

# An Educator Workforce for 2030

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Center on  
**GREAT TEACHERS & LEADERS**  
at American Institutes for Research ■



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## Mission

The mission of the Center on Great Teachers and Leaders (GTL Center) is to foster the capacity of vibrant networks of practitioners, researchers, innovators, and experts to build and sustain a seamless system of support for great teachers and leaders for every school in every state in the nation.

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## Rapid Social and Economic Change



Technology



Increased Connectivity



Globalization

## The Education Workforce for 2030

Can our education system change, evolve, and adapt to meet society's demands?

- What will our education and workforce needs be in 10–15 years?
- What do we want or need in the education profession?
- What knowledge and skills do educators need today? What about in 10–15 years?
- How do we know when someone is doing a good job?



## Two Key Points

1. We need a systematic approach to strengthening the educator workforce.



## Two Key Points

2. Currently, we are neither **strategic** nor **proactive** in our efforts to strengthen the educator workforce:

- We are mainly reactive (examples: teacher shortages in California, Kansas, and Nevada).



## Two Key Points

We **observe** change rather than **drive** change.



## Who Are Our Teachers Today?

## How Many Teachers Are In the U.S.?

Public and private school teachers

Year	Number of Teachers
1987-88	~2,500,000
1990-91	~2,600,000
1993-94	~2,650,000
1999-2000	~3,000,000
2003-04	~3,200,000
2007-08	~3,400,000
2011-12	3,850,000

<sup>1</sup>For corresponding student enrollment data, see the SASS Table Library at [https://nces.ed.gov/surveys/sass/tables\\_list.asp#2012](https://nces.ed.gov/surveys/sass/tables_list.asp#2012).  
 SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," 1987-88 through 2011-12; "Private School Teacher Data File," 1987-88 through 2011-12; and "Charter School Teacher Data File," 1999-2000. [http://nces.ed.gov/programs/digest/d14/tables/dt14\\_209.10.asp](http://nces.ed.gov/programs/digest/d14/tables/dt14_209.10.asp)  
 Image Source: Education Policy Center at AIR

### Student-to-Teacher Ratios

From 1987 to 2012:

- K-12 student enrollment increased by 19 percent.
- Teaching workforce increased by 46 percent.

(Ingersoll, Merrill, & Stuckey, 2015)

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## How Experienced Are U.S. Public School Teachers?

The distribution of teacher experience has fluctuated over the past 25 years. While the percentage of teachers with 10-20 years of experience has grown since 2007-08, the percentage of new teachers with less than 3 years of experience has declined.

Experience Level	1987-88	1990-91	1993-94	1999-2000	2003-04	2007-08	2011-12
20 years +	~1%	~1%	~1%	~1%	~1%	24%	21%
10-20 years	~1%	~1%	~1%	~1%	~1%	29%	36%
3-9 years	~1%	~1%	~1%	~1%	~1%	34%	33%
< 3 years	~1%	~1%	~1%	~1%	~1%	13%	9%

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," 1987-88 through 2011-12; and "Charter School Teacher Data File," 1999-2000. [http://nces.ed.gov/programs/digest/d14/tables/dt14\\_209.10.asp](http://nces.ed.gov/programs/digest/d14/tables/dt14_209.10.asp)  
 Image Source: Education Policy Center at AIR

### GREENER?

The first-year teacher attrition rate has increased more than 40 percent in the past two decades.

(Ingersoll, Merrill, & Stuckey, 2014)

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## Teacher Turnover: Stayers, Movers, and Leavers

Where did teachers go between school years 2011-12 and 2012-13?



84% of teachers stayed at the same school



8% of teachers moved to a position at another school



8% of teachers left the teaching profession



More teachers from high-poverty schools moved to other schools between the 2011-12 and 2012-13 school years than mid- or low-poverty schools.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), Teacher Follow-up Survey (TFS), "Current Teacher Data File," 2012-13. [http://nces.ed.gov/programs/coe/indicator\\_slc.asp](http://nces.ed.gov/programs/coe/indicator_slc.asp)

Image Source: Education Policy Center at AIR

## Monetary Cost

\$1 billion–  
\$2.2 billion per  
year on teacher  
attrition and  
turnover

(Hassel & Hassel, 2010)

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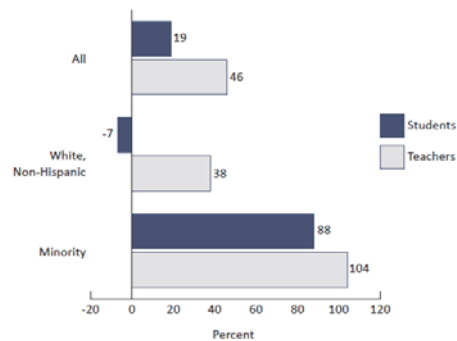
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## Minority Teachers: Overall Growth

“Growth in the number of minority teachers outpaced growth in minority students and was over **twice the growth rate of white teachers.**”

(Ingersoll, Merrill, & Stuckey, 2014)

Figure 9. Percent Change in Students and Teachers, by Race/Ethnicity, 1987-88 to 2011-12



(Ingersoll, Merrill, & Stuckey, 2015)

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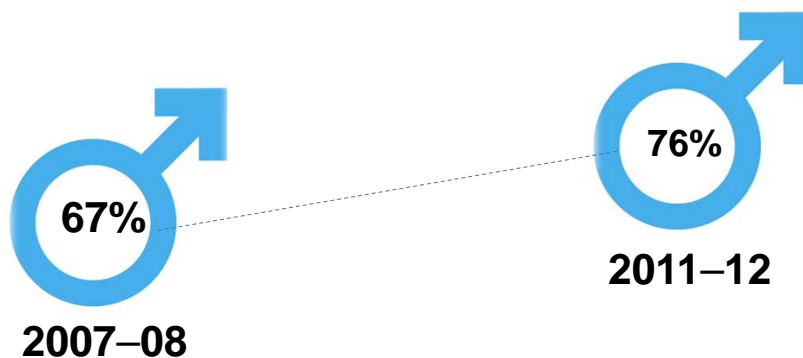
## Minority Teachers: Attrition

- Minority teachers have higher rates of turnover compared to white teachers, from low-income to mid- and high-income schools (see slide 11).
- Minority teachers have higher rates of attrition out of the profession, which can be explained largely by working conditions.

(Ingersoll, Merrill, & Stuckey, 2014)

## Gender

Percentage of Female Teachers in the Profession

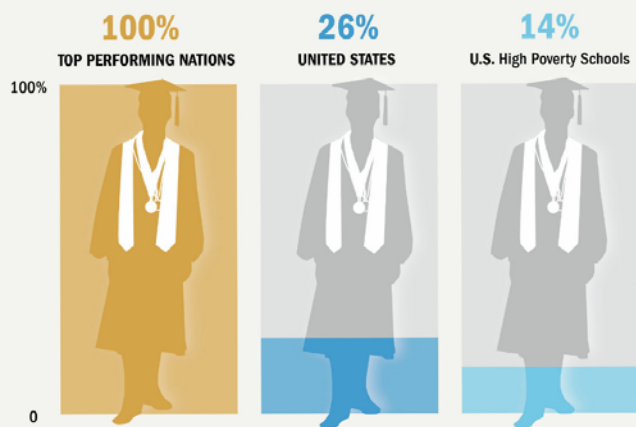


(Ingersoll, Merrill, & Stuckey, 2015)

# Who Stays and Who Leaves?

## Recruiting top-third graduates for teaching

A comparison of the **percentage of new teachers recruited from the top-third** of all graduating college students between the United States and the world's top performing nations such as Singapore, Finland and South Korea:



(Auguste, Khin, & Miller, 2015)





What are the most important job attributes?

- ✓ The quality of coworkers
- ✓ Prestige
- ✓ A challenging work environment
- ✓ High-quality training
- ✓ Financial security

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## Teacher Preparation

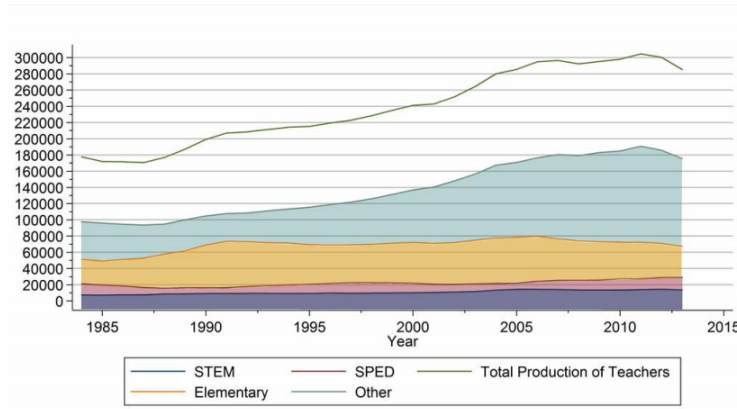
- Commonly cited statistic: 30 percent drop in teacher preparation program enrollment
- Caveats
  - Overall teacher production has grown steadily for more than two decades.
  - STEM (science, technology, engineering, and mathematics) and special education (SPED) teacher growth has been flat.
  - Elementary school teachers are projected to exceed elementary student need.

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# Teacher Preparation

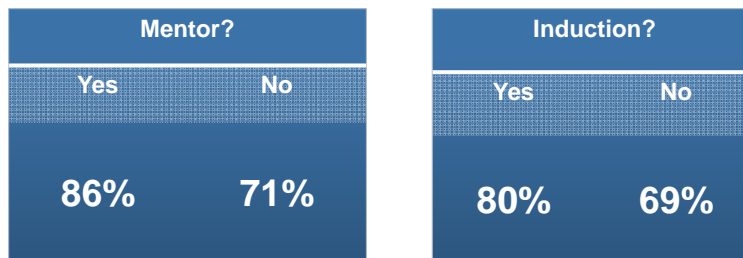
Figure 1: Aggregated Number of Degrees in Education (1984-2013)<sup>1</sup>



(Cowan, Goldhaber, Hayes, & Theobald, 2015)

# Attrition: Mentoring and Induction

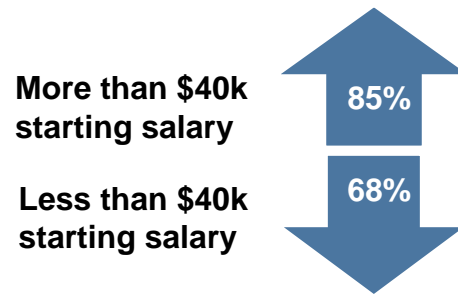
Percentage of teachers still in the profession after five years:



(Gray & Taie, 2015)

## Attrition: Salary

Percentage of teachers still in the profession after five years:



(Gray & Taie, 2015)

## How Do We Prepare for 2030?

## Information We Need

- Supply and demand studies
- Shortage prediction
- Exit surveys
- Leadership data



## Closing Thoughts

Our focus should be on assessing the following:

- Changing workforce needs
- How these changes impact education and the educator workforce

# Start By Adopting a Forward-Looking Approach



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