How do Self-efficacy, Leadership, Teacher-school Fit, and Diversity Dispositions Relate to Retention

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Project

- A collaborative Track 4 project (#1950019) to study teacher retention through motivation, leadership, and social networks
- Comparison of MTFs & non-Noyce teachers
- Eight universities involved

Problem Statement

Teacher mobility and attrition account for 90% of the annual demand for teachers[1]. High-poverty, high-minority public schools are the most hurt[2]. Investigations of the extent that factors such as motivation, leadership, and social networks relate to teacher retention are needed. Investigations of the impact of Noyce MTF programs are also needed.

Theoretical Framework

Most of the teachers leave the profession for reasons including dissatisfaction, lack of support, autonomy, and lack of collaboration opportunities[2].

Teachers' self-efficacy for teaching

Self-efficacy is an important factor in fostering constructive learning, student motivation, and higher academic performance[3], which may impact job satisfaction and retention[4].

Teacher leadership skills

Leadership skills and collaborative school-work environment can support and sustain high-qualified teacher in the profession[5].

Diversity dispositions

Positive diversity dispositions are associated with persisting in teaching in high-need schools[6].

Social networks

Teachers' social networks support their persistence[7,8].

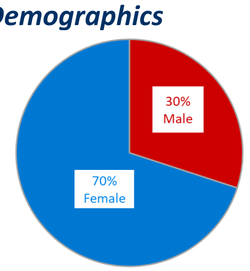
Research Questions

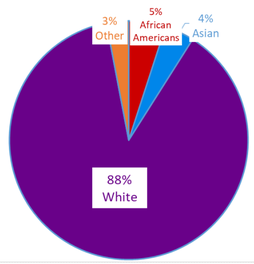
- How do Noyce MTFs and non-Noyce teachers compare in terms of their self-efficacy for teaching, leadership skills, diversity dispositions, social networks, teacher-school fit, and principal autonomy support?
- To what extent do aforementioned factors relate to teacher retention for Noyce MTFs and non-Noyce teachers?

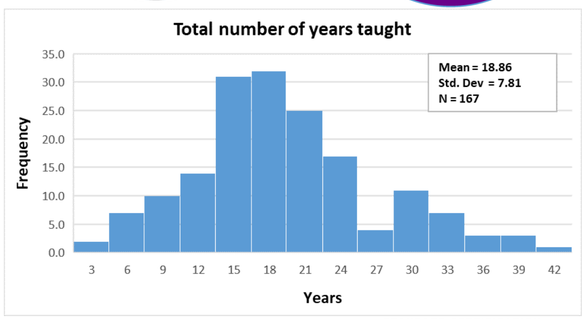
Methods

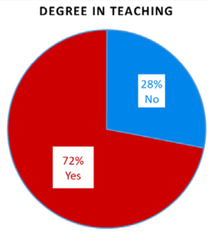
- Survey of 167 science and mathematics teachers (84 MTF and 83 non-Noyce)
- Multinomial logistics regression analysis on retention as the outcome (3-levels)

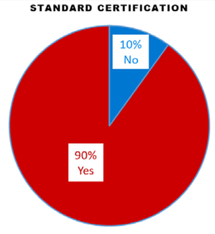
Demographics











		Retention			
		Stayer[a]	Shifter	Leaver	Total
Role	Non-Noyce	67	13	3	83
	MTF	51	24	9	84
	Total	118	37	12	167

[a]Implies staying in teaching and includes mover teachers (~12%).

Results

Comparison (MTF vs non-Noyce)

Variables	t value	df	p value (2-tailed)	Mean difference	S.E.	95% C.I .	
						Lower	Upper
Teaching self-efficacy	**2.23**	**165**	**0.03**	**0.187**	**0.08**	**0.02**	**0.35**
Teacher leadership skills	1.13	165	0.26	0.12	0.10	-0.08	0.32
Teacher-school fit	-0.83	165	0.41	-0.10	0.12	-0.33	0.13
Principal autonomy support	0.19	165	0.85	0.03	0.16	-0.28	0.34
Diversity dispositions	*1.81*	*165*	*0.07*	*0.06*	*0.03*	*-0.01*	*0.12*
Community connectedness	0.69	165	0.49	0.08	0.12	-0.15	0.31
Leadership network size	**3.18**	**165**	**0.00**	**1.91**	**0.60**	**0.72**	**3.10**
Teaching network size	0.65	165	0.52	0.45	0.69	-0.92	1.81

- MTFs have higher levels of *self-efficacy* and *leadership skills.*
- MTFs have slightly more availing beliefs about diversity (practical significance).

Regression Results

Variables	Shifter[a]			Leaver[a]		
	B	S.E	Exp(B)	B	S.E	Exp(B)
Intercept	-1.49	5.79		3.13	9.09	
Teaching self-efficacy	0.39	0.53	1.48	1.77	0.98	5.88
Teacher leadership skills	**1.86**	**0.53**	**6.44**	1.10	0.68	2.99
Teacher-school fit	**-0.79**	**0.36**	**0.45**	-0.25	0.50	0.78
Principal autonomy support	0.31	0.29	1.36	-0.55	0.37	0.58
Diversity dispositions	-0.97	1.39	0.38	-3.63	2.41	0.03
Community connectedness	-0.14	0.38	0.87	1.15	0.63	3.16
Leadership network size	0.12	0.07	1.13	0.14	0.11	1.15
Teaching network size	-0.02	0.06	0.98	-0.10	0.11	0.91

[a] The reference category: Stayer.

- Leadership skills are positively associated with shifting to a non-teaching position.
- Teacher-school fit is negatively associated with shifting.
- Leavers did not differ from stayers.

Open-ended Responses

Reasons for Shifting

- Support other teachers
  "To support teachers in reference to curriculum and materials to utilize for instructional purposes"
- Greater impact
- Evaluations and challenges in teaching
  "Tired of the evaluation procedure as an educator; took too much time from actual teaching"
- Professional growth

Reasons for Leaving

- Family reasons and retirement
- Pursuing graduate degrees
- Budget cuts
- Broadening scope of their work
  "Curriculum developer for a non-profit textbook publisher"

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