

## Research Question

What factors might predict teachers leaving school (mobility) or changing their teaching assignments (movement) within school?

## Importance of Study

- We speculate that the effects of teacher mobility and teacher movement on students are similar to that of teacher attrition (leaving teaching profession).
- Teacher mobility and movement affects:
  - the supply of teachers
  - the quality of teaching
  - students' academic performance
- Teacher mobility and teacher movement are exacerbated in urban schools.
- Few research studies have addressed within-school movement.

## Background Information



- This research was conducted as part of a larger project, "Promoting Science among English Language Learners (P-SELL)"
- P-SELL has targeted Miami-Dade County schools with a high proportion of English language learners (ELLs) and students receiving free or reduced lunch.
- More information on P-SELL can be found at [www.education.miami.edu/psell/](http://www.education.miami.edu/psell/)

## Participants

The participants in this study were 3<sup>rd</sup> and 4<sup>th</sup> grade urban public school teachers:

- Stable Teachers** stayed in the same grade and school from 2003-04 to 2004-05 ( $N = 28$ )
- Mobile Teachers** left the school ( $N = 37$ )
- Movable Teachers** received a different teaching assignment within the same school ( $N = 35$ )

## Instrument

A survey instrument was administered in spring 2004 and spring 2005. The survey:

- includes scales to measure latent constructs rather than individual items,
- considers science instruction and student diversity simultaneously,
- examines both classroom-level and school-level variables, and
- addresses issues pertinent to non-mainstream students in urban schools.

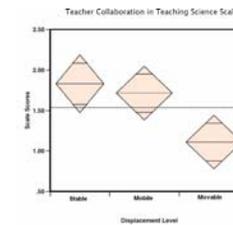
## Data Analysis

- The survey consisted of items that were grouped together to form 22 scales.
- The scales used a 4-point rating system for each item.
- The score for each scale was computed using the average of the responses to the items that comprised the scale.
- A scale score was computed only for those respondents who had valid responses for at least 75% of the items in the scale.

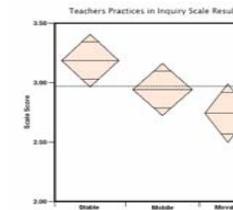
Scale Name	F	df	p	Cronbach $\alpha$
<b>Social Capital</b>				
Teacher Collegiality	2.69	95	0.073	0.74
Teacher-Principal Trust	0.345	93	>0.5	0.89
Teacher-Teacher Trust	1.055	97	0.352	0.82
Peer Collaboration Scale	1.611	97	0.205	0.82
Collective Responsibility Scale	2.277	97	0.108	0.88
Focus on Student Learning	2.2	98	0.116	0.84
<b>Organizational Supports in Teaching Science for Student Diversity</b>				
Principal Support of Science	2.082	94	0.13	0.84
Teacher Collaboration in Science Practice	0.088	96	>0.5	0.74
Teacher Collaboration in Teaching Science	5.163	93	0.008**	0.85
<b>Barriers to Teaching Science for Student Diversity</b>				
PCAT Barrier to Teaching Science	<.001	93	>0.5	0.9
School Barrier to Teaching Science	0.546	92	>0.5	0.77
School Personnel Barrier to Teaching Science	0.795	90	0.455	0.74
Parents, Family, and Community Barriers to Teaching Science	0.46	93	0.634	0.8
Poor Academic Skills as Barrier to Teaching Science	0.213	94	>0.5	0.93
<b>Teaching Science and English Language Development of ELL Students</b>				
Science Knowledge Scale	0.956	97	0.388	0.89
Teacher Practices in Understanding	2.47	74	0.092	0.77
Teacher Practices in Inquiry	3.577	73	0.033*	0.86
Traditional/Conventional Practices in Teaching Science	2.009	73	0.142	0.71
<b>Diversity</b>				
Student Diversity Scale	1.41	93	0.248	0.89
English Language Development/Practices in General	3.11	64	0.052	0.9
English Language Development/Practices for Home Language	3.11	63	0.052	0.83
English Language Development/Practices ESOL Strategies	2.53	66	0.087	0.84

\*Significant at  $\alpha = .05$   
\*\*Significant at  $\alpha = .01$

## Results



Bonferroni Test for Differences Between Means				
$\alpha = 0.05$				
Adjusted $\alpha = 0.02$				
Groups	Difference	Statistic	P	Significant
1.00 - 2.00	0.115	0.459	> 0.5	No
1.00 - 3.00	0.719	2.925	0.005	Yes
2.00 - 3.00	0.605	2.611	0.011	Yes



Bonferroni Test for Differences Between Means				
$\alpha = 0.05$				
Adjusted $\alpha = 0.02$				
Groups	Difference	Statistic	P	Significant
1.00 - 2.00	0.244	1.566	0.123	No
1.00 - 3.00	0.442	2.755	0.008	Yes
2.00 - 3.00	0.198	1.156	0.254	No

## Summary of Results

- There are two scales with significant differences among the groups:
  - 1) Teacher Collaboration in Teaching Science
  - 2) Teacher Practices Inquiry
- Stable teachers did not differ from mobile teachers. However, movable teachers did differ significantly from the other two groups:
  - 1) Movable teachers reported less collaboration.
  - 2) Movable teachers reported practicing less inquiry.

## Future Directions

- Run the analysis with years 3, 4, and 5 survey data and determine if trend continues.
- Design a mixed-methods study including survey, classroom observation, and individual and focus group interview data to find explanations for the trend.
- Offer possible solutions addressing the factors contributing to teacher mobility and movement.

The research reported here was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant DED-R305C050052 to University of Miami. The opinions expressed are those of the authors and do not represent views of the U.S. Department of Education.