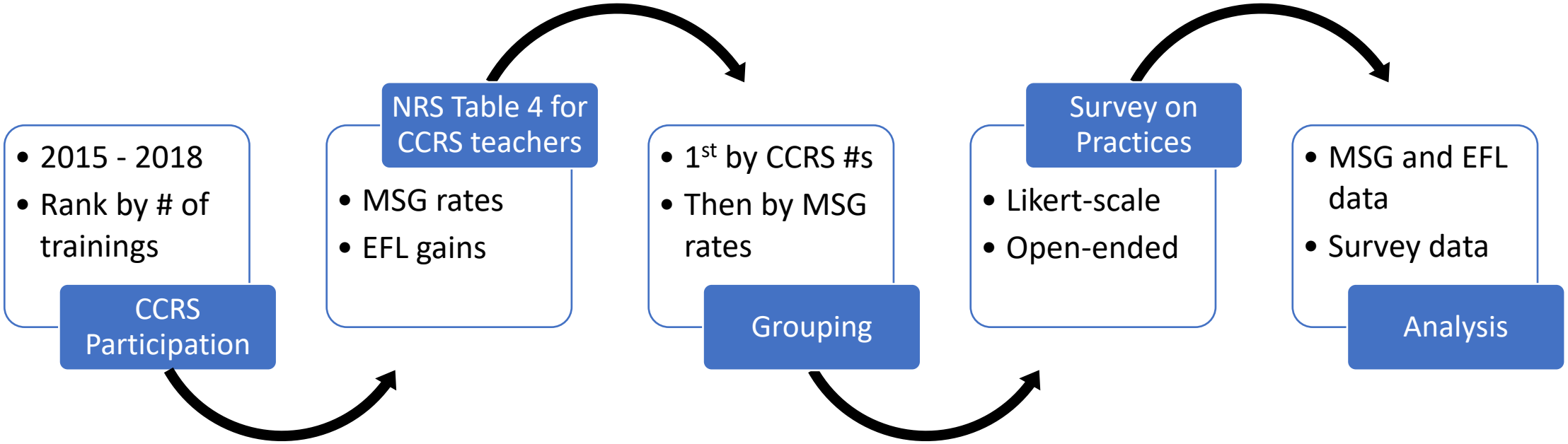
Leading questions

- Does our PD impact instructional practice?
- What does instruction look like in classrooms with teachers who participate in PD?
- How does instructional practice relate to learner outcomes?
- How does PD participation relate to learner outcomes?

Research Questions

1. How do measurable skill gain (MSG) rates and educational functioning level (EFL) gains differ for teachers who participate in college and career readiness standards (CCRS) trainings?
2. What does CCRS implementation look like at varying levels of PD participation and MSG rates?

Study Design: Mixed Methods



Data

Learning management system data	NRS data	Survey data	Member checks on findings
CCRS trainings (2015-2018) Participant information (N=156) # & type of trainings/participant	Table 4 for CCRS participant teachers in 2018-2019 MSG rates (I) EFL gains (E)	Likert-scale items based on CCRS Observation Tools 2 open-ended questions Collection ongoing	Forthcoming

Organizing the Data (N=156)

LMS Data

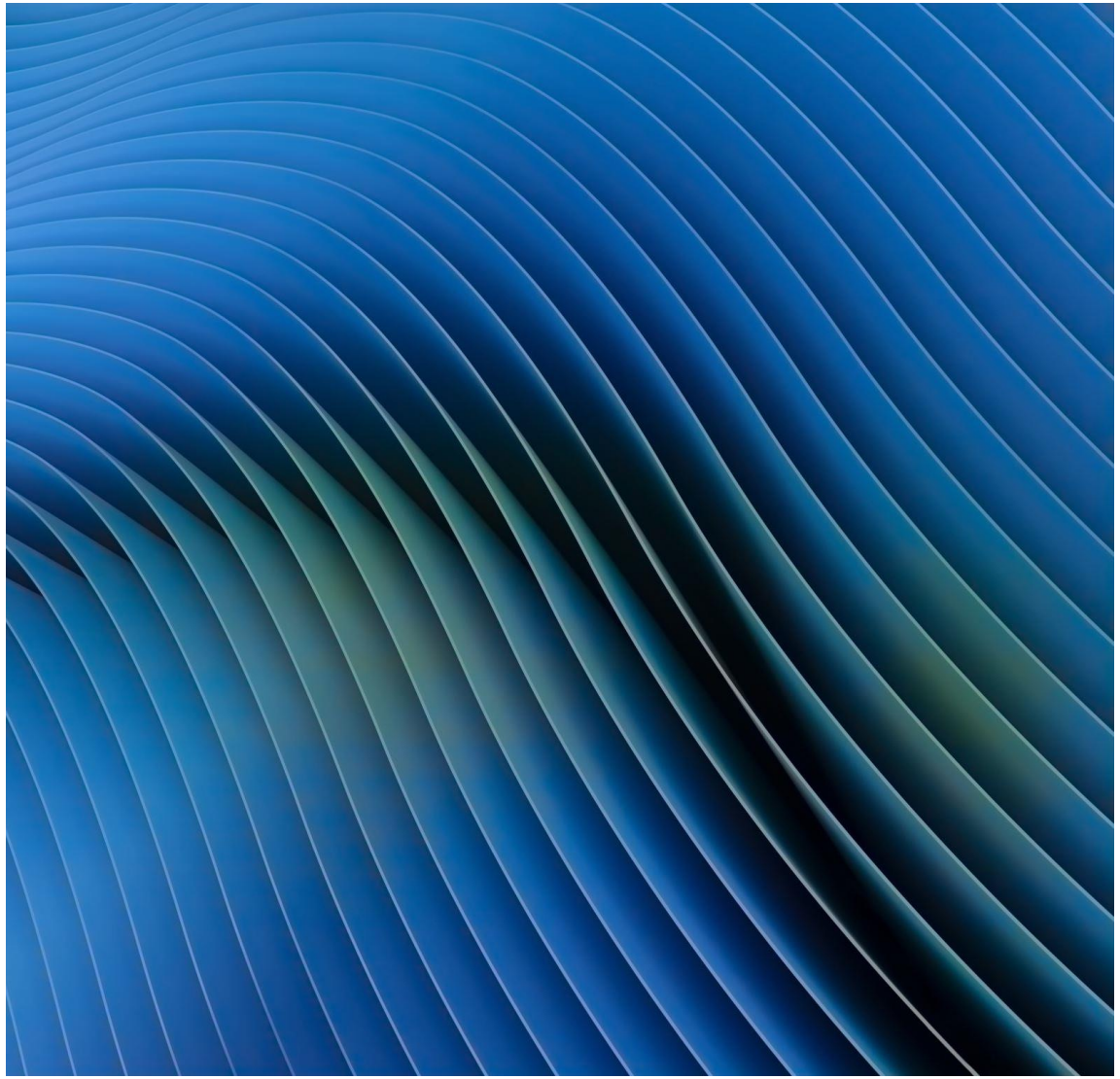
- Rank by 1st CCRS year
- Rank by # trainings
- Online v F2F

NRS Data

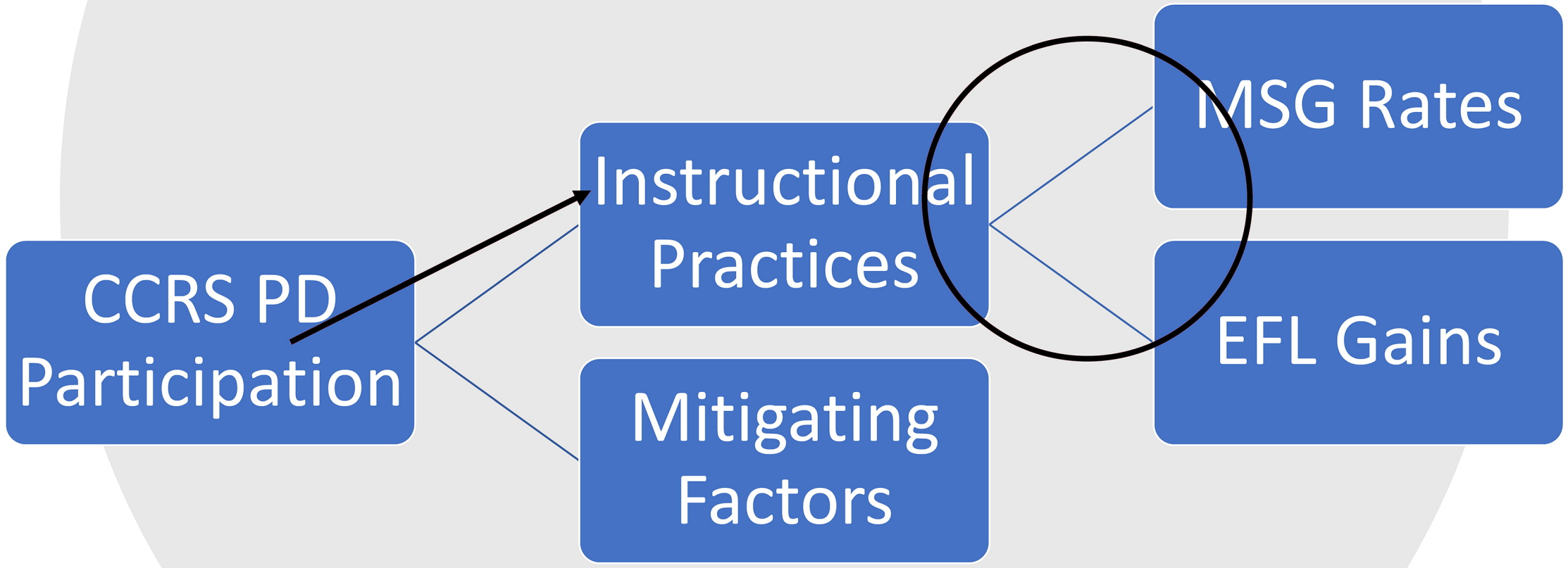
- MSG rates by teacher
- EFL gains by teacher

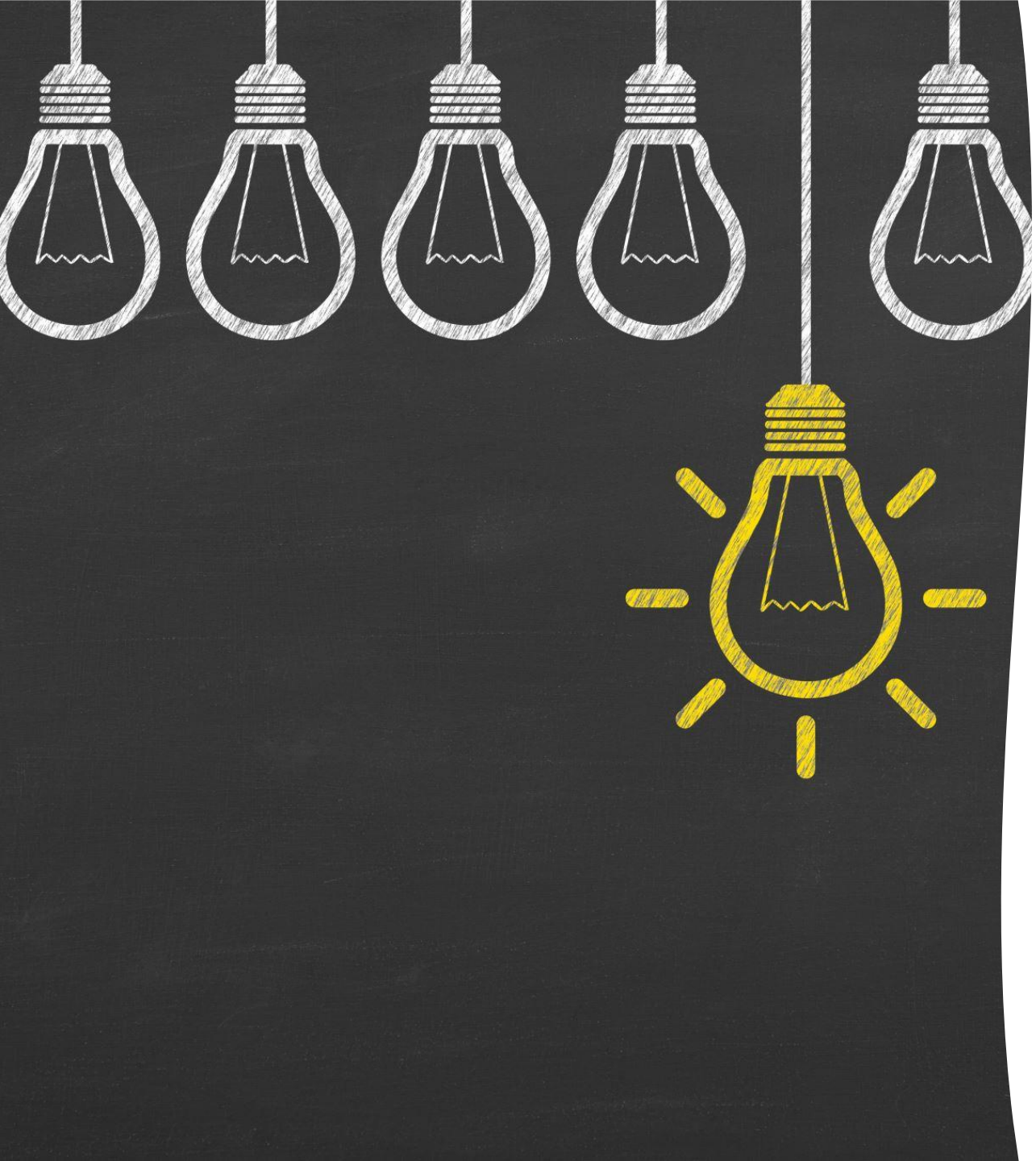
Sub-grouping the study sample

- High & low CCRS participation rates
- High & low MSG rates



Data Analysis Process





Preliminary Findings

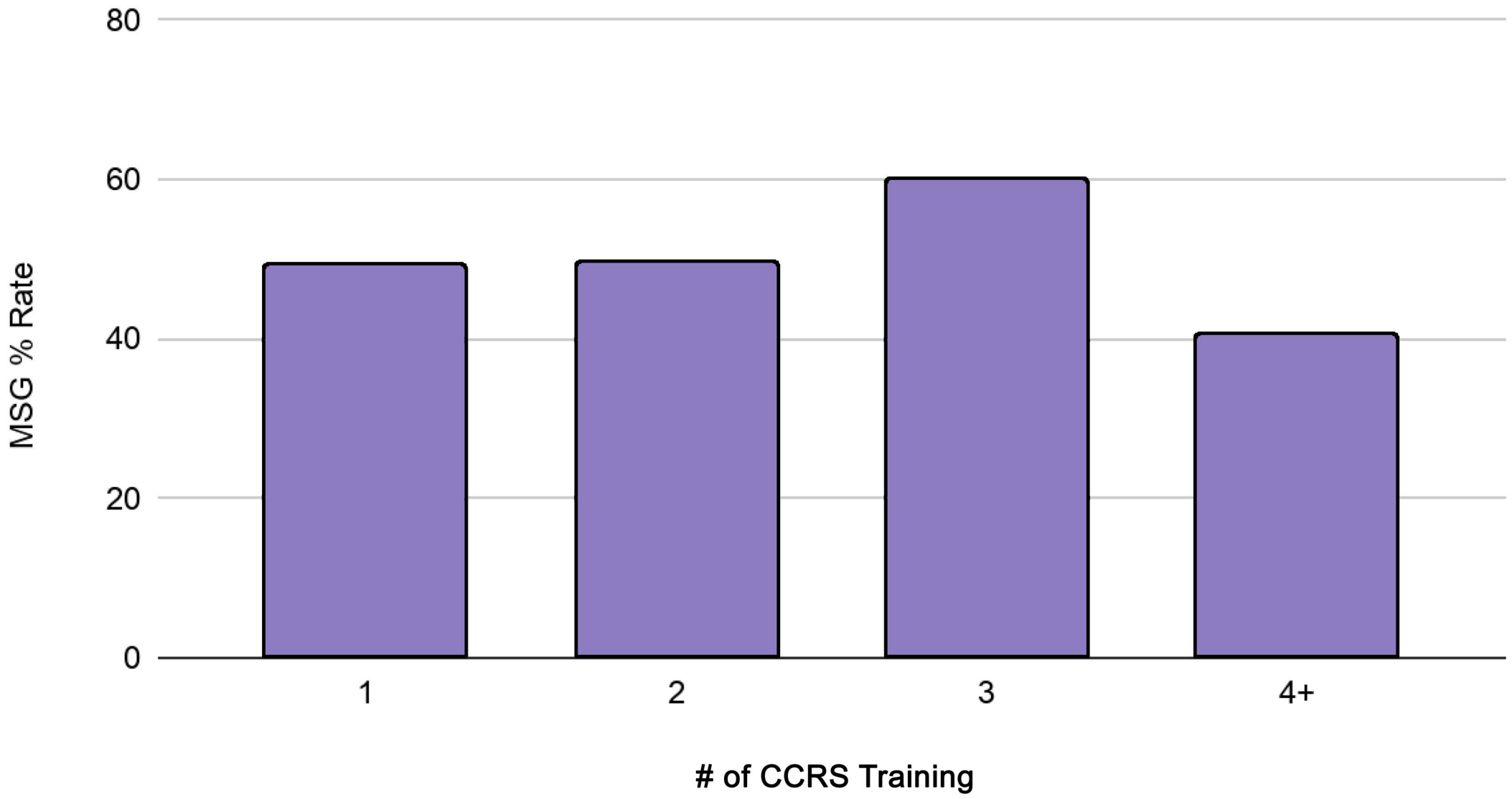
Process: We are developing a methodology to examine relationships between PD, instructional practices, and learner outcomes (MSG and EFL).

Preliminary findings show that

- the teacher group who participated in CCRS PD had higher MSG rates and EFL gains than the overall teacher population; and
- teachers who participated in more of our CCRS PD (3 and more) utilized a wider variety of instructional practices than teachers who participated in fewer trainings (1 or 2).

of CCRS Trainings & EFL Gains

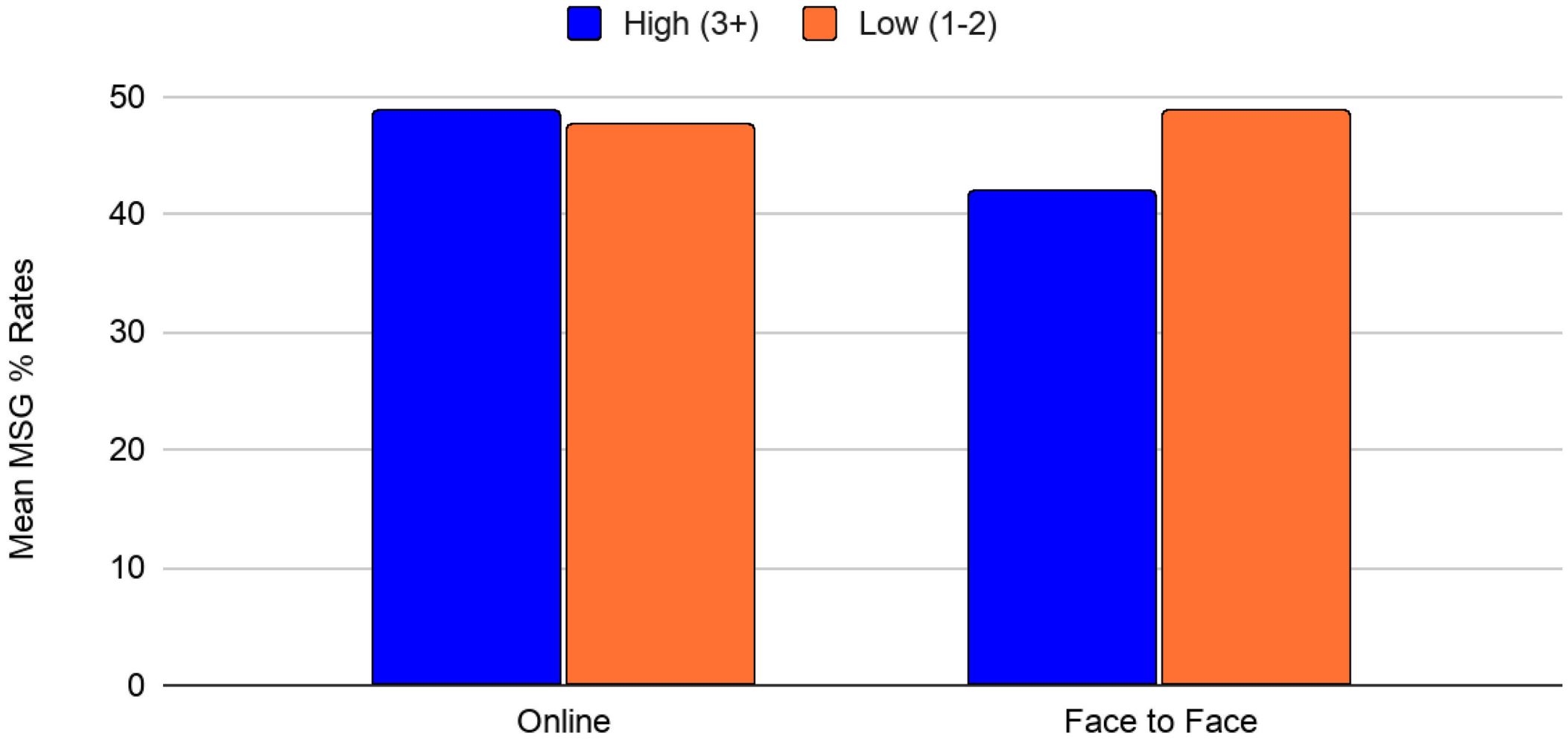
of CCRS Trainings & MSG Rates

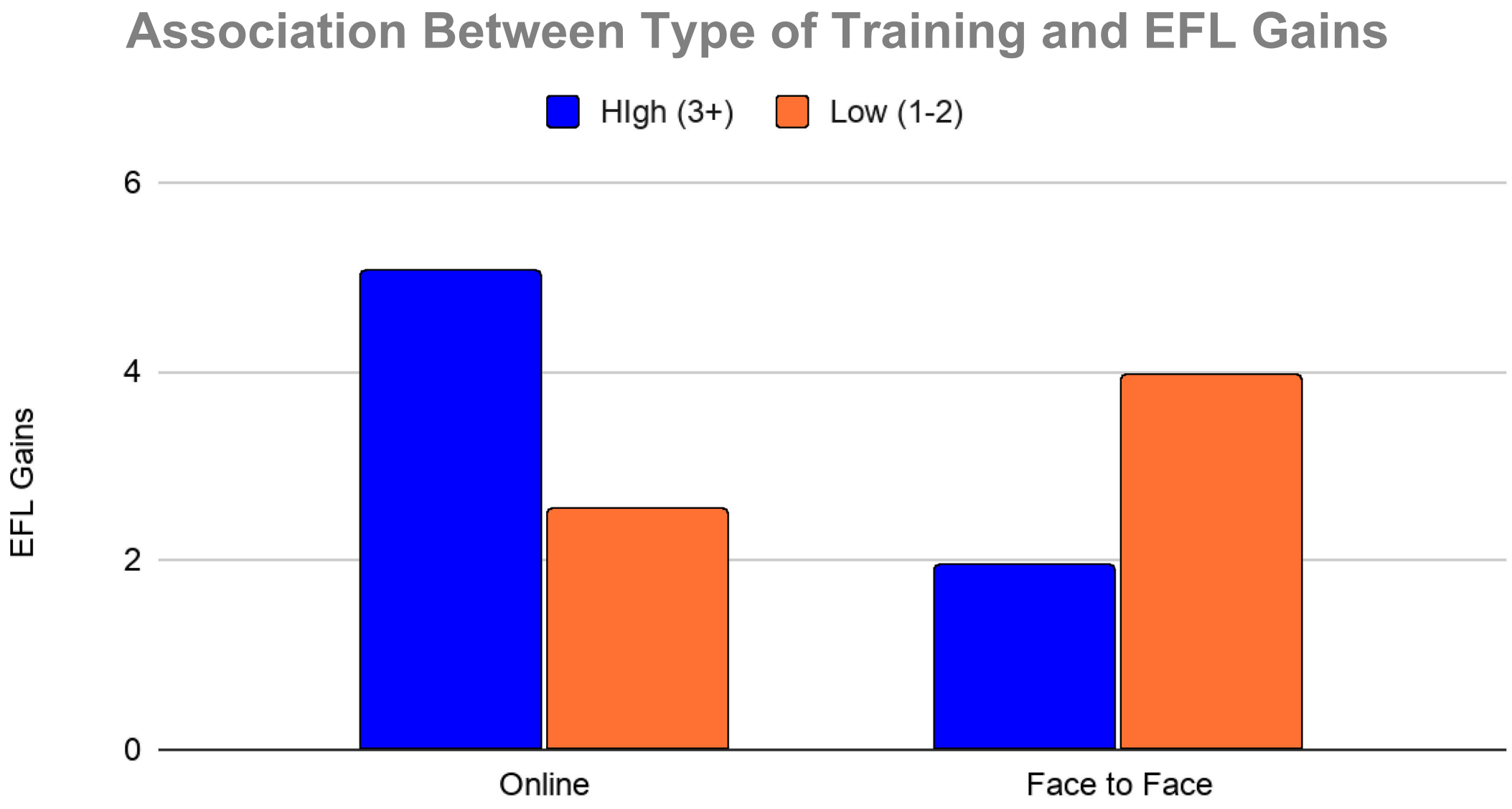


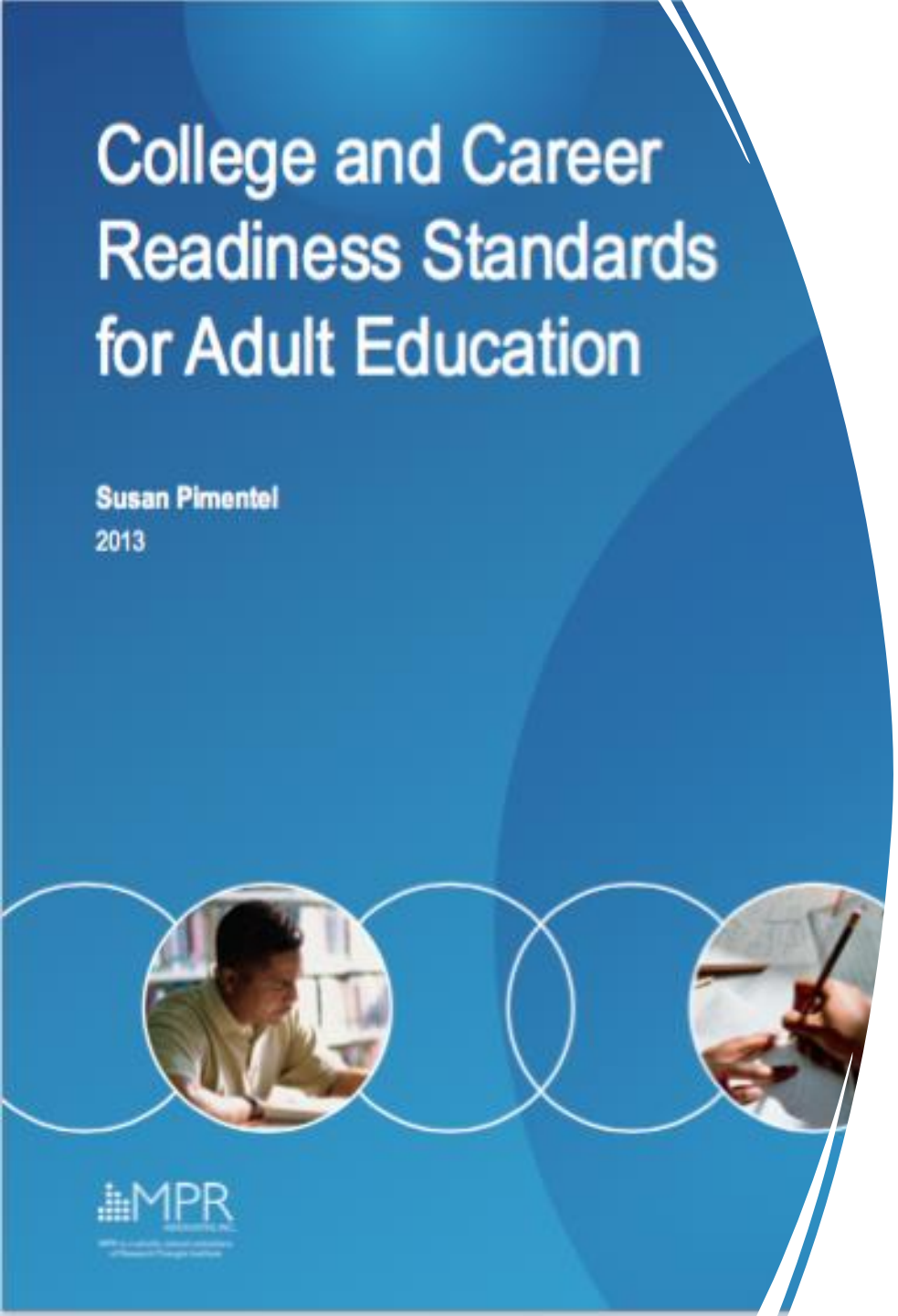
of CCRS trainings & MSG target

	Met MSG target	Did not meet MSG target
Low CCRS trainings	Count 38 Expected 40	Count 43 Expected 41
High CCRS training	Count 39 Expected 37	Count 36 Expected 38

Association Between Type of Training and MSG % Rates




Association Between Type of Training and EFL Gains
HIgh (3+)
Low (1-2)
6
4
2
0
EFL Gains
Online
Face to Face



Survey on the Implementation of the CCRS

Based on CCRS Observation Protocols

What does CCRS implementation look like at varying levels of PD participation and MSG rates?

Population Sub-groups

High CCRS High MSG	High CCRS Low MSG
Low CCRS Low MSG	Low CCRS Low MSG

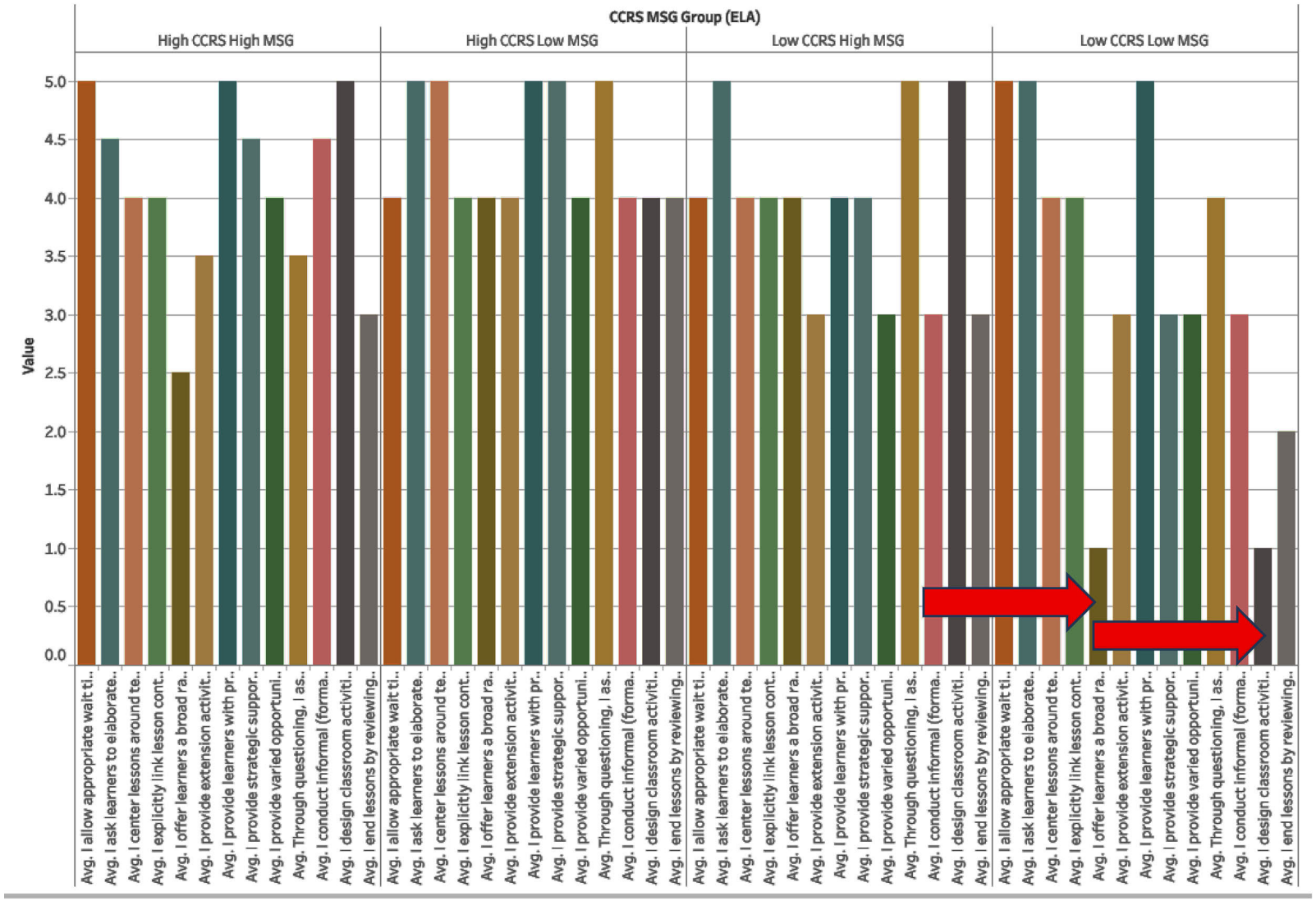
- N=156
- High CCRS PD: 3 and more
- High MSG rate: >43%

Survey Design

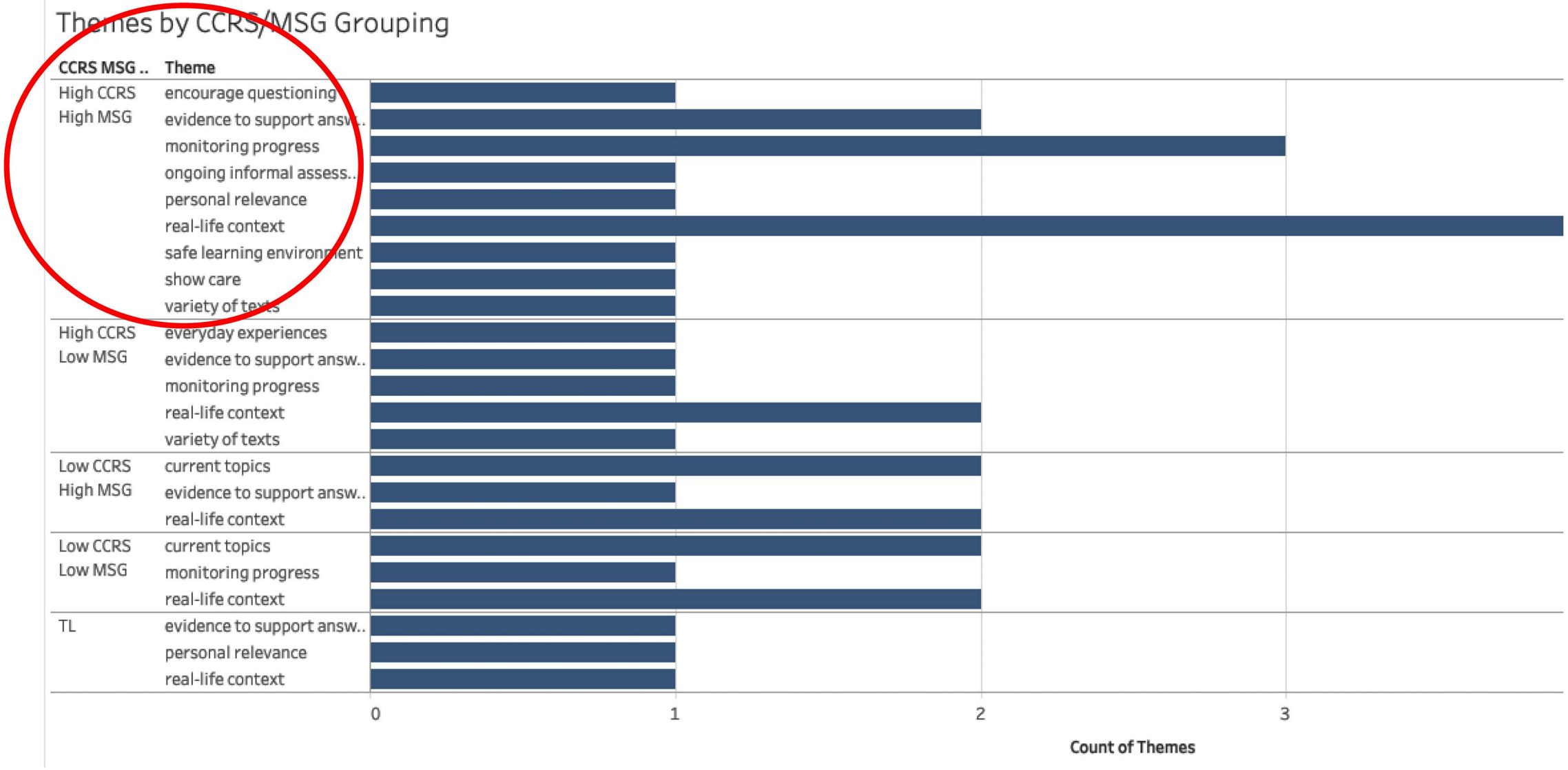
- **3 versions**
  - English language arts
  - English language proficiency
  - Math
- **3 sections**
  - Instructor information (name, program, region, content)
  - Likert-scale items (12 or 13) adapted from CCRS Observation tool protocol
  - 2 open-ended questions on instructional practice

Open-ended question examples

- Provide at least one example of a unit, lesson, or activity that provides learners with opportunities to apply new concepts to authentic or adult-oriented contexts.
- Describe the kinds of supports and scaffolds you provide to learners who need them in order to understand content and reinforce learning.



ELA Survey Responses by CCRS/MSG Group


Themes by CCRS/MSG Grouping
CCRS MSG ..
Theme
High CCRS High MSG
encourage questioning
evidence to support answ..
monitoring progress
ongoing informal assess..
personal relevance
real-life context
safe learning environment
show care
variety of texts
High CCRS Low MSG
everyday experiences
evidence to support answ..
monitoring progress
real-life context
variety of texts
Low CCRS High MSG
current topics
evidence to support answ..
real-life context
Low CCRS Low MSG
current topics
monitoring progress
real-life context
TL
evidence to support answ..
personal relevance
real-life context
0
1
2
3
Count of Themes

Preliminary Survey Findings

Implications for Educators

Our findings are preliminary, and survey responses still represent a small portion of adult education teachers in Virginia.

Based on these preliminary findings, the data indicate that

- higher levels of CCRS PD participation (3 or more) relates to **more variety in instructional practice**, including the use of a wider range of teaching strategies; and
- a wider range of instructional strategies used in the classroom may relate to higher MSG and EFL gain rates.

Implications for Professional Development

We now have a process in development that may strengthen our capacity to

- connect disparate datasets to examine relationships between PD and performance;
- more accurately target PD to demonstrated instructional skills gaps;
- more accurately determine the influences of PD on instructional behaviors;
- identify and highlight best practices among our teacher population;
- expand our pool of teacher leaders to represent a wider range of instructional experiences by providing us with another way to learn about instructional practices across the state; and
- better meet the needs of teachers and learners through more accurately targeted technical assistance.

Going Forward

- **Future research**
  - Compare with those who did not receive CCRS training
  - Look at survey data from a larger sample of instructors
  - Collect data over multiple years
  - Look at post-test rate and/or teacher retention
- **Implementation**
  - Continue to streamline the methodology for analyzing teacher-level data
  - Conduct regular check-ins with instructors regarding how CCRS is being implemented to help drive more targeted PD

Questions

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and

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