




The Distribution of Highly-Qualified, Experienced Teachers: Challenges and Opportunities

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Key challenge: Lack of data

- Thin research base about what states and districts are doing, what works
- States also need information on teachers in order to identify districts and schools most needing assistance



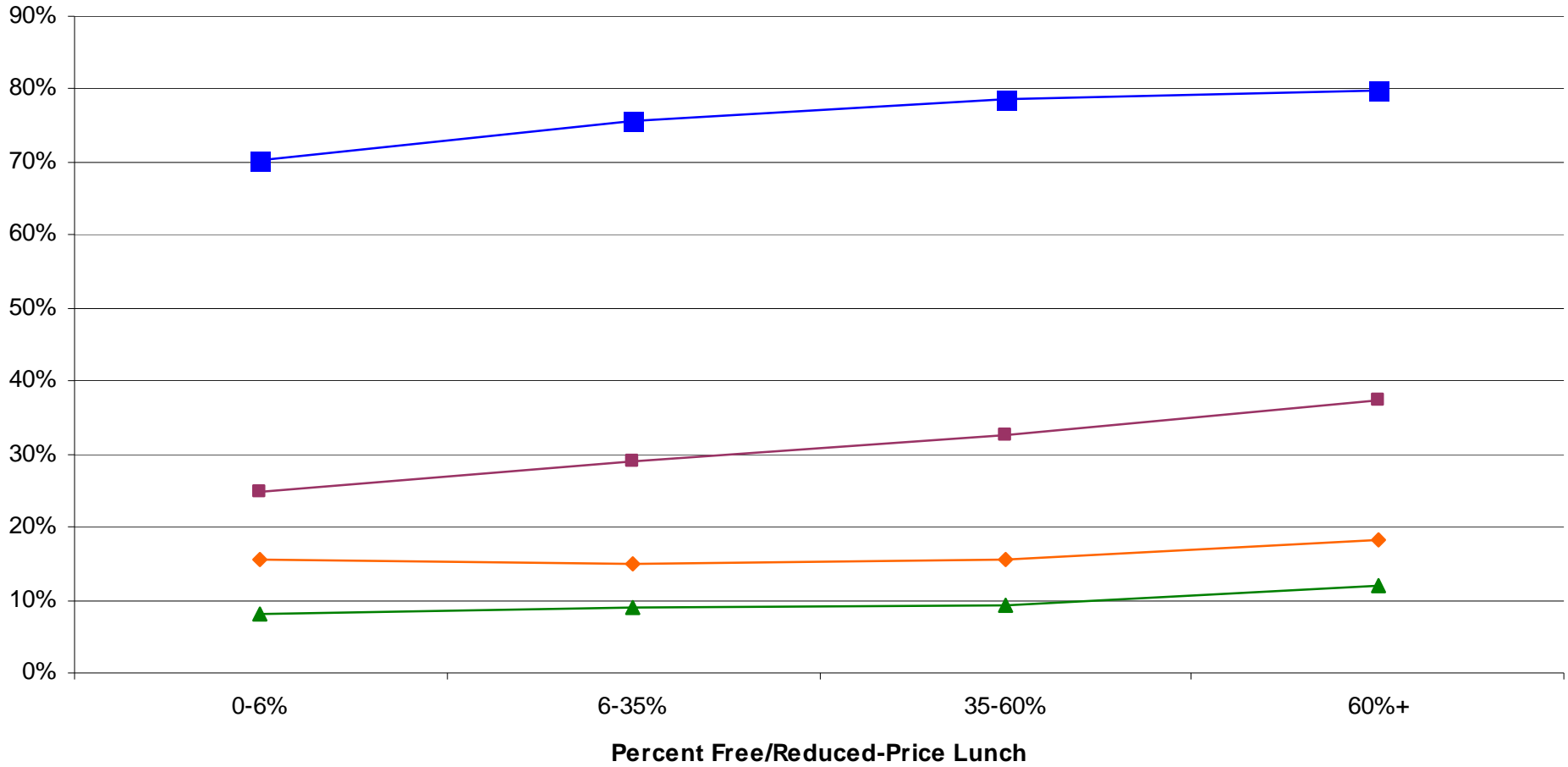
States must ensure “that poor and minority children are not taught at higher rates than other children by inexperienced, unqualified, or out-of-field teachers”

- What does the current distribution look like?
- Why is the current distribution inequitable?
- What do we know about policy responses?
 - Which policies are most cost effective?
- Recommendations

The Problem: Teachers not distributed equally

- Schools with higher proportions of low-income, minority and/or low-performing students are more likely to have higher proportions of less-qualified teachers
 - Lankford, Loeb and Wykoff (2002) find variance between schools within districts generally explains more of total variance than between districts or regions

Figure 1
Distribution of Teacher Experience and Preparation, by School Poverty
1999-2000 Schools and Staffing Survey



◆ % Non-Selective College
 ■ % w without Major in Main Field
 ▲ % w without Major or Certification in Main Field
 ◆ % Novice Teachers



Why is the distribution inequitable?

- Teacher preferences/mobility
- District hiring/assignment practices
- School, community preferences
- Political power of various stakeholders

Teacher preferences

- Lots of evidence that attrition rates are higher out of high-need schools, both across and within districts
 1. Teachers moving *from* higher-need schools *to* lower-need schools
 - Lankford, Loeb and Wykoff (2002) and Hanushek, Rivkin and Kain (2004) only studies that compare schools before and after transfer
 2. In high-need schools, replacements are more likely to be novice teachers



Movers replaced by new teachers

- In high-need schools (that lose more teachers in the first place), replacements are more likely to be novice teachers
- Geographic preferences of teachers disadvantage high-need urban and rural schools in recruiting (Boyd, et al; Reininger)

District Hiring/Assignment Practices

- District policies can make it easier/harder for teachers to act on preferences
- Transfer policies can disadvantage high-need schools by giving priority to incumbent teachers (NTP)
 - Primarily a problem in large urban districts (Koski and Horng)
- High-need schools also more likely to hire later in the season, losing out on qualified candidates



Policy responses

- Multitude of policies designed to attract and retain teachers in high-need schools
 - Financial incentives: salary bonuses, housing assistance, tuition/loan assistance
 - Induction programs: mentoring, workshops, planning time
 - Working conditions: class size, support personnel (counselors, aides, better administrators)
 - Other: Alternative certification, hiring policies



Are these policies effective?

- In general, we know almost nothing about whether specific policies are effective at equalizing the distribution of teachers
 - Most states do not evaluate impact
 - Lots of sources telling us where policies exist, relatively little data on specifics
 - Example: Financial policies may vary in magnitude, requirements to qualify (e.g. bonuses may be one-time or permanent, targeted only to specific fields, apply to low-income or low-performing schools or both)

Are these policies effective?

- Need extensive data on teachers and/or schools that participate as well as an appropriate control group
- Clotfelter, et al (2006) evaluation of North Carolina bonus program (\$1800 for math, science and special ed in low-income or low-performing schools)
 - Compares turnover in schools just above and below the cutoff of eligibility, just before and after implementation, in teaching subjects that were and were not eligible for the bonus



Are these policies *cost* effective?

- Imazeki (2008): Comparison of impact of salary increase versus induction program in reducing teacher attrition
 - Existing studies of teacher mobility
 - Salary studies compare salaries across districts (not bonuses)

Are these policies *cost* effective?

- Effects of salary increases quite small
 - On average, \$4000 reduces probability of transfer by less than one percentage point
- Effects of induction programs much larger
 - Example: CA's BTSA program = \$5675 per new teacher for two years, reduces turnover by 5 percentage points (other studies find bigger effects with more services)

Which schools to target?

- States have freedom to develop their own definitions of “high-poverty” and “high-minority”
 - Within these categories, some schools will require assistance and some will not
 - *On average*, high-poverty and/or high-minority schools need additional help to attract and retain high-quality teachers; *in practice*, many high-poverty, high-minority schools have a stable staff of highly-qualified, experienced teachers
- States should look at *both* the distribution of poor and minority students *and* the distribution of qualified and experienced teachers



Recommendations

- Track teacher movements within and across districts and exits out of the profession, and compare characteristics of schools they leave or go to
- Investigate the reasons for inequities within distribution, so that appropriate strategies can be employed



Recommendations (cont'd.)

- Analyze the specifics of bargaining agreements, particularly hiring and assignment policies, to identify areas where alterations may be needed
- Involve stakeholders (teachers, board members, union representative, parents, community members) in creating and implementing strategies and policies



Recommendations (cont'd.)

- Collect and analyze detailed information about strategies and policies put into place, including the type and amount of incentives and eligibility requirements

Recommendations (cont'd.)

- Maintain comprehensive data on teachers and their participation in programs designed to address teacher distribution
 - Follow teachers that participate and those that did not in order to look for differences in outcomes such as transfers and exits
 - Collect data on
 - Which teachers receive incentives
 - Amount of incentives



Recommendations (cont'd)

- For the most cost-effective use of resources, use key indicators to identify schools most in need of assistance, rather than targeting all schools that fall into the top quartile
- Weigh the relative cost-effectiveness of short- and long-term policies to ensure the maximum benefit to targeted schools




Draft Policy Brief on Equitable Distribution

- Designed to help states

- Consider how to target schools for assistance with equitable distribution in order to achieve the most cost-effective results
- Understand what the research on teacher distribution can and cannot tell us about “what works”
- Learn from other states’ efforts

Draft Policy Brief

- Imazeki, J. and Goe, L. (2009) The distribution of highly-qualified, experienced teachers: Challenges and Opportunities. Chicago: National Comprehensive Center for Teacher Quality.
- Send comments, suggestions to lgoe@ets.org



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