

CHAPTER 7

Creativity and Innovation

Effective problem-solving requires creativity in order to identify innovative solutions to complex and ill-defined problems. This chapter describes groups that value unique ideas and nurture creativity. We begin by explaining why innovation is important to teams and organizations. Then we define creativity and discuss the characteristics of creative people. Next is a description of the social and organizational contexts that nurture creativity. Finally, we propose brainstorming techniques that can empower groups to think outside the box.

CASE 7.1: THE IPOD

Although Apple Computer is known for its creativity and innovation, this has not always been the case. It is difficult to maintain a consistent track record of groundbreaking innovations, and Apple has had its share of problems. British designer Jonathan Ive joined Apple in 1992, with dreams of creating new and innovative products. However, during his first few years at the company, Apple strayed from its original foundation of innovation and imagination, and it began acting as a mere imitator in the market. In essence, Apple had become a follower in the industry. The stagnant corporate culture that had emerged had a negative effect on Ive and his design team, as they were no longer free to experiment and invent. However, when Apple's founder, Steve Jobs, returned to the company after pursuing other business interests, Apple Computer reinvented itself and returned to its prior mission. According to Ive, "By re-establishing the core values [Jobs] had established at the beginning, Apple again pursued a direction which was clear and different from any other company. Design and innovation formed an important part of this new direction." With the reestablished culture supporting experimentation and creativity, Ive had the opportunity to develop a new standard in music technology.

Initially, it was Tony Fadell, a computer engineer with an interest in developing an MP3 player, who came up with the initial idea for the iPod (Kahney, 2005). Then it took a team of a dozen designers from all over the globe, including New Zealand, Germany, Italy, and England, to bring the idea to completion. But what made this team so successful? According to Ive, it was the members' "fanatical care beyond the obvious stuff: the obsessive attention to details that are often overlooked that allow for creativity to blossom." They were committed to developing a new music player that would redefine the music industry.

134 Working in Teams

One of the greatest strengths of the team was its inquisitiveness (Burrows, 2006). It was this curiosity and sense of exploration that led members to consult with a wide range of people such as engineers, marketing specialists, and other manufacturers. During one of their trips to Asia, they observed the manufacturing technique of layering colored plastic over other materials that would become the signature look for iPods and iMacs. Even Jobs, CEO of Apple, contributed to the project. He met with developers on a daily basis to contribute to the product's design and interface. Jobs was obsessed with intuitiveness and ease of use, demanding that a song be accessible in less than three clicks.

Interestingly, the iPod prototype was made almost entirely from existing parts Apple bought from other companies, including the internal units from PortalPlayer, the battery from Sony, and the hard drive from Toshiba, to name a few (Kahney, 2005). The design team was able to look at the same pieces that other companies had produced and envision a different configuration that would change the industry. On October 23, 2001, at 10:00 a.m., Jobs announced the iPod's arrival—and the rest, as they say, is history. I've and his design team helped Apple restore its image as the iconic, innovative company it is today.

Case Study Discussion Questions

1. Why has the iPod been so successful? What are its most innovative design features?
 2. How did Steve Jobs create an atmosphere at Apple for creativity to flourish?
 3. What was the benefit of using a team versus an individual to develop the iPod?
 4. How did Steve Jobs' leadership style affect the development of the iPod?
-

In today's fast-paced and global economy, organizations must be innovative in order to survive (Hesselbein & Johnston, 2002). The most successful organizations are efficient, adaptable, and able to generate novel ideas as market conditions change. Innovation has become the new route to financial success (Hamel & Skarzynski, 2002). Products and services that are commonplace today, such as iPods, Facebook, and online banking, simply did not exist a decade ago. With rapidly evolving technologies driving much of the change, organizations have had to abandon the status quo and stretch themselves in order to compete in the new global market. In addition to leveraging technology, diversity has also become a competitive advantage for organizations. Diverse teams and organizations are able to take advantage of novel perspectives that result from demographic, gender, educational, or functional diversity and generate ideas that normally would not surface within a homogeneous group (Cox & Blake, 1991).

Improvisation is the ability to invent or compose something in real time with little or no preparation. For example, when well-trained jazz musicians play together, the results can be unpredictable, exciting, and spectacular. The complex and fluid interpersonal context that exists in a jazz session can be compared to the modern workplace (Kao, 1996). Just as the most exciting bands will incorporate unusual and novel rhythms into their music, the most successful businesses will utilize their diverse resources to come up with new and innovative ideas.

Complex problems that confront organizations and teams are often poorly defined and ill-structured (Van Gundy, 1984). While proven routines and formulas may be effective for simple or previously encountered problems, the more challenging and often unforeseen situations of today require thinking that is “outside the box.” These unstructured problems do not have a set of proven guidelines to follow, and the problem itself can be difficult even to define and articulate. For example, how much should a manufacturing company invest in robotics in order to be competitive in the next decade? What are the most cost-effective, yet family-friendly policies to embrace as an organization? How can we use science and technology to end the cycle of poverty in Africa? In sum, diverse groups that invite creativity and integrate the creative contributions of their members have the potential to find novel solutions to complex problems that exist in turbulent times.

Creativity

Creativity can be difficult to define and even more difficult to facilitate. Thompson (2004) suggests that “[t]eam creativity is the Holy Grail of teamwork: Everyone wants it, but very few people know where to look for it or how to set up the conditions to make it happen” (p. 178). For the purposes of this text, we will define creativity as the process by which original and useful ideas are produced (Rowe, 2004; Thompson, 2004). Individuals and groups may generate unusual ideas that might even border on the bizarre; but if those ideas have no practical use, they are of limited value. Creative ideas that are original *and* usable, however, don’t have to be of the magnitude of an Einstein, Picasso, or Da Vinci to be creative. The same process that creates a Mona Lisa can generate a brilliant new marketing strategy or innovative way to reduce expenses (Amabile, 1990). Creative solutions lead to innovation and change because they are able to go beyond existing perspectives (Woodman, Sawyer, & Griffin, 1993).



E. Paul Torrance, a dominant figure in the field of creativity research, is well known for the development of creativity assessments. His assessments are the gold standard in educational settings (elementary, secondary, and postsecondary) and noneducational settings alike (Baer, 1993). Torrance (1988) defines creative thinking as “the process of sensing difficulties, problems, gaps in information, missing elements, something askew; making guesses and formulating hypotheses about these deficiencies; evaluating and testing these guesses and hypotheses; possibly revising and retesting them; and finally communicating the results” (p. 47). Thus, the first step in the creative process is

seeing the problem accurately. Similarly, Csikszentmihalyi (1990) argues that the way one defines the nature of a problem is one of the most important components of the creative process. After all, identifying and defining the problem determines the quality and effectiveness of the solution.

Many theorists associate creativity with divergent thinking or the ability to generate multiple perspectives and unconventional ideas (Baer, 1993). Old conceptualizations and judgments are suspended in favor of generating a variety of possibilities. Divergent thinking is expansive and resists convention; it looks for alternatives that are not often apparent at first glance (Baer, 1993). For example, when asked to identify all the possible uses of a toothbrush, the most obvious answers have to do with cleaning teeth or other surfaces because that's what we think of when we picture a toothbrush in our mind. But someone who is using divergent thinking might envision a toothbrush as a director's baton, or a paintbrush, or a back scratcher. These answers are outside the conventional "box" that is normally associated with the concept of a toothbrush and, thus, qualify as divergent perspectives.

Convergent thinking, by contrast, suggests that there is "one right way" to go about any given task and that the primary job of the team is to find that right way. Chapter 6 described a process of informational processing called the Ladder of Inference. In this model, individuals use existing cognitive categories to make sense of incoming data. For example, based upon years of schooling, most people know what to expect when they walk into a classroom. Mental models of "proper classroom behavior" help to reduce anxiety and guide behavior. But those existing mental models can be restrictive and prevent people from seeing outside of their existing frames of reference. Thinking outside the box requires the ability to question assumptions and take risks.

Those who can think divergently have less rigid and less structured internal categories. This is important because individuals and teams that resist convention and expand their thinking have more possibilities to consider in solving any particular problem. According to Guilford (1967), there are four different ways to think divergently:

- **Fluency** is the ability to produce a large number of ideas for understanding or solving problems. For example, the iPod design team might have come up with 40 different music player platforms and delivery systems that it needed to consider before settling on the iPod.
- **Flexibility** is the ability to produce ideas in a variety of categories. The iPod designers might have considered a number of music delivery systems including hardware solutions, software solutions, and phone-based platforms. These three categories are very different from one another and demonstrate flexibility.
- **Originality** is the ability to produce unusual or unique ideas. If the design team suggested a variation of existing technology, it would not be very novel. A more original idea was for designers to think outside the box for a system that went far beyond existing MP3 players.
- **Elaboration** is the ability to develop ideas by generating details and depth. Creative ideas may not seem very usable at first glance. Elaboration is the ability to develop abstract ideas into realistic solutions that can be implemented successfully. In order to bring their

product to market, the iPod designers had to create an innovative manufacturing process that advanced technology while keeping costs within reasonable levels.

The most vexing problems facing groups today resist easy answers. As Senge (1990) suggests, today's problems are often the result of yesterday's well-meaning yet ill-conceived solutions. Groups that encourage creativity are able to avoid superficial solutions by generating and evaluating a greater number of possibilities. Divergent thinking helps groups consider a plethora of possible outcomes that can lead to better outcomes. Convergent thinking can then narrow down the options and decide upon the best course of action.

CHARACTERISTICS OF CREATIVE PEOPLE

In order to understand creativity, researchers have studied the lives of creative people in a variety of contexts including art, literature, music, science, and organizations (Amabile, 1990; Dacey & Lennon, 1998; Gardner, 1988, 1993). Interestingly, Gardner (1988) found that creativity is tied to specific domains or tasks. Some creative acts require expertise in language, others require logical problem-solving ability, and still others require specialized spatial skills. Being a creative genius in one area does not mean that a person will be creative in other areas. For example, a world-renowned ballerina might not be able to apply her creativity to the world of commerce and become an innovative, successful CEO. Different tasks and domains require different types of knowledge, expertise, and skills to produce results that are truly effective and unique. Thus, domain-specific knowledge is one of the first characteristics common to creative individuals (Amabile, 1990).

Characteristics of Creative People

1. Knowledgeable
2. Intrinsically motivated
3. Comfortable with ambiguity
4. Willing to take risks

Subject Knowledge

Creative genius is grounded upon a foundation of knowledge and technical skill. One can hardly imagine the brilliance of a Galileo or a Michelangelo without rigorous training and expertise in their disciplines. Thompson (2004) speculates that it takes 10 years of experience within any given area for an individual to gain enough expertise and understanding to make major leaps in creativity. Although existing knowledge and expertise can hinder individuals from seeing new and fresh perspectives, it is also difficult to make innovative advances without any knowledge at all (Woodman, Sawyer, & Griffin, 1993). According to Amabile (1990), this knowledge can be derived from innate cognitive abilities, perceptual skills, and both formal and informal education.

Knowledge acquisition is often influenced by curiosity and a love for learning. Albert Einstein was reported to have said that he had no special talents apart from passionate curiosity (Hoffman, 1972). Creative people acquire knowledge because they desire to understand and make sense of the world around them. Thus, the desire to learn for the sheer pleasure of learning is a trait common to creative people. They are curious about life, in general, while also being committed to their own specific discipline.

Intrinsic Motivation

For most people, creativity takes effort. The most significant creative achievements take long-term dedication and hard work. Intrinsic motivation can provide the perseverance that is often necessary to achieve results (Csikszentmihalyi, 1990). Amabile (1985, 1990) explored the relationship between motivation and creativity by enlisting 72 young adults to write two brief poems. The first poem functioned as a pretest, while the second poem was the posttest. Before writing the second poem, approximately one-third of the participants were asked to complete a seven-item questionnaire that prompted them to think about intrinsic motivations for writing a high-quality poem, such as deriving personal satisfaction or enjoyment from their work. Another third was given a questionnaire that asked questions about extrinsic motivations such as making money or achieving recognition. The final third, the control group, was not given any questionnaire. The questionnaires were used by the researchers to prime the participants and influence the type of motivation that was used to write their poems.

After each participant wrote his or her two poems, a panel of 12 literary experts rated each of the poems on a 40-point creativity scale. The initial poems of the three groups of participants were rated at about the same level of creativity, ranging from 18.18 to 18.76, as described below.

Table 7.1 The Relationship Between Motivation and Creativity

| | No Prompt | Intrinsic Prompt | Extrinsic Prompt |
|----------|-----------|------------------|------------------|
| Pretest | 18.18 | 18.76 | 18.19 |
| Posttest | 18.78 | 19.88 | 15.74 |

SOURCE: Adapted from Amabile (1985, 1990).

Writers who were prompted by intrinsic questions demonstrated a modest improvement in creativity from the first poem to their second, but not enough for statistical significance. Interestingly, the intrinsic group performed at about the same level of creativity as the group without any questionnaire, suggesting that all the writers were intrinsically motivated at the beginning of the experiment. People, by nature, want to improve their

performance on repetitive tasks. But the levels of creativity demonstrated by those who were exposed to extrinsic prompts were significantly lower than their original poem and also lower than the other two groups' second poem. In other words, the extrinsic prompts had a detrimental effect on levels of creativity. This decline may have occurred because external rewards and judgments undermine the pure enjoyment and satisfaction that can come from the work itself. The results indicate that introducing extrinsic rewards for individuals who are intrinsically motivated can have a detrimental effect on creativity.

Tolerance for Ambiguity

One of the most important traits of creative people is that they have a tolerance for ambiguity (Zenasni, Besançon, & Lubart, 2008). Innovation and creativity are often born out of confusion and sometimes even out of desperation. "An ambiguous situation is one in which no framework exists to help direct one's decisions and actions" (Dacey & Lennon, 1998, p. 98). History is replete with examples of tortured poets, musicians, and artists whose greatest accomplishments happened when they broke from convention and forged their own paths. Since there are no maps or trail markers on the road less traveled, creative individuals must be comfortable with ambiguity and the uncertainty of not knowing exactly where they are going.

In ambiguous situations, people do not have all the facts. There is no clear path upon which to embark. Rules are unclear, and existing procedures are outdated or nonexistent. For many, this produces great anxiety; the unknown can be quite unsettling. But for highly creative people it can be intriguing to attempt to make sense of the confusion and complexity (Dacey & Lennon, 1998). A tolerance for ambiguity means remaining open-minded and resilient in the face of uncertainty (Schilpzand, Herold, & Shalley, 2011). This attitude helps prevent premature and ill-conceived judgments and provides adequate time for creative ideas to emerge.

Willingness to Take Risks

Innovation and creativity require the ability to take risks. Creative individuals are recognized as such because they were willing to communicate their unconventional ideas to others. Most adults are risk averse and prefer security to the possibility of rejection (Dacey & Lennon, 1998). Our desire to be accepted and respected often leads us to conform to the expectations of others. However, the "play it safe" principle sometimes hinders creative expression. It is unfortunate to think of the countless number of world-changing ideas, literary triumphs, innovative business plans, life-enhancing inventions, and inspirational songs that lay dormant in the heads of very talented people who were unwilling to take the risk of sharing their ideas with others.

Creative people are not restrained by social convention. They are willing to appear unusual or odd. Because they are intrinsically motivated and have a strong belief in their work and themselves, they have minimal concern for what others think. Take, for example, noted physicist Richard Feynman, who was known for his curiosity and unique way of thinking. While in high school, he reinvented his math formulas. Feynman was never afraid to question the experts, even those of the magnitude of Niels Bohr. While listening to Bohr

140 Working in Teams

give a lecture, Feynman was the only one in the audience to argue with and debate the scientific giant. Ironically, this garnered Bohr's respect, and he requested a meeting with Feynman. Due, in part, to his tenacious quest for understanding and willingness to take risks, Feynman went on to win the Nobel Prize in Physics for quantum electrodynamics.

Discovery Orientation

Finally, creative individuals possess a discovery orientation. Renowned creativity researcher Mihaly Csikszentmihalyi (1988, 1990, 1996) made the following observation of creative people: They have the ability to identify problems and explore possible solutions that are only vaguely recognized.



Furthermore, those with a discovery orientation went on to greater levels of artistic success when evaluated 7 and 18 years later. In sum, creative individuals have the ability to see problems in unique ways in order to produce solutions that are equally unique.

THE SOCIAL AND ORGANIZATIONAL CONTEXT FOR CREATIVITY

Creative ideas are neither developed nor demonstrated in isolation; they are nurtured and expressed in social contexts. Human beings are social creatures, and human behavior can be attributed to a unique synthesis of biological, psychological, and social factors (Dacey & Lennon, 1998). While initial research on creativity focused on individual variables alone, subsequent work has broadened to include social and environmental influences (Amabile, 1990). Leading that perspective has been Mihaly Csikszentmihalyi (1988, 1990), an articulate advocate for a systems view of creativity.

While studying creativity in the traditional context of individual traits and cognitive processes, Csikszentmihalyi (1988, 1990) became convinced of the limitations of a person-centered view. In contrast, he believes that creativity is best understood as the interaction among three subsystems: the person, the domain, and the field. Creativity begins at the level of the *person*, with his or her natural and learned abilities. Those abilities are then exercised within an existing *domain*, which poses its own unique structure and expectations. For example, chess is a domain defined by certain rules, a unique set of vocabulary that players use to communicate with one another, and a reservoir of standard moves and strategies. Within every domain is a *field* of experts who define excellence and decide whether someone is truly innovative. Commentators, art critics, record executives, chess masters, and experts in every domain are part of the social context that influences what is deemed creative. Returning to our chess example, the most creative players are able to go beyond existing strategies and create their own unique style. But that style operates within a specific domain and is validated by experts in the field.

Family

Parents, mentors, significant others, and colleagues all contribute to the ability of individuals to fulfill their creative potential (Dacey & Lennon, 1998; Mockros & Csikszentmihalyi, 1999). Families are perhaps the most significant social influence on the development of creativity (Dacey & Lennon, 1998). Many of the world's creative geniuses grew up in environments that both supported and challenged them (Gardner, 1993). In interviews with 96 people noted for their creative accomplishments, virtually all of them described their childhood environments as intellectually stimulating and supportive of their talent development (Csikszentmihalyi, 1996). Raw potential is often shaped by disciplined study and practice guided by parents and mentors.

Education

Education also plays a significant role in the development of creativity. Unfortunately, education can also have an adverse effect. As Dacey and Lennon (1998) emphatically state, "Schools suppress creativity" (p. 69). Early childhood is a critical time in the development of creativity. Fueled by curiosity, children are eager to explore and learn, yet Gardner (1991) found that when children enter school, they become more cautious and less innovative. It seems that the need to conform to a structured system of externally imposed guidelines can extinguish creative imagination.

Distinguished Harvard professor and creativity researcher Theresa Amabile (1990) tells of how her own experiences in school had a lasting impact on the rest of her life. In kindergarten, to her delight, she overheard her teacher tell her mother that she had great potential for artistic creativity. Her first year of school nurtured that potential with liberal access to art materials and the encouragement to experiment. Unfortunately, her creative expression was discouraged in the first grade, when she and her classmates were given pictures of classic paintings and told to copy them. Instead of creative expression, art became an exercise in frustration as students were strictly graded on how well they replicated the paintings. Even years later, when given the opportunity to draw what she wanted, she was told by one of her teachers that she was exercising too much creativity. Sadly, this story captures the potentially negative influence of early education on wonder and creativity.

Mentors

During adolescence and young adulthood, mentors play a key role in nurturing the development of creativity (Mockros & Csikszentmihalyi, 1999). Mentors can be teachers, role models, parents, or colleagues who provide knowledge, resources, and encouragement. Observing mentors as they process information and solve problems is a tremendous benefit. In this way, the apprentice or novice is exposed to the tacit knowledge and inner processes of the mentor, which are more “caught” than taught. Ultimately, mentors provide direction and guidance that can have a lasting impact on development.

In adulthood, creativity and innovation are often supported and stimulated by colleagues and significant others. The most successful careers of creative people are aided by strong and supportive relationships. Spouses often provide both emotional and financial support to allow the development and expression of creative potential (Mockros & Csikszentmihalyi, 1999). Romantic partners can also be a source of inspiration and encouragement. Another important social influence comes from collegial relationships that provide intellectual stimulation and the opportunity for collaboration.

Organizations

Organizational settings can also have a profound effect on the development and expression of creativity. Certain organizational climates nurture creativity, while others destroy it. Amabile (1990) argues that environments that emphasize evaluation, surveillance, rewards, competition, and restricted choice negatively affect creativity. Thus, while performance-driven command and control hierarchies may improve efficiency, they also hinder innovation (Mauzy & Harriman, 2003; Van Gundy, 1984). Therefore, Woodman, Sawyer, and Griffin (1993) advocate environments that encourage risk-taking, the free exchange of ideas, legitimate conflict, active participation, and the use of intrinsic rather than extrinsic rewards. The most creative organizations have an entrepreneurial culture that empowers employees to take ownership and spawn innovation (Mauzy & Harriman, 2003).

Amabile and her colleagues (Amabile, Conti, Coon, Lazenby, & Herron, 1996) found that creativity is enhanced when the organizational environment supports the following four conditions. First, risk-taking and innovation should be nurtured at all levels of the organization. From the boardroom to the production line, all employees should be encouraged to think of ways to improve operating procedures and generate new ideas. Second, creative ideas should be critiqued and evaluated in fair and supportive ways. Most initial ideas will need to be refined and developed; yet a harsh, critical evaluation is a sure way to squelch innovation. Third, creative achievements should be rewarded in ways that validate and communicate the importance of innovation. Appropriate reward structures reinforce organizational values without suggesting that employees be innovative solely for the purpose of recognition or compensation. Finally, innovative organizations should encourage open communication and participative decision making. Collaboration and the exchange of ideas can create synergy that fosters reflection, learning, and experimentation.

Collaboration allows people the opportunity to discuss, debate, and dialogue as they work together. This free exchange of ideas creates a social environment where new perspectives are considered and innovative solutions can be discovered. Unsurprisingly, a

study of 160 college students showed that their ability to produce unique ideas increased as they were exposed to the creative ideas of others (Dugosh & Paulus, 2005). Contrary to the common image of creative geniuses working in isolation, many great thinkers develop their ideas as they engage in critical dialogue with others. Proposals that are critiqued and challenged force individuals to think more deeply and to find grounds that support their ideas or position. If adequate evidence cannot be found, new ideas and assertions are constructed. When vigorous debate is done with interpersonal sensitivity, unexamined assumptions can be identified, revealing blind spots and inviting exploration. In this way, groups that encourage dissent and value a multiplicity of perspectives are especially helpful in generating creativity and innovation (Woodman, Sawyer, & Griffin, 1993).

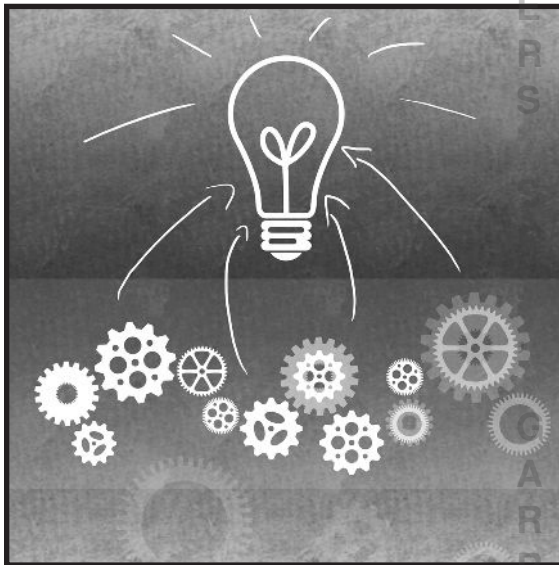
In interviews with highly successful and creative scientists, Mockros and Csikszentmihalyi (1999) consistently heard about the value of collaboration in the creative process. For instance,

a prominent physicist and author who received both the Max Planck Medal and the National Medal of Science stated, “I was able to do creative work collaborating with other people. Most of my work is collaborative. That’s how you find out how to do something which hasn’t been done before. Collaboration is extremely important” (p. 205).

Another highly successful physicist who won both the Einstein and Niels Bohr Prizes said, “Usually ideas grow slowly, they’re like flowers that have to be tended by reading, and talking with people . . . if you don’t kick things around with people you are out of it. Nobody, I always say, can be anybody without others around” (p. 205). Reinforcing the importance of dialogue, another physicist who is a Fellow of the Royal Society and a member of the National Academy of Sciences noted, “It is only by interacting with other people that you get anything

interesting done” (p. 205). These prominent scientists not only verbalize the importance of collaboration, their work demonstrates it.

Creative collaboration is enhanced when members with difference educational or functional backgrounds are placed on cross-functional teams. Cross-functional teams consist of members from different departments or areas within an organization who come together to accomplish a specific task. For example, AT&T may assemble a group of accountants, engineers, and salespeople to improve the company’s website. That way, different perspectives can be considered. The benefits of cross-functional teams are their ability to act quickly, especially when dealing with complex issues, their creativity, and their ability to learn (Parker, 1994). Cross-functional teams are able to accomplish tasks quickly because the knowledge and skills required to complete the task are represented on the team. Time that would have been spent soliciting various stakeholders outside the



144 Working in Teams

group is reduced. Furthermore, more complex tasks are easier to address when different types of expertise exist in one group. Because each member comes from a different functional background, they bring different perspectives, resulting in greater creative potential. And because members come from various parts of the organization, it is difficult only to advocate for their own group; this helps cross-functional teams focus on customers and the larger organizational mission.

However, cross-functional teams are not the answer for every organizational task or challenge. Jehn and Bezrukova (2004) found that cross-functional groups were most effective when involved in growth-oriented tasks, or tasks that emphasize innovation and creativity. The diverse backgrounds of members bring different perspectives to team discussions that can help generate new ideas and unique solutions. In contrast, cross-functional teams did not fare well in stability-oriented tasks, or tasks that emphasized efficiency and hierarchical differentiation over innovation. Essentially, cross-functional teams can generate a wide variety of ideas to complex organizational tasks and problems. Much of their success can be attributed to a rich and unrestricted brainstorming process.

CREATIVITY THROUGH BRAINSTORMING

Brainstorming is a common practice for idea generation in teams and organizations. Early researchers such as Alex Osborn (1953) explored the circumstances under which creativity is optimally nurtured. His colleagues first used the term *brainstorm* in 1938 when he called a collaboration meeting at his company. Through systematic observation of this and many other meetings, he identified four characteristics of successful brainstorming: (a) minimal criticism of ideas, (b) frequent “free-wheeling” or free expression of ideas, (c) a large quantity of ideas, and (d) the use of proposed ideas as a catalyst for more ideas. Unfortunately, Osborn found that most brainstorming sessions do not have these characteristics. Consequently, brainstorming does not always produce the results teams are capable of achieving. Group processes such as social loafing, evaluation apprehension, and production blocking reduce the effectiveness of group brainstorming.

Social loafing is a common problem in which group members withhold their best efforts and most creative ideas because they perceive that others will do the work for them. Harkins and Petty (1982) found that participants who generated ideas collectively produced fewer ideas than the sum total of ideas that were generated by participants who brainstormed individually. However, in completing difficult tasks, participants working in a group produced a comparable number of ideas as those who were working alone. This suggests that social loafing is more common when tasks are simple and people do not feel that their work will be missed. In addition, Nijstad, Stroebe, and Lodewijkx (2006) found that groups tend to insulate individual members from feelings of failure, and do not hold them accountable. Since group members do not feel personal failure as keenly, they do not realize that they are performing below standard.

Evaluation apprehension is the reluctance to contribute to a discussion out of a fear of being judged or evaluated by others. Most people want to be perceived as competent and to garner the respect of others. So when group members are unsure of the quality of their contribution, they might hold back. In a study conducted by Camacho and Paulus (1995),

evaluation apprehension due to social anxiety caused group members to contribute fewer ideas in a group setting than they would alone. Furthermore, as group size increases, individuals tend to become more intimidated and therefore withhold their opinions even more (Mullen, Johnson, & Salas, 1991).

Production blocking is the logistical reality that when one person is talking, others are blocked from contributing their ideas. In most groups, time is limited and not everyone can speak out on every topic. Diehl and Stroebe (1987) found that as members wait for their turn to speak up, they can forget what they were going to say. In addition, the discussion can move on to a different topic while members mentally rehearse what they are going to say, thus missing their opportunity. Nijstad, Stroebe, and Lodewijkx (2003) support this view with their study on delays. Nijstad and his colleagues manipulated wait delays to see how they would affect the number of ideas that were generated by participants. Unpredictable delays were found to reduce the number of idea sequences, also known as semantic clusters, because participants were distracted by the uncertainty of the timing in their chance to contribute. Long delays shortened the length of semantic clusters for the same reason.

Although there are challenges to effective brainstorming, groups can take specific steps to improve both the quality and quantity of ideas that are generated (Goldenberg, Larson, & Wiley, 2013). For instance, Paulus, Nakui, Putman, and Brown (2006) found that taking breaks during brainstorming sessions helped yield more ideas. Breaks should be taken at times when the session loses momentum and ideas have stopped flowing. The number of breaks, meanwhile, should vary with the time apportioned for brainstorming. The use of a facilitator to prompt participants was also found to be helpful. In that way, one person is guiding the process instead of focusing on generating ideas. The use of ground rules such as “stay focused on the task,” “everyone’s ideas are important,” “keep the ideas flowing,” “no critiquing of ideas until we’re done,” and “quantity over quality” can help improve the quantity and quality of ideas.

One particularly helpful exercise to enhance group brainstorming is “brainwriting” (Paulus & Yang, 2000). Brainwriting involves jotting down ideas on slips of paper and passing them around the group. Members read one another’s ideas and add their own. A variation of this exercise is to have everyone generate as many ideas as possible by writing each on a Post-it note. Then, after a predetermined amount of time, everyone sticks their notes on a whiteboard or public medium for other group members to see. After that, similar ideas are grouped together and collapsed or combined. In this way, a group can create a shortlist of 5 to 7 strong ideas for further examination and critique. The benefit of allowing everyone in the team to contribute in a systematic and structured format cannot be overstated. In this way, a team of eight people can generate 80+ ideas on any given topic. This is considerably more than the typical 8 to 10 total number of ideas that are usually generated when the whole group speaks in an unmoderated, free-for-all discussion.

LEADERSHIP IN ACTION

Creativity and innovation help us solve problems and improve our personal and professional lives. They bring about needed change and progress. Isn’t it ironic, then, that creativity and innovation are resisted by so many? Within teams, some members actively resist,

while others drag their feet, becoming quiet in their reluctance to change and brainstorm new ideas. Team leaders can overcome this resistance by strategically planning for the creative process ahead of time. At the beginning of a proposed brainstorming session, leaders can present specific ground rules and guidelines for the meeting. For example, an agenda might be created that allocates 10 minutes for idea generation, 20 minutes for the systematic reduction of options, 20 minutes for evaluation of a limited number of ideas, and 10 minutes for final voting. During the idea generation phase, it should be emphasized that there will be no criticism, no sarcasm, and no explanations of how or why something *won't* work. When a rule is violated or the process compromised, the leader can simply remind the team of the rule, get it back on track, and move on.

Members have 10 minutes to generate as many ideas as they can. At this point in the process, the goal is quantity and not necessarily quality. After all of the group's ideas have been generated and publicly displayed on a whiteboard or other visual format, the team can enter the reduction phase. Members are granted a limited number of votes with which to choose their favorite ideas. This can be done by placing a check mark or sticker next to the ideas people are in favor of. After the voting, the ideas with the most votes will be critiqued more closely. If necessary, teams can revote if something is "too close to call the first time around." Sometimes, ideas are combined and expanded upon during this phase. Dialogue and "thinking outside the box" should be encouraged. Next, smaller groups are formed to evaluate the remaining ideas on the shortlist. Each group has 10 minutes to construct an argument in defense of one of the ideas. After each team has presented its proposal, a formal voting process can be used to make the final decision. Members can place stickers on the wall above each of the ideas, or take a vote by hand, or vote "yea or nay" for each idea.

For any number of reasons, members may be resistant to the creative or innovative process. In those cases, leaders may need to sit down with the resistant party one on one, and inquire about why he or she isn't contributing to the group's task. An open, investigative, or inquisitive approach is often the best strategy; this is not the time to put someone who is already defensive *on* the defensive. The leader can begin by making some observations about how he or she has perceived the member's behavior. For example, the leader might have noticed a pattern of passive behavior or lack of involvement in team discussions and is interested in getting the member's perspective. Often, the first response will be superficial and vague; but if the leader is able to listen actively, the real issues may emerge.

Active listening skills and sincere inquiry can help lead the conversation to the heart of the matter. Eventually, the leader might hear a member vent about why the team has to "change what it's doing," or "think outside the box," or "come up with new ideas." Or a member might say that he or she is just not very creative. In any case, it can be the beginning of a meaningful conversation in which the leader has a better understanding of where the member is coming from. Once the real issues are on the table, the creative process can be engaged to find a way to reenlist and reengage the resistant member. The two can brainstorm possible solutions to the problem, choose the best option, and then implement that choice. While this might be a lot of work for the leader, it can yield a higher-than-average rate of return for his or her effort. Enlisting the entire team in the creative process can be the difference between good teamwork and great teamwork. And modeling it is one of the best ways to teach it.

KEY TERMS

Fluency 136
Flexibility 136

Originality 136
Elaboration 136

DISCUSSION QUESTIONS

1. Name and describe the four ways to think divergently according to Guilford.
2. Describe how divergent and convergent thinking styles affect the process of creativity.
3. Describe the four characteristics of creative people and give an example of *each*.
4. Name and describe the three subsystems of creativity according to Csikszentmihalyi.
5. What are the four characteristics of successful brainstorming discovered by Osborn?
6. Create a hypothetical group meeting that uses an effective brainstorming strategy.

GROUP ACTIVITIES

EXERCISE 7.1 DIVERGENT THINKING

In groups of four, generate a list of all the possible uses of a red solo cup. You have 10 minutes to complete this task and will be awarded one point for every unique idea. Ideas that are on the list of two or more groups will cancel one another out. After the time is up, declare a winner and make observations about the process.

EXERCISE 7.2 BRAINSTORMING EXERCISE

Form teams of four students and assign the roles of task leader and time keeper to two of the members. The leader should follow the following instructions to identify the best business a college student could start to make money and have fun at the same time:

- **Generate ideas (4 minutes):** Each team should have a stack of Post-it notes to begin. Each member should silently write down as many ideas as possible (one per Post-it). The goal is quantity, not quality.
- **Organize ideas (10 minutes):** Post all the Post-it notes on the board and organize them into categories.
- **Create a shortlist (14 minutes):** Weigh the relative merits of each idea and determine the best idea per category.

CHAPTER 8

Diversity

Diverse membership within teams can be a tremendous asset. At the same time, diversity tends to magnify the typical challenges present within most groups. Diverse teams must learn to appreciate their functional, cultural, and geographical differences before they can harness the power of their collective wisdom. This chapter will discuss the benefits, challenges, and potential of diversity. Unfortunately, the outcomes of diversity are not always positive. A skilled and insightful leader can be the difference between success and failure in a diverse team.

CASE 8.1: DELOITTE

As one of the most successful consulting companies in the world, Deloitte regularly shows up on lists such as Forbes magazine's "Top 100 Employers," the "Top 100 Places to Launch a Career," and, most important to this chapter, the Diversity Inc. list of "Top 50 Companies for Diversity" (number 11 in 2013). Deloitte is an employer of choice among the top undergraduates and MBA graduates from leading business schools around the globe, competing with the likes of McKinsey, Bain, and Ernst & Young. It attracts the best and the brightest talent and is known for investing heavily in its human capital; in fact it recently invested over \$300 million in a new team development and leadership development campus in Westlake, Texas, called "Deloitte University." One of the ways Deloitte has developed this stellar reputation as the top consultancy in the world is by utilizing and nurturing diverse, integrated teams of highly trained specialists, and Deloitte University is just the latest example of the extent to which Deloitte has learned to harness the power of diversity.

Deloitte's success has not happened by accident. It has required a sustained and strategic effort to build internationally and culturally diverse teams, to create an integrated operational platform, and to struggle past the challenges of heterogeneity to a point where diverse groups can elicit the best that each member can offer. At any of Deloitte's client engagements, there is likely to be a fair amount of cultural, racial, gender, national, and functional diversity represented. In order to reach this rare level of interdependent and high-functioning effort, Deloitte holds leadership development trainings for its consulting associates from offices around the world who have been with the company for at least one year (as well as more advanced training and development opportunities throughout an associate's tenure with the company). Deloitte does this because it is dedicated to developing a cross-functional leadership pipeline that leverages diversity and ensures the future success of the company.

150 Working in Teams

This training model is available to associates in either a one-week- or two-week-long seminar built around consulting cases, cohort discussions, debates, projects, and team challenges. In many instances, associates are divided into teams to tackle the cases, for example, so that these professionals can learn (or refine) how to work with other exceptionally smart, driven, talented, competitive, "type-A" leaders in a "quick-change" environment. Consultants must be able to establish trust, develop understanding, scope and scale a project, delegate responsibility, and produce solutions on very short timelines. Deloitte University equips its associates to formalize these skill sets, philosophical bases, and best practices so that the diversity of the teams becomes a strength instead of a weakness.

One way of forcing teams to learn how to adapt comes at various intervals during the case-based portions of Deloitte University's sessions. The consulting teams are given additional case information that brings unexpected changes—such as the sudden dismissal of the case company's CEO or a surprise legal investigation into some aspect of the company—and the teams have to find ways of accommodating the new information. This demands that the teams "think outside of the box" and, in many cases, calls on the full breadth and depth of the experience that all members bring, whether they are from offices in Atlanta, Singapore, London, Buenos Aires, or San Francisco; whether they are of European, African, American, or Asian descent; or whether they are men or women, gay or straight, young or old. Team members learn to work together to harness their collective capacity for solving problems throughout the workshop.

While participants share a great deal in common since they are all members of the Deloitte community, the diversity of these teams presents a valuable challenge and learning opportunity. Not only are these rising leaders able to sharpen their consulting skills, they are also able to learn lessons about how to harness the strengths other participants bring from their respective backgrounds and markets. This is more than working in teams; this is leadership development and diversity training in action. It is how Deloitte keeps its diverse talent pipeline full. For example, according to a recent DiversityInc "Top 50" list, it has double the percentage of senior leaders of black, Latino, and Asian descent than the average company. According to a May 8, 2013, press release:

"We believe that diversity and inclusion are essential for sustainable success in today's business environment," said Kelvin Womack, Deloitte's managing principal for Diversity. "At Deloitte, by looking at our people holistically, there are more opportunities for advancement as well as a more productive work environment, resulting in greater value to our clients through a variety of experiences and perspectives."

Case Study Discussion Questions

1. Why does Deloitte think diversity is so important?
2. What is uncommon about Deloitte's approach to diversity?
3. Name three short-term and three long-term diversity issues Deloitte University might help overcome.
4. Discuss how Deloitte University might eventually lead to a sustainable competitive advantage for the company.

In her engaging and practical book on diversity, Laura Liswood (2010) introduces the concept of diversity with a parable about a mouse and an elephant. When a mouse and

elephant are in a room together, the elephant is hardly aware that a mouse is even present. The elephant is powerful and strong enough that the mouse is of little concern. On the other hand, the mouse is very aware of the elephant. As a matter of fact, much of the mouse's movement is governed by the elephant. As a result, the mouse is very observant of what the elephant is doing at all times. Much of what the mouse does is determined by where the elephant is in the room and what it is doing. This makes the mouse very perceptive and aware. In contrast, the elephant is, to some degree, oblivious to the fact that there are other creatures sharing the same space they inhabit. As a matter of fact, most elephants know nothing about mice. Furthermore, because of the elephant's powerful and elevated vantage point, it can be shortsighted and slow to react to changing conditions.

Liswood goes on to say that this parable is a perfect example of how dominant and nondominant cultures exist together in organizations and teams. Members of the dominant culture are rarely aware of the perspectives of the nondominant culture. Yet members of the nondominant culture are very aware of the movements and power of the dominant culture. And as the world has gotten more unstable and complex, the mouse and the elephant need to combine their resources and work together in order to survive. They have much to learn from each other's unique perspectives and life experiences. Applied to the context of teams, team members need to understand that people have different perspectives, and that those diverse perspectives can make the team stronger and more adaptable.

VISIBLE VERSUS NONVISIBLE DIVERSITY

In order to identify how people differ from one another, some diversity researchers have classified those differences as either visible or nonvisible (Milliken & Martins, 1996). Visible forms of diversity include characteristics such as race, age, and gender. Nonvisible differences include individual variations in education level, socio-economic background, personality, and values. Another type of diversity involves differences among people based upon cultural background. The distinction is important because different types of diversity affect groups differently. Thus, a mixed-gender group with different nationalities and languages will experience diversity differently than a group of middle-class, white, male executives with different backgrounds in engineering, marketing, accounting, and human resources. In general, visible differences are more of a challenge to groups than are nonvisible differences (Mannix & Neale, 2005). However, these outcomes are moderated by the work environment within which the groups operate (Jehn & Bezrukova, 2004).

Visible Differences

With the diversification of the workforce over the last few decades, demographic changes have increasingly become a challenge for organizations. Employees tend to be more comfortable working with people who are similar to them (Mannix & Neale, 2005). Similarities among people create a sense of familiarity and security, and many of those clues about similarity and difference come from physical appearance. As a general rule, people are more trusting of those who look just like them.

152 Working in Teams

Furthermore, as a result of past experiences, exposure to the perspectives of friends and family, and images from the media, individuals construct beliefs about certain groups of people that tend to be one-dimensional and overgeneralized. These broad categories are used to assess incoming data and make quick judgments. Often, people are categorized and judged by their external, visible characteristics. When this happens, superficial judgments run the risk of being unconscious, unfair, and problematic for working groups. Unfortunately, since many groups of people have unfair and inaccurate stereotypes, issues such as racial prejudice, sexism, ageism, and homophobia are not uncommon.

Nonvisible Differences

Nonvisible differences can be divided into characteristics that are either psychological (based upon personality) or functional (based upon occupation and training) (Jackson & Ruderman, 1995). The table below describes three types of diversity that can exist within organizations. While demographic differences are most often visible, personality and functional difference are not.

Psychological differences include those personality traits and characteristics that make people unique. Much of the research on personality characteristics uses the Big Five model of personality. The Big Five model is a well-established conceptual framework for psychological research that measures individuals on five dimensions: conscientiousness, agreeableness, openness, neuroticism, and extraversion (Halfhill, Sundstrom, Lahner, Calderone, & Nielson, 2005). Excluding neuroticism, each of the variables is positively correlated with team effectiveness.

Teams tend to function better when there is a variation of personality traits among members. For example, it might be helpful if a majority of team members are agreeable. If there are not enough people with that characteristic, the group can get mired down in unproductive conflict and endless power struggles. But it is also important for some members not to have that trait. Otherwise, the group is susceptible to groupthink because nobody is willing to challenge the status quo and disagree with others. A healthy balance is ideal.

Table 8.1 Different Types of Diversity

| Type of Diversity | Examples |
|---------------------------|--|
| Demographic differences | Race, ethnicity, gender, age |
| Psychological differences | Personal beliefs, goals, past experiences, personality, interpersonal style, attitudes |
| Functional differences | Training, work experience, education, knowledge, skills |

In the same way that psychological diversity is beneficial to teams, functional differences are also desirable when considering the composition of workgroups (Hüttermann & Boerner, 2011). For example, a team leader might want someone on the team who is technologically savvy if he or she wants to utilize regular virtual meetings. That individual's specialized training and knowledge fill a need for the group. Cross-functional workgroups capitalize on this philosophy by enlisting members with different backgrounds in education and training in order to bring a diversity of perspective to the group. Constructing teams of people with different functional backgrounds ensures that problem analysis and decisions are considered from multiple angles.

CULTURAL DIVERSITY

Culture can play a significant role in groups and teams (Zhou & Shi, 2011). Members of the same familial, geographic, or professional culture typically share similar values, beliefs, and attitudes. Of course, not everyone in a cultural group holds to the exact same beliefs in a consistent manner, but a common worldview helps foster a sense of community, mutual understanding, and communication. Stories and proverbs communicate and reinforce important values that distinguish one culture from another (Liswood, 2010). For example, Americans have the saying, "The squeaky wheel gets the oil," highlighting the importance of assertiveness and being outspoken in order to get what you want. But in Japan, a common saying is, "The nail that sticks out gets hit on the head." In a similar fashion, one might hear a grandmother in China say, "The loudest duck gets shot." The Japanese and Chinese sayings extol the virtues of conformity and quietness, in contrast to American assertiveness. Given these cultural traditions, it would be easy to imagine an American team leader becoming frustrated with Asian team members who were quiet and rarely participated in team discussions. Likewise, Asian members might be put off by American members who were loud and boisterous. Cultural differences can create misunderstandings that hinder team performance (Haas & Nüesch, 2012).

Cultural diversity can be an asset on teams because it brings fresh perspectives to discussions (Crotty & Brett, 2012), but it can also be a potential problem if members are culturally ignorant or insensitive. In order to distinguish one culture from another, Trompenaars and Hampden-Turner (1998) surveyed over 15,000 participants from 30 companies within 50 countries. They found seven specific characteristics that distinguish one culture from another. Five of those differences have to do with how people relate to one another, one has to do with attitudes about time, and one relates to perceptions of the environment.

One of the ways cultures differ from one another is in how members relate to one another. Relationship norms are modeled, taught, and passed down from one generation to the next. They govern the interaction among members and evoke various degrees of punishment if a member strays too far from acceptable interpersonal behavior. Trompenaars and Hampden-Turner (1998) have identified five general differences in the way members of various cultures define relationships. Each of those cultural norms exists on a spectrum between two opposite extremes.

Characteristics of Relationships

- Universalism versus particularism
- Individualism versus collectivism
- Neutral versus emotional
- Specific versus diffuse
- Achievement versus ascription

Universalism versus particularism describes the degree to which members adhere to societal norms and values. A universalist believes in universal rules that apply to everyone, while a particularist is willing to bend the rules based upon the circumstances and give special treatment to those who are deemed worthy. **Individualism versus collectivism**

describes whether people define themselves primarily as individuals or as members of a group. Individualists give priority to the individual, while collectivists regard the community as more important than any one person. Next, cultural norms define the appropriate level of emotion in interpersonal transactions in the dimension of **neutral versus emotional**. In a neutral culture, emotions such as anger or sadness are not displayed, whereas in an emotional culture it is appropriate to show such feelings. The **specific versus diffuse** dimension describes the degree to which members include their personal lives in business relationships. Some cultures are task oriented (specific) and require little in the way of relationship-building, while others (diffuse) invite people to share their lives with one another and welcome social connectedness. Finally, **achievement versus ascription** refers to the way people within a certain culture define status. Achieved status is granted on the basis of personal accomplishments, whereas ascribed status is awarded on the basis of other attributes such as age, education, kinship, or personal connections.

Attitudes about time and environment are additional dimensions that differ among cultures and influence individual worldviews. Cultures with a *past orientation* value tradition and time-tested institutions and procedures. In contrast, a *future orientation* attempts to create a more desirable future by being progressive, innovative, and idealistic. A *present orientation* tends to minimize the value of tradition and does not necessarily strive to improve the future; instead, it focuses on present activities and enjoyments. In addition to these general orientations to time are norms regarding the role that time plays in daily life. In some cultures, for example, a 3:00 appointment should start exactly on time, while in other cultures it might mean anytime between 3:00 and 3:30.

Finally, **attitudes about the environment** or natural world often vary by culture. Some cultures attempt to control the environment, while others view it as something that should be honored and respected. In contrast to control-oriented cultures, those with a cooperative orientation understand events as products of powerful natural or supernatural forces worthy of respect. In other words, these cultures attribute events such as a booming economy or a catastrophic earthquake to external forces such as fate, luck, or a divine force, whereas control-oriented cultures place the source of good and bad events within human control related to effort, planning, and ability.

People from diverse cultural backgrounds have different ways of seeing the world, relating to others, and solving problems. These differences can have a significant effect on a number of group processes including communication, member satisfaction, cohesion, commitment, and decision making (Milliken & Martins, 1996). Unfortunately, members of

certain groups are negatively evaluated and devalued based upon cultural differences. According to Bazerman (2006), people have a greater tendency to attribute positive characteristics to their own cultural group and associate negative characteristics with other groups. If group members are not aware of these ingroup and outgroup biases, an atmosphere of distrust and conflict can emerge, creating a suboptimal working environment. Attention must be paid to countering and minimizing internal biases and stereotypes in order to achieve optimal interpersonal dynamics and group performance.

THE CHALLENGES AND BENEFITS OF DIVERSITY

With changing demographics in the United States, organizations are becoming more diverse (Hays-Thomas, 2004; Jackson, 1992). While individual differences, or heterogeneity, make it more difficult to create a sense of cohesion and trust in workgroups, a number of trends, including the growth of multinational corporations, the increasing age gap, and the integration of female, minority, and international workers within organizations, has increased the frequency with which employees interact with persons of diverse backgrounds (Milliken & Martins, 1996).



Thus, it is particularly important to understand how diversity affects organizational behavior. To benefit from diversity, groups must overcome the tendency for interpersonal differences to divide. Group members must learn to embrace diversity and address potential problems before they begin in order to maximize the benefits of a diverse team.

Diversity in work teams can increase productivity due to the benefit of multiple perspectives and skill sets (Holtzman & Anderberg, 2011). For example, because members of cross-functional work teams have more exposure to employees outside of their

particular workgroup, they have the ability to generate a wider range of perspectives and produce higher-quality solutions than do functionally nondiverse groups (Milliken & Martins, 1996; O'Reilly, Caldwell, & Barnett, 1989). However, without effective management, diversity can create problems by compromising trust, cohesion, and a shared identity (Mannix & Neale, 2005).

Diversity is a complex issue that affects organizations in various ways, both positive and negative (Jayne & Dipboye, 2004). Not all forms of diversity foster positive relationships or

organizational effectiveness. Yet diversity has the potential to bring innovative and fresh perspectives to complex problems and stagnant systems when there is an atmosphere of acceptance and psychological safety (Martins, Schilpzand, Kirkman, Ivanaj, & Ivanaj, 2013). In his book *The Difference*, Scott Page (2007) explains diversity by using the analogy of a toolbox. He describes people as having different toolboxes with different sets of cognitive skills and perspectives. The more diverse a team is, the more tools it has to accomplish any given task. Page suggests that diversity based upon cognitive differences—that is the way people think and process information—is the real benefit of diversity. Diversity based upon demographic differences such as gender, race, sexual orientation, or religion may have little or no impact on team performance. In other words, when diverse perspectives are not relevant to the specific tasks the team is engaged in, diversity may not impact performance.

As groups process information and make decisions, the most innovative ideas are often suppressed. As described in Chapter 6, on decision making, group members tend to conform to the ideas of the majority. The Solomon Asch line experiments (Asch, 1956) offer convincing evidence that members are reluctant to disagree with the dominant views of the group. In these experiments, more than a third of the subjects were willing to deny their own perception in order to side with the majority. People adopt the majority view because they assume that the majority must be right and because they do not want to face possible rejection by others. But minority views are extremely important and can have a significant influence on a group (Martin & Hewstone, 2001). When dissent is voiced, members are more likely to question assumptions and consider alternatives, which increases the likelihood of groups selecting and developing more optimal solutions, products, and results (Nemeth, 1992).

Minority perspectives are viewpoints held by either one person or a small percentage of members. Minority views are generally more divergent in thought, which can lead to greater levels of creativity and innovation in group decisions (Nemeth, 1986, 1992, 1995). When groups fail to consider alternative viewpoints, they are at risk of making premature and ill-informed decisions. Innovation and change often begin with an alternative view that is brought to the attention of a group. When members question the dominant position, the decision-making process is not only slowed down (preventing groupthink), it is also qualitatively changed. The minority position may not be adopted, but it can serve as a catalyst to help the group think more divergently, make better decisions, and improve group performance (De Dreu, 2002; De Dreu & West, 2001).



Minority dissent prevents premature consensus and promotes cognitive complexity, but because groups generally resist deviant perspectives, group leaders have a tendency to encourage, and if necessary, enforce conformity to the majority position (Marques, Abrams,

Paez, & Hogg, 2001). In the classic “Johnny Rocco” experiment done by Schachter (1961), participants were asked to decide the punishment of a fabricated lawbreaker, Johnny Rocco. A confederate was planted in each group who insisted on an especially harsh punishment, which functioned as a deviant position within the group. After some initial attempts to change the mind of confederates, groups stopped communicating with them and relegated them to low status and marginal roles. When group members were asked whom they would like to remove from the group, deviants were most often identified. It can be a very lonely and uncomfortable position to be in the minority on a group discussion.

The pressure to conform is even more salient in homogeneous groups (Marques, Abrams, Paez, & Hogg, 2001). Group members who stray too far from collective attitudes and beliefs can be judged harshly. Deviant or minority perspectives are often incorrectly perceived as weakening the social identity and cohesion of the group. Thus, alternative views are devalued, marginalized, and discounted. Groups that value diversity and invite disagreement can avoid these pitfalls. When there is freedom to challenge and debate the dominant perspective, groups are able to consider more options and alternatives (De Dreu & West, 2001). In this way, there is an increased likelihood that the worst ideas are exposed and scrutinized while the best ideas will be identified, evaluated, and implemented.

OUTCOMES OF GROUP DIVERSITY

The research on group diversity has produced conflicting results (Ely & Thomas, 2001; Mannix & Neale, 2005; van Knippenberg, De Dreu, & Homan, 2004). In an attempt to synthesize the data, Milliken and Martins (1996) surveyed the literature in 13 leading management journals between 1989 and 1994 and found 34 studies related to diversity in organizational settings. Most of the studies looked at the influence of visible demographic characteristics (race, ethnicity, gender, and age) and functional differences (educational background, occupational history, job-related knowledge, and skills) on group performance. Very few studies have focused on the effects of personality differences within organizational groups. In general, the majority of results indicate that diversity at all levels has the potential to increase the effectiveness of workgroups, but it also poses a threat to the relational connectedness and satisfaction of group members. People tend to be more comfortable with those who are most similar to them. However, groups that are diverse have a greater potential for success, especially with tasks that require innovation and creativity.

Cognitive Outcomes and Task Performance

In terms of team performance, diversity has been linked to a number of competitive advantages (Milliken & Martins, 1996). Differences of ethnicity and nationality have been shown to improve the quality of ideas and level of communication on complex tasks. Presumably, these positive outcomes occur because heterogeneous groups are able to consider a greater variety of perspectives, eventually leading to more realistic and sophisticated ways to analyze issues, make decisions, and solve problems. While it might take ethnically diverse members longer to warm up to one another, cultural differences can garner a wider variety of perspectives within the group (O’Reilly et al., 1989).

Gender diversity has been linked to higher personal productivity for women when there are high-level female executives present in the organization. If women perceive that career advancement is a realistic goal as evidenced by the success of other women, they will work harder to obtain it. Gender diversity also influences the communication structure within a group. A study by Smith-Lovin and Brody (1989) found that men were twice as likely to interrupt women as they were other men. Women were equally likely to interrupt both women and men, but were less than half as likely to successfully interrupt men.

In terms of communication networks, diverse groups have access to and communicate more frequently with members outside of their workgroup (Milliken & Martins, 1996). Because members come from varied backgrounds, they are embedded in diverse social networks. Thus, diverse workgroups gain valuable information and resources from outsiders, while avoiding insulated, limited perspectives. This increases the range of perspectives as well as the number and quality of ideas that are discussed within a group.

Results for both functional and educational diversity are not consistent across work contexts. While boards of directors, top management groups, and organizational task groups benefit from diversity, other groups have mixed results. Groups that are more functionally diverse have better links to external networks, thereby allowing them greater access to outside information. But cross-functional teams also have greater process losses because members have different ways of approaching tasks and projects. For example, engineers might approach certain tasks very differently than would marketing specialists. Yet these differences, when handled properly, can produce a more comprehensive view of issues that leads to better decisions and more effective solutions (Milliken & Martins, 1996).

Affective Outcomes and Relational Connection

While diversity has the potential to improve the quality of work within a team, it can be difficult for minority members to feel like they are accepted and valued. In general, members who are racially and ethnically different than their teammates tend to be less committed to their organizations and have higher rates of absenteeism (Milliken & Martins, 1996). Furthermore, minority members tend to have lower levels of group identification and member satisfaction, and are more likely to be evaluated negatively by their supervisors. Unfortunately, these lower levels of commitment together with lower performance ratings lead to higher turnover rates among minority workers.

Functional diversity can also be frustrating for members because it incurs higher coordination costs than those for functionally homogenous groups (Milliken & Martins, 1996). After all, it takes more effort to coordinate the work of members who have different skill sets and functional backgrounds. While it might be beneficial for engineers to work with salespeople and advertising specialists, it can also be difficult. Consequently, functional diversity has been linked to higher turnover rates and lower social integration within organizations.

The most consistent finding in the review of diversity research done by Milliken and Martins (1996) is that groups have a systematic tendency to homogenize all forms of diversity. Diverse groups have lower levels of member satisfaction and higher rates of turnover than homogenous groups typically do. These results apply to multiple types of diversity, including race, ethnicity, age, and gender. In particular, minority members are less satisfied with their groups than are other members. However, if groups can overcome the

initial difficulties and predisposition toward conformity and learn to value differences, then they can experience the benefits of diversity (Watson, Johnson, & Zgourides, 2002).

CONTEXTUAL CONDITIONS FOR SUCCESS

Clearly, teams and organizations can benefit from a diverse workforce. However, some organizations either are not convinced of the benefits of diversity or do not know how to take advantage of it. Diversity will have a greater chance for success if (a) the organizational or workgroup context is supportive of it, (b) the influence of minority members is enhanced, and (c) group tasks require creativity and a variety of perspectives. When these conditions are met, the power and potential of diversity are released.

First, organizational and workgroup cultures that value diversity and cooperation are better suited to capitalize on the potential benefits of diversity (Homan & Greer, 2013). As Ely and Thomas (2001) found, organizations that view diversity as an asset will most likely benefit from it. Jehn and Bezrukova (2004) studied 10,717 members of 1,528 workgroups operating within a Fortune 500 company to evaluate the effects of diversity on performance. In this study, performance was measured by merit-based performance reviews, bonuses, and stock options at both the individual and group levels. Members of functionally diverse groups had higher bonuses in departments that cultivated a people-oriented, cooperative environment. Educationally diverse groups received higher bonuses in environments that emphasized customer service and building customer relationships.

Second, due to the tendency of groups to encourage cohesion and conformity, divergent perspectives are often marginalized. Groups that have more than just nominal representations by minority members are better positioned to succeed.



For example, in mixed-gender groups, women are less likely to contribute when they are the sole female member than when there are other women on the team (Myaskovsky, Unikel, & Dew, 2005). But just how many minority members does it take to empower those members? Kanter's (1977) theory on the proportion of minority to majority members suggests that "skewed" groups, where minority members constitute from between 1% to 15% of the group, are the most problematic for diverse members. Without a significant proportion of minority perspectives, minority members are more likely to

be marginalized and subject to stereotyping. Minorities and women suffer disproportionately in their solo status as compared with males or whites. Sekaquaptewa and Thompson (2003) found that white males performed better in their solo status roles than white women, and white women performed better than minority women. On the other hand, groups where minority

proportions range from 35% to 65% can lead to hostility and resentment among majority members because they feel that they have become outnumbered (Mannix & Neale, 2005). In reality, they are feeling what it is like to be in the minority. Thus, creating the ideal group composition can be tricky. Knouse and Dansby (1999) found that optimal diversity levels are obtained when the diversity subgroup comprises between 11% to 30% of the total workgroup.

Finally, diversity may be more advantageous for complex tasks that require innovation, creativity, and change, while workgroups that manage existing processes and practices may not benefit as much from a diverse membership (Mannix & Neale, 2005). Yet even in groups that manage existing day-to-day operations, team leaders can utilize the power of diversity to improve task efficiency. Over time, groups can become blind to their own deficiencies and weaknesses. Diverse perspectives can help groups accurately evaluate performance and maintain the highest levels of efficiency and team performance.

LEVERAGING DIFFERENCE TO IMPROVE TEAM PERFORMANCE

Diversity within teams can be a strategic advantage to organizations. But team leaders have to leverage those differences in order to experience the benefits. Noted diversity expert Martin Davidson (2002) suggests that in order to reap the sizable rewards of diversity, teams must first *see* the differences among members; then they must *understand* those differences; and, finally, they must *value* those differences. Only then can diversity be used as a lever to transform teams that have high potential into teams that are high performing.

Seeing Differences

The first step in leveraging difference is to see and acknowledge the differences among team members. As discussed earlier in this chapter, some of those differences are visible and some are not. And even when the differences are visible, some members are not aware of those differences, as seen in the opening parable about the elephant and the mouse. To benefit from diversity, teams must recognize that members are different. Once those differences are acknowledged, they can be leveraged to improve team performance.

In order to see and acknowledge differences among members, teams must adopt a “difference matters” stance. Team leaders can model this attitude and encourage team members to do the same. For example, a team leader might say, “John, how would the marketing department see this problem?” In another example, a team leader might acknowledge the fact that a particular member is from a different country or ethnic background and suggest that the person’s unique perspective might benefit the team. Admittedly, conversations like these can be a bit awkward, but they communicate the message that differences are important.

Differences can often be identified by noting points of conflict among members. Conflicts not only reflect different opinions, they can also emerge from different backgrounds, different life experiences, or differences in professional training. Exploring the sources of conflict can identify the specific differences among members that have produced the difference of opinion. A team leader might say, “It seems like you two have very different ideas on this topic. Could those differences be related to your differences in personality, gender, race/ethnicity (if appropriate), or life experiences, etc.?” Questions such as these invite members to step back from the issues at hand and reflect on *why* members see things differently.

And finally, a third way to note differences is to observe silence. When certain members or subgroups within a team are silent, they might be feeling out of place or marginalized. Human beings have a deep need for acceptance and inclusion, so when a member withdraws, he or she might be feeling “different” from others and thus reluctant to participate. A simple question such as “John, I noticed you haven’t said anything for a while. How are you feeling about this conversation?” can bring attention to possible feelings of isolation or rejection. It takes courage for members to speak up when they feel like they are seen as a minority or hold a minority position; acknowledging those differences is the first step in understanding those differences.

Understanding Differences

Once differences are seen and acknowledged, they need to be understood. Understanding the differences among members includes understanding member’s backgrounds, their worldviews, and their life experiences. Understanding differences requires the time and freedom to explore and inquire about members who are different. In addition, teams need to understand how individual member differences affect the work of the team.

One of the ways to understand differences among members is to be curious. Members who are curious are able to inquire and ask questions of others who seem to be different or who might have a different perspective. It involves the regular practice of asking people to talk about themselves. “Tell me about your background” and “I’d like to hear more about your life experiences” are requests that invite others to tell their stories. A team leader might ask members to describe how they see themselves as both similar and different from other members on the team. Once authentic dialogue is taking place, members have to listen carefully in order to fully understand individual differences and to validate those who are sharing potentially vulnerable information.

Another way of understanding differences is to acquire information about people who come from different ethnic backgrounds, cultural backgrounds, and life experiences. Members can read and do research about what it means to come from a different gender, race, sexual orientation, country, or life experience. In order to be citizens of the world, we must be interested in and knowledgeable about other cultures and lifestyles. We need to be educated and keep an open mind about people who are different from ourselves. Because the world is becoming more multicultural and integrated, we are more likely to interact with those who come from different backgrounds. Communication is greatly enhanced when we have some context and knowledge of different groups of people. While we cannot assume everyone we meet from a certain group will share the typical characteristics of people from that group, it is a starting point that can be verified or refined based upon further conversations.

Valuing Differences

Finally, in order to leverage differences, teams must value those differences (Hentschel, Shemla, Wegge, & Kearney, 2013). Valuing differences among members occurs when teams have a true appreciation for diversity and an appreciation for different perspectives. Valuing differences means that members resist the initial impulse to reject ideas or discount people who are different from them. Instead, they have a posture of openness and appreciation for new ideas and new perspectives because of their potential to improve the performance of the team.

162 Working in Teams

One way to increase the valuing or appreciation of differences is to reduce excessive carefulness in communication. Because members do not wish to offend others, they can be reluctant to acknowledge or explore individual differences. Furthermore, asking for a “woman’s perspective” or an “African American” perspective on any given subject can be problematic because it suggests that the person answering the question is speaking for the whole reference group. Instead, team leaders can ask for the perspective of someone who is a woman or someone who is African American. The question can still be awkward, but teams that leverage differences are direct and explore members’ perspectives and backgrounds openly without the excessive fear of being perceived as insensitive or inappropriate. If someone does get offended by a direct question, the questioner should be quick to apologize but should also take the opportunity to reinforce the importance of different perspectives, no matter how awkward those conversations can be.

Differences are leveraged when teams persist in the midst of conflict. Conflict often occurs in the storming stage of development, when differences among members are intensified. Different perspectives can cause differences of opinion, which can cause team conflict. Instead of prematurely reverting to a fight-or-flight response, teams that leverage differences are able to stand firm in the midst of conflict and push through the possible discomfort that can be experienced when working within a diverse environment.

Finally, groups that value differences are able to incorporate new perspectives into group discussions and team decisions. Unique perspectives are appreciated, valued, and given thoughtful consideration. In some cases, they are adopted into the processes of the group. In other cases, they are used as a catalyst to uncover unexamined assumptions and blind spots. The most effective teams are able to use difference to sharpen, expand, and then integrate new ideas.

For example, imagine a task force consisting of faculty, students, and college administrators who have been asked by the dean of student life to address the issue of alcohol abuse on campus. Each group of people will have very different ideas about how to define and solve the problem. One can easily imagine how age differences might affect differences of opinion. In the midst of conflicting views, students might realize they have very little power to influence the discussion, and thus only “go through the motions” of participation. If that happens, differences would not be leveraged and an important opportunity for change would have been missed. On the other hand, if students, who represent a minority voice in the creation of campus policies, are valued and empowered, they can offer a perspective on alcohol abuse that is more likely to lead to lasting change on campus.

LEADERSHIP IN ACTION

Globalization is a trend that is rapidly increasing. The best colleges and universities are veritable melting pots that attract scholarly, artistic, and athletic talent from around the world. Many of those students graduate and pursue work for Fortune 500 companies. These international conglomerates leverage the strengths and benefits of a broad range of countries to drive their success. As with any benefit, however, international team management comes with a cost.

In one of his final lectures in a popular course, “Leading and Managing Organizations,” a highly respected emeritus professor at the Harvard Graduate School of Education addressed the issue of communication, the power of assumptions, and the unnecessary boundaries

leaders unwittingly create for themselves by being unwilling to ask necessary, though potentially embarrassing, questions. He told his students a story about one of the first consulting engagements he had in Japan, where it is customary for the client to host the consultant for a “night on the town.” In class, the professor recounted the exquisite meal, exceptional musical entertainment, and luxurious bar to which the group retired after dinner.

As the story goes, he was quite tired from his flight and was ready to retire to his hotel room, when his interpreter told him it was customary to have a post-dinner drink with his hosts before finishing the evening’s activities. So, as the professor put it, “I decided to finish my drink as quickly as I could so I could get back to my hotel room and go to bed.” Apparently, the businessmen with him *also* finished their drinks quickly and ordered another round of the very expensive Scotch. This seasoned professor and internationally respected organizational expert explained to his students that he stared wearily at a second glass of Scotch and decided to “take one for the team” and tough it out. He hurried through this second glass and, much to his dismay, noticed that the other men around him had finished theirs just as quickly and the servers had brought a *third* glass to everyone.

Just as the professor was raising the third glass to his lips in an effort to get through the end of the night as quickly as possible, his interpreter leaned in, excused the interruption, and asked him very politely how many more drinks he might be planning to have. The Japanese businessmen were struggling to keep up with the professor’s drinking and were ready to go home, but because of the customary honoring of a guest, they were unable to say anything. Both groups had been trying to behave respectfully toward their counterpart, but by observing custom without communicating, they had both ended up at a destination neither desired.

The obvious message is that, often, as with the professor and the businessmen, cultures can work past one another, and diverse international teams can bring with them unanticipated challenges, despite the best of intentions. Thus, before an encounter with an unfamiliar cultural group it might be helpful not only to do some research but also to ask team members to describe some of their customs and expectations. Although it might be uncomfortable, leaders can model genuine interest by asking colleagues who come from a different background to describe how that background, whether cultural, racial, ethnic, or functional, influences their work on the team or project.

KEY TERMS

| | | | |
|-----------------------------------|-----|---------------------------------|-----|
| Universalism versus particularism | 154 | Achievement versus ascription | 154 |
| Individualism versus collectivism | 154 | Attitudes about time | 154 |
| Neutral versus emotional | 154 | Attitudes about the environment | 154 |
| Specific versus diffuse | 154 | | |

DISCUSSION QUESTIONS

1. Give three examples of visible diversity and three examples of nonvisible diversity.
2. List the various ways people are different from one another. What do people do to fit into the dominant culture, and what do they do to stand out from it?

164 Working in Teams

3. What are the seven differentiating factors that distinguish cultures?
4. What are three benefits of diversity? Three challenges?
5. Describe three cognitive or task-related outcomes of diversity. Why is this so?
6. Describe three affective or relational outcomes of diversity. Why is this so?
7. In order to leverage differences among members, Davidson suggests that teams must first see, then understand, and, finally, value those differences. Describe how a team leader might facilitate this process.

GROUP ACTIVITIES

EXERCISE 8.1 UNCOVERING ASSUMPTIONS

Write down the first two or three characteristics that come to mind when you look at the following categories of people. There are no right or wrong answers. Please do not censor or screen your responses. After you are done, form groups of three to four to discuss your answers.

Characteristics of people in the following occupations:

Teachers: _____

Accountants: _____

Lawyers: _____

Salespeople: _____

Janitors: _____

Secretaries: _____

Nurses: _____

Characteristics of the following types of people:

Extroverts: _____

Open-minded: _____

Depressed: _____

Ambitious: _____

Characteristics of the following groups of people:

Men: _____

Women: _____

Japanese: _____

French: _____

British: _____

Hispanics: _____

Blacks: _____

Whites: _____

Asians: _____

What can you learn from this activity? How do stereotypes hurt or help teams?

EXERCISE 8.2 LEVERAGING DIFFERENCE

You have been appointed by the principal of your local high school to make recommendations about how to improve the school. Test scores and graduation rates have been in decline for five years, and she is desperate to reverse the trend. Form groups of four to five to address this issue but do not actually come up with recommendations for the school. The goal of this activity is become more aware of how diversity could benefit your team on this hypothetical project.

Please do the following:

1. *Seeing*: Describe all the ways the members of your group are different from one another.
2. *Understanding*: Discuss the significance of some of those differences. Share with one another how those differences have affected the way you see yourself, the way you see others, and the way you see the world.
3. *Valuing*: Discuss how member differences could be a benefit to the task of making recommendations to improve the school.

CASE 8.2: THE PRICE OF VALUE

The interdisciplinary task force at James Williams University has been assigned the responsibility of creating a series of integrated programs for a new first-year student dormitory complex that will help students make a successful transition from high school to college. Professors, students, administrators, and student life professionals have been invited to participate on the team. At first, enthusiasm and excitement about the new dorms and the endless possibilities kept the mood high and drove the team's progress. However, when decisions needed to be made about what to include and what to cut from the proposed budget for the program, differences arose:

166 Working in Teams

- Faculty members were adamant about including lectures and discussions about intellectual pursuits. For example, a Renaissance English professor wanted to include formal and structured discussions around poetry and the meaning of life.
- Students, in contrast, wanted autonomy and freedom to define their own living environment. They wanted very few mandatory programs.
- Minority students wanted to emphasize the importance of diversity on campus and to offer programming to educate students on the benefits and challenges of living in integrated communities.
- Administrators were passionate about drafting and implementing alcohol and drug abuse prevention policies to minimize the risk to the university.
- Representatives from student life wanted to hold weekly community meetings to feature core values and social events that would encourage study skills, personal responsibility, and living in community.

Clearly, not all of these things could be featured in full; something had to be sacrificed.

Professor BigWig made the emphatic statement, “Back in my day, we were serious about academic pursuit and didn’t need all of this coddling and extracurricular self-actualization. Much of this is rubbish, and we clearly need to focus our attention on giving students enough time for their studies.”

Student CoolGuy answered, “Hey, man . . . this is a different world now. With all due respect, people don’t come to college to bury their nose in a book. Kids are here to have fun, meet people, and get a good job after they graduate. All of this programming is getting in the way. We just need to let kids do their own thing!”

The minority student interjected, “I disagree. I think the whole purpose of living in this new setting is to learn about people from different cultures, races, and religions. I think it would be a shame if we missed the opportunity to create a global community.”

Administrators said, “This is all well and good, but your ideas are going to cost money! We can’t afford to hire anyone but resident advisors, who are paid to enforce the rules and maintain order. We can no longer afford to have students drinking and partying in the dorms. We have to stop the epidemic of underage drinking and drug use.”

Student life added, “We need to ensure that students have the tools for success in college. We need this to be a cool place to live, and we need it to be a cool place to learn! This will be the only opportunity kids have to learn about living in community, personal responsibility, and life management. Oh! And we need to decorate the hallways. Let’s make sure there is money in the budget for that.”

- What is the value of the different opinions? If you were the leader of this team, how would you reconcile the differences of opinions? Using content from the chapter, at the end of the day, (a) how would you determine who gets their way, (b) how could you empower minority perspectives, and (c) how could you ensure that every voice gets heard?