

TEACHER REFLECTION OVER TIME: ASSOCIATIONS WITH CHANGE IN TEACHER PRACTICE AND CHILDREN'S ENGAGEMENT

Michelle Baldanza¹, Manuela Jimenez Herrera², Jennifer LoCasale-Crouch², Sonia Cabell²

¹University of California, Los Angeles ²University of Virginia

TEACHER REFLECTION

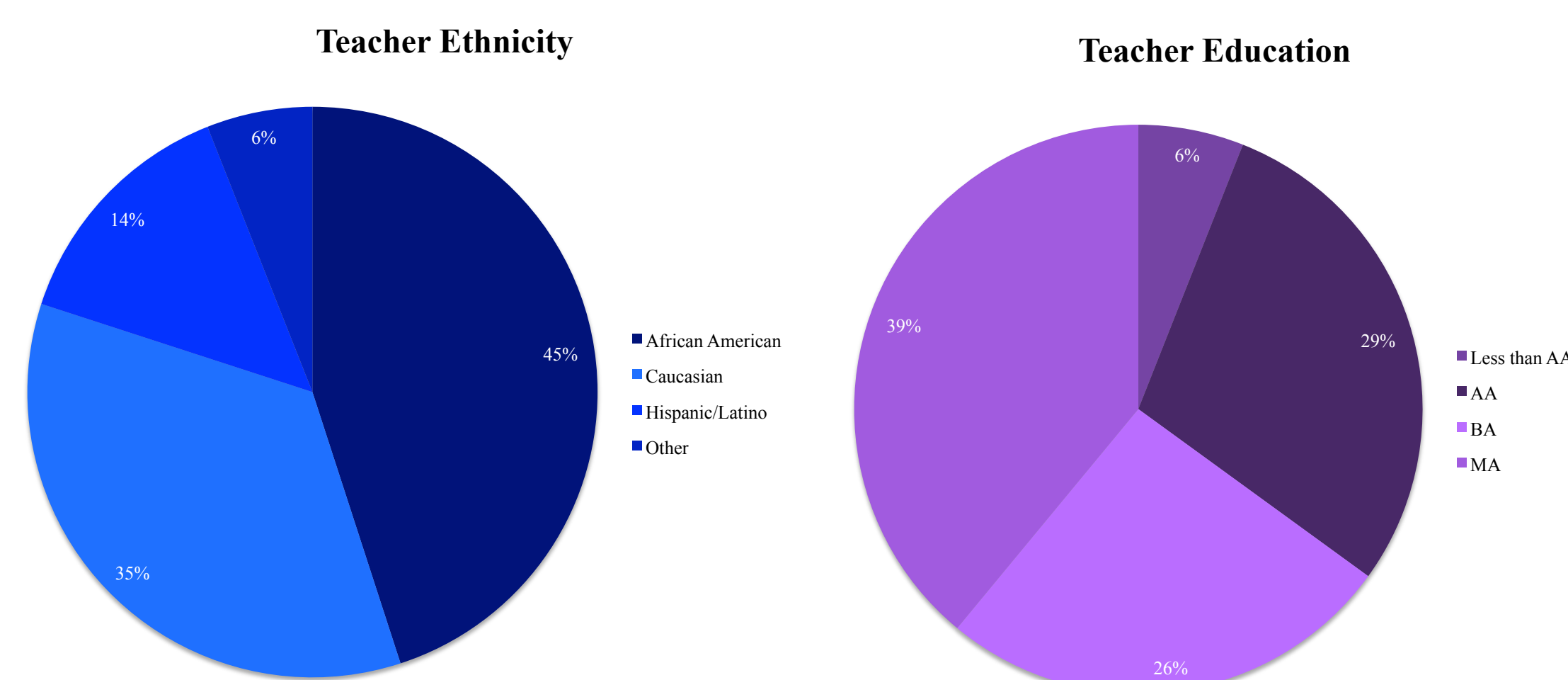
- Teacher reflection is important for teacher growth and effectiveness.
- Teacher reflection tends to involve a recurrent pattern of identifying a problem, developing an action plan, evaluating the effectiveness of the plan, and assessing the outcome (Marcos, Sanchez, & Tillema, 2009).
- Intervention components closely aligned with teacher reflection matter for effective teacher practice and children's vocabulary development (Mashburn, Downer, Hamre, Justice, & Pianta, 2010; Pianta, Mashburn, Downer, Hamre, & Justice, 2008).
- Questions still remain regarding how teacher reflection changes within the context of an intervention and how it relates to teacher effectiveness.
- The current study employs an in-depth analysis of teacher reflection and examines associations between levels of reflection and change in practice and child engagement.

RESEARCH QUESTIONS

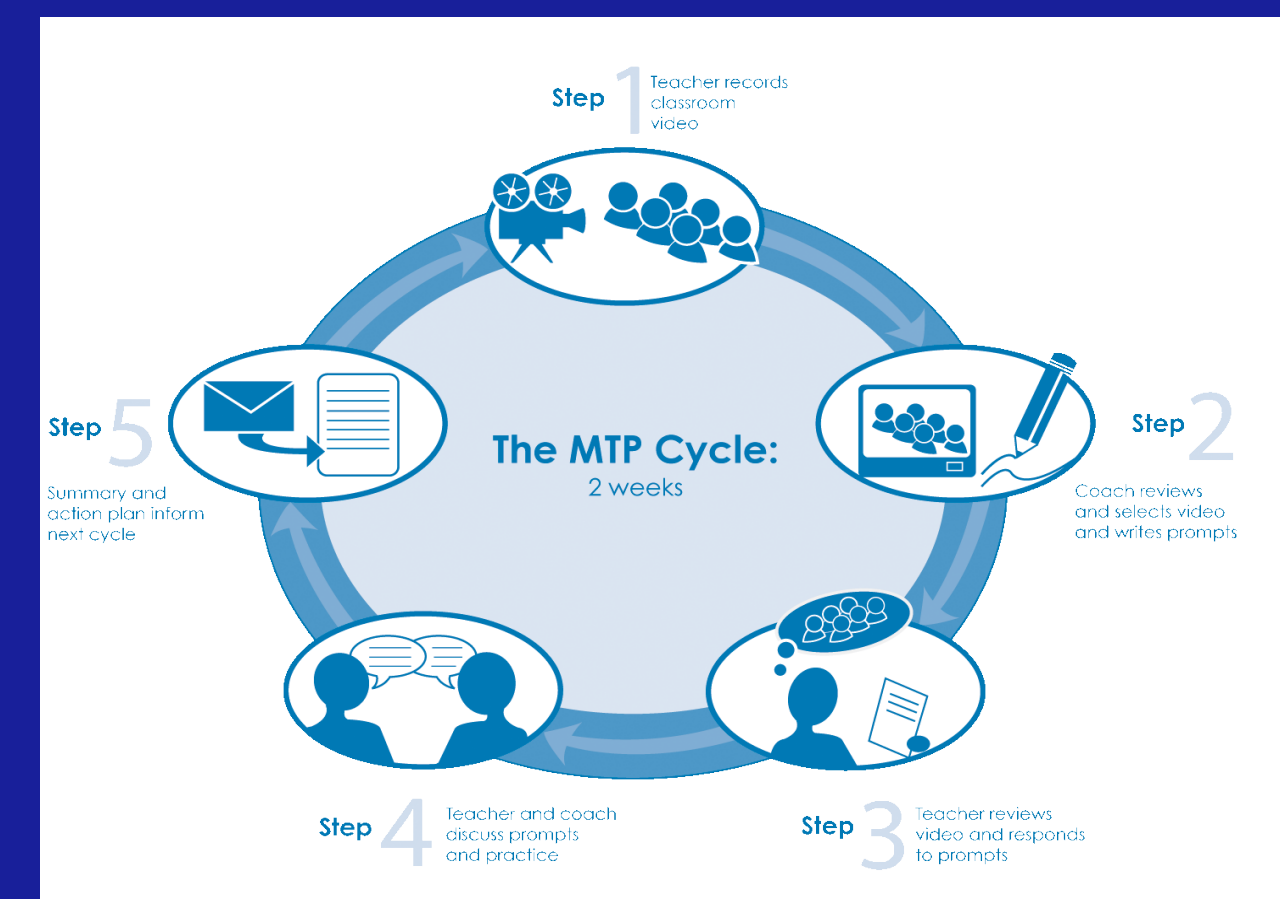
1. Do levels of teacher reflection change over time within the context of a coaching intervention?
2. Is teacher reflection associated with change in teacher practice?
3. Is teacher reflection associated with higher levels of child engagement?

SAMPLE AND DEMOGRAPHICS

Participants included 146 pre-kindergarten teachers participating in the year-long consultancy phase of a large professional development study and 327 children within their classrooms the following year. The large majority of teachers were female (94%) with an average age of approximately 43 years.



PROCEDURES AND MEASURES



TEACHER REFLECTION
Responds to the question
Describes teacher-child interactions
Demonstrates knowledge
Makes connections
Overall level of engagement
Overall level of reflection

- Teacher-Child Interactions**
- The Classroom Assessment Scoring System (CLASS)
- Peer Engagement**
- The Individualized Classroom Assessment Scoring System (inCLASS)

Three cycles were coded for each teacher. The first cycle, a cycle in the middle of the process, and the last cycle.

The association between average teacher reflection and change in teacher's CLASS scores from pre- to post-intervention and with children's classroom engagement the following school year were examined using linear regression.

DESCRIPTIVES

Table 2. Descriptive Statistics of Teacher Reflection

	N	Min	Max	M	SD
Time 1	140	1.11	2.69	1.85	0.38
Time 2	144	1.03	2.75	1.87	0.36
Time 3	142	1.08	2.83	1.87	0.37

TEACHER-CHILD INTERACTIONS

Table 3. Prediction of Change in Teacher-Child Interactions (N=137)

Predictor Variable	Instructional Support ^a		
	B	SE	p
Teacher Reflection	0.34	0.16	0.04

^a Full model: $R^2=.03$, adjusted $R^2=.02$; $F=4.39$, $df=1$, $p<.05$

Table 4. Prediction of Change in Teacher-Child Interactions (N=137)

Predictor Variable	Concept Development ^a			Quality of Feedback ^b			Language Modeling ^c		
	B	SE	p	B	SE	p	B	SE	p
Teacher Reflection	0.44	0.20	0.03	0.19	0.18	0.28	0.39	0.20	0.05

^a Full model: $R^2=.04$, adjusted $R^2=.03$; $F=4.89$, $df=1$, $p<.05$

^b Full model: $R^2=.01$, adjusted $R^2=.001$; $F=1.17$, $df=1$, $p>.05$

^c Full model: $R^2=.03$, adjusted $R^2=.02$; $F=4.07$, $df=1$, $p<.05$

CHILD ENGAGEMENT

Table 5. Prediction of Child Engagement with Teachers and Peers (N=327)

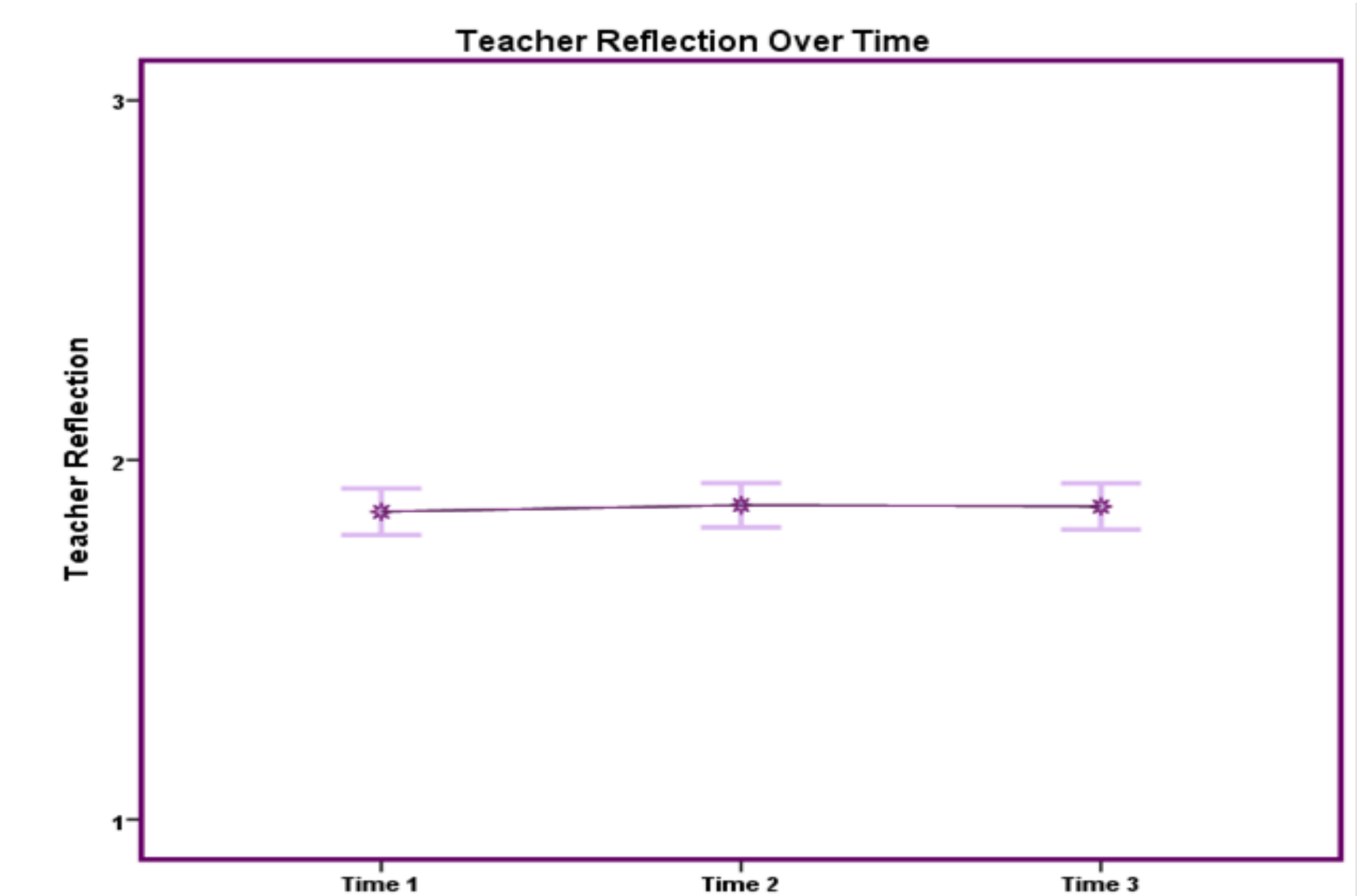
Predictor Variable	Teachers ^a			Peers ^b		
	B	SE	p	B	SE	p
Teacher Reflection	0.48	0.16	0.00	0.41	0.17	0.02

^a Full model: $R^2=.03$, adjusted $R^2=.03$; $F=9.34$, $df=1$, $p<.01$

^b Full model: $R^2=.02$, adjusted $R^2=.02$; $F=5.93$, $df=1$, $p<.05$

CHANGE IN TEACHER REFLECTION

A one-way repeated measure ANOVA was conducted. Results indicated on average there was no significant effect of teacher reflection across time 1, time 2, and time 3 of the intervention ($F(1.88, 251.23) = .19$, $p = .81$). These results suggest that teacher reflection is stable across time points.



CONCLUSIONS

- Teacher reflection did not change significantly across the intervention.
- Large variability in teachers' ability to engage in reflection suggests teachers may be having very different experiences engaging in the intervention.
- Future analyses involving characteristics of teachers associated with reflectivity, as well as potential moderating effects of consultant effectiveness would prove valuable.
- Average teacher reflection was associated with improvements in teacher-child instructional interactions and child engagement the following year.
- Reflection may be important for improving teacher effectiveness.
- The specific mechanisms by which reflection leads to improved practice still need "unpacking."

References are available upon request. The research reported here was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R305A060021 and R305B090002 to the University of Virginia. The opinions expressed are those of the authors and do not represent views of the U.S. Department of Education.