Social psychologists have shown that seemingly small changes can sometimes have large effects on diversity, with effects that endure for years. How is this possible? It’s not magic! Learn more—and attract people from diverse backgrounds to your company and help them thrive.

This brief describes 15 changes companies can make to be more diverse and inclusive. These changes fall into four key areas:

- How to help everyone feel welcome
- How to hire the best talent
- How to promote mindsets that increase resilience on the job
- How to use everyday practices to help diverse teams function well

If you’d like more detail on any of these ideas, this folder contains papers from the leading researchers who have pioneered work in these areas.

Making Everyone Feel Welcome
An important goal of any company is to make everyone feel welcome—and especially people from backgrounds that are different from the majority of the people in the company or the industry. The key is to communicate to people from underrepresented groups that they are valued members of the team.

1. Write job ads that include, not exclude
Job ads signal who belongs in a company from the very outset. Research by Danielle Gaucher at the University of Winnipeg shows that ads for male-dominated areas tend to use more words associated with male stereotypes (e.g., leader, dominant). That wording makes people think men dominate those settings and, in turn, undermines women’s motivation to pursue those opportunities.

2. Celebrate diversity—in everyone
Sure it’d be great to be color-blind—but no one really is. And if a company isn’t very diverse, telling people of color that you “just don’t see color” can come
across as disingenuous. Research by Valerie Purdie-Vaughns at Columbia University shows that African American professionals mistrust Silicon Valley companies that brag about colorblindness in mission statements, especially when the company is not actually diverse. Instead, communicating explicitly that you value diverse perspectives and identities helps those in the minority feel included.

That message need not exclude people in the majority. If this is a concern, Vicky Plaut at the University of California, Berkeley shows that a message called “all-inclusive multiculturalism,” which emphasizes that people from all backgrounds contribute diversity to an organization, can help everyone feel included.

3. Talk about growing talent, not finding the (boy) geniuses
While all companies want to hire and promote the best workers, the language they use may unintentionally send a message that excludes underrepresented groups. Mary Murphy at Indiana University finds that when companies talk about identifying and hiring “geniuses” with “innate, natural talent,” it sends the message to women and people of color that companies are really looking for white or Asian men—the groups stereotypically associated with those attributes in business and tech. Instead, companies should communicate their mission is to find and promote passionate, hard-working, motivated workers who want to learn and grow. This language reduces concerns about stereotyping and makes women and people of color feel more included and more likely to apply for positions.

4. Take down the Star Trek posters!
Nobody likes it when they walk into a room and it looks like a place where people like them just don’t belong. Research by Sapna Cheryan at the University of Washington shows that women look around at the physical environment in computer science classrooms and companies and when objects signal that the people there are geeky men (e.g., Star Trek posters, stacked soda cans from all-night coding sessions), they lose interest. Changing the environment can capture women’s interest. In one study, nearly all women (and two-thirds of men) preferred a technology company that had a neutral physical environment (e.g., nature posters). What messages does your décor send about who belongs, maybe even messages you don’t intend? How can you convey that you value all sorts of people? The key is to think about balance—make sure that stereotypical objects don’t dominate and that the physical environment contains cues that convey the company is inclusive of individuals from minority groups.

5. When hiring and promoting, prioritize diversity and show off that diversity
It’s true that diversity begets diversity. Why? Because the more that women and people of color see people like them among their peers, supervisors, and upper management, the more they feel valued and respected—and the more likely they are to refer a more diverse pool of candidates to the company. Diversity throughout a company communicates that this is a place where gender and race/ethnicity do not block employees’ ability to advance.

Research by Mary Murphy at Indiana University finds that women and people of color are particularly vigilant to how many “identity mates” are in a workplace. That’s why it’s important to think about diversity early and often—even when hiring the first people at a startup. More diversity reduces the pressure minorities feel to represent and speak for their group.
That makes people feel more comfortable, less stressed, and more committed to the organization. Diverse hires also beget more diverse candidates. Satisfied employees are more likely to recommend the company to their networks of friends and family. That way diverse employees expand the pool of diverse candidates the company can tap in the future.

6. Communicate that tech is not just about me, me, me—it’s also about working together, and making a difference
People differ in what motivates them on the job. Research by Amanda Diekman at Miami University shows that for many people, and especially for many women, communal motivations to work with others and to better society drive career choices. Yet people often see science and technology as individual pursuits with self-focused goals. That mismatch doesn’t inspire women who hold more pro-social goals. Touting the potential to work on collaborative teams in tech and to create products that make a real difference in society can help people see tech as an opportunity to achieve these communal goals—and thus inspire a new and more diverse generation of workers.

Hiring the Best Talent
Everyone is exposed to common cultural stereotypes that allege that women are less capable in technical fields than men and that some racial and ethnic groups are less intelligent than others. Even if individuals reject those stereotypes, they can still prevent companies from hiring the best talent. First, it’s easy for stereotypes to bias decision-making. When people evaluate candidates for a gender-typed position they tend to prefer candidates of the “right” gender—even when they are no more qualified.

7. Avoid bias in hiring, part 1: Commit to standards before looking at applicants
How can hiring teams overcome bias? Research by Eric Uhlmann at INSEAD shows that if decision-makers commit to their hiring criteria before evaluating applications—What exactly do we need this person to be able to do? How important are different skills?—this can eliminate biases. Then people rely on the candidate’s qualifications, not their background.

8. Avoid bias in hiring, part 2: Think about a series of hires as creating a group
Another way to eliminate bias in hiring is to get people out of the mindset of hiring one individual person at a time. When people think of their hires as a series of independent decisions, decision-makers tend to look for the prototypical candidate with each hire—and that biases them toward the usual suspects. But strong teams make successful companies. And thinking about hires as creating a group naturally leads people to think about diversity.

Research by Valerie Purdie-Vaughns at Columbia University shows that when decision-makers think of their hires as a group—What kind of team do I want to create?—characteristics that emerge across the group become more obvious. It pushes people to ask: How did my tech panel end up having five white men on it? How did I hire a team of five new engineers and they’re all white or Asian men? Is that what I really want? People generally don’t want to be biased. Thinking about hiring as creating a group gives people a chance to self-correct.

9. Identify hidden talent
A second way stereotypes can prevent companies from hiring the best candidates is by causing bias in candidates’ scores on critical qualifications, like prior test scores, grades, and even interview performance.
When people perform in settings where they are aware of negative stereotypes about their intellectual abilities, they experience “stereotype threat”—the worry that a poor performance could seem to confirm the negative stereotype about their group. This worry is distracting and it makes people perform less well than they are capable.

Research by Greg Walton at Stanford University shows that the result is that scores earned by women and underrepresented racial and ethnic groups often underestimate their true ability and potential. It’s like members of these groups run into a headwind in assessments of their ability in science and technology. When they get the same score as men and whites, often they’re actually faster runners.

The first step to addressing this bias is just being aware that the same score might not mean the same thing for everyone. When making hiring decisions, take general measures of ability with a grain of salt. Look more at specific evidence that indicates how well a candidate will perform on the job. Minimizing threat during the interview process and being mindful about how the process can be experienced differently by underrepresented groups can help bring in the most talented people and more diverse people, too.

**Promoting Mindsets that Increase Resilience on the Job**

One of the most important qualities employees can have is resilience—the tendency to persevere through challenges and difficulties. But what makes people resilient or not? A critical factor involves mindsets—how people make sense of challenges. Specific techniques can help people think about challenges in more productive ways—and, in turn, increase resilience and raise achievement months and years into the future.

Members of underrepresented groups often benefit the most from exercises that promote different mindsets. That’s because a natural consequence of being in the minority is to worry “Maybe people like me don’t belong here,” or “If I screw up, will people think like me can’t code?” Addressing those worries can complement efforts to reduce negative stereotypes in tech, and help people from underrepresented groups thrive.

10. **Encourage a “growth mindset” about ability**

We’re surrounded by a culture that tells us that some people “are smart” and other people “are dumb.” Research by Carol Dweck at Stanford University and Joshua Aronson at New York University shows that this “fixed mindset” sets people up for failure. It makes people think when they are challenged or struggle that they just don’t have what it takes (e.g., “I’m just not a math person”; “Maybe I’m not a natural leader”).

But when you help people understand that abilities and talents can be developed, they see challenges as opportunities (“I love a good challenge!”) and respond to mistakes with relish (“Something I can learn from!”). That makes people reengage after setbacks, learn more from mistakes, persist longer on tough problems and, over time, achieve at higher levels.

A growth mindset is especially important in innovative tech companies that rely on their employees to take smart risks and constantly challenge themselves to reach new heights. How can you encourage this “growth mindset”? One way is to focus on people’s growth and development rather than traits. For example, give praise for their process (“You encouraged your team to take ownership over their work and you delivered a great product.”) rather than ability (“You’re a great leader.”).5

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When making hiring decisions, take general measures of ability with a grain of salt. Look more at specific evidence that indicates how well a candidate will perform on the job.
11. **Tell stories to bolster belonging**

One challenge of being in the minority is that when things go badly it’s easy to wonder whether it means that people like you just don’t belong. At times like this it can be essential to share stories that convey that everyone struggles at first—say, feels lonely or isolated, or is criticized—and that such struggles typically pass with time as people become more integrated in a setting. This knowledge helps people stay in the game.

Research by [Greg Walton at Stanford University](#) shows that sharing stories like this when people enter a new environment (e.g., during orientation), and giving them the opportunity to reflect on how this process has been true for them, can raise performance and well-being among members of underrepresented groups. One hour-long exercise raised African American students’ GPA in a highly selective college over the next three years, halving the racial achievement gap. Another eliminated gender differences in GPA in the first year of a highly selective engineering program. Belonging exercises can help people see everyday difficulties as normal challenges to be overcome—not a permanent indictment of their belonging. Then they get back on their feet and build the friendships and mentor relationships that are key to success.

12. **Incorporate personal values at work to help people feel like a whole person, not a stereotype**

Another problem people face when they are negatively stereotyped in a setting is it can seem like all you are in that context is the negative stereotype—the old guy in the office, or the token woman in engineering. That makes challenges seem especially threatening. In this context, researchers have found that it can be helpful to give people an opportunity to connect with their broader values, what is really important to them, who they really are. That helps people feel less overwhelmed and better able to ride out stressors and challenges.

One way to do this is through value-affirmation exercises—brief writing tasks in which people reflect on personally important values in school or at work. Research by many scholars, especially [Geoff Cohen at Stanford University](#), shows that these exercises can cause large and lasting gains in achievement for people who face negative stereotypes in a setting. One value-affirmation exercise reduced the gender gap in exam scores in college physics by 61% (after accounting for academic preparation).

In work settings, companies can think about how to encourage employees to bring their whole selves to work, such as posting pictures of their families and friends, encouraging employee clubs for non-work interests, or sponsoring activities that include employees’ friends and families.

### Everyday Practices that Help Diverse Teams Succeed

**You can get a diverse team in the door but that doesn’t mean people will necessarily work well together. How can companies help diverse teams work effectively on a daily basis?**

13. **Train managers to tell subordinates why they are giving critical feedback**

High quality critical feedback is both hard to give and incredibly valuable. What could be better than specific feedback on a project you’re working on? The problem is it can turn people off. The problem is especially acute when criticism is given across group lines—when a White manager criticizes a Latino employee’s work, or when a male engineer critiques his female staff’s code. The subordinate can wonder whether the manager is biased thinks or they are incompetent.

Yet research by [Geoff Cohen at Stanford University](#) shows that a simple clarification—*Why am I giving you this critical feedback?* Because this project is hard and I think you can do it—can make all the difference. That
helps people take critical feedback the way it is intended. In one study, when a teacher's critical feedback on essays written by African American students was prefaced with this “high standards + assurance” message (“I'm giving you these comments because I have very high expectations and I know that you can reach them.”) the percentage who chose to revise their essay for a higher grade increased from 17% to 71%.

14. Create opportunities for women to work more with other women
One of the challenges for women in tech involves interactions with men. Whatever men's personal views, the reality of social stereotypes means that women contend with the possibility that men could view them or treat them disrespectfully, not as valued work partners. This concern can make women hold back in interactions and not perform to their best.

One solution is to give women more opportunities to work with other women. Research by Nilanjana “Buju” Dasgupta at University of Massachusetts, Amherst shows that the gender composition of small teams has a substantial impact on women’s motivation and performance in engineering. Women participate more actively in project teams that are mostly female (vs. mostly male or equal gender proportions). Women also feel less anxious and more confident and maintain greater career aspirations in engineering when they are part of majority female teams.

This approach may not be possible in some companies and there may be good reasons not to pursue this approach. It’s also important that companies not group women onto the “easier” technical or non-technical teams, which is stigmatizing and bad for the industry overall. But paying attention to how teams are structured can help support women in tech.

15. Encourage employees to communicate small gestures that convey their respect for and connection to one another
While the goal is to have a more diverse workforce, the reality is that many tech companies aren't there yet. What if, realistically, a company's underrepresented employees will work mostly with members of the majority in the setting? Research by Lauren Aguilar at Stanford University shows that even small gestures by men that convey to women that they see them as valued work partners—like exchanging tips on an ongoing project—can increase women’s performance in quantitative fields. Why? These gestures matter because women then perceive the man as feeling genuinely connected to her. Presumably then they worry less about being judged through the lens of a negative stereotype.

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### Summary of the 15 Hacks to Promote Diversity in Tech Companies

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<td>Wording of job ads in male-dominated areas tend to use words associated with male stereotypes</td>
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<td>Non-diverse companies purporting to be “color-blind” come off as disingenuous</td>
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<td>Talking about identifying natural talent sends the message to women and people of color that the company is looking for white or Asian men</td>
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<td>Environmental cues reinforce narrow stereotypes about what kinds of people belong in that setting</td>
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<td>Underrepresented groups feel pressure to represent their group, causing discomfort and added stress</td>
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<td>Stereotypes about tech suggest it is individualistic, which doesn’t appeal to some groups that more often hold communal goals</td>
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<td>Biases from stereotypes about what type of people fill which roles can inadvertently influence the selection of candidates</td>
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<td>Worry about confirming negative stereotypes can artificially depress performance on key qualifications</td>
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<p>| <strong>Identify hidden talent.</strong> Minimize stereotype threat in the interview process and be aware that the same score may not mean the same thing for everyone |</p>
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| When employees hold a fixed mindset, they are more worried about proving their ability than improving it—undermining resilience in the face of challenges | **Encourage a “growth mindset” about ability.**  
A focus on growth and development cultivates a growth mindset, improving motivation and resilience |
| When employees are in the minority, it’s easy to wonder whether a negative event means “People like me don’t belong.” | **Tell stories to bolster belonging.**  
Convey that everyone worries about this at first, but such worries often fade |
| When people are negatively stereotyped, it can seem like all they are in that context is the stereotype, making challenges more threatening | **Incorporate personal values at work to help people feel like a whole person, not a stereotype.**  
Encourage people to connect with broader interests and values |
| **Everyday Practices that Help Diverse Teams Succeed**                              |                                                                                                   |
| When criticism is given across group lines, the subordinate can wonder whether their manager is biased or thinks they’re incompetent | **Train managers to tell subordinates why they are giving critical feedback.**  
Convey high standards and confidence the employee can meet them |
| Concerns colleagues might view them disrespectfully can make stereotyped people hold back in interactions | **Create opportunities for women to work more with other women.**  
When appropriate and without stigmatizing women, give women opportunities to work with more women |
| People from negatively stereotyped groups can worry about being judged through the lens of the stereotype | **Encourage gestures that convey respect and connection.**  
Pay attention to daily interactions that show people they are seen as genuine work partners |
Want to Learn More?

All of the published articles listed below are available in this dropbox folder (/tinyurl.com/15hacks-PDFs).

Review Articles


Making Everyone Feel Welcome

1. Write job ads that include, not exclude

2. Celebrate diversity—in everyone

3. Talk about growing talent, not finding the (boy) geniuses

4. Take down the Star Trek posters!

5. When hiring and promoting, prioritize diversity and show off that diversity

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Bias in hiring
7. **Avoid bias in hiring, part 1: Commit to standards before looking at applicants**

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The Project for Education Research that Scales (PERTS) has created the *Mindset Kit*, a free resource to help teach people about growth mindset: www.mindsetkit.org/.

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1 Contact: gwalton@stanford.edu and mcmpsych@indiana.edu.
3 tinyurl.com/15hacks-PDFs
4 For specific examples of more inclusive job ads, see: Gaucher, D., Friesen, J., & Kay, A. C. (2011).
6 The Project for Education Research that Scales (PERTS) has created the *Mindset Kit,* a free resource to help teach people about growth mindset: www.mindsetkit.org/.