
The IERC Principal Studies:

Changing Demographics, Turnover Trends, Preferences & Practices, and Research on the Effects of Illinois Public School Principals

Brad White, Senior Researcher
Illinois Education Research Council

The Associated Colleges of Illinois
Chicago, IL
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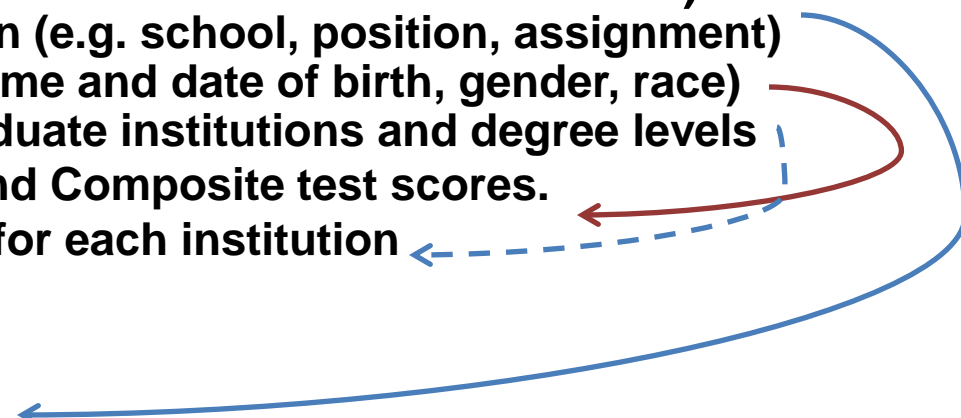


Context

- Recent research finding principals have a significant (though largely indirect) impact on student outcomes and that tenure in school (among other things) is associated with student achievement gains
- New policies in Illinois (new principal certification and evaluation programs) and nationally (school-based accountability, RttT, School Improvement grants) placing principal at center of school reform efforts
- Series of IERC studies on public school principals in Illinois:
 1. Distribution of Principal Characteristics
 2. Principal Turnover
 3. Survey on principal practices and preferences
 4. Principal effects

Data

- **Principal Data**

- Principal service and certifications information from state administrative data (Illinois State Board of Education)
 - employment information (e.g. school, position, assignment)
 - identifying data (e.g. name and date of birth, gender, race)
 - undergraduate and graduate institutions and degree levels
 - ACT, Inc. English, Math, and Composite test scores.
 - Barrons' (2003) rankings for each institution
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- **School Data**

- ISBE School report card
 - School level, enrollment, race, gender, poverty, and achievement
- Common Core of Data (CCD)
 - location, urbanicity

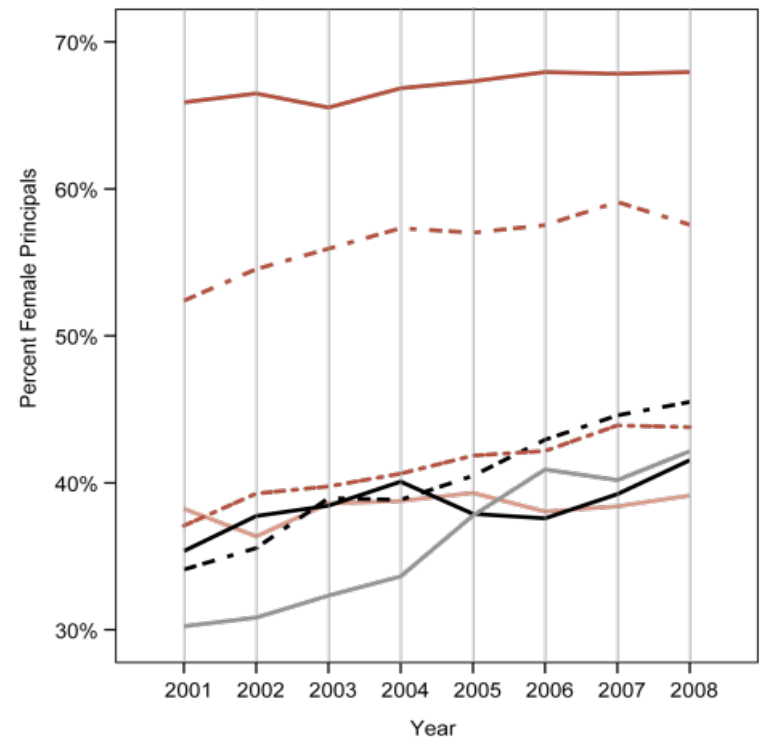
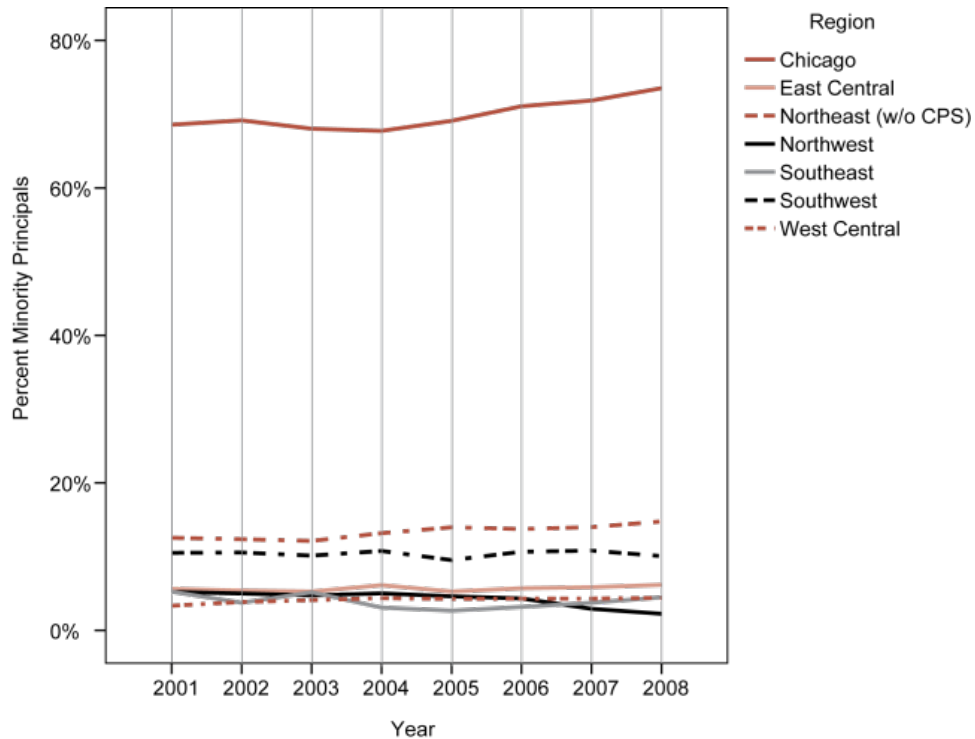
- **3500+ principals/schools per year over 8 years (2001-2008)**
 - Approx 28,000 records for approx 7,000 individuals
 - Employment history dating back to 1971

The Changing Distribution of Principal Characteristics

Summary

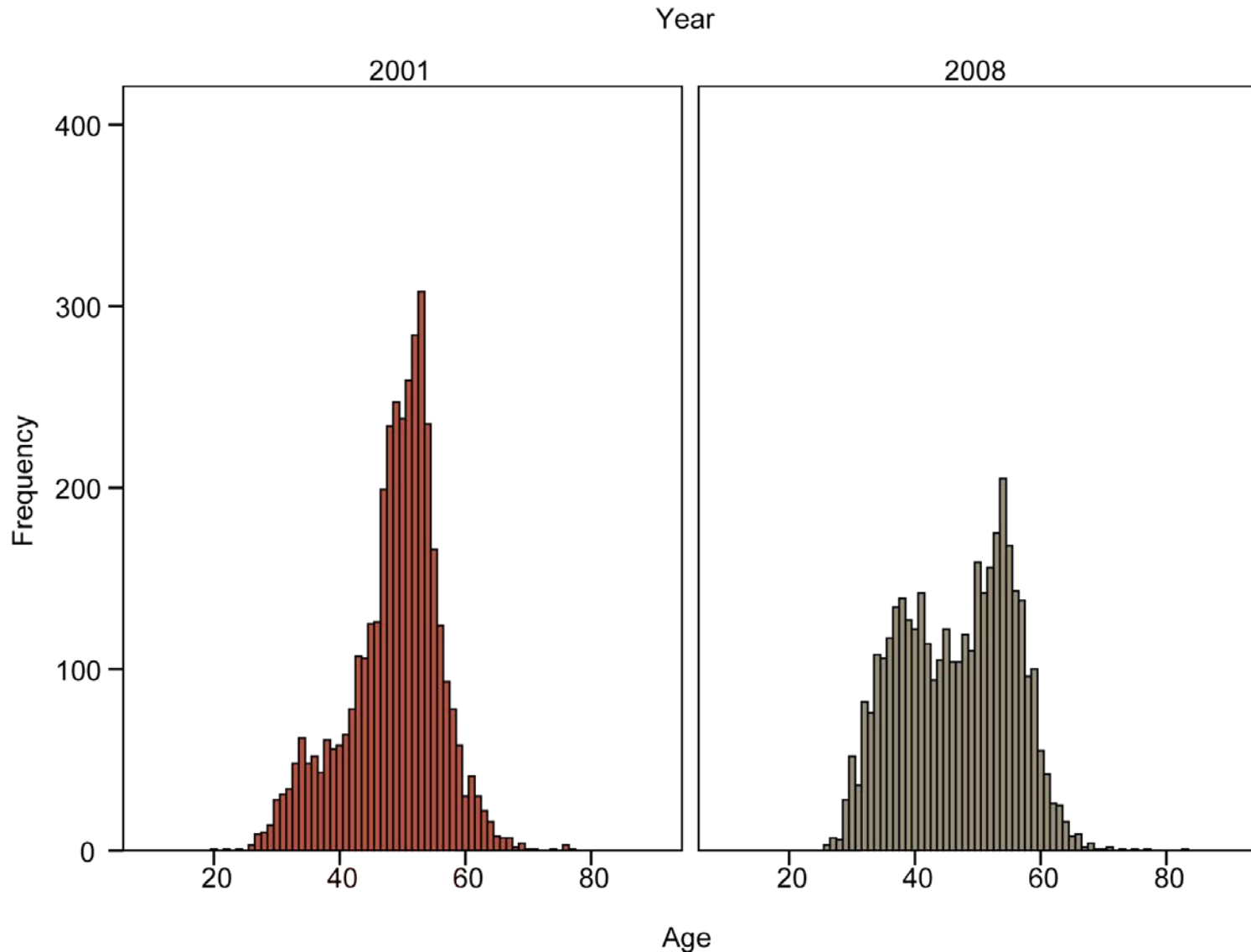
- Proportion of women increased to more than 50% and proportion of minorities *slightly* increased
 - Principals in more populous areas (Chicago/ Northeast/ urban/suburban) are more likely to be minorities and more likely to be women
- Today's principals are younger and less experienced than those eight years ago
 - But assistant principal and academic core teacher experience have increased, and principals in the state's most urban areas are more likely to have such experience
- Principals' academic characteristics haven't changed much
 - And they are distributed in much the same manner as teacher academic backgrounds – schools with low proportions of poor and minority students tend to have principals with the strongest academic backgrounds

Principal Race and Gender by Region



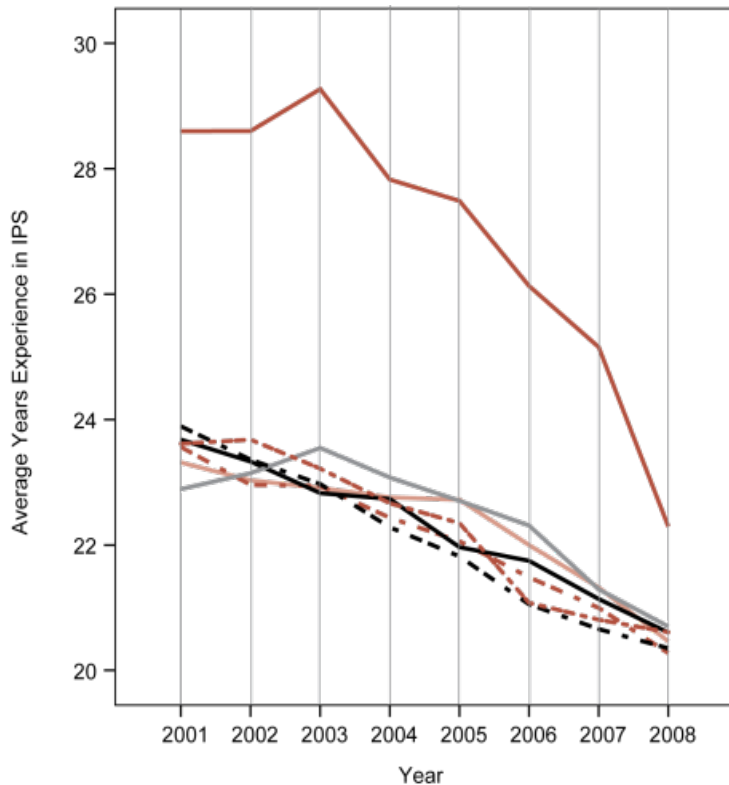
Minorities make up a much larger proportion of principals in Chicago...and so do women

Principal Age Distribution (2001 vs. 2008)

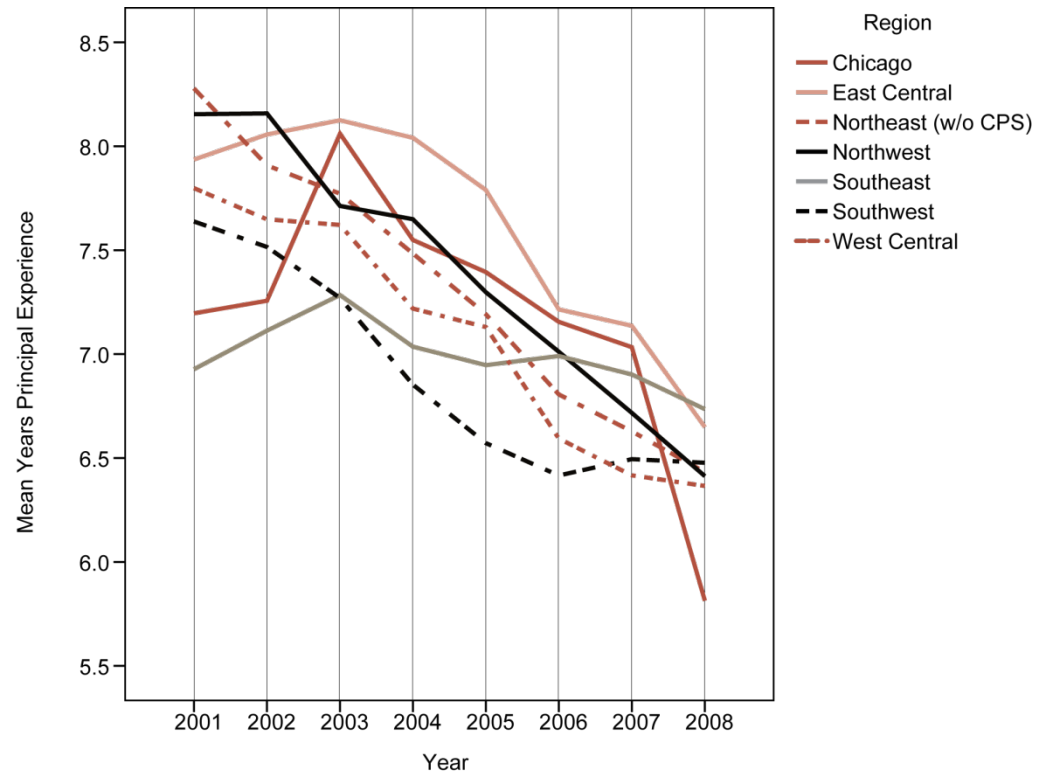


Principal Experience by Region

Experience in Any Position

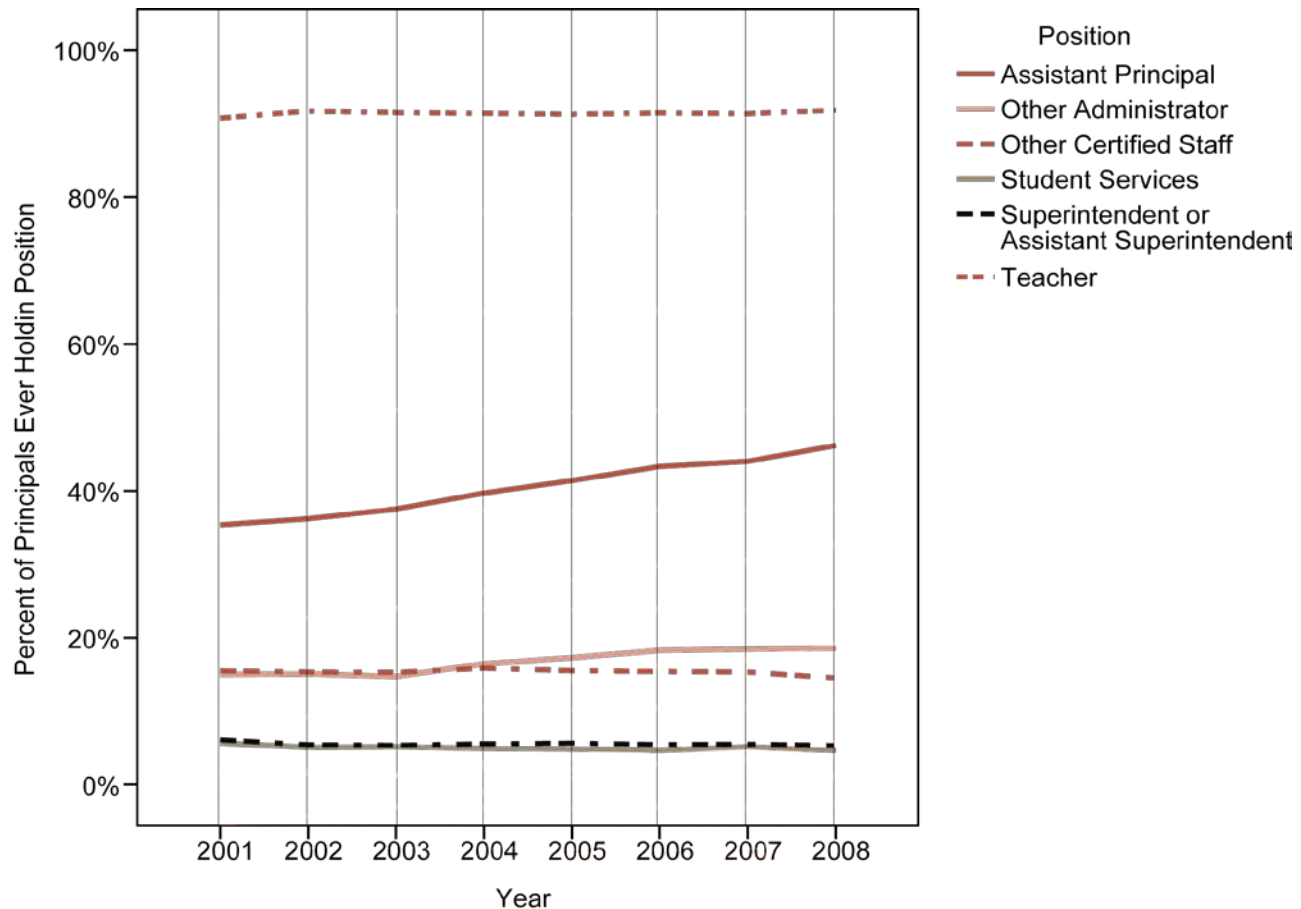


Experience as a Principal



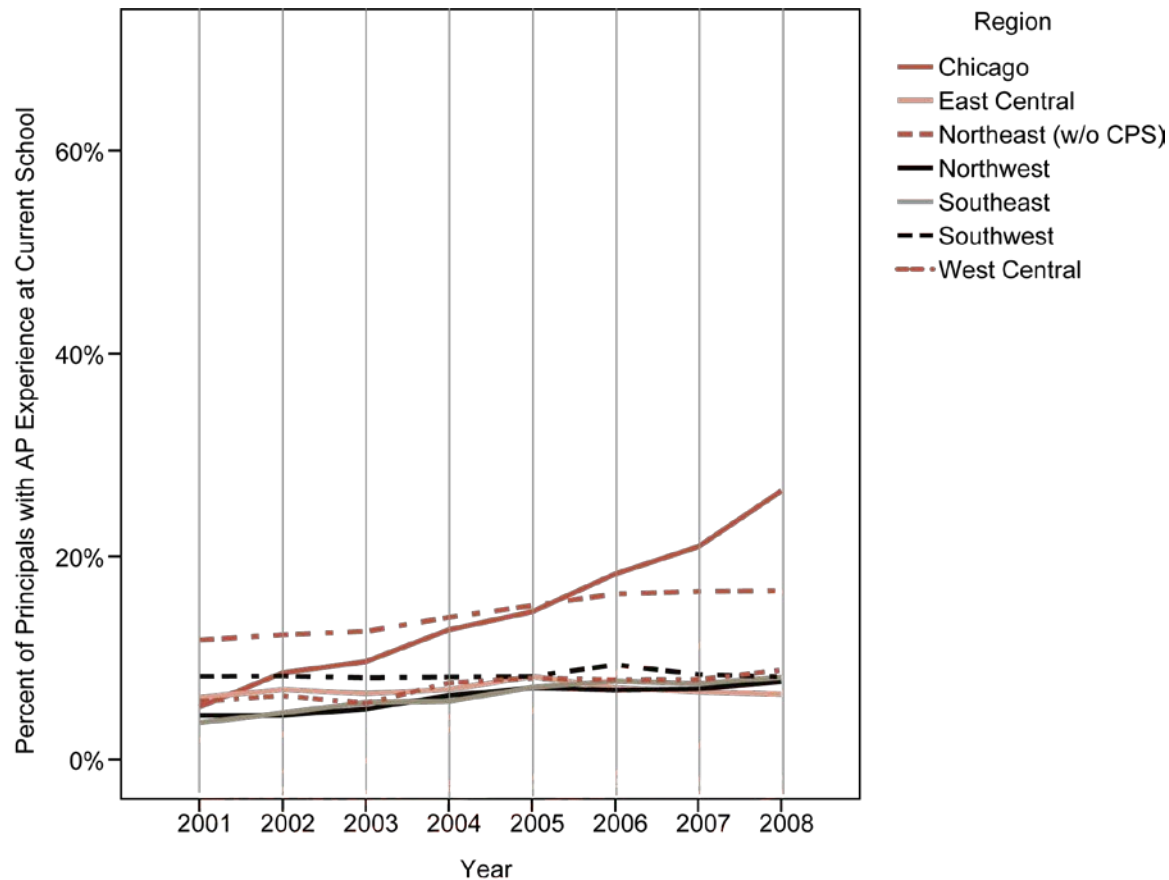
Chicago principals have more overall experience, but there's not much difference between regions in terms of experience as a principal

Principals' Prior Positions in IPS



More than 80% of principals have regular classroom teaching experience in Illinois public schools, and the proportion with experience as an AP is increasing

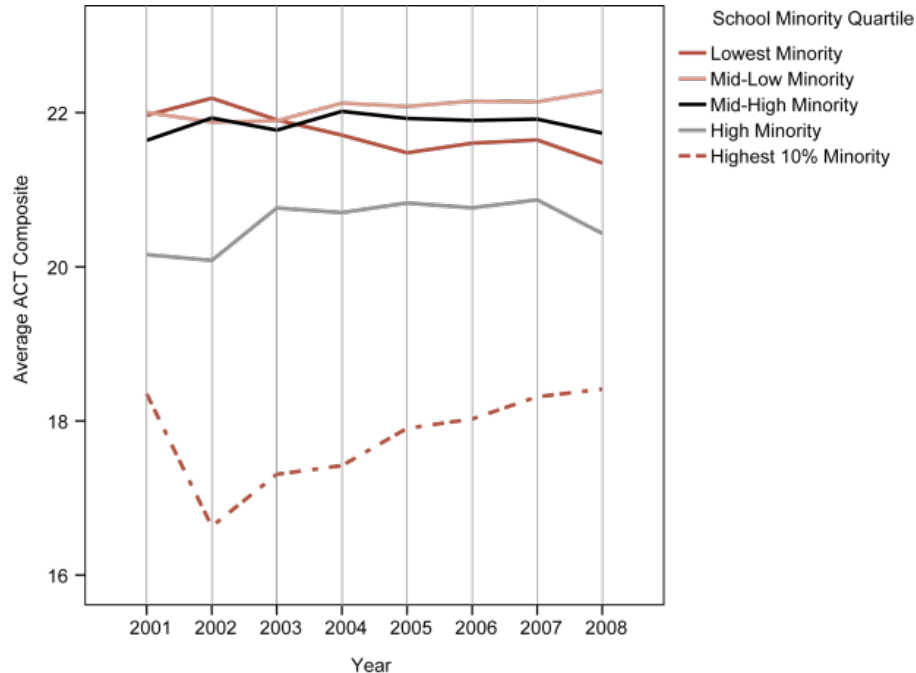
AP Experience at Current School



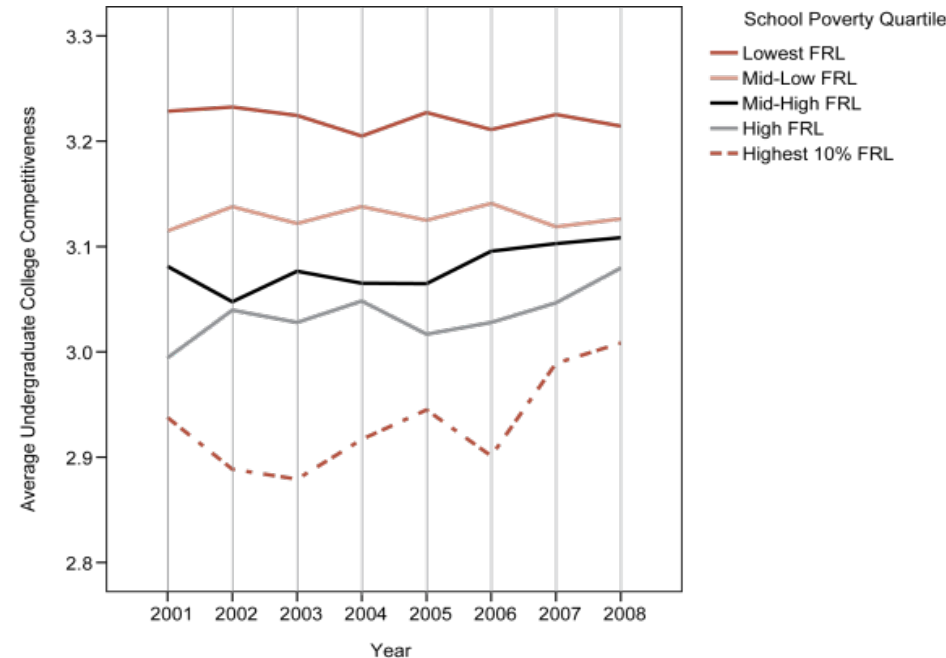
The proportion of CPS principals who were APs at the same school has increased substantially

Principal Academics by School Demographics

Principal ACT by School Minority



Principal College by School Poverty



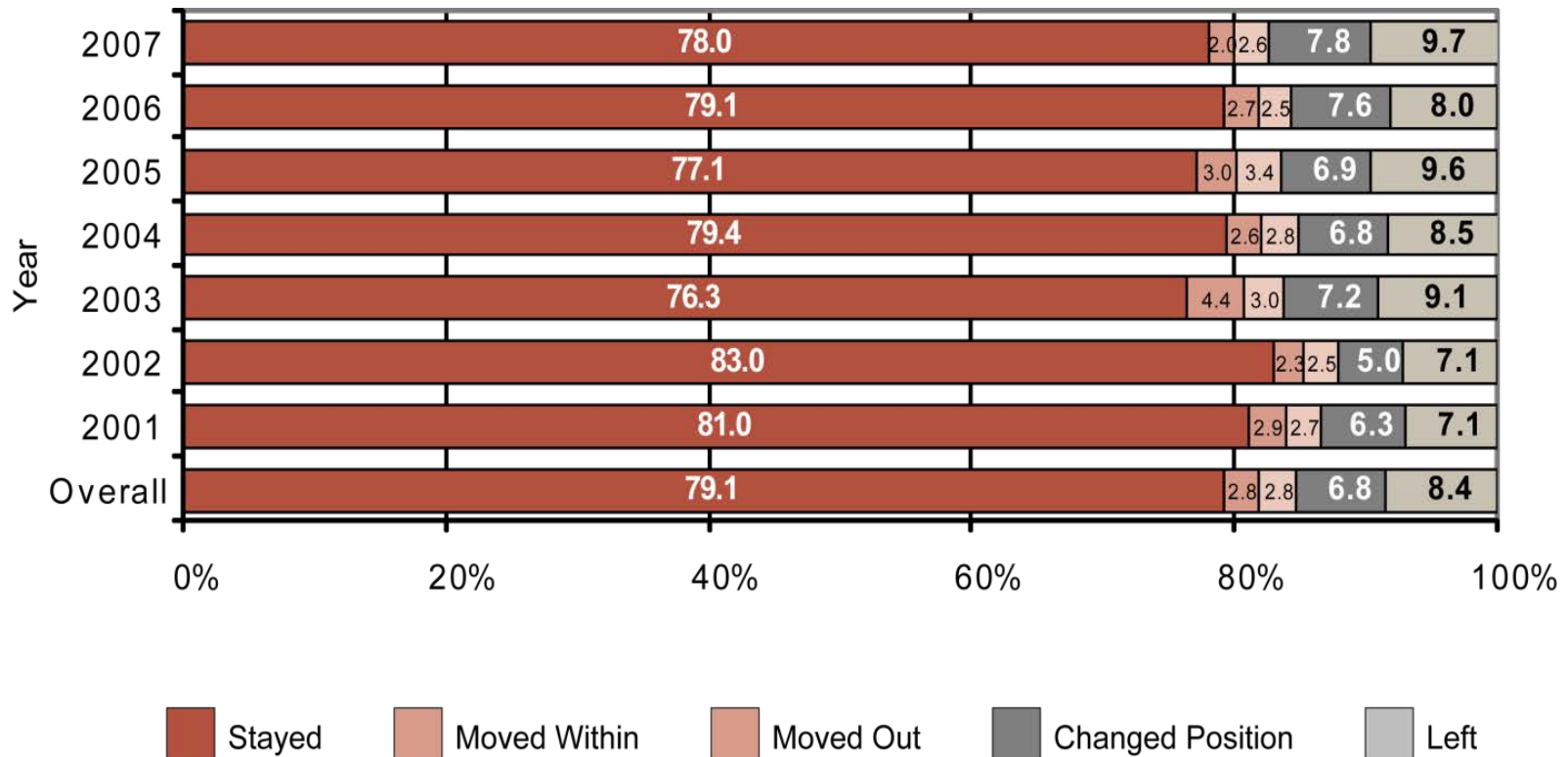
The principals in the most disadvantaged schools tend to have the weakest academic backgrounds

Principal Turnover

For the population of Illinois principals in each year, we identify each principal's status in the subsequent year as follows:

1. **Stayer:** stayed in the same school as principal
2. **Within District Mover:** remained a principal but moved to another school within the same district
3. **Out-of-District Mover:** remained a principal but moved to another school in a different district
4. **Changer:** changed to a non-principal position within IPS
5. **Leaver:** left the IPS system altogether

Overall Principal Turnover, 2001-08

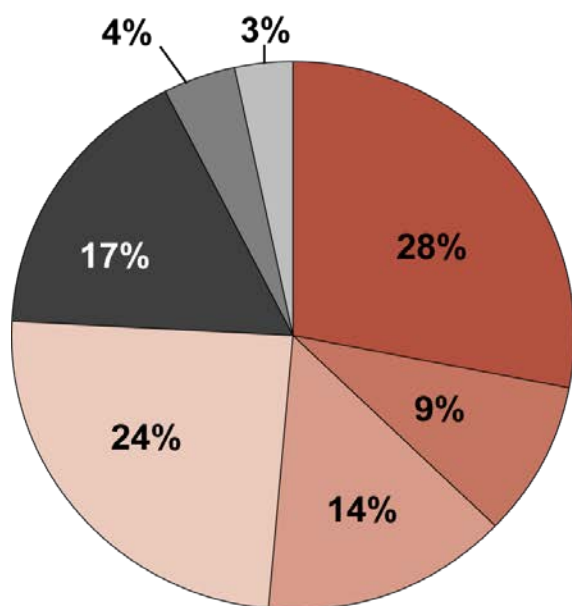


Decline in principal stability

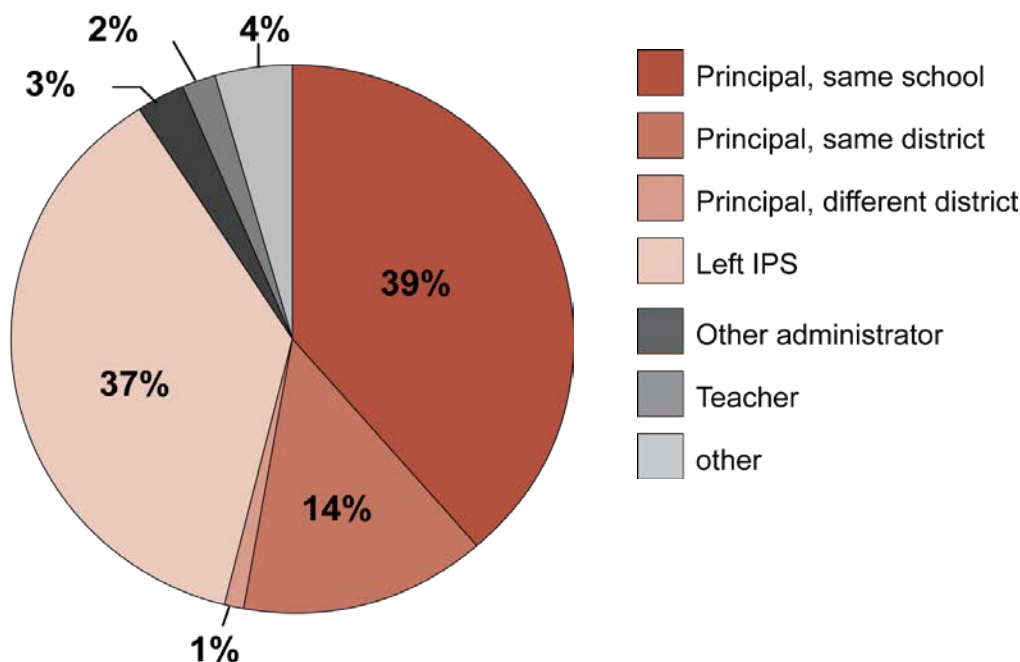
(79% stay rate now vs. 86% in the 1990s)

First-Time Principal Turnover: 2001 & 2002 cohorts after six years

Illinois



Chicago

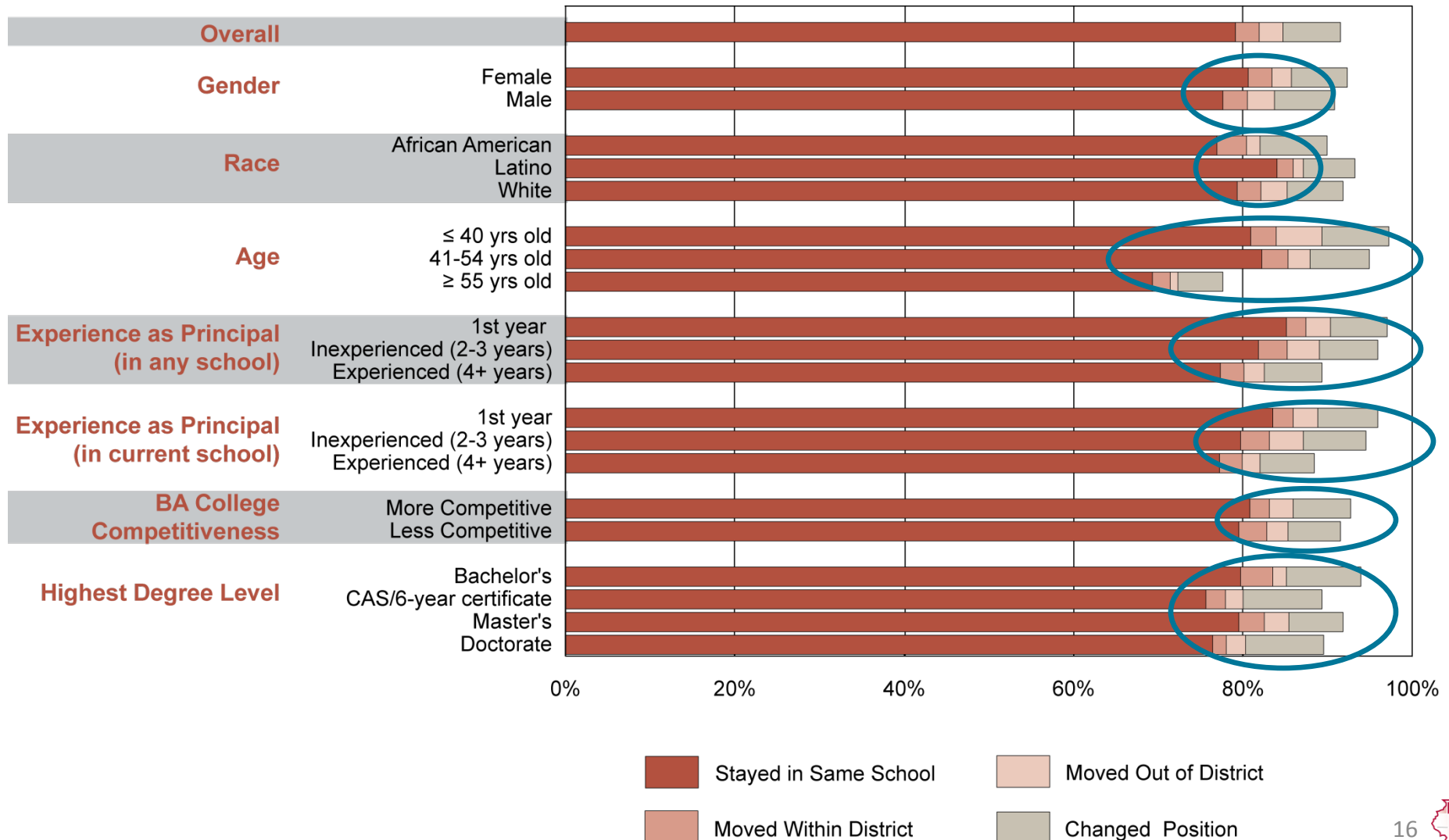


Decline in stability for first-time principals too

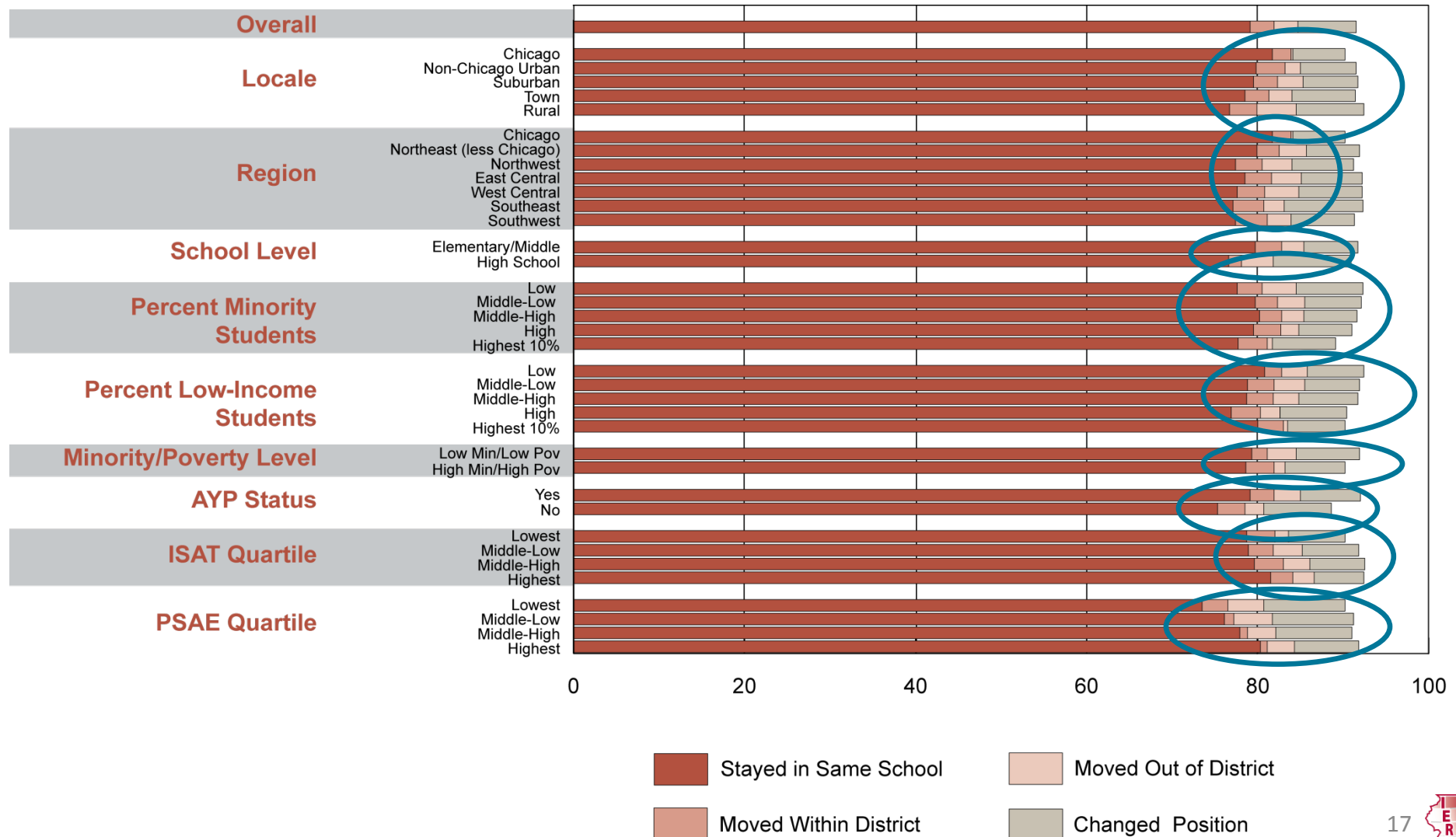
(State: 28% now vs. 38% in 1990s)

Chicago: 39% now vs. 53% in 1990s)

Average Turnover Rates by Principal Characteristics

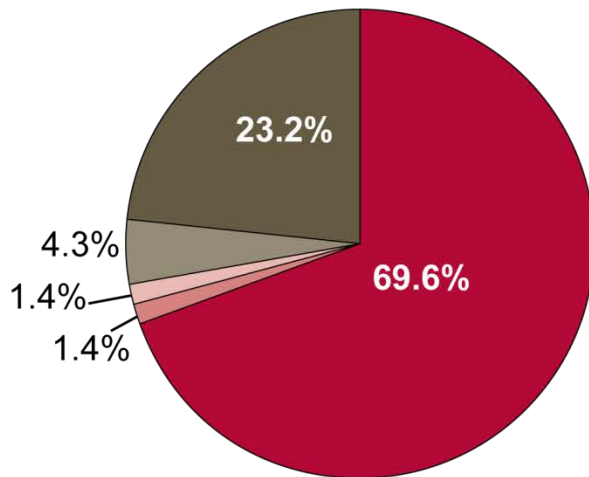


Average Principal Turnover Rates by School Characteristics

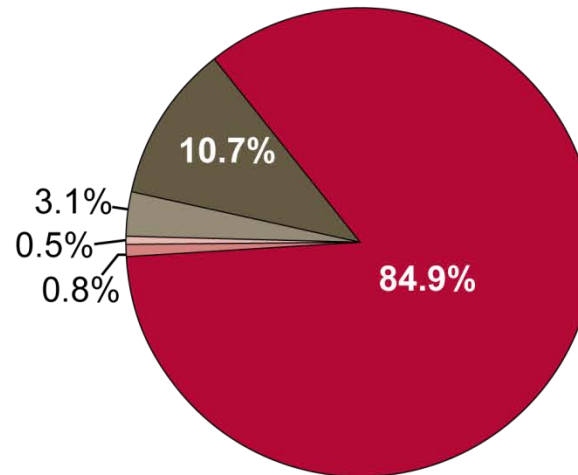


Leavers: Average Rates of Return

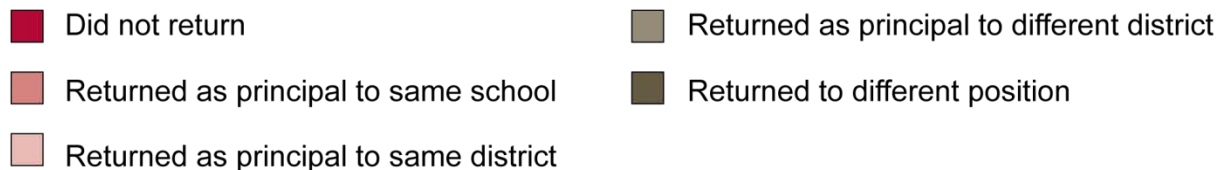
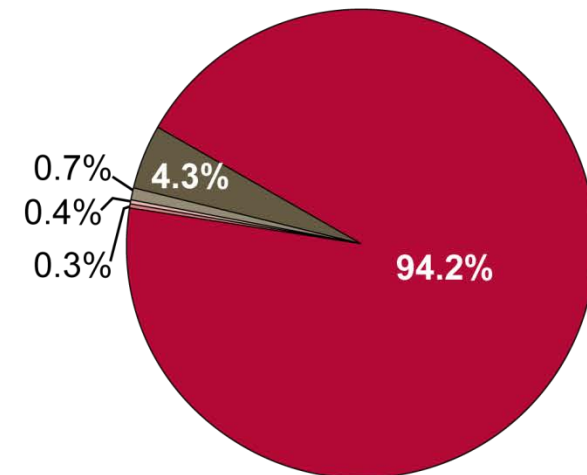
≤ 40 years old



41 – 54 years old



≥ 55 years old



Most who leave don't return (though younger leavers more likely to do so)

Leavers: Reasons for Leaving

| | Overall | ≤ 40 years old | 41–54 years old | ≥ 55 years old |
|---|---------|----------------|-----------------|----------------|
| Retirement | 65.6% | 1.1% | 64.6% | 72.9% |
| Other | 23.6% | 34.9% | 20.4% | 24.2% |
| Education position in non-public or out-of-state school | 3.5% | 24.5% | 4.2% | 1.0% |
| Involuntary departure ^a | 2.3% | 12.8% | 3.2% | 0.7% |
| Domestic/child care responsibilities | 1.4% | 12.8% | 1.5% | 0.2% |
| Health issue or death | 1.4% | 1.1% | 2.6% | 0.8% |
| Non-education vocation | 1.2% | 4.3% | 2.3% | 0.2% |
| Military service/Other leave of absence | 0.5% | 3.2% | 0.8% | 0.0% |
| Sabbatical/Return to school | 0.5% | 5.3% | 0.4% | 0.0% |
| N | 1,536 | 94 | 528 | 914 |

^a Includes reduction in force and forced resignation by the board.

Most leavers cited retirement as their reason for leaving and few left to pursue work outside of education

Within District Movers: Characteristics of initial and receiving schools

| | % Minority Students | | % Low-Income Students | | Mean Achievement (standardized score) | | Mean Teacher ACT Score | | % Inexperienced Teachers | |
|----------------------|---------------------|-----------|-----------------------|-------------------|---------------------------------------|-----------|------------------------|-----------|--------------------------|-------------------|
| | Initial | Receiving | Initial | Receiving | Initial | Receiving | Initial | Receiving | Initial | Receiving |
| Overall | 38.4 | 39.5* | 43.4 | 42.2 [†] | -0.10 | -0.13 | 20.9 | 21.0 | 17.2 | 18.4* |
| Chicago | 95.1 | 93.8 | 87.0 | 84.4 | -1.53 | -1.47 | 19.7 | 19.8 | 19.6 | 22.5 [†] |
| Non-CPS Urban | 52.3 | 52.4 | 54.7 | 47.3** | -0.32 | -0.35 | 21.2 | 21.2 | 17.3 | 17.4 |
| Suburban | 43.5 | 45.6** | 37.9 | 38.3 | 0.02 | -0.04 | 20.8 | 21.0 | 18.8 | 21.3** |
| Town | 13.2 | 12.0 | 42.6 | 38.8 | 0.20 | 0.26 | 21.2 | 21.1 | 12.2 | 10.4 |
| Rural | 5.4 | 7.1** | 26.7 | 27.5 | 0.40 | 0.34 | 21.2 | 21.3 | 15.0 | 15.0 |

Within district movers experienced very little change in student and teacher characteristics

Note: Significance tests reflect differences between initial and receiving schools.

* $p \leq .05$
 ** $p \leq .01$
 *** $p \leq .001$
[†] $p \leq .10$

Out-of-District Movers: Characteristics of initial and receiving schools

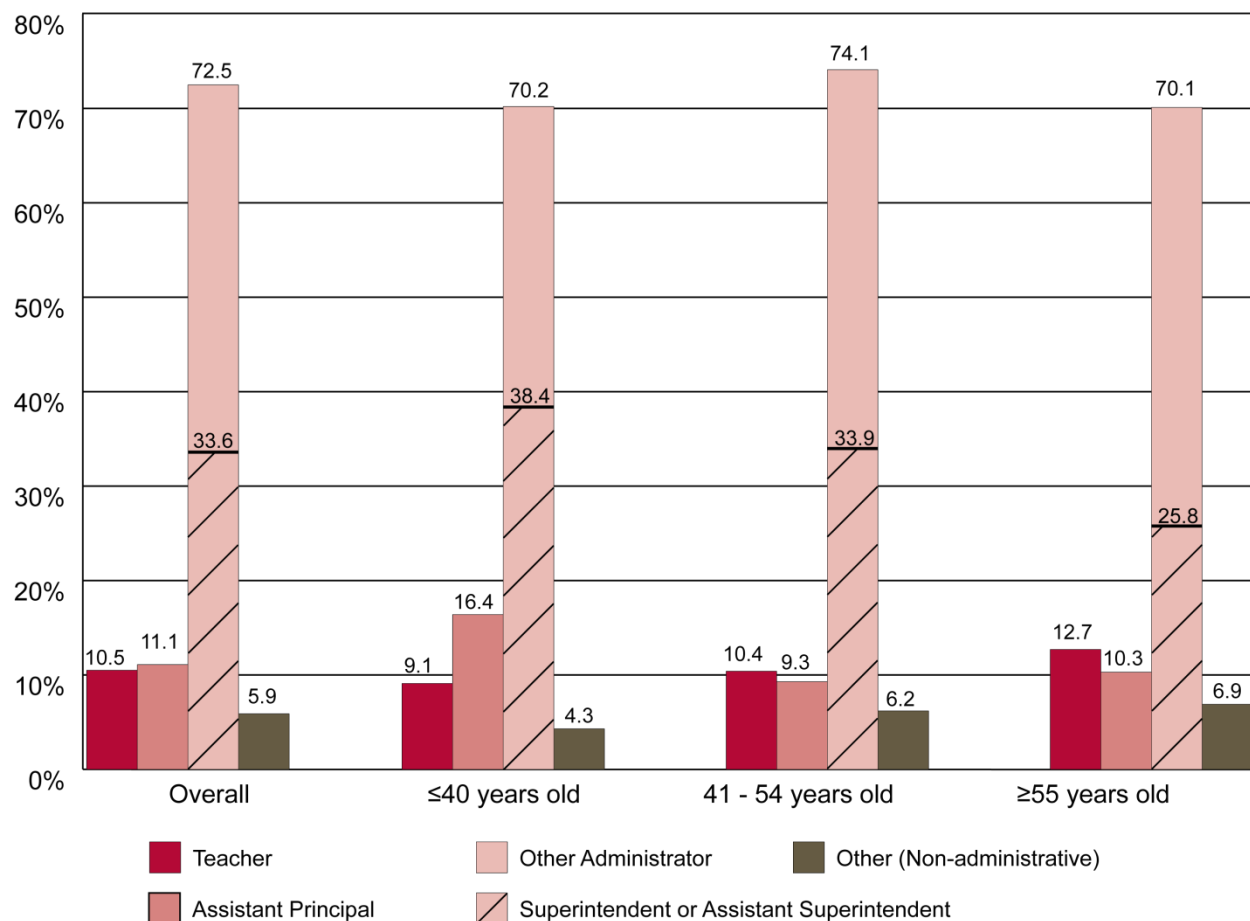
| | % Minority Students | | % Low-Income Students | | Mean Achievement (standardized score) | | Mean Teacher ACT Score | | % Inexperienced Teachers | |
|----------------------|---------------------|-------------------|-----------------------|-------------------|---------------------------------------|--------------------|------------------------|-----------|--------------------------|-----------|
| | Initial | Receiving | Initial | Receiving | Initial | Receiving | Initial | Receiving | Initial | Receiving |
| Overall | 24.8 | 24.9 | 29.5 | 27.8 [†] | 0.16 | 0.29*** | 21.4 | 21.5* | 18.6 | 17.7 |
| Chicago | 92.7 | 66.7 | 87.5 | 42.9** | -1.42 | -0.47 [†] | 19.8 | 21.1 | 23.8 | 23.7 |
| Non-CPS Urban | 48.5 | 33.9** | 40.0 | 29.8* | -0.02 | 0.28 [†] | 21.6 | 21.6 | 19.2 | 16.8 |
| Suburban | 37.8 | 34.7 [†] | 28.0 | 24.9* | 0.21 | 0.37** | 21.3 | 21.6*** | 20.1 | 19.1 |
| Town | 10.8 | 14.3 | 36.2 | 30.0 [†] | 0.12 | 0.23 | 21.4 | 21.5 | 11.8 | 13.9 |
| Rural | 6.1 | 2.8*** | 26.5 | 30.1** | 0.18 | 0.22 | 21.6 | 21.5 | 18.2 | 16.8 |

Between district movers tended to move to schools with less poverty and higher achievement

Note: Significance tests reflect differences between initial and receiving schools.

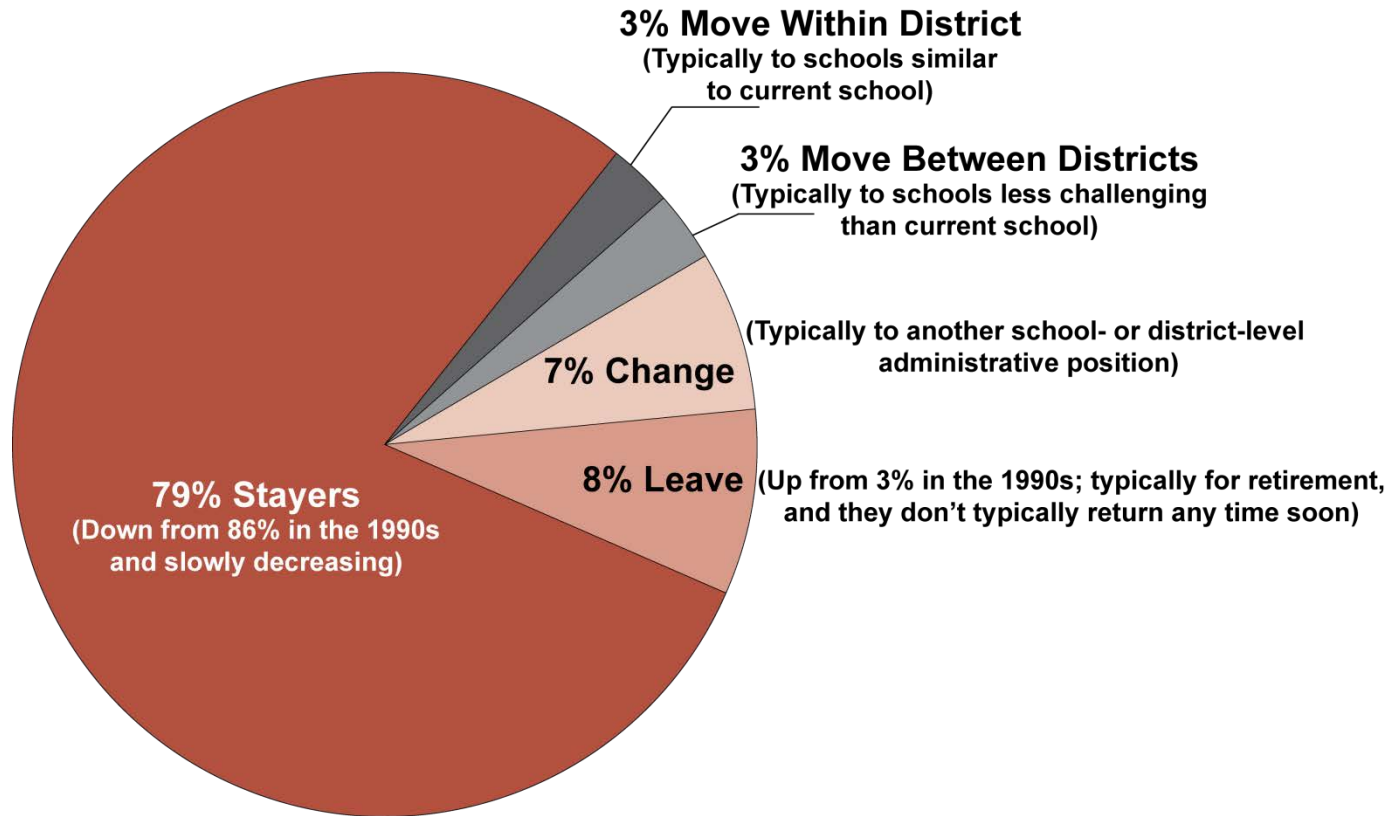
* p≤.05
 ** p≤.01
 *** p≤.001
 † p≤.10

Changers: New position in subsequent year



Changers tended to move to other (school- or district-level) administrative positions

Summary: Principal Turnover 2001-08



- Chicago: both greater retention AND greater attrition
- For better or worse, accountability pressures appear to have had a negative impact on principal stability

The 2010 Illinois Principals Survey: Principals' Teacher Hiring & Evaluation Practices

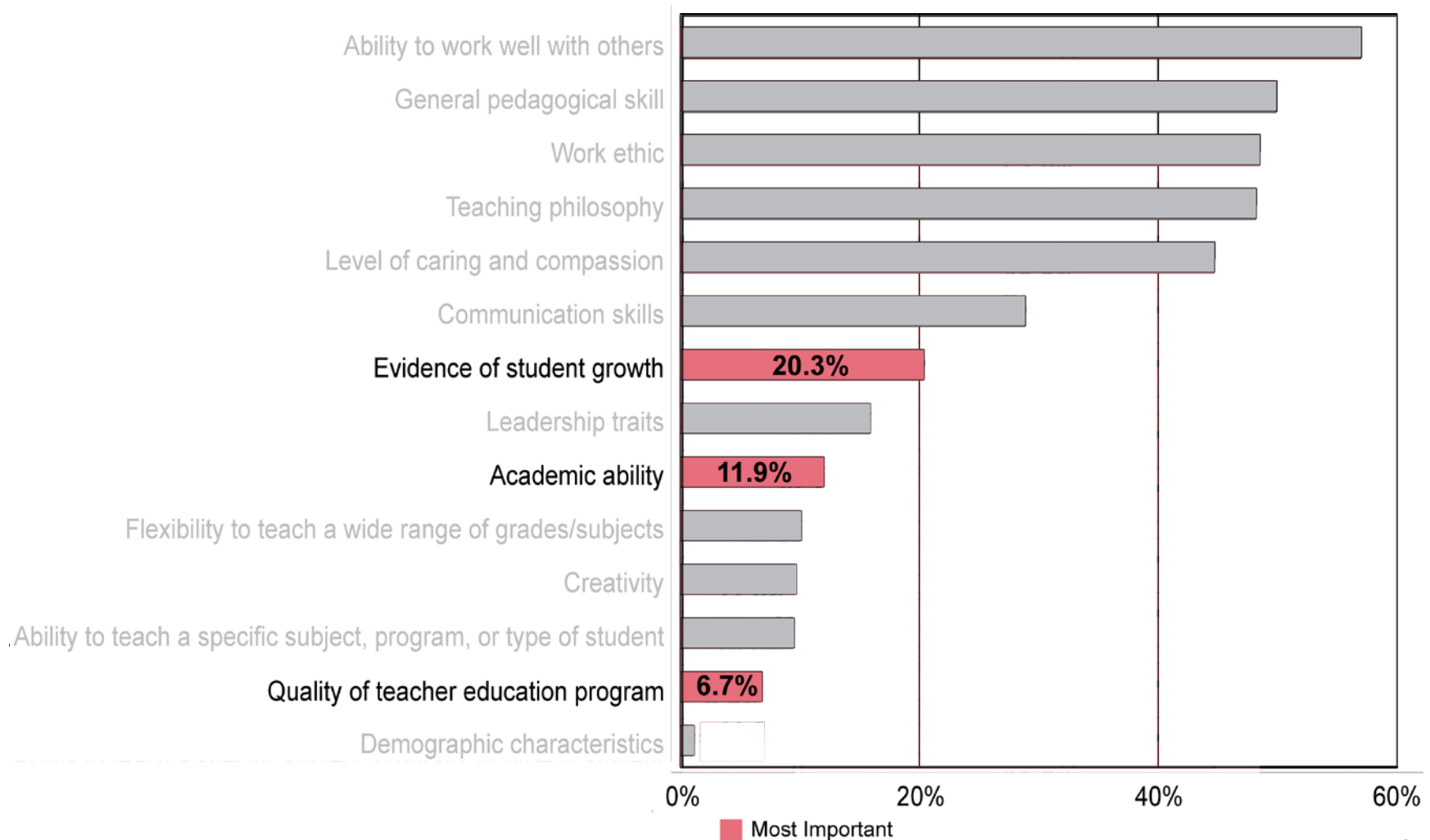
Methodology

- Survey items – modeled on Stanford's School Leadership Research project and other recent research – addressed:
 - Job satisfaction & work preferences
 - Professional priorities & practices
 - Teacher hiring & evaluation
- Electronic surveys sent to all Illinois public school principals (+ sample of Illinois private school principals) in November 2010
- Responses from 916 principals
 - 877 from public schools
 - Approx. one in five public school principals participated
 - Not generalizable (not random, Chicago under-represented)

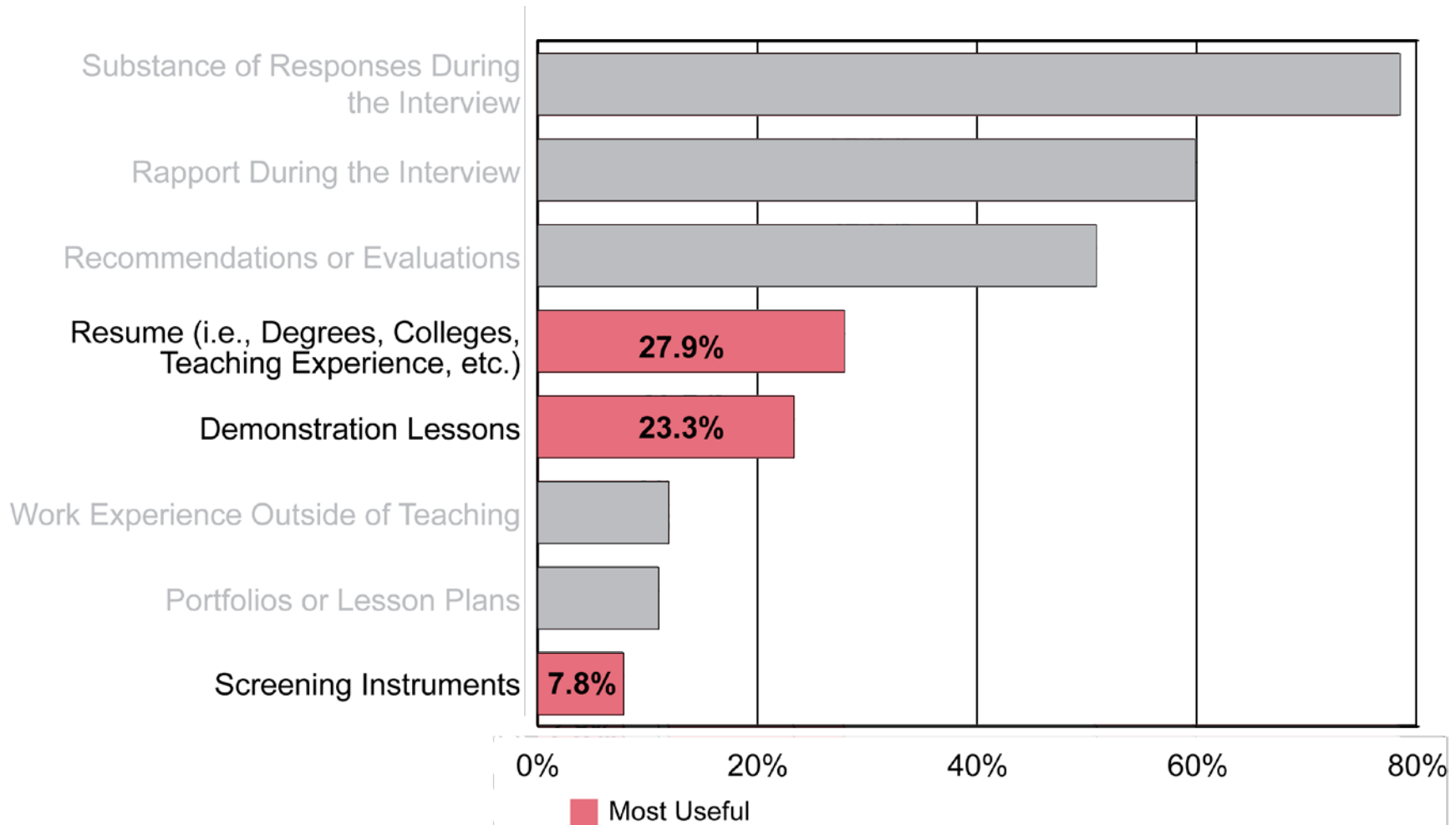
Finding #1:

Teacher Hiring: Relationships, soft skills, and first-hand experience are more valued than data from screening instruments or information about prospective teachers' academic backgrounds or past teaching performance.

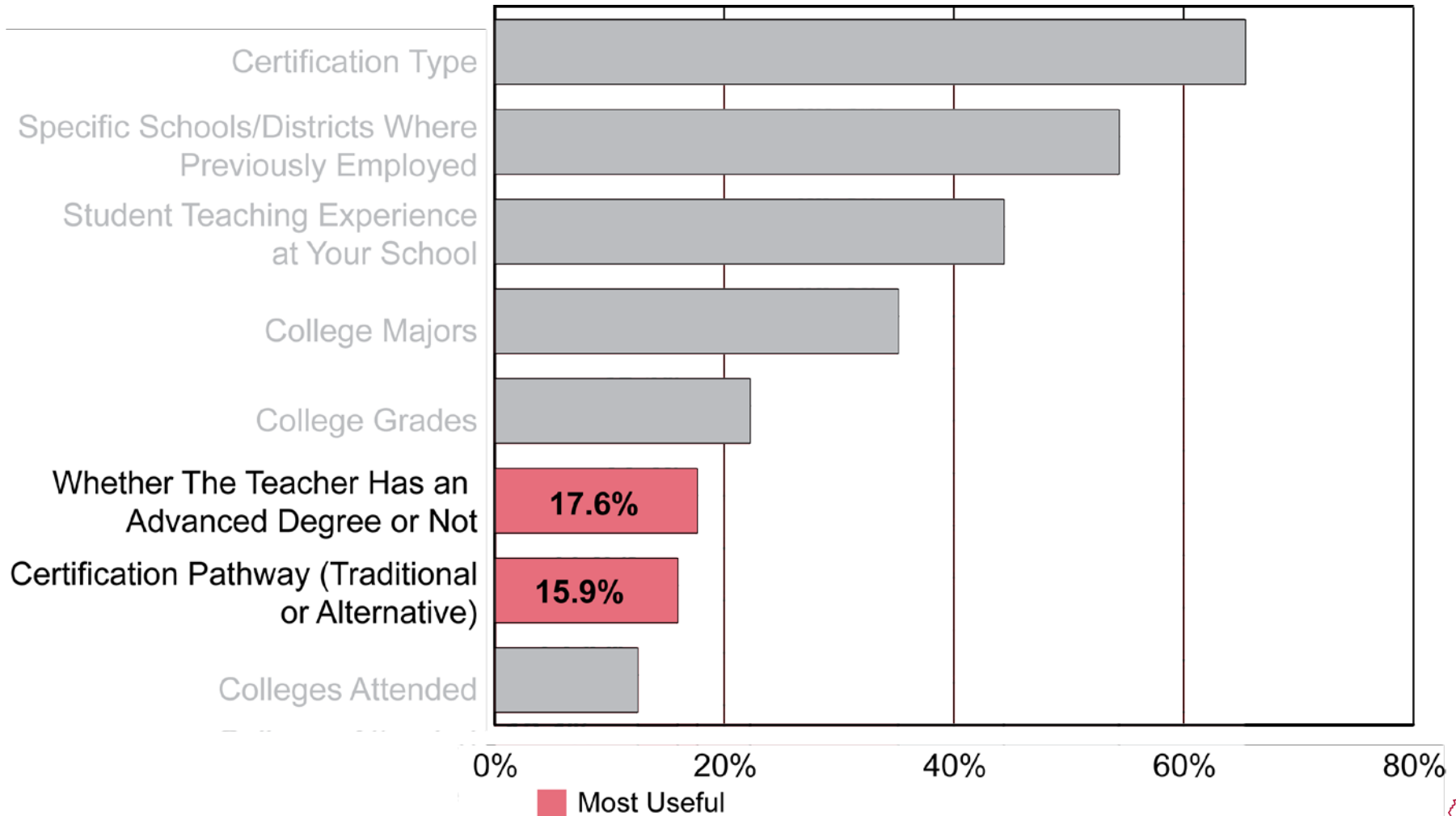
Which characteristics are most important in hiring a prospective teacher?



Which tools are most useful in assessing the quality of a prospective teacher at your school?



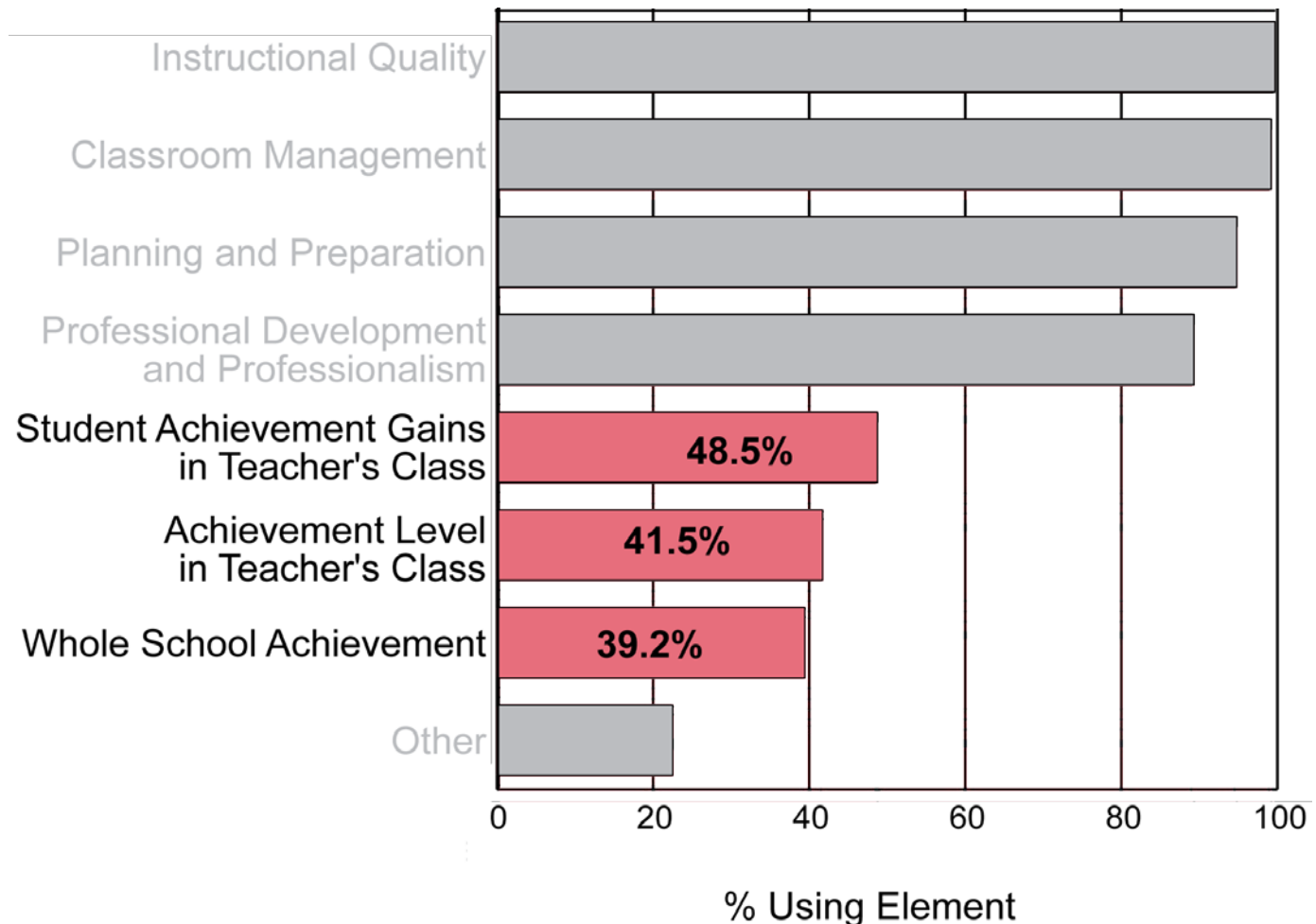
How useful do you find the following portions of a prospective teacher's resume?



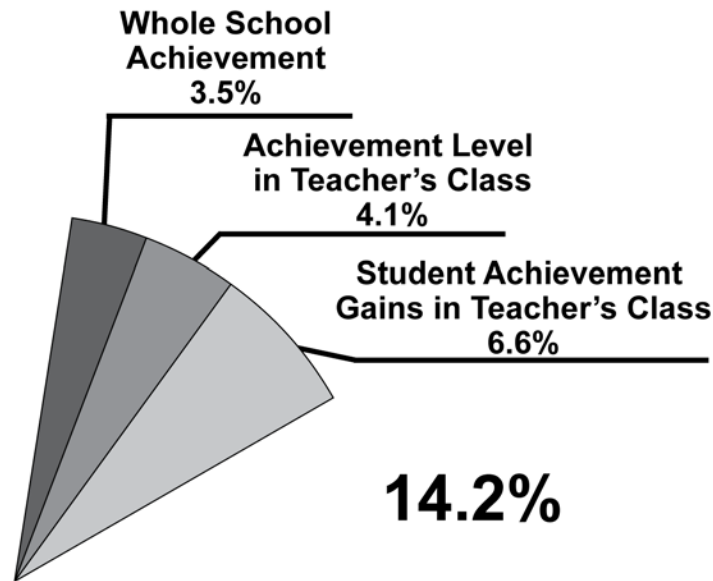
Finding #2:

Teacher Evaluation: Many systems do not include any measures of student achievement and, where they are included, they don't count for much. Instead, classroom observations and other measures of teaching practice are viewed as considerably more useful.

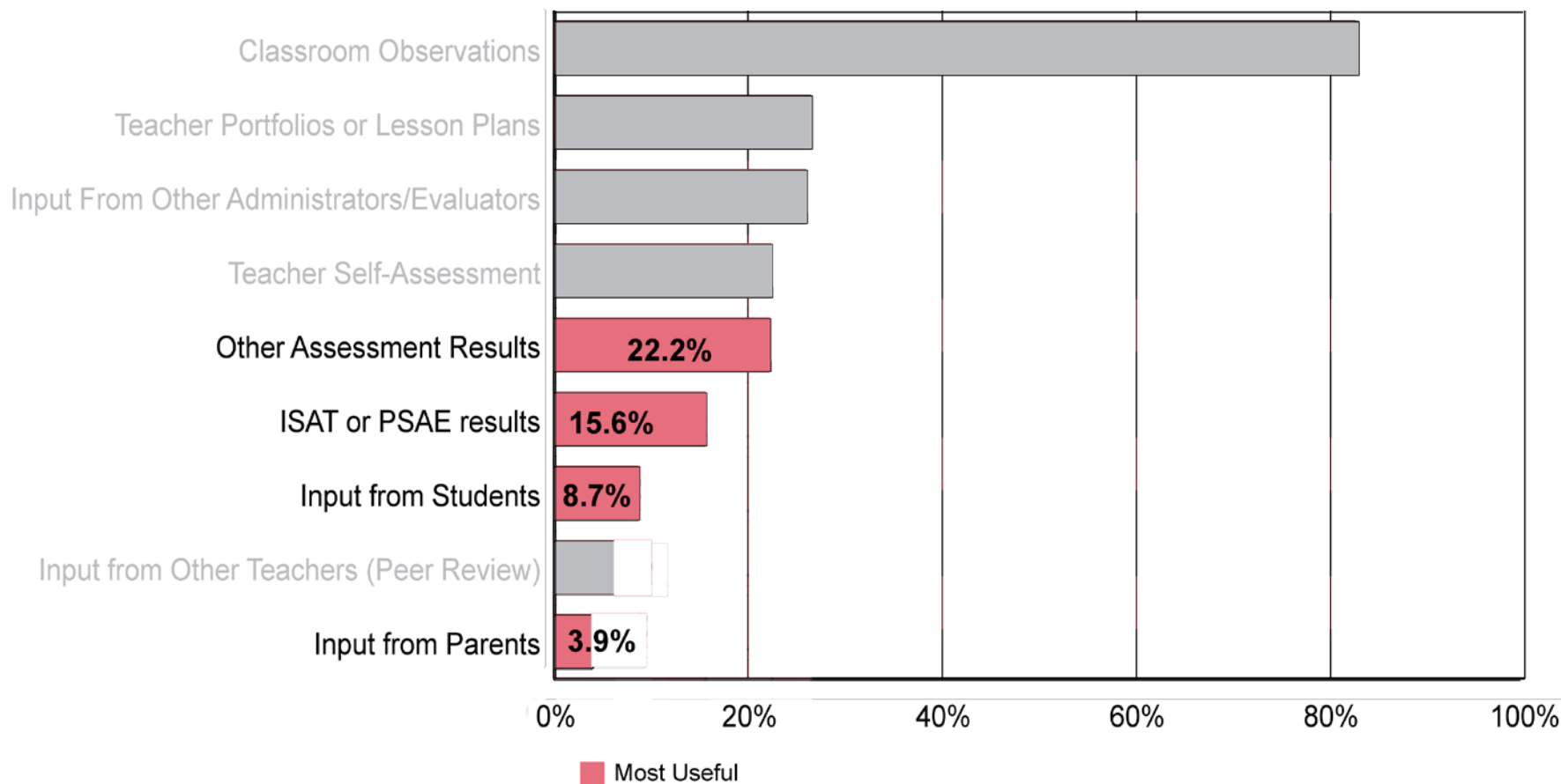
Which of the following elements do you include in evaluations of tenured teachers?



When you are evaluating tenured teachers in your school, what proportion of the evaluation derives from each of the following elements?



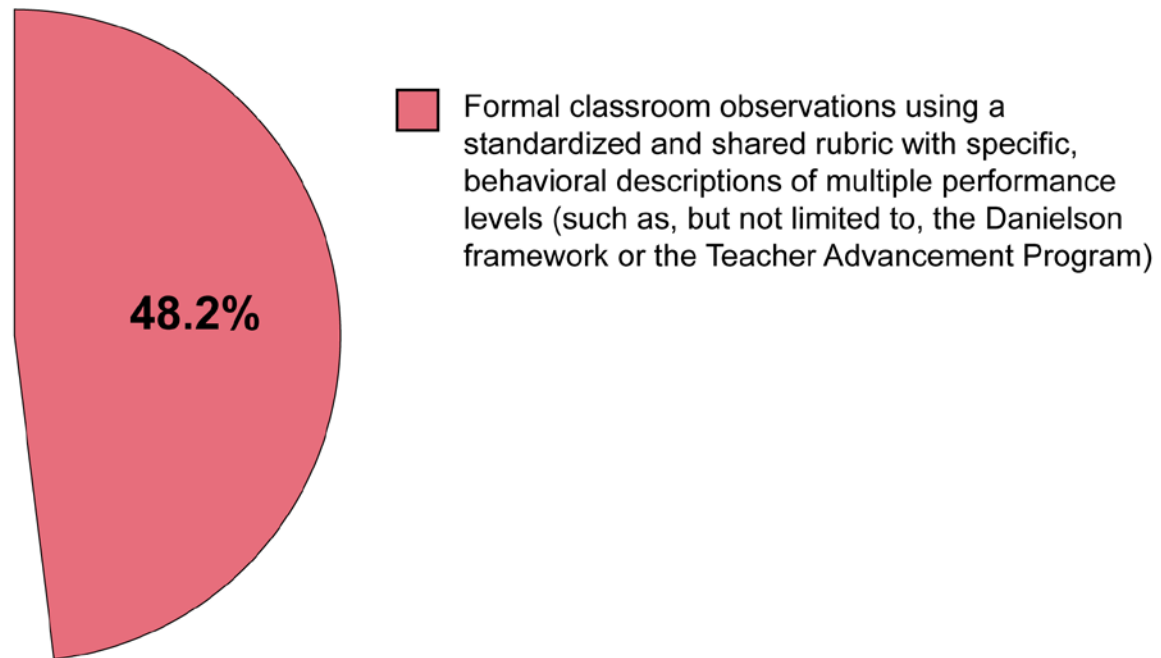
How useful are each of the following tools in evaluating the performance of tenured teachers at your school?



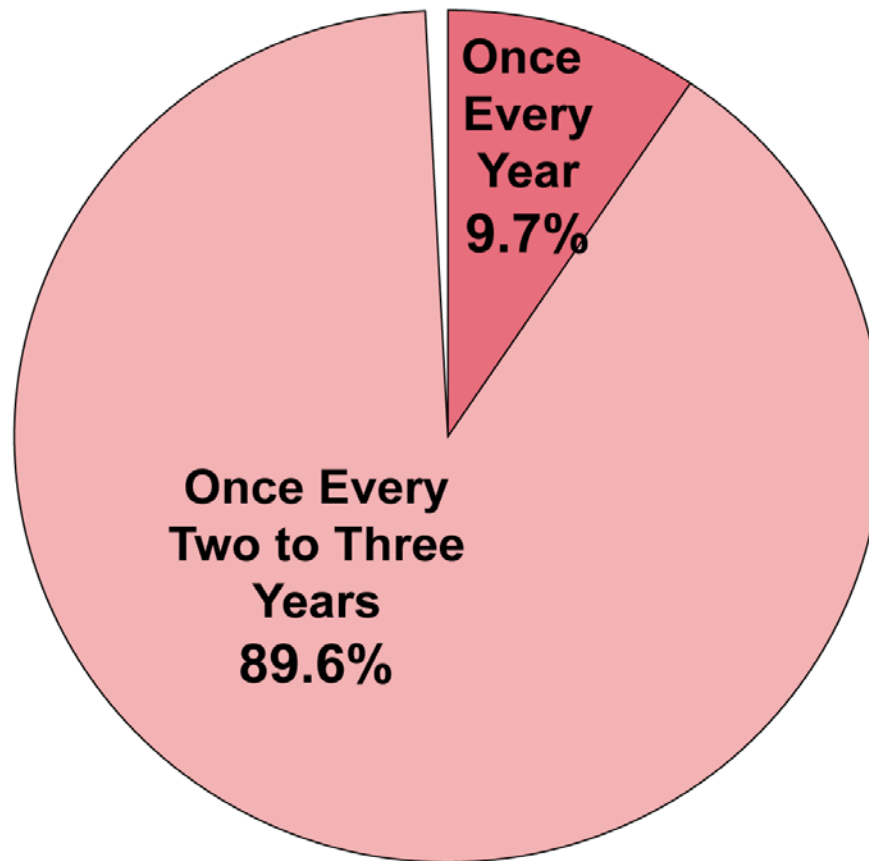
Finding #3:

Despite frequent criticisms, there are some promising features of the **teacher evaluation systems currently used by Illinois principals.**

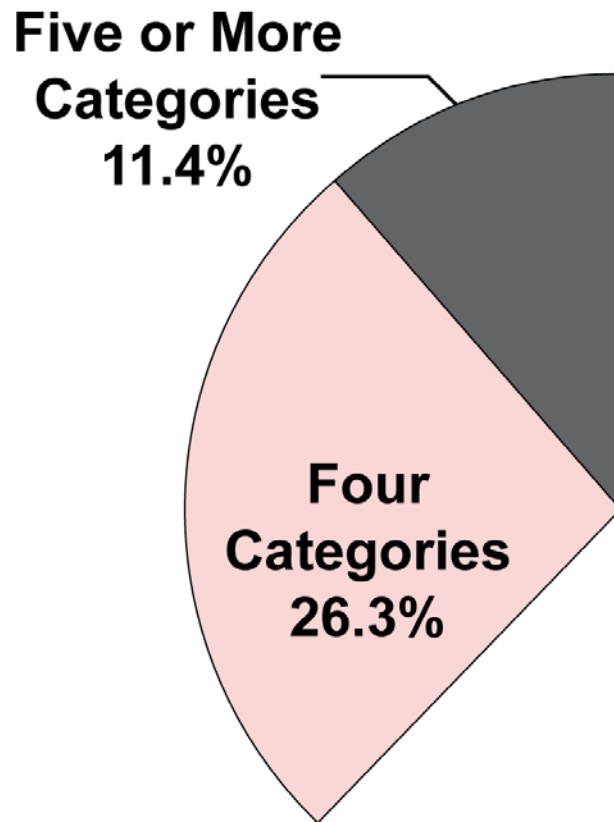
Which of the following describes the classroom observation format that is most important in your evaluation of tenured teachers?



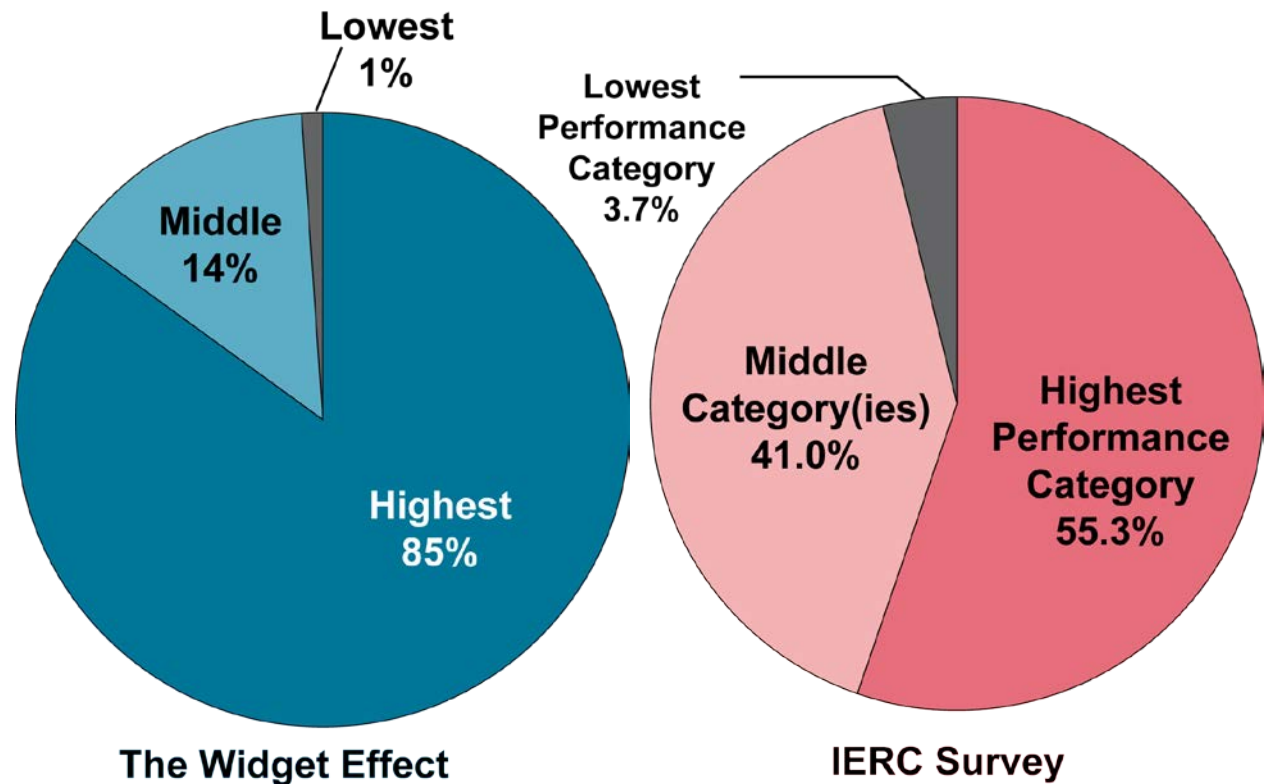
On average, how often do tenured teachers in your school undergo a full evaluation?



How many performance categories does your teacher evaluation system have?

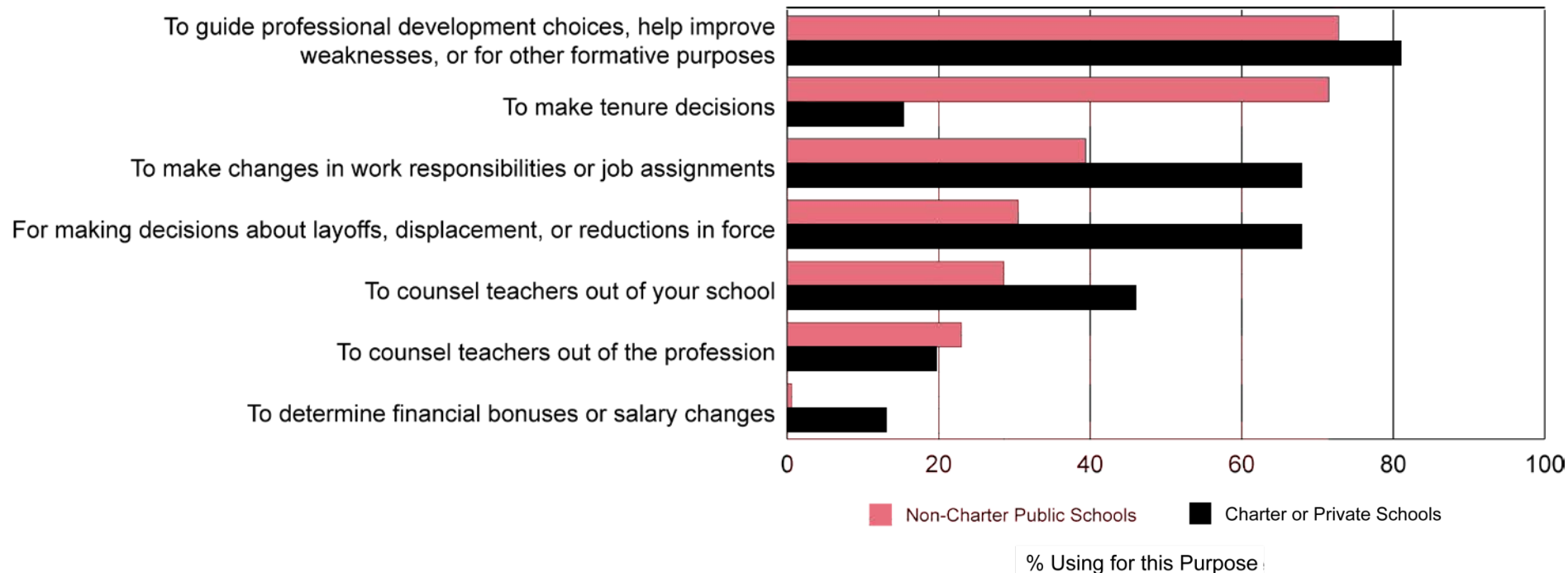


On average, what proportion of ALL your teachers' evaluation fall into each of the following performance categories?



In what ways do you use the results of teacher evaluations at your school?

(Check all that apply.)



Implications

- Room for improvement in policy and principals' pre-service and in-service education to help make teacher hiring and evaluation more strategic and more valid
 - use of more research-based criteria
 - alignment between hiring, evaluation, and other systems
- A lot of work to be done (in some areas) to meet PERA requirements
 - especially with regard to the role of student growth

Research on Principal Effects

Literature Review

- **Principal effects are measurable and consequential**
 - **Smaller than teacher effects**
 - **Substantial variations between principals**
- **What characteristics differentiate principals who are more effective from those who are less so?**
 - **Education, training, and PD have no consistent, direct impact on student achievement gains**
 - **Experience as principal—especially at current school—seems to matter most**
 - **For new principals, school tenure as assistant principal also seems to matter**

Lit Review Cont'd

- Principal effects are indirect—principals influence student achievement through their influence on a school's curriculum, culture, and **teachers**
- A principal's ability to assess **teacher quality** is particularly important for improving student achievement. More effective principals:
 - **Attract and hire teachers with stronger academics, more teaching experience, and better track records**
 - **Retain higher-quality teachers, remove less-effective teachers, and develop teachers' skills more rapidly, compared to less effective principals**

Our Study

- We estimate two-level hierarchical linear growth models to measure the impact of principal characteristics on growth in student proficiency and teacher qualifications over time.
 - Level 1: within school change over time
 - Level 2: differences between schools in initial achievement (or teacher qualifications)
- For all Illinois public schools over six academic years (2001-06) separate models by school level and by Chicago/non-Chicago
- Data from ISBE administrative records, student, teacher, and principal variables (aggregated to the school-level):
 - Principal variables: race, academic background, work experience in IPS
 - Teacher variables: teaching experience, academic background
 - Student variables: school enrollment, attendance and mobility rates, and student race and poverty concentrations

Summary of Findings: Impact of Principal Characteristics on Student Proficiency and Teacher Academic Qualifications

| Principal Characteristics | | Impact on Student Achievement | Impact on Student Achievement Growth | Impact on ITAC (teacher qualifications) | Impact on Growth of ITAC (teacher qualifications) |
|---------------------------|--|---|---|---|---|
| Principal Experience | First Year at School (vs. 2 nd –5 th year at school) | No significant effects | Negative effect in non-CPS elem/mid schools | No significant effects | No significant effects |
| | 6+ Years at School (vs. 2 nd –5 th year at school) | Positive effects in elem/mid schools | Negative effect in non-CPS elem/mid schools | No significant effects | No significant effects |
| | Years as Assistant Principal at School | No significant effects | Positive effects in elem/mid schools | No significant effects | No significant effects |
| Principal Academics | More Competitive Undergrad (vs. competitive) | No significant effects | No significant effects | No significant effects | No significant effects |
| | Less Competitive Undergrad (vs. competitive) | No significant effects | No significant effects | No significant effects | No significant effects |
| | Grad Degree from Research Institution (vs. masters-level institution) | Positive effect in non-CPS high schools | No significant effects | Positive effect in non-CPS elem/mid schools | Positive effect in non-CPS elem/mid schools |

Questions or comments?



Brad White, Senior Researcher
Illinois Education Research Council
brawhit@siue.edu
618-650-2240