Skills-based hiring

Prepared for the Greenhouse product team. About 4 minutes to read.

Recommendation

Ship skills-first job post templates together with skills assessments built into the ATS. Launch with ten roles where the degree requirement is weakest.

What to do

1. Build templates that list the skills a role needs, pulled from O*NET, with the degree field set to optional by default.
2. Pair every template with an assessment. Templates alone repeat what most employers did. They removed degree language and kept screening by degree.
3. Match the assessment to the skill. Management roles get a budget or staffing case. Technical roles get a hands-on task. Sales roles get a role play. Compliance roles get a writing exercise.
4. Launch with the ten roles in the shortlist below. Together they have about 260,000 openings a year that match the share of current workers without a degree.
5. Give customers a report on hires made without a degree and how long they stay. Firms that made skills-based hiring stick saw non-degreed hires stay longer, and customers need that proof in their own data.

Key numbers

Measure	Value
Occupations where BLS lists a bachelor's degree for entry	177 (42.9 million jobs)
Workers in those jobs without a bachelor's	12.7 million (30%)
Openings a year in those jobs	3.1 million
Openings a year that match the share of workers without a degree	about 970,000
Firms that dropped degree requirements and actually changed who they hired	37%

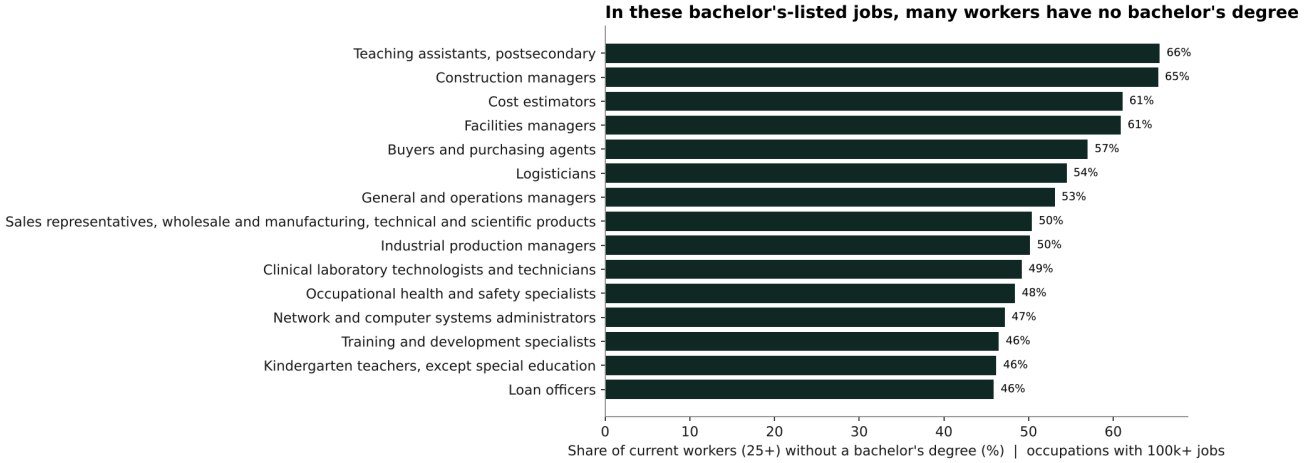
Ten roles to launch skills-first templates and assessments with

Occupation	Openings/yr	No BA (BLS)	Below BA (O*NET)	Top skills
General and operations managers	285.0k	53%	72%	Personnel mgmt, Material mgmt
Construction managers	49.7k	65%	55%	Financial mgmt, Personnel mgmt
Sales representatives (technical products)	23.6k	50%	63%	Persuasion, Negotiation
Computer occupations, all other	27.0k	43%	42%	Programming, Systems Analysis
Compliance officers	32.7k	35%	37%	Writing, Reading Comprehension
Administrative services managers	22.0k	43%	72%	Negotiation, Financial mgmt
Facilities managers	14.2k	61%	54%	Financial mgmt, Personnel mgmt
Industrial production managers	17.0k	50%	53%	Financial mgmt, Personnel mgmt
Loan officers	17.1k	46%	30%	Mathematics, Judgment and Decision Making
Network and computer systems administrators	13.4k	47%	38%	Programming, Troubleshooting

Where the degree gap is largest

BLS Table 5.4 gives the typical education needed to enter each occupation. Table 5.3 shows the education current workers actually hold. Among bachelor's-listed jobs with 100,000+ workers, construction managers top the list at 65% without a bachelor's. Cost estimators and facilities managers follow at 61% each.

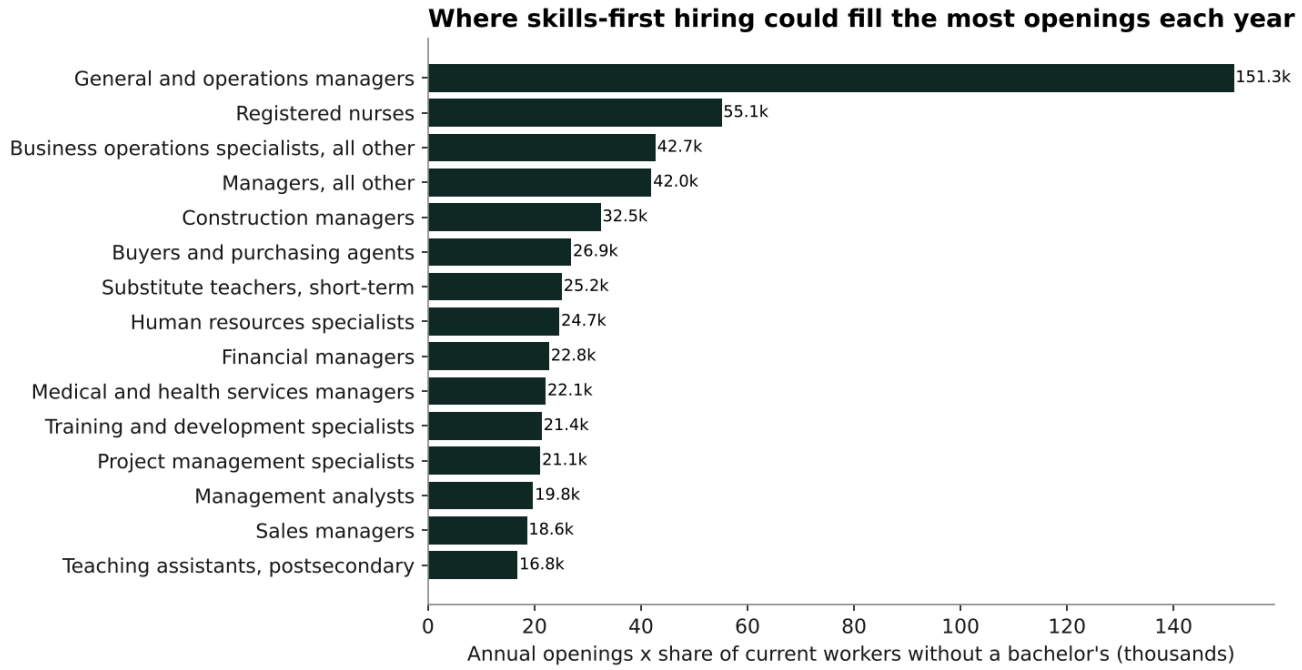
66 bachelor's-listed occupations have at least 30% of workers without the degree.



How much the pool widens

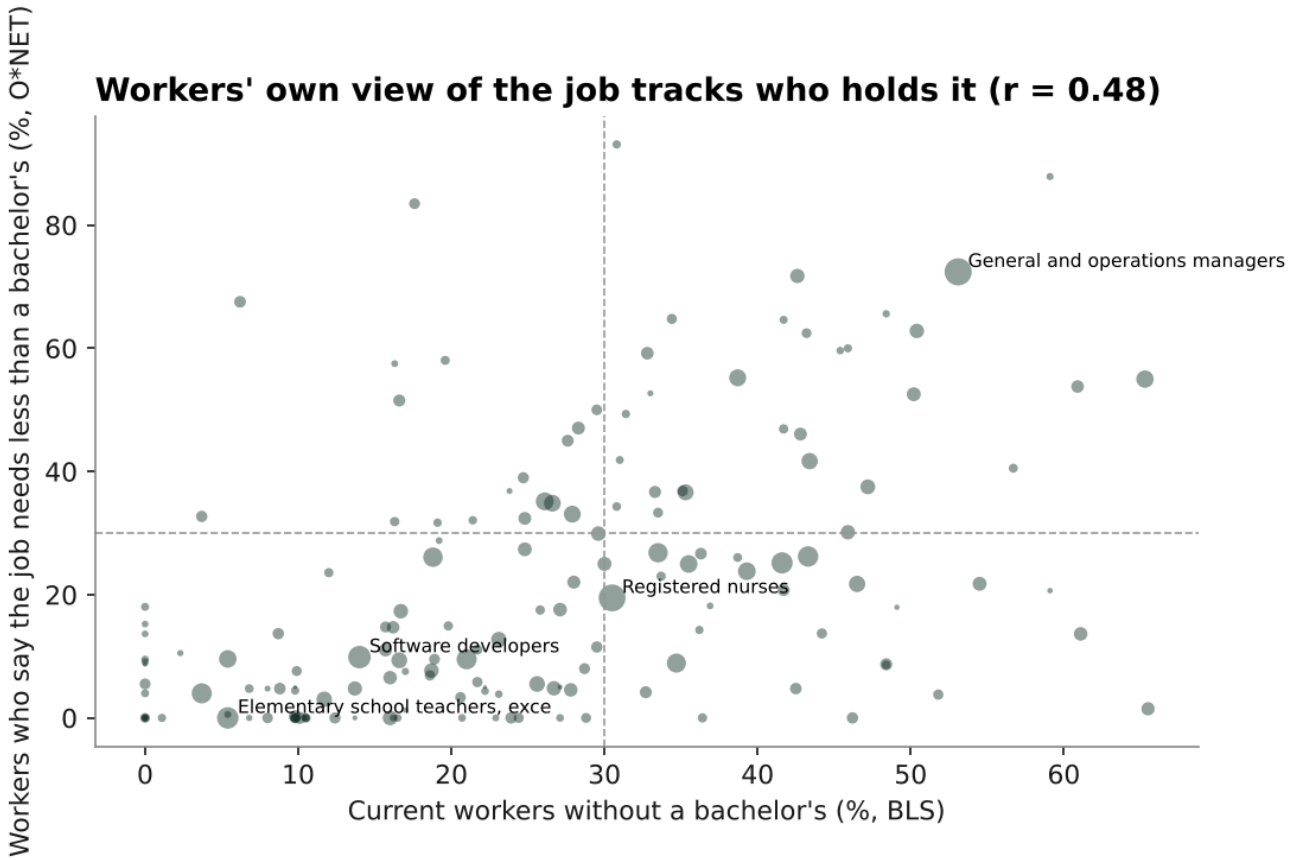
Annual openings multiplied by the share of current workers without a bachelor's estimates how many openings could go to skills-first candidates if hiring matched the people already doing the

work. General and operations managers lead by far at about 151,000 a year. Registered nurses come second, though state licensing sets the rules there.



Two independent signals agree

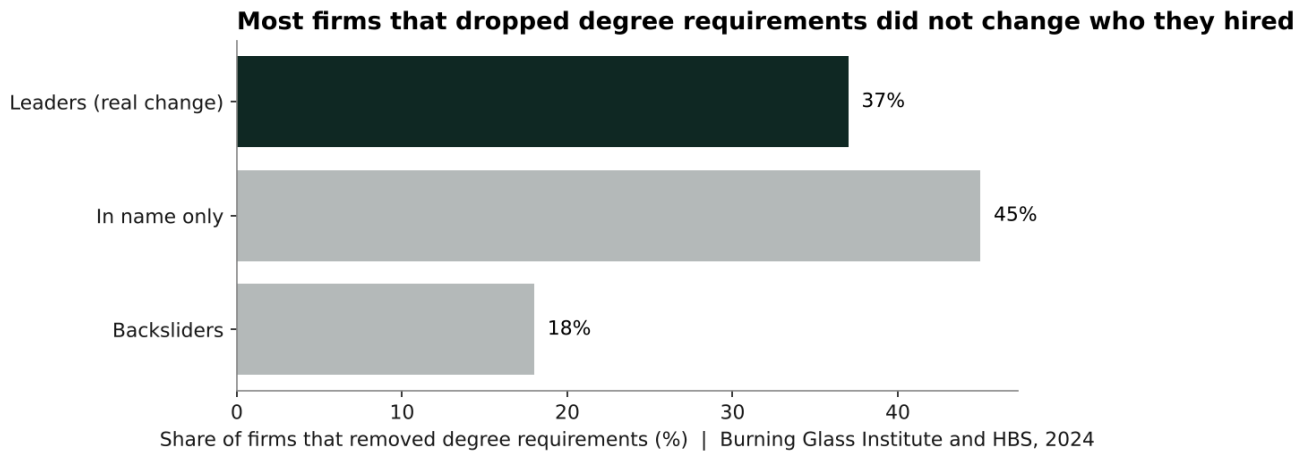
O*NET asks workers what level of education their job requires. Across bachelor's-listed occupations, the share of workers who say less than a bachelor's is enough tracks the share who hold less than a bachelor's (correlation 0.48). 30 occupations clear 30% on both measures. That overlap is where a degree requirement is weakest, and it drives the shortlist.



Why templates need assessments

The Burning Glass Institute and Harvard Business School studied 11,300 roles at large firms before and after degree requirements were dropped. Non-degree hiring rose by 3.5 percentage points on average, which touched fewer than 1 in 700 hires in 2023. 45% of firms changed the posting and kept hiring the same way. 18% made early gains and slid back. A 2025 follow-up with OneTen across 1,000+ employers found removing degree requirements alone added about 2 points.

The 37% of firms that did change who they hired saw non-degreed workers stay at a rate 10 points higher than their degree-holding colleagues. The difference was real evaluation of skills. That is the gap an assessment inside the ATS closes.



How the shortlist was built

Rules for the ten launch roles:

- BLS lists a bachelor's degree for entry
- At least 30% of current workers have no bachelor's (BLS)
- At least 30% of workers say the job needs less than a bachelor's (O*NET)
- At least 5,000 openings a year
- Teaching and clergy roles left out, since licensing boards or the employing body set those credential rules

Ranked by openings that match the share of workers without a degree. The skills shown are the ones most distinctive to each job in O*NET, meaning their importance sits furthest above the average across all jobs. Generic skills like active listening rank high in nearly every job, so they make poor assessment targets.

Limits of this study

The worker education data covers 2023 and 2024 and counts people 25 and older. Some workers without a degree may have been hired before the degree became the norm, so their share overstates what new hiring would look like.

Openings multiplied by a share estimates scale. It does not forecast actual hires.

O*NET skill ratings come from a mix of job analysts and workers. Assessment design should still be validated with each customer's own top performers.

Data sources

- U.S. Bureau of Labor Statistics, Employment Projections 2025 to 2035: Tables 1.2, 5.3 and 5.4. https://www.bls.gov/emp/
- O*NET 30.0 Database: Education, Training, and Experience; Skills. https://www.onetcenter.org/database.html
- Sigelman, Fuller and Martin, Skills-Based Hiring: The Long Road from Pronouncements to Practice. Burning Glass Institute and Harvard Business School, 2024. https://www.burningglassinstitute.org/research/skills-based-hiring-2024
- Burning Glass Institute and OneTen follow-up, as summarized by Brian Heger (2025). https://www.brianheger.com/credential-fluency-the-hiring-advantage-in-the-race-for-skills-burning-glass-institute-and-oneten/
- Opportunity@Work, STARs research. https://opportunityatwork.org/

Tools used

Python (pandas, matplotlib), DuckDB SQL, Jupyter, Excel source tables from BLS.

Andrew Ly · andrewlengly.com · November 2026