

Teacher Pay & Student Achievement

Does the salary schedule correlate to MAP Achievement?

Dr. Jared Terry
Spokane R-7 School District
Lindenwood University

Teacher Quality

Teacher - #1 factor in student
achievement

Marzano (2007), Wong (2009), Reeves (2009), Harris & Sass (2009)

What Characteristics = quality teacher?

Teacher Experience

Advanced Degrees

Salary Schedule

		500	500	1500		400	400
	BS	BS+12	BS+24	MA OR	MA+9	MA+18	MA+24
1	34,000	34,500	35,000	36,500	36,900	37,300	37,700
2	34,000	34,500	35,000	36,500	36,900	37,300	37,700
3	34,000	34,500	35,000	36,500	36,900	37,300	37,700
4	34,450	34,950	35,450	36,950	37,350	37,750	38,150
5	34,900	35,400	35,900	37,400	37,800	38,200	38,600
6	35,350	35,850	36,350	37,850	38,250	38,650	39,050
7	35,825	36,325	36,825	38,325	38,725	39,125	39,525
8	36,300	36,800	37,300	38,800	39,200	39,600	40,000
9	36,775	37,275	37,775	39,275	39,675	40,075	40,475
10	37,250	37,750	38,250	39,750	40,150	40,550	40,950
11	37,725	38,225	38,725	40,225	40,625	41,025	41,425
12	38,200	38,700	39,200	40,700	41,100	41,500	41,900
13	38,675	39,175	39,675	41,175	41,575	41,975	42,375
14	39,150	39,650	40,150	41,650	42,050	42,450	42,850
15	39,625	40,125	40,625	42,125	42,525	42,925	43,325
16	40,100	40,600	41,100	42,600	43,000	43,400	43,800

Salary Schedule

- Salaries and Benefits – 80% of Budget
 - “Master’s Bump”
 - National Average Salary – 2011 (NCES)
 - Bachelor’s - \$43,650
 - Master’s - \$54,810
 - Missouri
 - Average Salary Increase - \$4283
 - \$150 Million statewide
- Roza & Miller, 2009

Other Policies

- NCLB Highly Qualified Requirements
 - HOUSSE
- Tenure
- LIFO
- Hiring Practices

The Study

- Why?
 - Experience & Advanced Degrees
- Who?
 - SWMO School Districts w/ ADA < 600
 - 3rd & 5th Grade
 - Sample – 23 Districts, 65 Teachers
- How?
 - Teacher Demographics
 - MAP Scale Score
 - Correlational & Regression Analysis

District Demographics

- District Enrollment - 327.78
- District Staff - 41.26
- Elementary Enrollment -190.39
- Elementary Staff - 22.00
- % of teachers with Master's Degrees – 46%
- Experience
 - 0-6 years: 43%
 - 7-15 years: 42%
 - 16+ years: 15%

Pearson r Correlation

	Teaching Experience	Advanced Degreeed Completion
3 rd Grade		
Communication Arts	-0.03	0.09
Math	0.13	0.15
5 th Grade		
Communication Arts	0.21	0.10
Math	0.19	0.06

No statistically significant relationship between the variables.

Multiple Regression Analysis

	R^2
3 rd Grade	
Comm. Arts	0.0197
Math	0.0301
5 th Grade	
Comm. Arts	0.0442
Math	0.0373

The Variables explained less than 5% of the variation in test scores

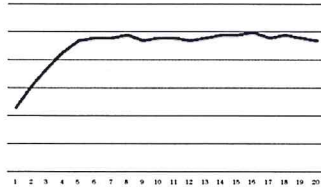
Findings

- Analysis showed no significant relationship

Previous Research

Experience & Student Achievement Correlation

- Improvement is shown up to year 5
- After year 5 it levels off



Experience & Student Achievement

2 areas showed continued correlation

- Kindergarten (Chetty et al., 2011)
- 3-8 Math (Ost, 2009)

One study suggests a continued correlation between experience and student achievement well into a teacher's career
(Papay & Kraft, 2011)

Advanced Degrees & Student Achievement

- Advanced degree has no effect
Hanushek & Rivkin, 2012; Clotfelter, Ladd, & Vigdor, 2007; Dobbie & Fryer Jr., 2011; Harris & Sass, 2009.
- Earning a master's degree after beginning teaching are less effective
Clotfelter, Ladd, & Vigdor, 2007
- Districts with a majority of teachers with advanced degrees have lower test scores
Dobbie & Fryer, Jr., 2011

Implications

- What does this mean for school policies..
 - Salary schedule?
 - Tenure?
 - LIFO?
 - Hiring?
- Teacher Education Programs
- Professional Development

Current Salary Schedule

- Base Salary – higher base
- Advanced degree increase options
 - Must be aligned w/instruction and subject area
 - Admin degrees do not count
- School district & higher ed. partnerships
- National Board Certified

Front Loaded Schedule

Larger increases in the earlier years of salary schedule

- Provides incentive for teachers to stay in teaching
- Teachers earn 8-20% more over career

Market Based Schedules

- Higher salary or stipends for tougher to fill positions
- Douglas County, CO
- Putnam County, TN – PASS Program
- Georgia Math & Science Teacher Bonus Provision

Other Policies

- Teacher Tenure
- Staff Reduction Policies

Moving Forward..

Learning how to..

- Determine characteristics of better teachers
- Attract higher quality teaching candidates
- Identify & keep higher quality teachers
- Compensate those quality teachers

Teacher - #1 factor in student
achievement

-Marzano (2007), Wong (2009), Reeves (2009), Harris & Sess (2009)

Contact Info:

Jared Terry

terryj@spokane.k12.mo.us

@jared_terry
