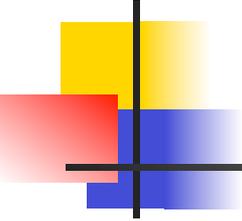


# **Why Schools Have Difficulty Staffing Their Classrooms with Qualified Teachers?**

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**Richard M. Ingersoll  
Professor of Education and Sociology  
University of Pennsylvania  
and  
Consortium for Policy Research in Education**



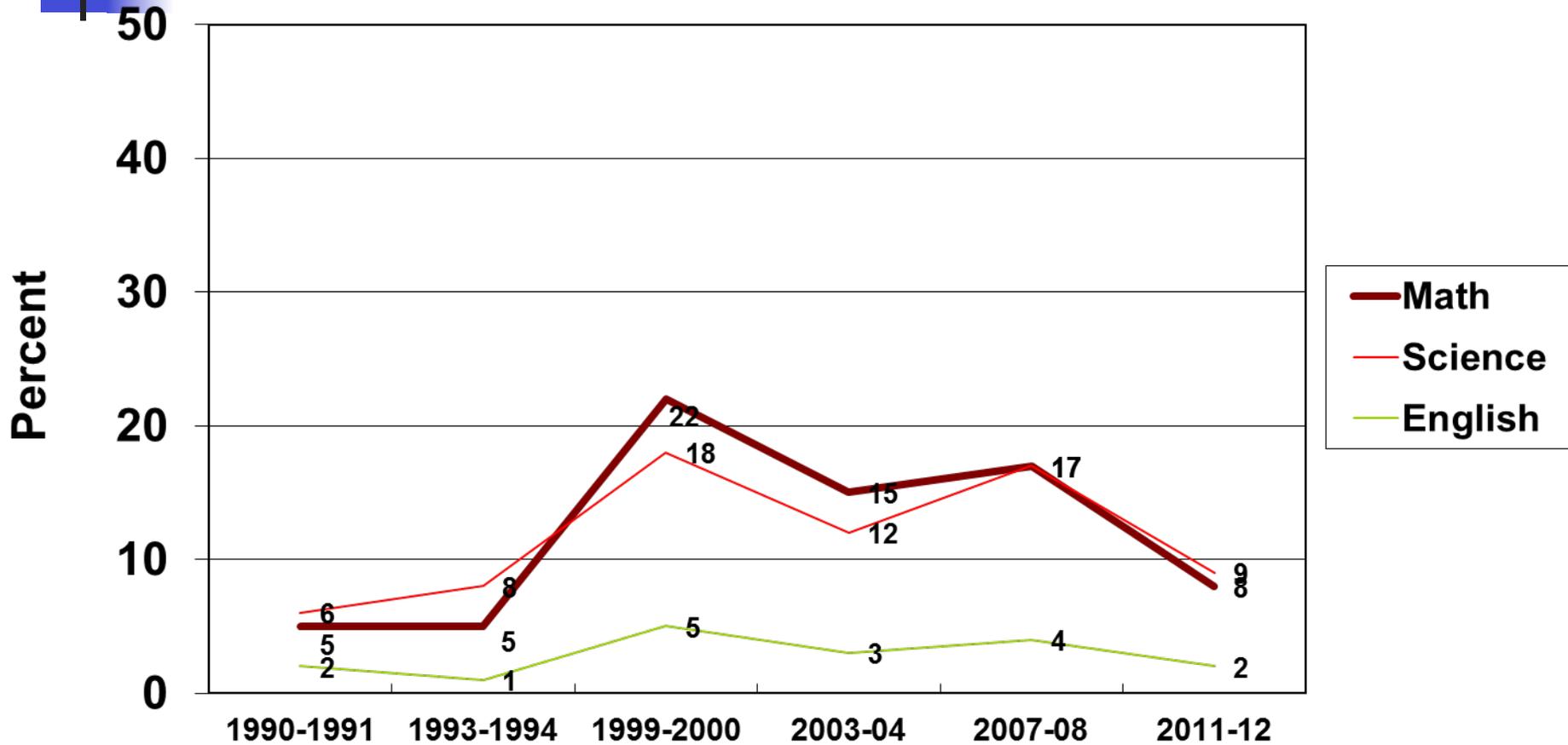
# **Figure 1: The Source of Data**

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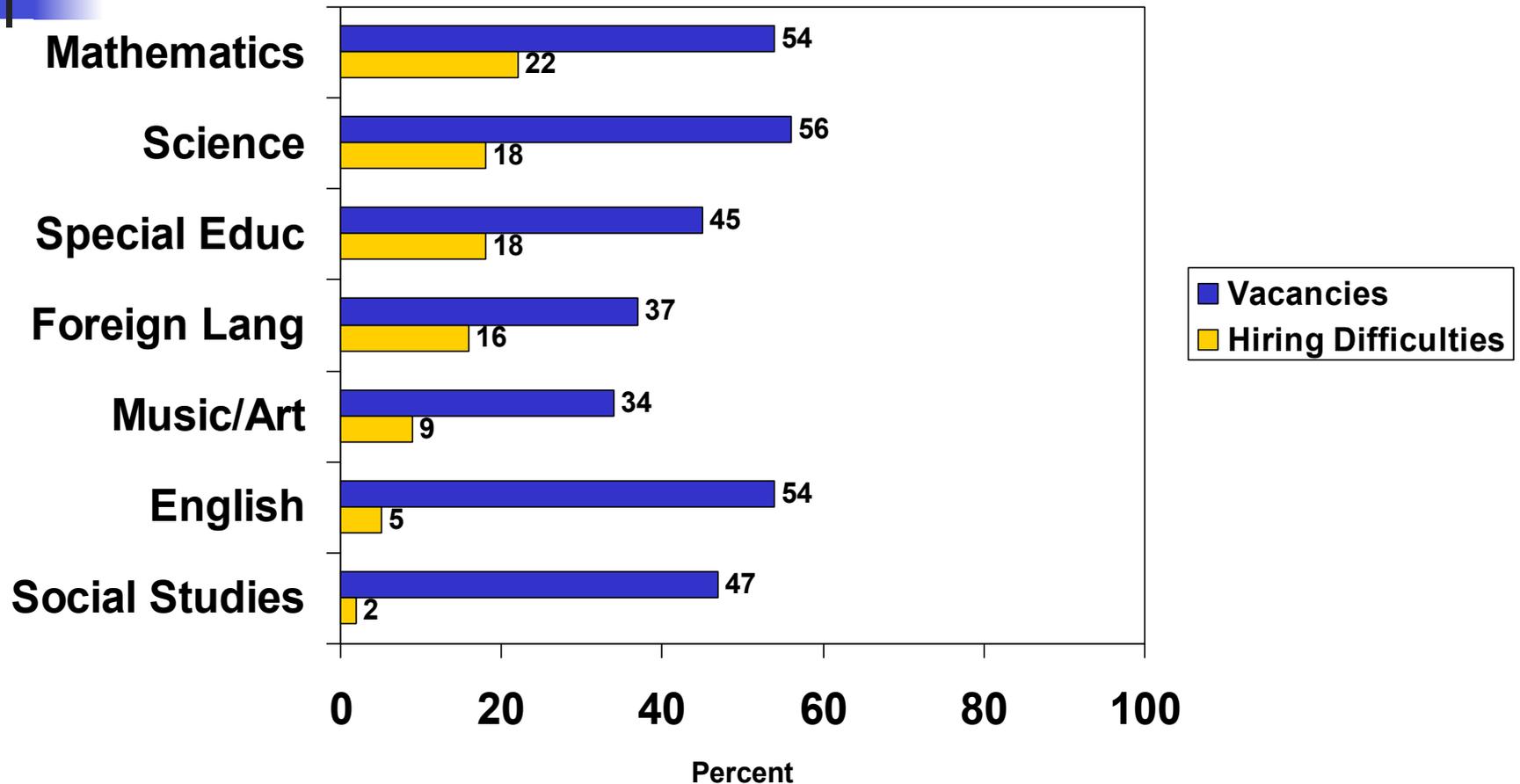
## **The Schools and Staffing Survey with the Teacher Follow-up Survey**

- **Conducted by the Census Bureau for the U.S. Department of Education**
- **7 Cycles over 2 ½ Decades:  
1987-1989, 1990-1992, 1993-1995,  
1999-2001, 2003-2005, 2007-2009; 2011-13**
- **The largest source of information on teachers:**
  - Sample: 55,000 teachers  
12,000 schools**
  - Representing all 50 states**

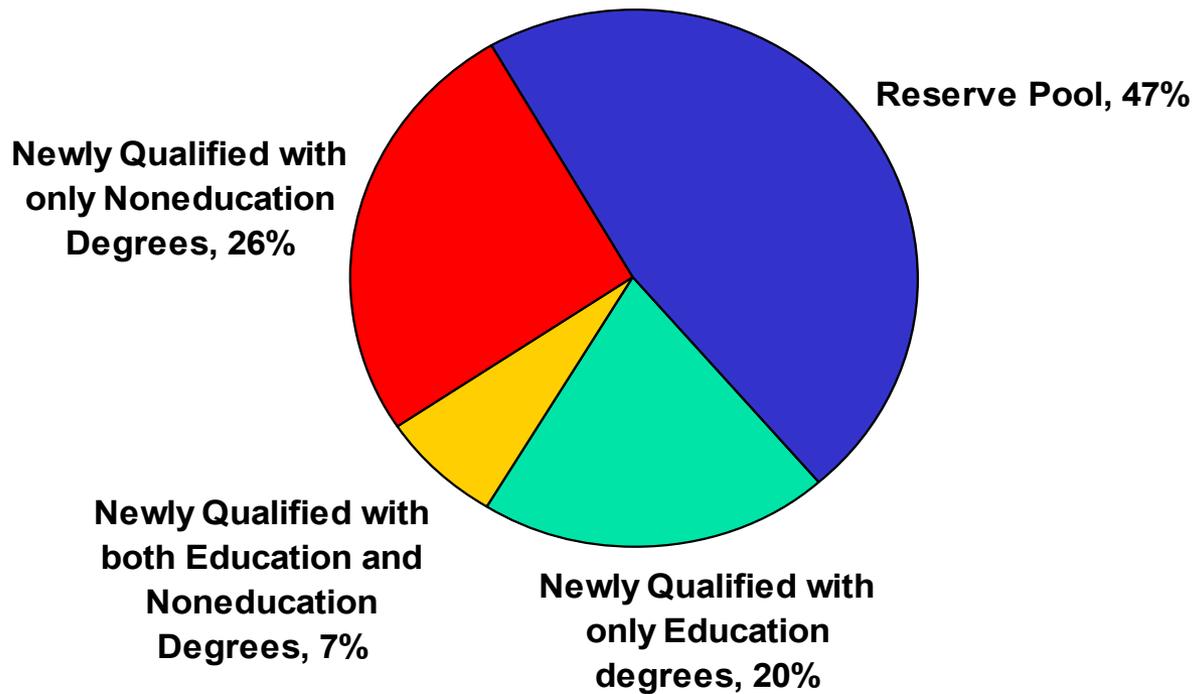
# Figure 2: Trends in Percent Secondary Schools Reporting Serious Difficulties Filling Teaching Vacancies, by Field



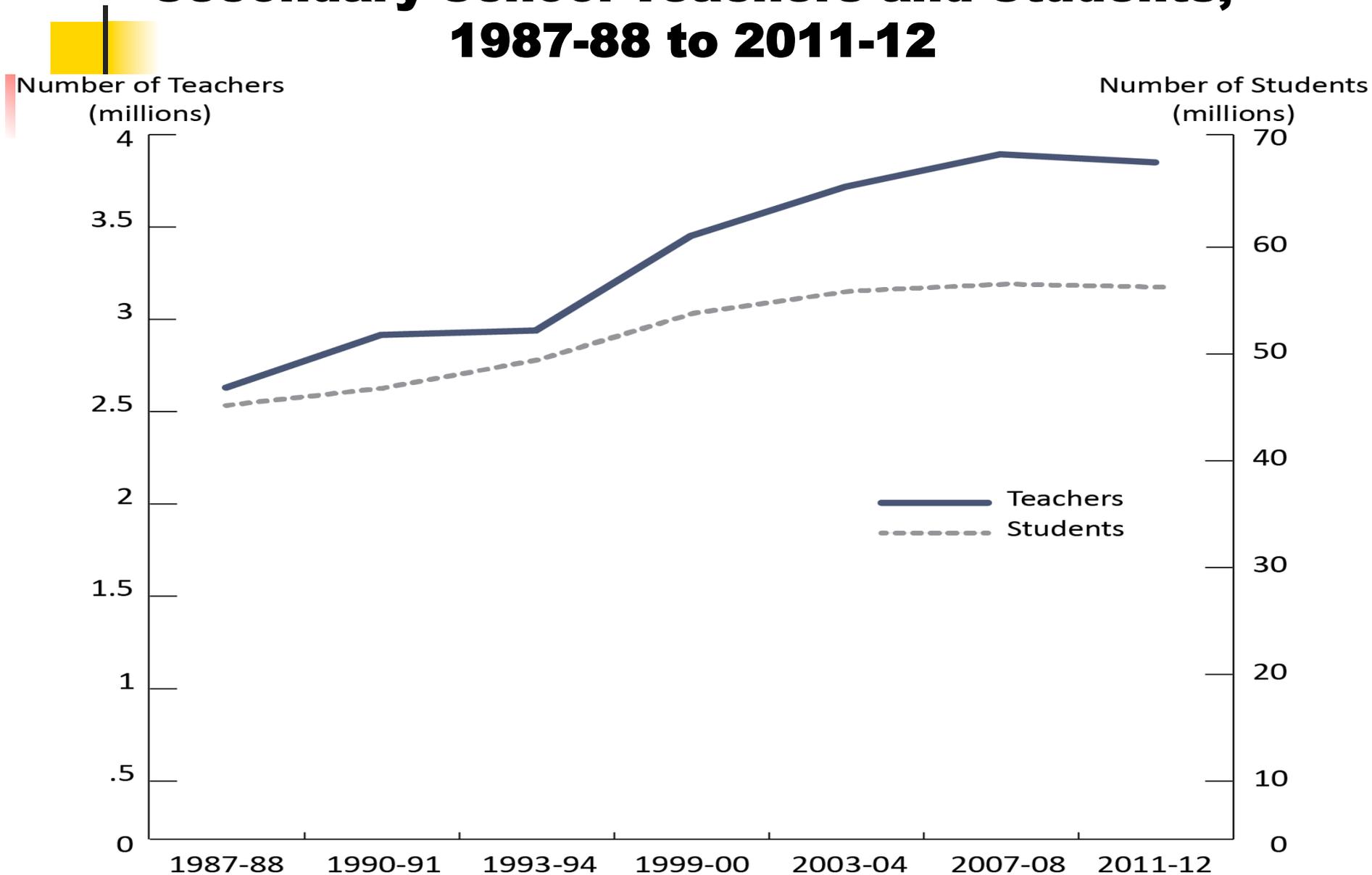
# Figure 3: Percent Secondary Schools with Teaching Vacancies and with Serious Difficulties Filling those Vacancies, by Field



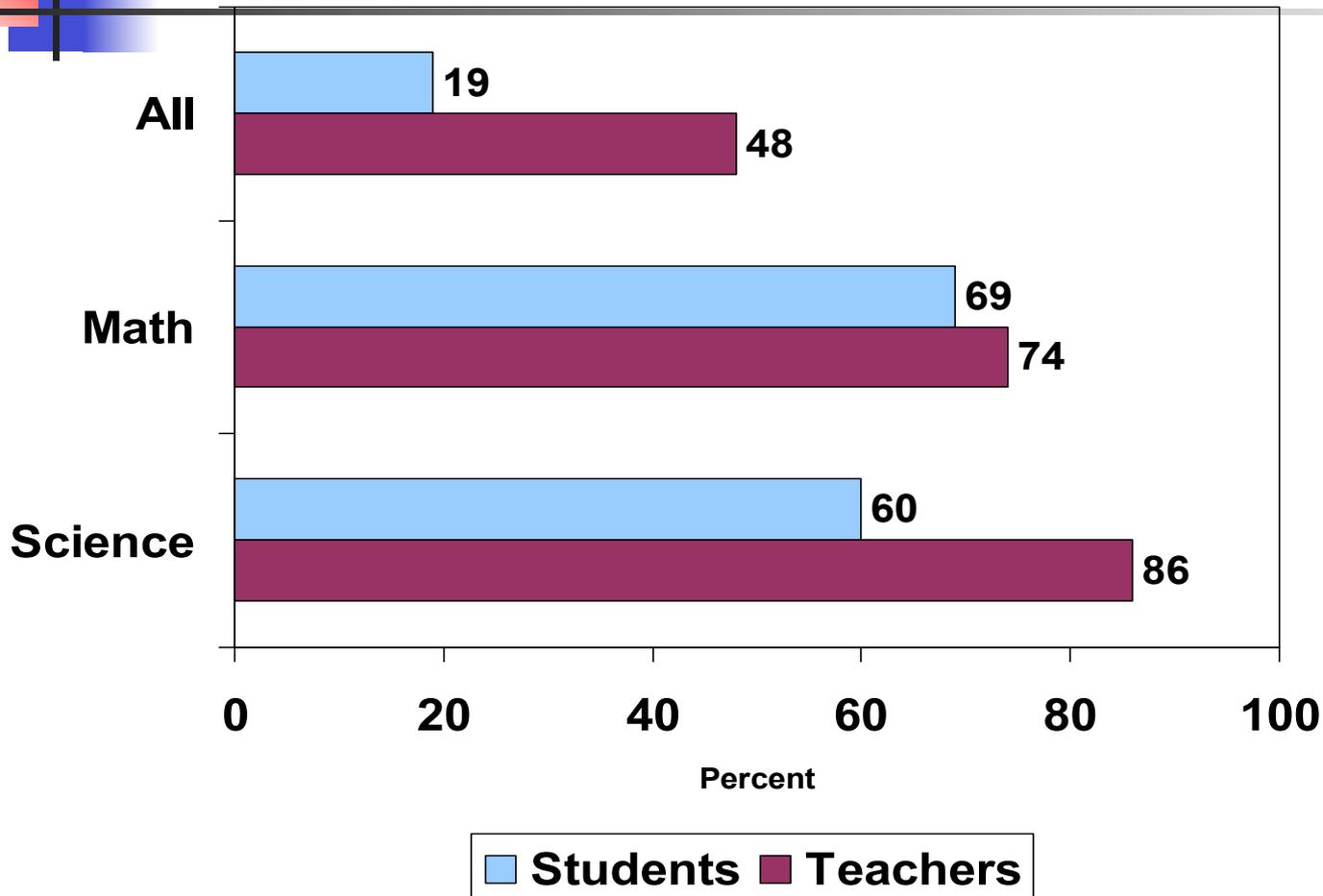
# Figure 4: Percent of Math and Science Teachers Newly Hired in the School System, by Supply Source



# Figure 5: Number of Elementary and Secondary School Teachers and Students, 1987-88 to 2011-12

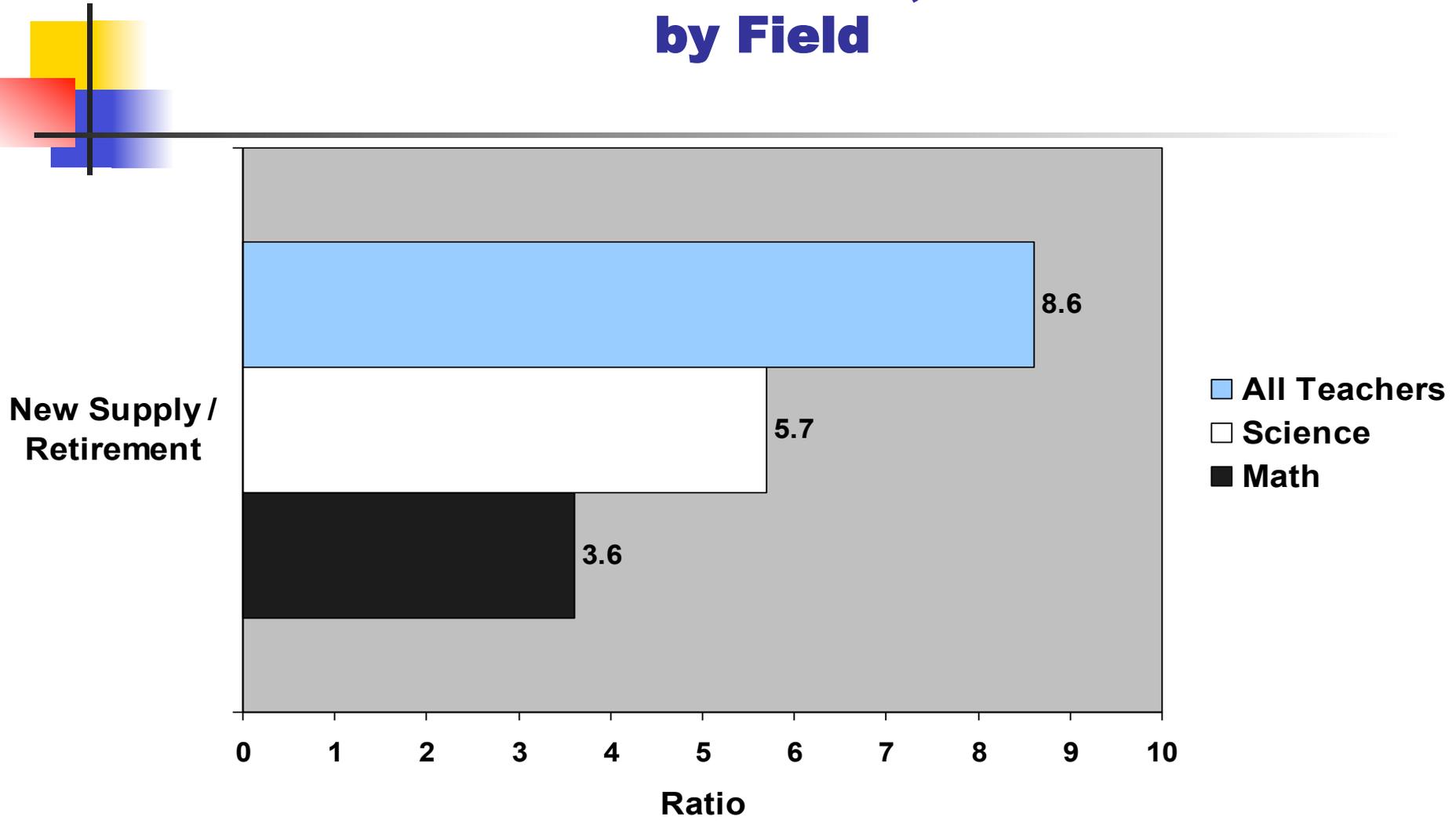


# Figure 6: Percent Increase in Students and Qualified Employed Teachers, by Field from 1987-88 to 2007-08

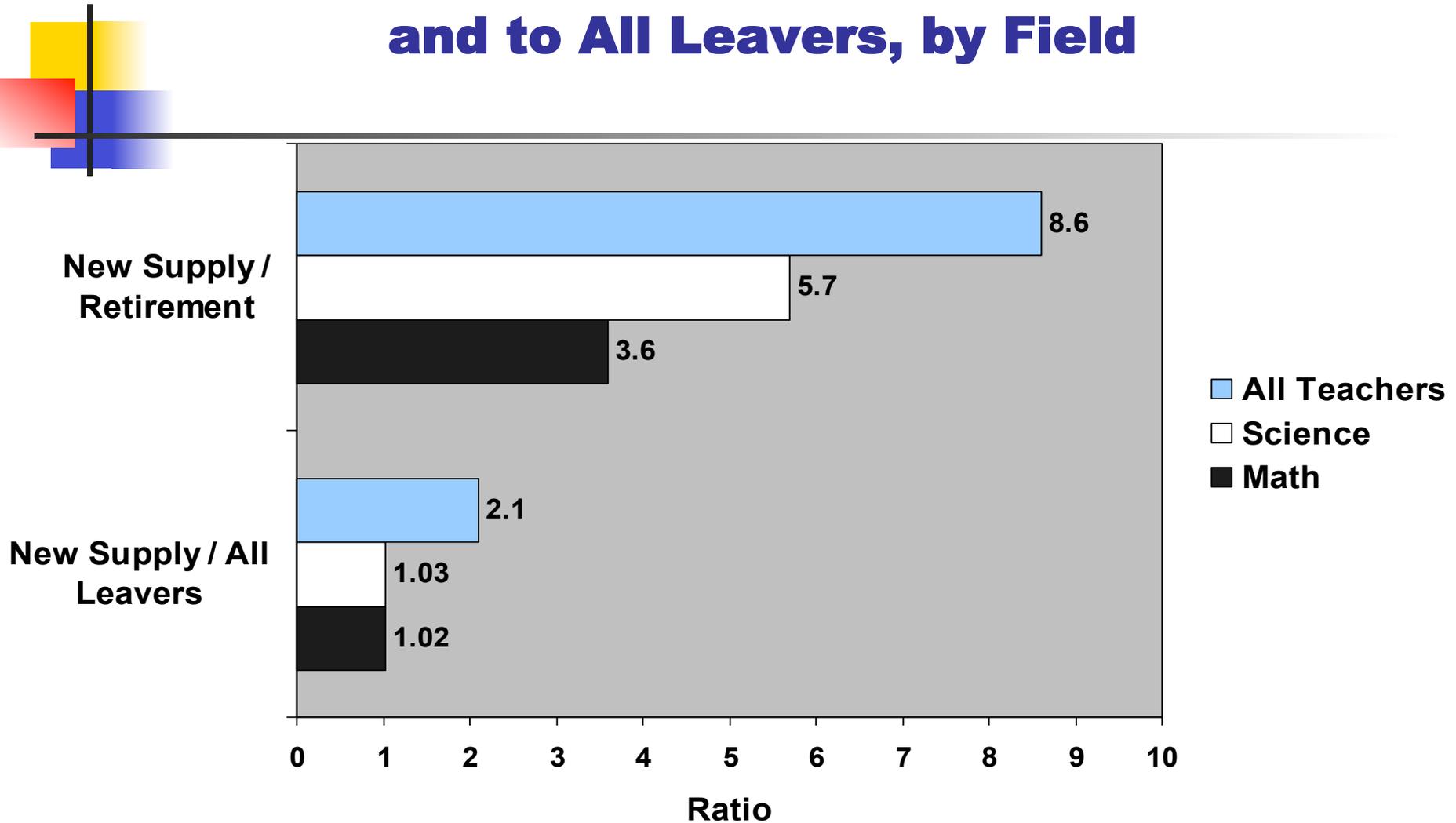


Source: Ingersoll, R. & Perda, D. 2010. "Is The Supply of Mathematics and Science Teachers Sufficient?" *American Educational Research Journal*. 47(3): 563-594.

# Figure 7: Ratio of New Supply of Teachers to Retirement, by Field

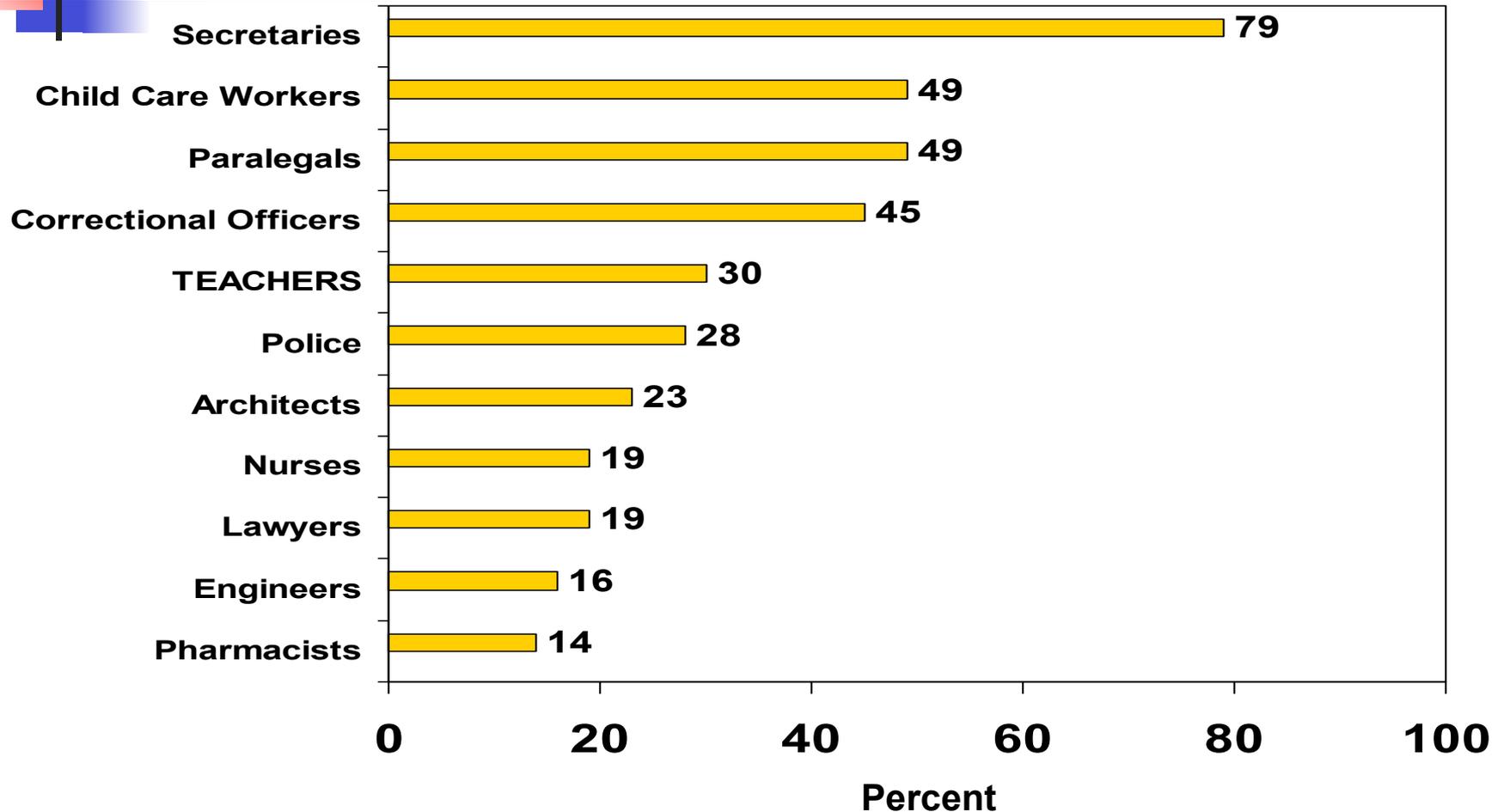


# Figure 8: Ratio of New Supply of Teachers to Retirement and to All Leavers, by Field



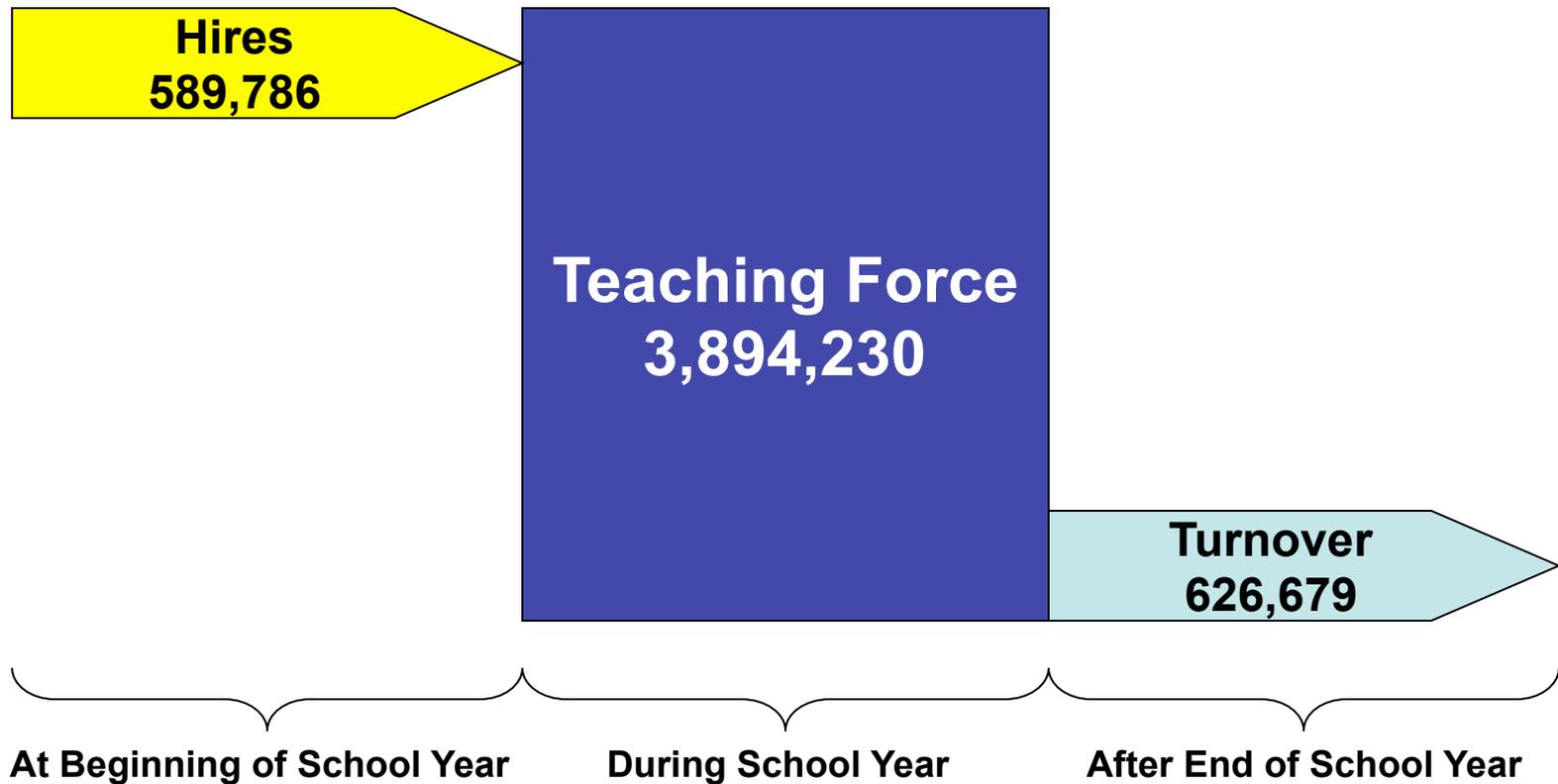
# Figure 9: Attrition in Teaching is Higher Than in Many Occupations

(Among 1993 College Grads Who Entered Selected Occupations by 1997, Percent Gone From Occupation by 2003)



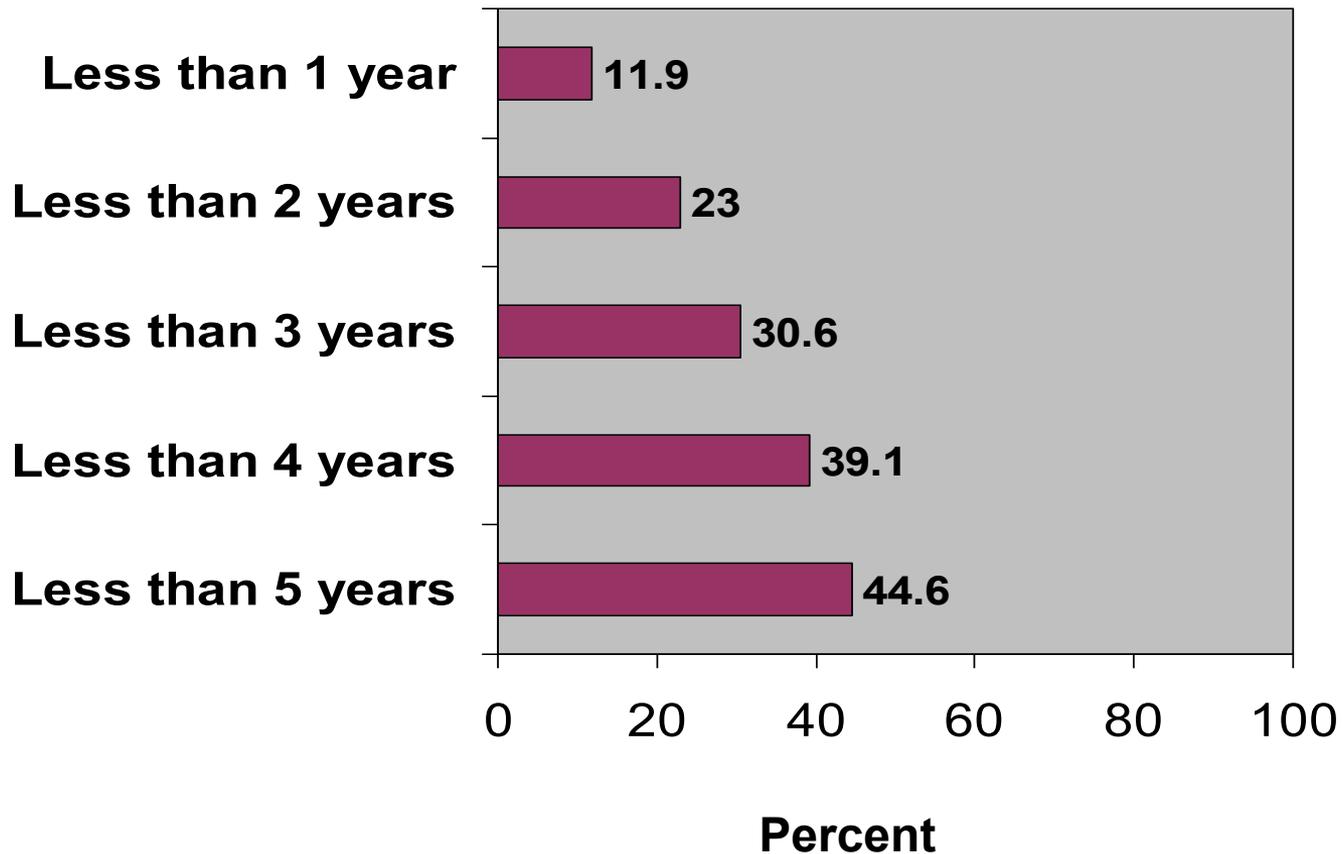
# Figure 10: Schools Suffer from a Revolving Door

(Numbers of Teachers in Transition Into and Out of Schools Before and After 2007-2008 School Year)



# Figure 11: Beginning Teachers Leave at Highest Rates

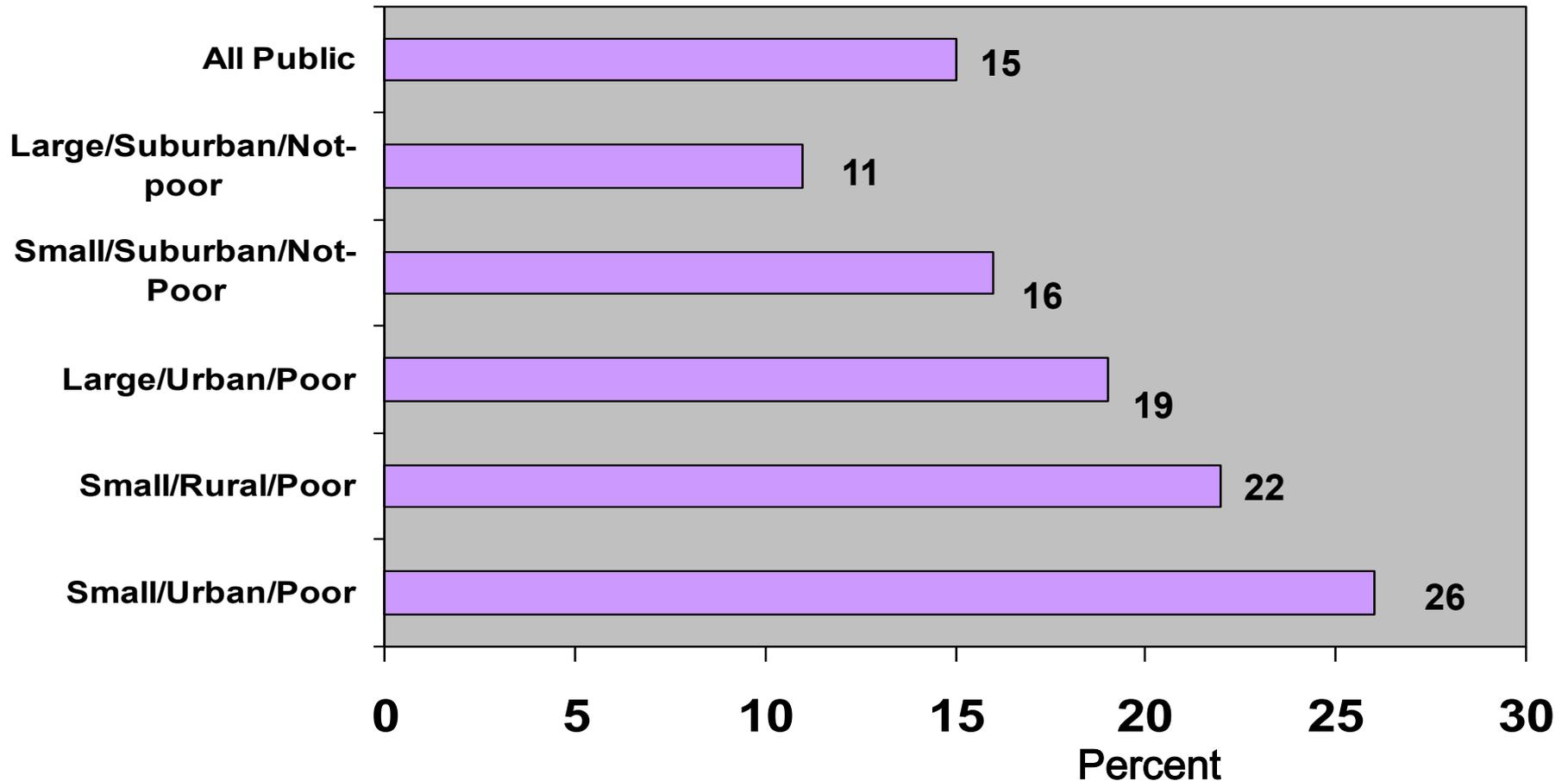
(Cumulative Percent Teacher Attrition, by Years of Experience: 1993-2003)



Source: Perda, D. 2013. *Transitions Into and Out of Teaching: A Longitudinal Analysis of Early Career Teacher Turnover*. PhD Dissertation, University of Pennsylvania.

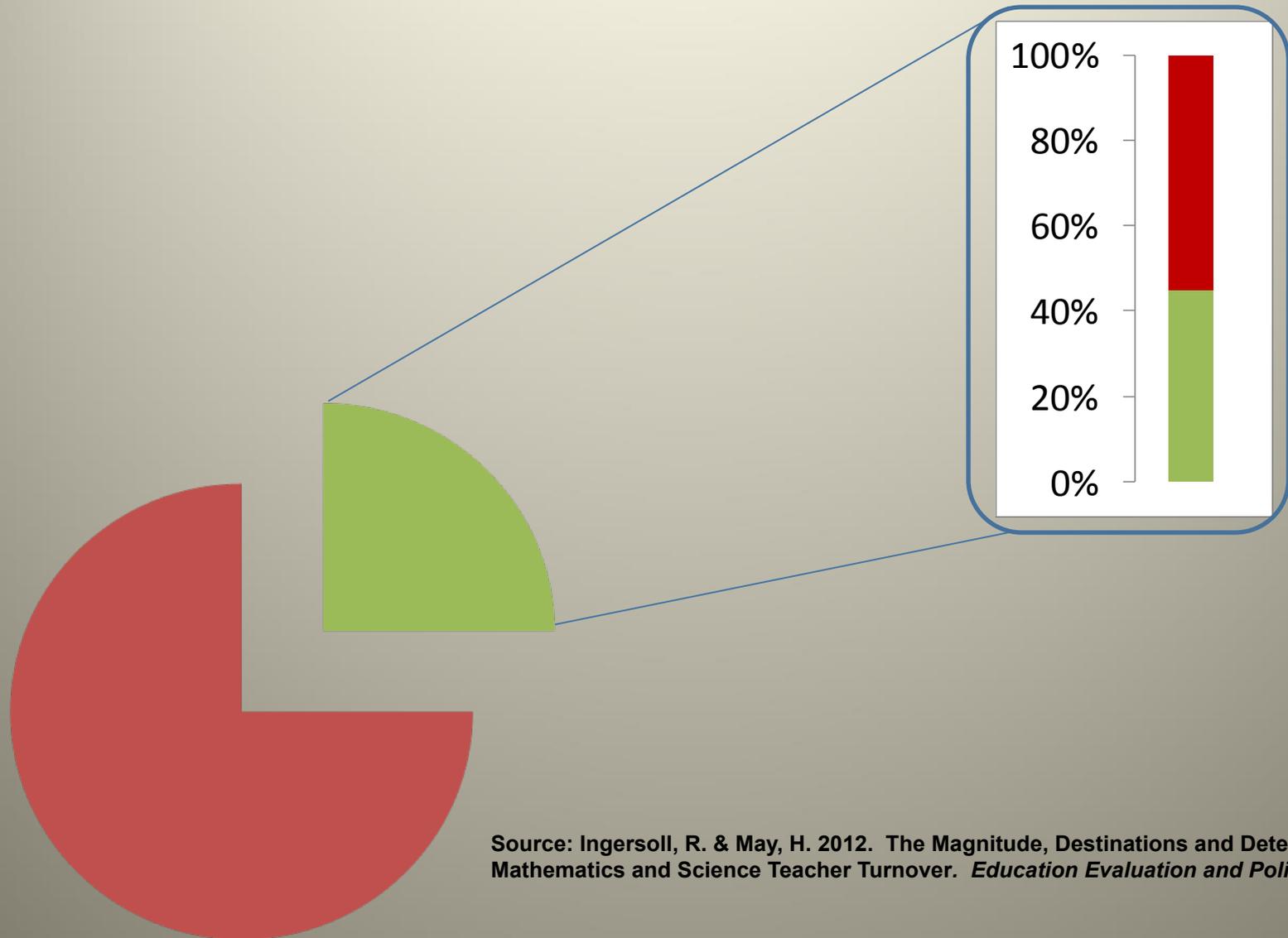
# Figure 12: Schools Vary in Teacher Turnover

(Percent Annual Public School Teacher Turnover, by Selected School Characteristics)



Source: Ingersoll, R., original analyses of 2000-2001 Teacher Followup Survey

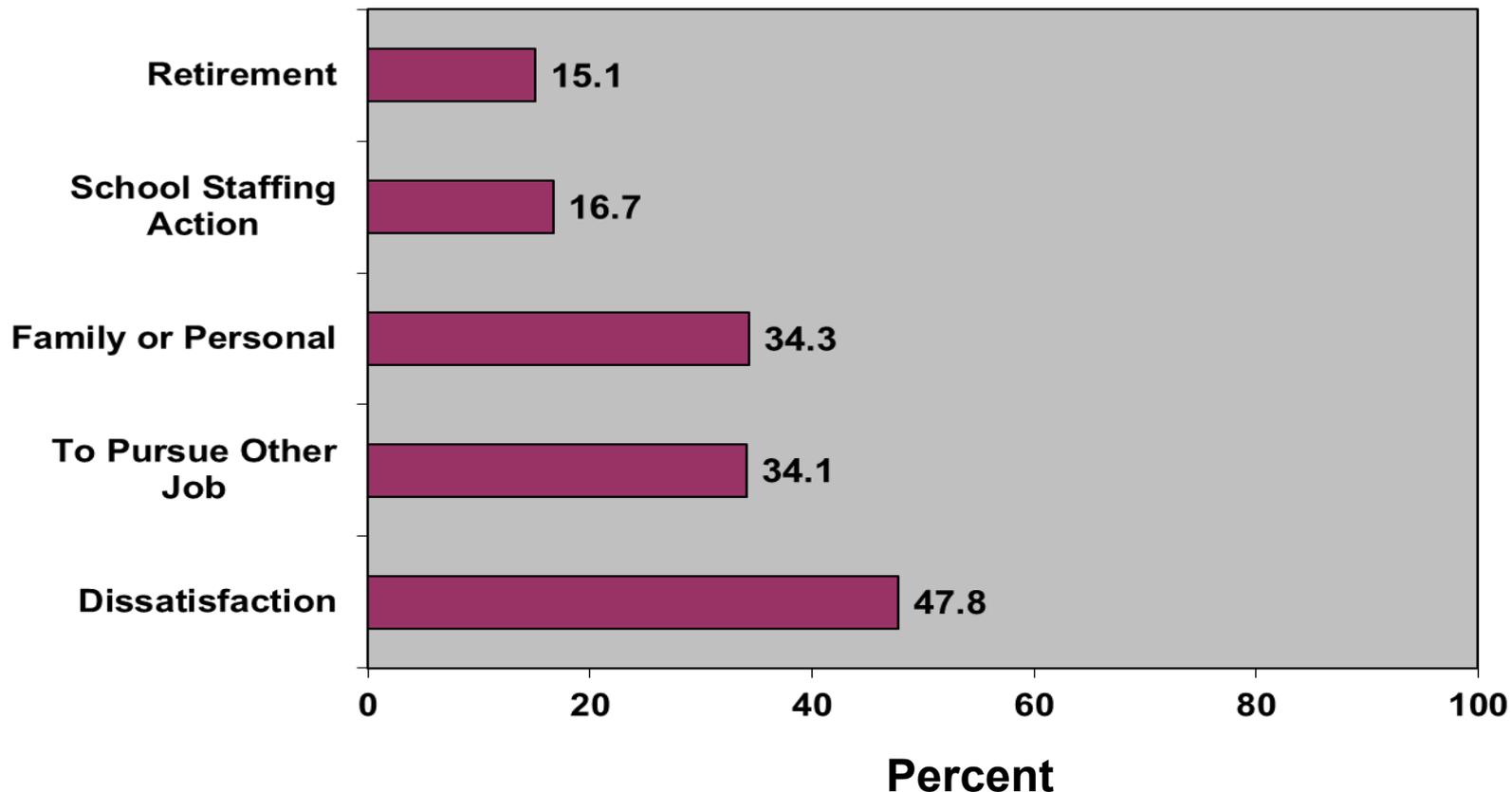
# Figure 13: 45% Of All Public School Turnover Occurs In Just 25% Of Schools



Source: Ingersoll, R. & May, H. 2012. The Magnitude, Destinations and Determinants of Mathematics and Science Teacher Turnover. *Education Evaluation and Policy Analysis* .

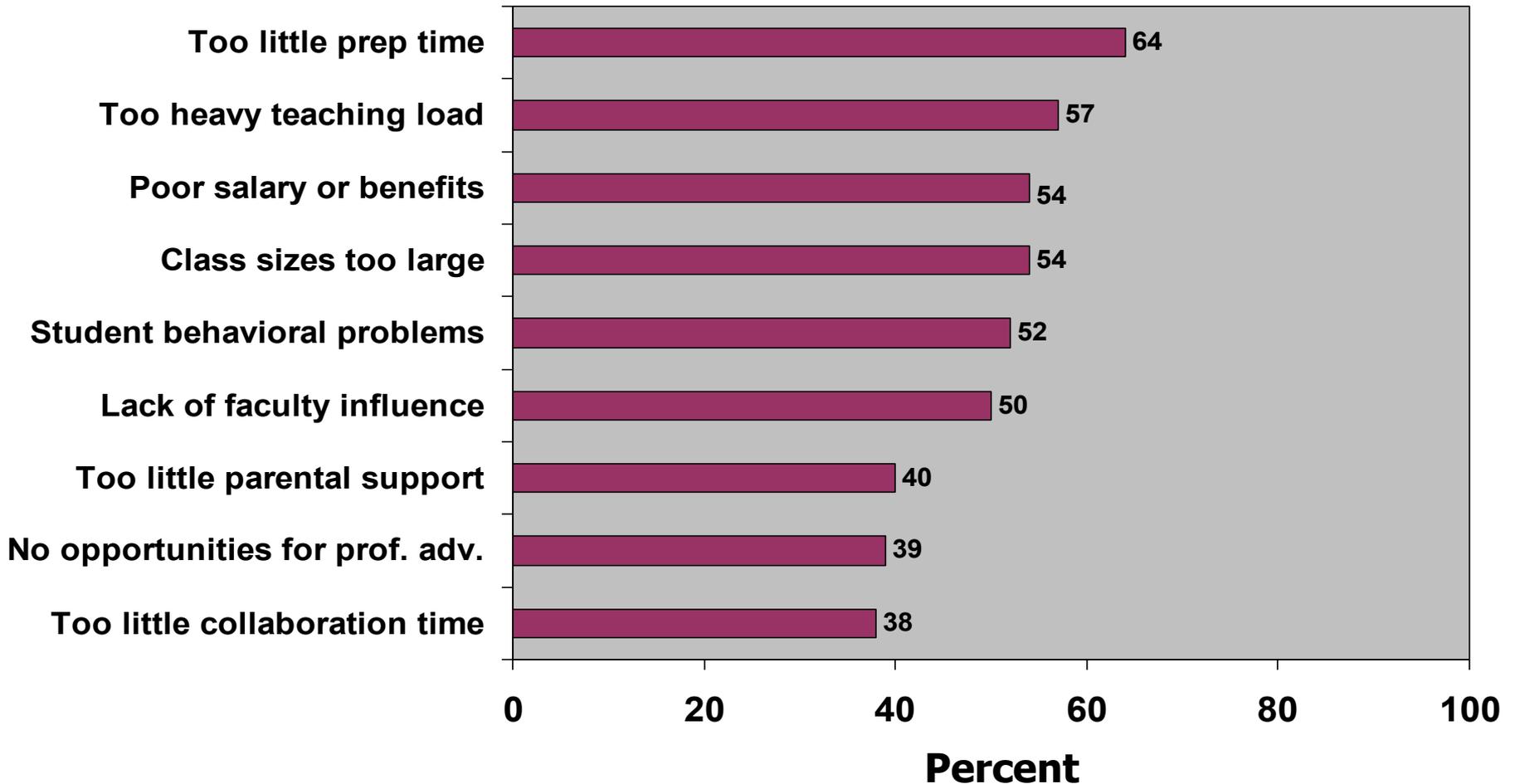
# Figure 14: Job Dissatisfaction a Leading Factor Behind Turnover

(Percent Public School Teachers Reporting that Various Reasons Were Important for their Turnover)

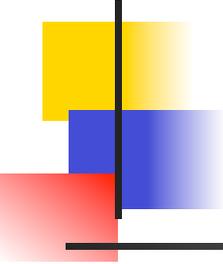


# Figure 15: Teachers' Working Conditions are Important

(Of Those Public School Teachers Who Moved From or Left Their School, Percent Reporting Various Sources of Dissatisfaction)



Source: Ingersoll, R. & Perda, D. forthcoming. *How High is Teacher Turnover and is it a Problem?*  
Consortium for Policy Research in Education, University of Pennsylvania



# Figure 16: Teacher Recruitment Alone Does Not Work

President Obama has Proposed Recruitment of 10,000 New Math/Science Teachers per year for 10 years.

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But, between 2004 and 2005 alone.....

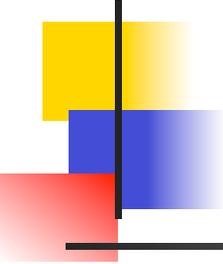
- 26,400 Math/Science Teachers Left Teaching
  - Of them:
    - 7,000 Retired
    - 14,000 left due to dissatisfaction or to pursue another job
- 25,000 Moved to Other Schools
  - Of them:
    - Four times as many moved to affluent as to poor schools



# Figure 17: Research Shows Positive Effects of Induction & Support Program for Beginning Teachers

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- We examined 15 best empirical studies, since the 1980s
- three sets of outcomes:
  - teacher commitment and retention
  - teacher classroom instructional practices
  - student achievement
- Most of the studies reviewed showed positive impacts



# **For Further Information**

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- **[www.gse.upenn.edu/faculty/ingersoll](http://www.gse.upenn.edu/faculty/ingersoll)**