

# In First Person: Suzanne Bell

*People + Strategy* guest editor Dave Winsborough spoke with Suzanne Bell, a tenured professor at DePaul University, NASA-funded researcher, and independent consultant. She is particularly noted for her award-winning research and cutting-edge practice related to maximizing team effectiveness.

## Predicting Team Success in Outer Space

**P+S:** Many organizations seem “unconsciously incompetent” when it comes to teams—that is, they encompass many forms of coordinated group activity (virtual teams, project teams, management teams, and so on) but rarely provide support or training to help teams perform at their best. What lessons could be drawn from the greater rigor applied to space missions (or any other area you know well)?

**Suzanne:** I think a common mistake is to organize work around teams but to keep HR practices such as selection, training, and compensation focused on individuals. For example, when staffing and managing teams there is usually a focus on individual characteristics and skills; compatibility is often overlooked. In our research for NASA, we specifically focus on the compatibility of team members and the healthy patterns of team dynamics that help a team succeed in the long run. Even highly competent people who are good “team players” can get into patterns of jockeying for leadership and fall into classic team traps like not sharing important information with the team or the right team members. The value of a certain characteristic often depends on the characteristics of other team members. For example, empathy may increase in importance when one or more team members are less emotionally stable.

Knowing how a team’s composition is likely to shape teamwork can be used

to staff teams; however, it’s not always possible to create “dream teams” and a manager has to work with what he or she is given. In these cases, team composition can also be thought of as the team’s DNA and informs how to best structure, lead, reward, and train the team. For example, I worked with teams deployed to Afghanistan that had an ambiguous leadership structure. Team members were competent and well trained, but could not resolve who should take the lead in a particular circumstance. Members in two different “leadership” positions were constantly jockeying for power. The organization tended to attract leaders that were highly assertive and who were used to “telling it like it was” (e.g., low self-monitoring). With the ambiguous leadership structure, teams with this composition could not get into a workable pattern of teamwork. Information sharing decreased between team members, and several of the teams were unable to meet their objectives. In this case, the positions were so highly specialized it was difficult for the organization to recruit a broader type of applicant. Changes such as the retitling of positions and role clarification were used to reduce the ambiguity in leadership structure that was interacting negatively with the team’s DNA.

Few teams, if any, perfectly coordinate all the time, but the teams that are “mission focused” are able to keep smaller disagreements and hiccups

in team interaction from derailing their team. A “mission focus” is understanding what it means for the team to succeed and a willingness to do whatever positive behaviors are needed (e.g., putting egos aside, backing each other up as needed) to help the team meet its objectives. It also requires an understanding of how the team’s success contributes to the bigger picture; for example, the organization’s mission or competitive advantage. This mission focus can help team members bridge small differences and leverage these differences for the team’s and organization’s success. Hybrid rewards that integrate both individual and team-based rewards are one means of keeping team members accountable while encouraging a mission focus.

**P+S:** Many leaders know instinctively what the right mix of people is when composing teams, but they mostly think in terms of hard skills. What have we learned about the mix of other attributes people possess and their effect on team cohesion and performance?

**Suzanne:** We know a lot about how team composition affects teamwork and performance. Here are some basics. First, in most team situations, deep-level (i.e., underlying) characteristics such as personality, work style, values, and intelligence have a stronger influence on teamwork and performance than more readily detectable characteristics like age

and gender. So, when you think of team diversity, don't stop at demographics. It's very important to think of how differences in personalities, work style, and values can shape teamwork.

Second, the influence of readily detectible attributes on teamwork such as gender, race, and age is highly dependent on the situation. Within a team, attributes can be configured to create a faultline—a hypothetical divide between team members. Stronger faultlines occur when multiple attributes are aligned within a team. For example, if all engineers are women and from the same location (e.g., Palo Alto) and all marketing professionals are men and from a different location (e.g., New York), multiple attributes (e.g., profession, gender, location) are aligned. This can contribute to subgrouping where engineers form a highly cohesive subgroup and marketing creates a highly cohesive subgroup. Too much subgrouping can lead to the “siloeing” of information because of a lack of communication and coordination across the subgroups.

**P+S:** What impacts on teams do you see from the technologies now emerging at work—platforms like Slack or tools like machine learning and AI?

**Suzanne:** Collaboration tools allow teams to better organize their work. Teams can assign and keep track of tasks, simultaneously work on the latest version of a document or other application, and archive communications among other things. These tools can help employees work on multiple teams, allow teams to be more organized and efficient, and can greatly enhance virtual collaboration.

Proper integration between these platforms and the human element is important for these tools to enhance teamwork. Teams are inherently relational. Team members need to know how to relate to one another, just as much as they did before these tools existed. For example, norms, or unspoken rules, develop in teams. Has the team established norms around how these collaboration tools are used? Are they aware of how other team members use the tools? For example, a lead designer

may be assigned to 20 projects and be a member of all of their virtual communities. To manage the large amounts of information across these communities, the designer might use a rule of thumb such as “I only read things that I am tagged on” or search for certain terms. These norms are important for the team to be aware of and establish so everyone has the same expectations of how the tool is used and how the use of the tool might differ across team roles.

organizations. For example, a retail store would call the store manager a “team leader” and refer to sales associates as “team members” regardless of whether or not they used teamwork in the store. What has increased is the use of “real teams”—people who work together interdependently to do something greater than one person could do on their own. The nature of teams has also changed. In many organizations, teams are fluid and dynamic networks with team mem-



Collaboration tools could be a means of integrating both human and AI team members in the future. For example, many of the limitations of collaboration tools have to do with limits in human and team information processing. AI team members could distill information for a human decision maker. For example, a “bot” could be trained to understand what information the “designer” needs to make decisions. It could then monitor multiple projects and summarize key information for the human team member to make more informed decisions and more effectively contribute novel ideas to multiple projects.

**P+S:** Do you think teams are becoming more or less prevalent in modern workplaces? What are the reasons you see for that view?

**Suzanne:** In the 90s, the word “team” started popping up everywhere in or-

bers assigned to multiple teams. Both intact, long-term teams as well as those with dynamic membership have the potential to contribute to competitive advantage.

Teams are already prevalent in organizations; however, leveraging team science to better compose and manage the teams is increasing. Organizations are starting to understand that there is a science behind effective teamwork. Our NASA-funded research is a good example. We are combining real data with computer simulations to create a predictive model of team composition for long-distance space exploration such as the mission to Mars. Our work can be used to compose teams that are more likely to succeed and to tailor interventions (e.g., training, modifying the task environment) to the unique needs of the team that will someday go on the incredible 2 ½ year journey.

**P+S:** Some firms are looking now to hire

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teams as complete units—not hire individuals at all but an entire coding crew, for example. What do think of this trend? Does it happen in other contexts you are familiar with?

**Suzanne:** Team hiring has been used with top management teams for quite some time; however, it is on the increase in other circumstances. For example, as innovation is increasingly difficult for organizations, I've seen team and cluster hiring used for Research & Development and science teams. Hiring teams can be a good idea when the team is central to the organization's competitive advantage, when the organization wants to break into a new space, or when teamwork is highly interdependent.

Hiring a team can seem like the "safe" bet because there is evidence that the team can already work well together. Whether the team engages in beneficial teamwork processes and has developed important emergent states like team cohesion or shared cognition can be assessed. At the same time, just because a team was successful elsewhere may not mean that it will excel in the new organization. Differences between the old and new organization in terms of culture and resources need to be thoughtfully considered. A team hired as a unit can sometimes become too inward focused in a new organization. The team was likely hired in part because it is cohesive. Communication and workflow between the team and the broader organization needs to be considered during team hiring process. Does the team have a "boundary spanner," a person that will help integrate the team and their discoveries to the broader organization? Membership change can also be beneficial for team innovation, although it can be disruptive to teamwork at first. If an intact team will be hired, is there reason to believe that they will have a continued flow of fresh ideas? The ultimate question is whether the team, as a unit, can contribute to the organization's

competitive advantage in a meaningful way. Knowing the team can work well together is one component of that.

**P+S:** Many teams are no longer collocated and are scattered across time zones and geographies. They are also composed of highly diverse members. What are the special requirements of highly diverse virtual teams?

**Suzanne:** Trust, regular communication between different subgroups of the team that are at different locations, and a clear understanding of who is doing what is essential for virtual team success. Particularly as teams are increasingly multinational, it can be important to have an initial in-person interaction to build trust and for team members to develop an understanding of each other. Trust (or lack of trust, unfortunately) provides a lens through which all future team member interactions are perceived and judged. Often virtual teams have a subset of team members at one location and another subset of team members at another location. While some bonding within each location is okay, too much can create silos in a team. Information is less likely to be shared across these divides, which can be detrimental to team effectiveness. Regular communication across different locations and a focus on the overall shared team objectives are important for helping the team to leverage the capabilities of team members across the country or across the world.

**P+S:** I know you have done work on teams who have to remain together for very long periods in preparation for deep space missions, for example. What have we learned about human compatibility and our ability to cooperate from these environments?

**Suzanne:** Our research for deep space missions provides a magnifying glass for many of the dynamics seen in more traditional workplaces. We put teams in a small habitat for an extended period

of time, isolate them from outside influences, and gather a number of metrics through interviews and surveys, as well as unobtrusive sources like text analysis and video. We've learned quite a bit from these teams. First, interpersonal compatibility is important because team members rarely "grow" to appreciate one another. How team members think and feel about one another after 45 days of isolation can be predicted fairly well by how members they think and feel about one another very early on. Some combinations of people are more com-

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patible than others and this shapes the trajectory of team member relationships and ultimately team performance.

Second, while team-level phenomena like cohesion and shared cognition are important, the relationships between specific team members are also important. For example, team members were confident in their team's capabilities across the mission; however, some members were not confident in one of the team member's capabilities. The team member didn't feel that his insights were appreciated and stopped contributing his ideas. This led to poorer team decision-making in our experiments. Teams are strongest when they incorporate the diverse perspectives of team members. A belief in the team as a whole is important, but it can't always compensate for strained relationships between specific team members. Compatibility needs to be considered between team members in key positions, as well as for the team as a whole. ■■