

SHORTAGE OF SPECIAL AND GENERAL EDUCATION TEACHERS: ISSUES AND RESEARCH

Erling E. Boe
University of Pennsylvania

**Symposium:
Labor Shortages and Comprehensive
Immigration Reform**

Economic Policy Institute
May 20, 2009

IS THERE A TEACHER SHORTAGE?

Unfilled Teaching Positions Nationally:

- Public school teaching positions: 0.2% vacant
- Special education teaching positions: 1.1% vacant

*National data from USDE for mid-1990s

Teacher Shortage Definition

Shortfall in the Supply of Teachers to Fill Funded Teaching Positions (i.e., Demand)

Quantification of Teacher Shortage:
Depends on the Definition of Supply

Teacher Shortage Types

Teacher Quantity Shortage

A shortfall in the number of any individuals who are willing to become employed in teaching positions under prevailing working conditions, salary, and location

Teacher Qualifications Shortage

A shortfall in the number of qualified individuals who are willing to become employed in teaching positions under prevailing working conditions, salary, and location

Teacher Quantity Shortage

Schools Will Fill Open Positions:

- First with Qualified Teachers
- Then with Unqualified Teachers

Sufficient Numbers of Unqualified Teachers Are Willing to Become Employed, Leaving Only:

- 0.2% Vacant Positions in All Public Schools
- 1.1% Vacant Positions in Special Education

Therefore, Virtually No Quantity Shortage

Teacher Qualifications Shortage

Major Dimensions of Teacher Qualifications

- Completed program of teacher preparation
- Earned a bachelor's or higher degree*
- Fully certified/licensed*
- Expertise in subjects taught (e.g., major in math)*
- Others

*NCLB definition of “highly qualified teacher”

Supply of Qualified Teachers

Supply Defined:

The number of qualified individuals who are willing to become employed in teaching positions under prevailing working conditions, salary, and location

But Supply thus Defined Is Not Known:

Would require data on unduplicated counts of applicants for open teaching positions and their qualifications

Solution: Must Infer supply from imperfect indicators

Teacher Qualifications Shortage: Depends on Specification of Level and Teaching Field

Teaching Field	<u>Level</u>		
	National	State	School
Special Ed.			
English			
Mathematics			
Science, etc.			
ALL Fields			

**FOCUS NEXT ON THE
SHORTAGE OF TEACHERS WITH
EXTENSIVE TEACHER PREPARATION**

Shortage of Beginning Public School Teachers (1-3 Years of Experience) With Extensive Preparation

Amount of Preparation

- With Extensive Preparation: 71%
- With Some Preparation: 22%
- With No Preparation: 7%

Shortage: Without Extensive Prep.: 29%

Shortage of Beginning Special Education Teachers (1-5 Years of Experience) with Extensive Preparation and Major in Special Education

Amount of Preparation

- **With Extensive Preparation:**
 - Major: Special Ed. Teaching 44%
 - Major: General Ed. Teaching 33%
- **With Some Preparation: 11%**
- **With No Preparation: 12%**

Shortage: Without Special Ed Major: 56%

**FOCUS NEXT ON THE
SHORTAGE OF TEACHERS WITH
BACHELOR'S DEGREES**

Shortage of Beginning Public School Teachers (1-3 Years of Experience) with Bachelor's Degrees, By Amount of Preparation

**Shortage: Without
Bachelor's Degree**

Amount of Preparation

- **With Extensive Preparation: 0.5%**
- **With Some Preparation: 3.8%**
- **With No Preparation: 5.5%**

**FOCUS NEXT ON THE
SHORTAGE OF TEACHERS WHO ARE
FULLY CERTIFIED IN THEIR ASSIGNMENT**

Shortage of Special Education Teachers With Full Certification in Their Main Teaching Assignment

Sources of Supply	Shortage: Not Fully Certified
1. Continuing Teachers from Prior Year:	10%
2. Entering Teaching Employment:	44%
a. First-Time Teachers	
(1) With Extensive Preparation:	36%
(2) With Some Preparation:	98%
(3) With No Preparation:	98%
b. Reentering Experienced Teachers:	27%

**FOCUS NEXT ON THE
SHORTAGE OF TEACHERS WITH
DEGREE MAJORS IN
THEIR MAIN TEACHING ASSIGNMENT**

Shortage of Teachers with a Degree Major in Their Main Teaching Assignment: Differences between Special and General Education

Special Ed (by Disability)	<u>General Ed. (by Subject Matter)</u>		
	English	Math	Science
Learning Disabilities			
Mentally Retarded			
Visually Impaired			
Autism			
10 other disabilities			

Shortage of Teachers with a Degree Major in Their Main Teaching Assignment (MTA)

**Shortage:
No Degree
Major in MTA**

Teaching Assignment Areas

1. Special Education	53%
2. English/Reading	46%
3. Mathematics	41%
4. Science	57%
All Public School Teachers	38%

FOCUS NEXT ON

VARIOUS POLICY ISSUES CONCERNING

THE SHORTAGE OF QUALIFIED TEACHERS

Critical Requirements for a Qualified Teacher: Standards Established by Three Authorities

According to the Teaching Profession Establishment

1. Completed accredited program of teacher preparation
2. Earned a bachelor's or higher degree
3. Fully certified/licensed in each subject assigned

According to No Child Left Behind Legislation (2002)

1. Earned a bachelor's or higher degree
2. Fully certified/licensed in any subject
3. Expertise in each subject assigned (e.g., major in math)

According to the Secretary of Education (2002)

1. Expertise in each subject assigned (e.g., major in math)
2. High verbal ability (i.e., highly intelligent)

Why Do Shortages of Qualified Teachers Occur? Controversial Perspectives and Issues

- 1. Inadequate Supply of Qualified Teachers under Prevailing Working Conditions, Salary, and Location**
- 2. Excessive Attrition for Non-Education Jobs and Retirement**
- 3. Maldistribution of Employed Teachers Among Schools**
- 4. Maldistribution of Newly-Graduated Prepared Teachers**
- 5. High Standards for Teaching Employment**

What Policy Interventions Can Reduce or Eliminate Shortages of Qualified Teachers?

Controversial Strategies and Issues

1. Improve Supply of Applicants for Teaching Positions:
 - a. Increase salary levels
 - b. Differentiate salary levels by subject matter and locale
 - c. Improve working conditions
2. Increase production of graduates of teacher preparation
3. Redefine the role of highly qualified teachers by:
 - a. Enhanced use of information technology
 - b. Managing teams of less qualified instructors
4. Import teachers from abroad in severe shortage areas