

Roeper Review



ISSN: 0278-3193 (Print) 1940-865X (Online) Journal homepage: http://www.tandfonline.com/loi/uror20

WICS: A model of giftedness in leadership

Robert J. Sternberg

To cite this article: Robert J. Sternberg (2005) WICS: A model of giftedness in leadership,

Roeper Review, 28:1, 37-44, DOI: 10.1080/02783190509554335

To link to this article: http://dx.doi.org/10.1080/02783190509554335

| Published online: 20 Jan 2010. |
|---|
| Submit your article to this journal |
| Article views: 116 |
| View related articles 🗹 |
| Citing articles: 7 View citing articles |

Full Terms & Conditions of access and use can be found at http://www.tandfonline.com/action/journalInformation?journalCode=uror20

Broader Conceptions of Leadership

WICS: A Model of Giftedness in Leadership

Robert J. Sternberg

When we identify people, especially children, for giftedness, we often neglect what arguably is the most important kind of giftedness of all—giftedness for leadership. Ultimately, the individuals we identify should not just be potentially "good" in one or more domains, but also potential leaders in that domain. There is a big difference between merely knowing a lot about a field and taking a leadership role in that field. Gifted adults—certainly those who are remembered—are those who take a leadership role. This article argues that effective leaders demonstrate in their leadership a synthesis of three elements: creativity, intelligence, and wisdom. Creativity is used to generate novel ideas; intelligence is used to analyze the quality of these ideas, as well as to implement the ideas and persuade others of their worth; and wisdom is used to balance the effects of these ideas on all possible stakeholders. This article reviews the proposed "WICS" (Wisdom-Intelligence-Creativity-Synthesized) theory of giftedness in leadership, and compares it to some other theories.

Robert J. Sternberg is Dean of Arts and Sciences at Tufts University. He also directs the Center for the Psychology of Abilities, Competencies, and Expertise at Yale University. Sternberg was the 2003 President of the American Psychological Association. He has written over 1000 journal articles, book chapters, and books and is a member in numerous scientific societies. He has won many awards from APA, AERA, APS, and other organizations. Sternberg is most well known for his theory of successful intelligence, investment theory of creativity (developed with Todd Lubart), theory of thinking styles as mental self-government, balance theory of wisdom, WICS theory of leadership, and for his duplex theories of love and hate. E-mail: robert.sternberg@tufts.edu

Then we identify individuals, especially children, as gifted in one or more domains, we often concentrate on what they know about the domain (e.g., school achievement) and their ability to learn about that domain more rapidly or more thoroughly than other individuals (e.g., school aptitudes). But gifted adults are usually identified as such by the leadership roles they take in their fields, not by how quickly they learned about their fields. For example, in the field of gifted education, one does not attain eminence by memorizing a textbook on theories of and facts about gifted education, or by solving puzzle-like IQ-test problems that predict how rapidly or thoroughly one will be able to learn the contents of that book. Instead, one attains eminence by leading the field with one's ideas. If one thinks of some of the most eminent people in the field of gifted education, one knows they got to their positions not by demonstrating high scores on tests of knowledge of books on gifted education, but by being leaders with their ideas about how to educate the gifted.

The goal of this article is to argue that giftedness in leadership is, in large part, a function of *creativity* in generating ideas, *analytical intelligence* in evaluating the quality of these ideas, *practical intelligence* in implementing the ideas and convincing others to value and follow the ideas, and *wisdom* to ensure that the decisions and their implementation are for the common good of all stakeholders. The model is referred to as WICS—wisdom, intelligence, creativity, synthesized—although the order of elements in the acronym is intended only to make it pronounceable (Sternberg, 2003b, 2003c; Sternberg & Vroom, 2002).

Creativity, intelligence, and wisdom are not merely innate. Although these attributes may be partially heritable, heritability is distinct from modifiability (Sternberg & Grigorenko, 1999). Leaders can develop their creativity, intelligence, and wisdom. Thus, on the present view, one is not "born" a gifted leader. Rather, giftedness in wisdom, intelligence, and creativity—the ingredients of gifted leadership—is, to some extent, a form of developing competency and expertise (Sternberg, 1998a, 1999a, 2003a) that one can decide to utilize or not in actual leadership decisions. The environment strongly influences the extent to which we are able to utilize and develop whatever genetic potentials we have (Grigorenko & Sternberg, 2001; Sternberg & Grigorenko, 1997, 2001).

eadership involves both skills and attitudes. The skills are developing competencies and expertise based on how well one can execute certain functions of leadership. Gifted leaders are highly skillful in making and implementing decisions that represent creative, intelligent, and wise judgments. The attitudes are developing expertise based on how one thinks about these functions. Gifted leaders seek out the information they need and then process it creatively, intelligently, and wisely. Many leaders have the skills they need to be gifted leaders but not the attitudes: They effectively squander their own gifts. This article argues that the attitudes are at least as important as the skills. One needs creative skills and attitudes to generate fresh and good ideas for leadership; one needs analytical intellectual skills and attitudes to decide whether they are good ideas, as well as practical intellectual skills and attitudes to implement the ideas and convince others of the value of the ideas; and one needs wisdom-related skills and attitudes to assess the long- and short-term impacts of these ideas on other individuals and institutions as well as oneself. Gifted leaders either excel in all three or find helpers—staff, assistants, followers, whatever-to help them compensate for the skills or attitudes in which they do not excel.

This view of leadership contrasts with many traditional views. Traditional models of leadership often stress identification of "fixed" traits or behaviors that make leaders gifted; other models instead emphasize the interaction between internal attributes and situations (Antonakis, Cianciolo, & Sternberg, 2004).

This article considers the elements of creativity, intelligence, and wisdom, in that order, because it represents the order in which the elements often are initially used, although as leadership decisions evolve, the elements become interactive, so order becomes less relevant.

Manuscript submitted November 17, 2004. Revision accepted January 19, 2005.

Creativity

Creativity refers to the skills and attitudes needed for generating ideas and products that are (a) relatively novel, (b) high in quality, and (c) appropriate to the task at hand. Creativity is important for leadership because it is the component whereby one generates the ideas that others will follow. A leader who lacks creativity may get along and get others to go along—but he or she may get others to go along with inferior or stale ideas. A good leader, on this view, is one who embodies a creative vision.

Creative Leadership as a Confluence of Skills and Attitudes

A confluence model of creativity (Sternberg & Lubart, 1995, 1996) suggests that creative people show a variety of characteristics. These characteristics represent not innate abilities, but largely, decisions (Sternberg, 2000a). In other words, to a large extent, people decide to be creative. People who decide to be creative exhibit a creative attitude toward leadership. Creativity is in large part attitudinal, as Thomas Edison recognized when he referred to his inventions as 99% perspiration and 1% inspiration. Being creatively gifted is hard work!

What are the elements of a creative attitude toward leadership?

- 1. Problem redefinition. Creative leaders do not define a problem the way everyone else does, simply because everyone else defines the problem that way. They decide on the exact nature of the problem using their own judgment. Most importantly, they are willing to defy the crowd in defining a problem differently from the way others do (Sternberg, 2002a; Sternberg & Lubart, 1995). Gifted leaders are more willing to redefine problems and better able to do so. For example, the Founding Fathers originally conceived of the problem of an oppressive British government as one of how to minimize the burdens imposed by the British monarchy. Finding that that they were unable sufficiently to alleviate this burden, they redefined the problem as one of how to shake off the monarchy entirely.
- Problem analysis. Creative leaders are willing to analyze
 whether their solution to the problem is the best one possible. Gifted leaders are more willing to analyze their own
 decisions and better see their strengths and weaknesses.
- 3. Selling a solution. Creative leaders realize that creative ideas do not sell themselves; rather, creators have to decide to sell their ideas and then decide to put in the effort to do so. Gifted leaders are better salespeople. They persuade others of the value of their ideas and to follow those ideas. They thus need to be able to articulate the value of their ideas in a clear and persuasive way.
- 4. Recognition of how knowledge can both help and hinder creative thinking. Creative leaders realize that knowledge can hinder as well as facilitate creative thinking (see also Frensch & Sternberg, 1989; Sternberg, 1985). Sometimes leaders become entrenched and susceptible to tunnel vision, letting their expertise hinder rather than facilitate their exercise of leadership. Gifted leaders are more likely to recognize their own susceptibility to entrenchment and take steps to battle against it, such as seeking able advisors, new ideas from novices, and so forth.
- Willingness to take sensible risks. Creative leaders recognize that they must decide to take sensible risks, which can lead them to success but also can lead them, from time to time, to failure (Lubart & Sternberg, 1995). Gifted leaders

- are more willing to take large risks and to fail as often as they need in order to accomplish their long-term goals.
- 6. Willingness to surmount obstacles. Creative leaders are willing to surmount the obstacles that confront anyone who decides to defy the crowd. Such obstacles result when those who accept paradigms confront those who do not (Kuhn, 1970; Sternberg & Lubart, 1995). All leaders encounter obstacles. Curiously, gifted leaders are particularly susceptible to obstacles, because they often want to move followers more quickly and further than the followers might be ready for. The gifted leader needs great resilience in order to accomplish his or her goals.
- 7. Belief in one's ability to accomplish the task at hand. Creative leaders believe in their ability to get the job done. This belief is sometimes referred to as self-efficacy (Bandura, 1996). Gifted leaders believe in themselves and their ideas—not necessarily in the value of every single idea, but in the value of their overall strategy for leadership.
- 8. Willingness to tolerate ambiguity. Creative leaders recognize that there may be long periods of uncertainty during which they cannot be certain they are doing the right thing or that what they are doing will have the outcome they hope for. The more gifted the leaders, the greater the ambiguity, because these leaders try to make large changes that can create shock waves for followers but also for themselves.
- 9. Willingness to find extrinsic rewards for the things one is intrinsically motivated to do. Creative leaders almost always are intrinsically motivated for the work they do (Amabile, 1983, 1996). Creative leaders find environments in which they receive extrinsic rewards for the things they like to do anyway. Gifted leaders almost always love what they do.
- 10. Continuation of intellectual growth rather than stagnation. Creative leaders do not get stuck in their patterns of leadership. Their leadership evolves as they accumulate experience and expertise. They learn from experience rather than simply letting its lessons pass them by. Gifted leaders do not flame out as time passes them by. Rather, they adapt to changing circumstances.

Types of Creative Leadership

The creative ideas leaders propose can be of different types (Sternberg, 1999b; Sternberg, Kaufman, & Pretz, 2002). Consider each type of leadership in turn (Sternberg, Kaufman, & Pretz, 2003).

Conceptual replication. This type of leadership is an attempt to show that a field or organization is in the right place at the right time. The leader therefore attempts to maintain it in that place. The view of the leader is that the organization is where it needs to be. The leader's role is to keep it there. The replicative leader metaphorically pedals in place, as with a stationary bicycle. This type of leadership is only minimally creative; it is a limiting case. The creativity is in applying a past model to an ever-changing environment. An example of a conceptual replication is the creation of a Mercury version of a Ford car. It is almost the same car, with a different label.

Replicative leadership is likely to be most successful during periods of relative stability, both in terms of consumer demands and in terms of competitive threats. In times of flux, the kind of leader that worked before may not work again and the organization may lose preeminence by selecting a leader like the last one.

Redefinition. This type of leadership is an attempt to show

that a field or organization is in the right place but not for the reason(s) that others, including previous leaders, think it is. The current status of the organization thus is seen from a different point of view. Metaphorically, this type of leadership is like riding a bicycle in a circle, so that one returns to where one is but sees the same location from a different vantage point. Redefiners often end up taking credit for ideas of others because they find a better reason to implement the others' ideas, or say they do. This type of leadership is only, on average, slightly more creative than replicative leadership. The creativity is in realizing how to redefine what the previous leader did. An example of a redefinition was the selling of aspirin as a preventative measure for heart attacks and not just as a pain remedy. The product remained the same, but its function was seen as changed.

Corward incrementation. This type of leadership is an attempt to lead a field or an organization forward in the direction it already is going. Most leadership is probably forward incrementation. In such leadership, one takes the helm with the idea of advancing the leadership program of one's successor. The promise is of progress through continuity. Creativity through forward incrementation is probably the type most easily recognized and appreciated as creativity. Because it extends existing notions, it is seen as creative. Because it does not threaten the assumptions of such notions, it is not rejected as useless or even harmful. Forward incrementations tend to be successful when times are changing in relatively predictable and incremental ways. The times thus match the leadership strategy, whether in terms of leadership of people or leadership of products. When times change unpredictably, leaders may find that their strategies no longer work. Examples of forward incrementations can be seen in successive generations of computer chips, which are faster than the earlier chips but still build on the same technology.

Advance forward incrementation. This type of leadership is an attempt to move an organization forward in the direction it is already going, but by moving beyond where others are ready for it to go. The leader moves the organization ahead at a very fast clip. Advance forward incrementations usually are not successful at the time they are attempted, because followers in fields and organizations are not ready to go where the leader wants to lead. It may be that significant portions of them may not wish to go to that point, in which case followers form an organized and sometimes successful source of resistance. The fax machine, when it was originally introduced, was an advance forward incrementation. People were simply not ready for it. It was not until some years after its introduction that it actually became widely used.

Redirection. This type of leadership is an attempt to redirect an organization, field, or product line from where it is headed toward a different direction. The leader decides that the direction in which the organization currently is moving is less than adaptive, and so redirects the organization elsewhere. Redirective leaders need to match to environmental circumstances to succeed (Sternberg & Vroom, 2002). If they do not have the luck of matching environmental circumstances, their best intentions may go awry. Under Louis Gerstner, IBM transformed itself from a company that specialized in making computers, especially mainframe computers, to a company that specialized in information-technology services. The company as it had been was dying and Gerstner redirected it. Even more recently, under Sam Palmisano, it sold its personal-computer division to a Chinese company, Lenovo. The transformation thus became complete.

Reconstruction/redirection. This type of creative leader-

ship is an attempt to move a field, an organization, or a product line back to where it once was (a reconstruction of the past) so that it may move onward from that point, but in a direction different from the one it had taken previously. Reconstruction/redirection tends to be successful when an organization had strong leadership, then gets a weak leader who takes the organization in the wrong direction. The reconstruction/redirection becomes an attempt to return to a safe, or at least more nearly secure, harbor. Neo-Marxists are attempting to reconstruct and redirect by returning to a philosophy that has, to a large extent, gone out of fashion.

Reinitiation. This type of leadership is an attempt to move a field, organization, or product line to a different, as yet unreached starting point and then to move from that point. Reinitiation is appropriate when an organization must either entirely transform itself or die. For example, an organization that at one time made horse-drawn carriages would probably have had to reinitiate itself or die in the face of modern transportation. The electric clothes drier was a reinitiation vis à vis the clothesline. It used a completely different technology from air currents—electricity or gas—to dry clothes.

Synthesis. In this type of creative leadership, the creator integrates two ideas that previously were seen as unrelated or even as opposed. What formerly were viewed as distinct ideas now are viewed as related and capable of being unified. Integration is a key means by which progress is attained in the sciences. It represents neither an acceptance nor a rejection of existing paradigms, rather a merger of them. Sometimes, syntheses occur across disciplines, as when psychologists began using neuroscientific methods in order to study the functioning of the brain during psychological tasks. The invention of the seaplane was also a synthesis.

Creative Leadership

What holds these kinds of leadership together is that they represent various forms of "propulsion" through a conceptual space. In other words, a creative leader wishes to move his or her followers from one point to another. In replication, the limiting case of creativity, the leader does not move at all in the space. In redefinition, the leader stays in the same place, but redefines the location (or axes pinpointing the location). In forward incrementation, the leader moves the organization forward in the conceptual space in the direction the organization already is going. In redirection, the leader moves the organization in a new direction in the space. In reconstruction/redirection, the leader moves backward in the space in the direction from which the organization came, and then redirects from a point already passed at an earlier time. In reinitiation, the leader changes both the starting point and direction in the space. And in synthesis, the leader essentially "adds" vectors in the space—combining the vector in which his or her organization is moving with that in which another organization is moving to synthesize their movements. Figure 1 illustrates the different kinds of propulsion.

Various forms of creative contributions engender different kinds of leadership. In particular, some leaders transform the nature of an organization or other institution, whereas others do not. At a given time, in a given place, transformation may or may not be called for. So transformation is not necessarily needed in every leadership situation. But the leaders who tend to be remembered over the course of history are probably, in most cases, those who transform organizations or, more generally, ways of thinking.

Types of Propulsion in Creative Leadership Forward Legend Redefinition Replication Advance Forward Incrementation Incrementation (Accelerated Forward Motion) (Stationary Motion) (Circular Motion) (Forward Motion) Where field is Where another field is Where creator wishes to move the field Where the field is tending to go Where the field 4 3 has been A new starting point Reconstruction/Redirection Reinitiation Redirection Integration (Divergent Motion) (Backward/Divergent Motion) (Reinitiated Motion) (Converging Motion) Where the creator is trying to move the field Where the field is tending to move in the absence of the creator's work Where the field has moved from Interconnecting of fields Redefining where the field is 5 7 6 8

Figure 1

One can compare the current view to that of transactional and transformational leadership. Transactional leaders emphasize the contractual relationship between leader and follower. For example, an employee might agree to engage in certain activities in exchange for certain rewards from the leadership of organization by which he is employed (Sashkin, 2004). Transformational leaders emphasize higher needs and a relationship in which followers may become leaders and leaders become moral agents (Burns, 1978; Sashkin). In the terms of Bass and Avolio (Bass, 1985, 1998, 2002; Bass, Avolio, & Atwater, 1996), transactional leaders are more likely to pursue options that preserve current paradigms. Transformational leaders, on the other hand, are more likely to pursue any options that reject current paradigms. They are crowd-defiers. In terms of Kuhn's (1970) theory of scientific revolutions, which applies to ideas outside the sciences as well, these are the leaders who revolutionize ways of thinking. In other words, transformational leaders exhibit a more creative leadership style than do transactional leaders.

One might ask whether gifted leaders are more likely to show one or another form of creativity. For example, are gifted leaders more likely to be reinitiators than replicators? Probably, on average, gifted leaders are more likely to adopt leadership styles that involve challenging existing paradigms. But two important points must be kept in mind.

First, the various types of creativity refer to kinds of novelty, not quality. Creativity, however, involves quality as well as novelty. One can have a very novel idea that is nevertheless not good. For example, terrorists destroyed the World Trade Center using passenger-filled airplanes. That was a novel idea, perhaps, but not a good idea. It lacked all the qualities of wisdom (to be discussed below). So even if the idea was a redirection of terrorism, it was not the act of a gifted leader in the sense of the WICS model. Stalin was ingenious in his methods for maintaining the reigns of power, but he was not a gifted leader in the sense of WICS because of his lack of wisdom. Hence, it is always important that there is a balance of

creativity, intelligence, and wisdom. Merely being a reinitiator, for example, does not make one a gifted leader.

Second, even the more mundane forms of creativity can lead someone to be labeled as gifted. As an example, violin makers have been trying for centuries to replicate the sound of a Stradivarius violin, without much luck. If a violin maker succeeded, he would be considered gifted indeed. If a leader were able to replicate within a society some of the creativity of the Renaissance in art, literature, and science, he or she might be considered to be quite gifted. So the type of creativity does not necessarily speak to whether a leader is gifted. Even more modest types of creativity can result in gifted performance.

Our research on creativity (Lubart & Sternberg, 1995; Sternberg & Lubart, 1995) has yielded several conclusions. First, creativity often involves defying the crowd, or as we have put it, buying low and selling high in the world of ideas. Creative leaders are good investors: They do what needs to be done, rather than just what other people or polls tell them to do. Second, creativity is relatively domain specific. Third, creativity is weakly related to traditional intelligence but certainly is not the same thing as academic intelligence. In general, it appears that there is a threshold of IQ for creativity, but it is probably about 120 or even lower (see review in Sternberg & O'Hara, 2000). So let's next consider the role of intelligence in leadership.

Intelligence

Intelligence would seem to be important to leadership, but how important? Indeed, if the conventional intelligence of a leader is too much higher than that of the people he or she leads, the leader may not connect with those people and may become ineffective (Williams & Sternberg, 1988). Intelligence, as conceived of here, is not just intelligence in its conventional

narrow sense—some kind of general factor, *g* (Demetriou, 2002; Jensen, 1998, 2002; Spearman, 1927; see essays in Sternberg, 2000b; Sternberg & Grigorenko, 2002) or as IQ (Binet & Simon, 1905; Kaufman, 2000; Wechsler, 1939), but in terms of the theory of successful intelligence (Sternberg, 1997, 1999c, 2002b). Successful intelligence is defined as the skills and attitudes needed to succeed in life, given one's own conception of success, within one's sociocultural environment. Successfully intelligent people balance adaptation to, shaping of, and selection of environments by capitalizing on strengths and compensating for or correcting weaknesses.

Taking this view, gifted leaders are not necessarily good at everything. Rather, they know their own strengths and weaknesses. They make the most of the strengths and find ways to deal with the weaknesses. Many a leader who had a spectacular fall did so because he or she was unable to control or counteract the effects of his or her weaknesses.

It is clear how intelligence would have aspects of skill. But how would it have aspects of an attitude? The main way is through the decision to apply it. Many leaders know better but their actions do not reflect their knowledge. Their minds tell them what they should be doing, but their motives—for power, for fame, for money, for sex, or whatever—lead them in different directions. Leaders often fail not because they are not smart enough, but because they choose not to use the intelligence they have. Two particular aspects of the theory of successful intelligence are especially relevant. These are academic and practical intelligence (see also Neisser, 1979).

Academic Intelligence

Academic intelligence refers to the memory and analytical skills and attitudes that in combination largely constitute the conventional notion of intelligence—the skills and attitudes needed to recall and recognize but also to analyze, evaluate, and judge information. There is a long history of research on the relation between these skills and attitudes, and leadership, going back at least to Stogdill (1948), and the results are ambiguous. Although there seems to be a modest correlation between intelligence and leadership effectiveness (Stogdill; see also essays in Riggio, Murphy, & Pirozzolo, 2002), the correlation is moderated by factors such as the stress experienced by the leader (Fiedler, 2002; Fiedler & Link, 1994), which apparently can even change the direction of the correlation. Intelligence matters to leadership under conditions of low stress but actually can impede performance under high stress. Experience is more helpful than intelligence to leaders under conditions of high stress, when they do not have the luxury of applying analytical techniques to the solution of problems and need to draw from experience to solve problems that confront them.

The literature on giftedness is in large part a literature on academic intelligence (see, e.g., essays in Sternberg & Davidson, 1986). Certainly academic intelligence is important to giftedness and to gifted leadership, but there are many people who have been gifted intellectually who have not become gifted leaders. They lacked the other qualities of WICS.

The academic skills and attitudes matter for leadership, because leaders need to be able to retrieve information that is relevant to leadership decisions (memory) and to analyze and evaluate different courses of action, whether proposed by themselves or by others (analysis). But a good analyst is not necessarily a good leader.

The long-time primary emphasis on *academic* intelligence (IQ) in the literature relating intelligence to leadership has, per-

haps, been unfortunate. Indeed, recent theorists have been emphasizing other aspects of intelligence, such as emotional intelligence (e.g., Caruso, Mayer, & Salovey, 2002; Goleman, 1998a, 1998b) or multiple intelligences (Gardner, 1995), in their theories. Here the emphasis is on practical intelligence (Hedlund et al., 2003; Sternberg, Forsythe et al., 2000; Sternberg & Hedlund, 2002), which has a somewhat different focus from emotional intelligence. Practical intelligence is a part of successful intelligence. Practical intelligence is a core component of leadership and thus will receive special attention here.

Practical Intelligence

Practical intelligence is the set of skills and attitudes to solve everyday problems by utilizing knowledge gained from experience in order purposefully to adapt to, shape, and select environments. It thus involves changing oneself to suit the environment (adaptation), changing the environment to suit oneself (shaping), or finding a new environment within which to work (selection). One uses these skills to manage oneself, manage others, and manage tasks.

Giftedness in "transactional leadership" (Avolio, Bass, & Jung, 1999; Bass, 1985, 1998, 2002; Bass, Avolio, & Atwater, 1996) derives, in large part although not exclusively, from the adaptive function of practical intelligence. Transactional leaders are largely adapters: They work toward the mutual fulfillment of essentially contractual obligations with their followers. The leaders typically provide contingent rewards, specifying role and task requirements and rewarding desired performance. Or the leaders may manage by exception, in which case they monitor the meeting of standards and intervene when these standards are not met.

Different combinations of intellectual skills engender different types of leadership. Leaders vary in their memory skills. analytical skills, and practical skills. A leader who is particularly strong in memory skills but not in the other kinds of skills may have a vast amount of knowledge at his or her disposal but may be unable to use it effectively. A leader who is particularly strong in analytical skills as well as memory skills may be able to retrieve information and analyze it effectively, but may be unable to convince others that his or her analysis is correct. A leader who is strong in memory, analytical, and practical skills is most likely to be effective in influencing others. But, of course, there exist leaders who are strong in practical skills but not in memory and analytical skills (Sternberg, 1997; Sternberg, Forsyth et al., 2000). In conventional terms, they are "shrewd" but not "smart." They may be effective or even gifted in getting others to go along with them, but they may end up leading these others down garden paths.

Gifted leaders need to be high in practical intelligence. Their creativity may help them generate wonderful ideas. But it will not ensure that they can implement the ideas or convince others to follow the ideas. Many creative leaders have ended up frustrated because they have been unable to convince others to follow up on their ideas. Many analytically intelligent leaders have been frustrated because they could analyze ideas well but could not persuade others of the value of their ideas.

Sternberg and his colleagues (Hedlund et al., 2003; Sternberg, Forsyth et al., 2000; Sternberg & Wagner, 1993; Sternberg, Wagner, & Okagaki, 1993; Sternberg, Wagner, Williams, & Horvath, 1995; Wagner, 1987; Wagner & Sternberg, 1985) have taken a knowledge-based approach to understanding practical intelligence. Individuals draw on a broad base of knowledge in solving practical problems, some of which is acquired

through formal training and some of which is derived from personal experience. Much of the knowledge associated with successful problem solving can be characterized as tacit. It is knowledge that may not be openly expressed or stated; thus individuals must acquire such knowledge through their own experiences. Furthermore, although people's actions may reflect their knowledge, they may find it difficult to articulate what they know. For their own leadership, what matters is not so much what tacit knowledge they can articulate, but how much of this knowledge they can apply. However, to serve as effective mentors, it helps greatly if they can articulate as well as act on this knowledge.

The main findings (reviewed in Sternberg, Forsythe et al., 2000) from tacit-knowledge research are that (a) it tends to increase with experience; (b) it correlates minimally and sometimes not at all with scores on tests of academic intelligence; (c) it does not correlate with personality; (d) it predicts job performance significantly; and (e) it provides significant incremental prediction over conventional academic-intelligence measures.

Wisdom

A leader can have all of the previously mentioned skills and attitudes and still lack an additional quality that, arguably, is the most important quality a leader can have, but that is, perhaps also the rarest. This additional quality is wisdom (see also Baltes & Staudinger, 2000). Wisdom is viewed here in terms of a proposed balance theory of wisdom (Sternberg, 1998b), according to which an individual is wise to the extent he or she uses successful intelligence, creativity, and knowledge as moderated by values to (a) seek to reach a common good, by (b) balancing intrapersonal (one's own), interpersonal (others'), and extrapersonal (organizational/institutional/spiritual) interests, (c) over the short and long term, to (d) adapt to, shape, and select environments. Wisdom is in large part a decision to use one's intelligence, creativity, and experience for a common good.

Wise leaders do not look out just for their own interests, nor do they ignore these interests. Rather, they skillfully balance interests of varying kinds, including their own, those of their followers, and those of the organization for which they are responsible. They also recognize that they need to align the interests of their group or organization with those of other groups or organizations because no group operates within a vacuum. Wise leaders realize that what may appear to be a prudent course of action over the short term does not necessarily appear so over the long term. Giftedness in wisdom is a matter of balance—skillful balance of the various interests and of the short and long terms in making decisions.

Land have been less than fully successful often have been so because they have ignored one or another set of interests. For example, Richard Nixon and Bill Clinton, in their respective cover-ups, not only failed to fulfill the interests of the country they led but also failed to fulfill their own interests. Their cover-ups ended up bogging down their administrations in scandals rather than allowing them to make the positive accomplishments they had hoped to make. Freud was a great leader in the fields of psychiatry and psychology, but his insistence that his followers (disciples) conform exactly to his own system of psychoanalysis led him to lose those disciples and the support they might have continued to lend to his efforts. He was an expert in interpersonal interests but not as applied to his own life. Napoleon lost sight of the extrapersonal interests that would have been best for his own country. His

disastrous invasion of Russia, which appears to have been motivated more by hubris than by France's need to have Russia in its empire, partially destroyed his reputation as a successful military leader and paved the way for his later downfall.

Unsuccessful leaders often show certain stereotyped fallacies in their thinking. Consider five such flaws (Sternberg, 2002a, 2002b). The first, the unrealistic-optimism fallacy occurs when leaders think they are so smart and effective that they can do whatever they want. The second, egocentrism fallacy, occurs when successful leaders start to think that they are the only ones who matter, not the people who rely on them for leadership. The third, *omniscience fallacy*, occurs when leaders think that they know everything and lose sight of the limitations of their own knowledge. People who commit this fallacy do not learn from mistakes and often ignore the advice of others. They and their team become susceptible to groupthink (Janis, 1972). The fourth, *omnipotence fallacy*, occurs when leaders think they are all-powerful and can do whatever they want. And the fifth, invulnerability fallacy, occurs when leaders think they can get away with anything, because they are too clever to be caught. Even if they are caught, they believe that they can get away with what they have done because of who they imagine themselves to be.

Leaders can be intelligent in various ways and creative in various ways, but it does not guarantee they are wise. Indeed, probably relatively few leaders at any level are particularly wise. Yet the few leaders who are (or were) wise to the point of being gifted—perhaps Nelson Mandela, Martin Luther King, Jr., Mahatma Gandhi, Winston Churchill, Mother Teresa—leave an indelible mark on the people they lead and, potentially, on history. It is important to note that wise leaders are probably usually charismatic, but charismatic leaders are not necessarily wise, as Hitler, Stalin, and many other charismatic leaders have demonstrated over the course of time.

[uch of the empirical data on wisdom has been col-✓ Lected by Paul Baltes and his colleagues (e.g., Baltes, Smith, & Staudinger, 1992; Baltes & Staudinger, 1993). Over time, they have collected a wide range of data showing the relevance of wisdom for gifted performance. For example, Staudinger, Lopez and Baltes (1997) found that measures of intelligence and personality as well as their interface overlap with but are not identical to measures of wisdom in terms of constructs measured and Staudinger, Smith, and Baltes (1992) showed that leading human services professionals outperformed a control group on wisdom-related tasks. The professionals thought more contextually in terms of life pragmatics than did the control participants. Staudinger and her colleagues also showed that older adults performed as well on such tasks as did younger adults, and that older adults did better on such tasks if there was a match between their age and the age of the fictitious characters about whom they made judgments. Baltes, Staudinger, Maercker, and Smith (1995) found that older individuals in leadership positions who were nominated for their wisdom performed as well as did clinical psychologists on wisdom-related tasks. Up to the age of 80, older adults performed as well on such tasks as did younger adults. In a further set of studies, Staudinger and Baltes (1996) found that performance settings that were ecologically relevant to the lives of their participants and that provided for actual or "virtual" interaction of minds increased wisdom-related performance substantially. These results suggest that part of wise leadership is achieving a meeting of minds, rather than merely imposing the view of the leader's mind on the minds of the followers.

Synthesis

One of the most gifted leaders of the 20th century was Nelson Mandela. He transformed South Africa from a repressive Apartheid state into a model of modern democracy. It did not become a country without problems. But if one looks at the alternative model provided by Robert Mugabe in Zimbabwe, economically, politically, and morally a failed state, one can see how badly things could have gone.

What made Nelson Mandela so successful? He had the creativity to envision a transformation of South Africa from a state that deprived the large majority of its citizens of human rights to one that would embrace human rights for all, including the former oppressors. He had the analytical intelligence to evaluate his plan and to fine-tune it as it was implemented. He had the practical intelligence to implement the plan with great success and to persuade a very broad range of constituencies that his plan was a good one. Such persuasion was no mean feat, especially in largely preventing a mass exodus of White people and in convincing Black people that reconciliation rather than retribution was the key to success in the new democratic state. And he had the wisdom to let go of the massive abuse of human rights to which he himself had been subjected in prison, and to propose a plan that was in the common good for all stakeholders.

Gifted leadership requires each of the elements of WICS. Without creativity, one cannot truly be a gifted leader. Leaders constantly confront novel tasks and situations. If they lack the creativity to deal with them effectively, they fail. Mugabe, in place of creating a new vision, essentially copied the model of divisive dictators such as Stalin, pitting one group against the other, and has presided over a state in radical decline on all measures of well-being. Without the application of a high level of intelligence, one cannot be a gifted leader. Any leader may have creative ideas that are either flawed from the outset or that fail in implementation. The leader needs the intelligence to distinguish good from bad ideas, and to ensure that followers follow rather than ignore or rebel against the leader. Without wisdom, a leader may choose a path that benefits his or her cronies but few others, as in the case of Mugabe or Saddam Hussein. Gifted leadership requires WICS.

Conclusion

There probably is no model of leadership that will totally capture all of the many facets—both internal and external to the individual—that make for a gifted leader. The WICS model may come closer than some models, however, in capturing dimensions that are important. It is based on the notion that a gifted leader decides to synthesize wisdom, intelligence, and creativity.

gifted leader needs exceptional creative skills and Lattitudes to come up with ideas, academic skills and attitudes to decide whether they are good ideas, practical skills and attitudes to make the ideas work and convince others of the value of the ideas, and wisdom-based skills and attitudes to ensure that the ideas are in the service of the common good rather than just the good of the leader or perhaps some clique of family members or followers. A leader lacking in creativity will be unable to deal with novel and difficult situations, such as a new and unexpected source of hostility. A leader lacking in academic intelligence will not be able to decide whether his

or her ideas are viable, and a leader lacking in practical intelligence will be unable to implement his or her ideas effectively. An unwise leader may succeed in implementing ideas but may end up implementing ideas that are contrary to the best interests of the people he or she leads.

The WICS model is of course related to many other models. It incorporates elements of transformational as well as transactional leadership (Bass, 1998; Bass & Avolio, 1994; Bass, Avolio, & Atwater, 1996), emotionally intelligent leadership (Goleman, 1998b), visionary leadership (Sashkin, 1988, 2004), and charismatic leadership (Conger & Kanugo, 1998; Weber, 1968). Eventually a model of leadership will appear that integrates all the strengths of these various models. In the meantime, the WICS model seems like a start.

We may look at WICS as a model just for adults, but that is not what it is at all. The WICS model suggests we need to broaden the way we conceive of giftedness in childhood. Giftedness is not just a matter of ability-test scores or of grades. The state of the world makes clear that what the nations of the world need most is gifted leaders, not just individuals who get good grades or good test scores, or who have the skills that will get them into elite colleges, which in turn will prepare them to make a lot of money. The United States is so individualistic that it is working against its own self-interests. We risk developing successive generations of self-interested gifted individuals who view their gifts primarily as a means to serve their own needs and desires. The country needs leaders, and WICS provides a model for developing leadership in its young.

Preparation of this article was supported by Contract MDA 903-92-K-0125 from the U.S. Army Research Institute, by Grant Award # 31-1992-701 from the United States Department of Education, Institute for Educational Sciences, as administered by the Temple University Laboratory for Student Success, and by Grant R206R00001 from the same organization. Grantees undertaking such projects are encouraged to express freely their professional judgment. This article, therefore, does not necessarily represent the position or policies of the U. S. Army Research Institute or the U.S. Department of Education, and no official endorsement should be inferred.

REFERENCES

Amabile, T. M. (1983). The social psychology of creativity. New York: Springer-Verlag. Amabile, T. M. (1996). Creativity in context. Boulder, CO: Westview.

Antonakis, J., Cianciolo, A., & Sternberg, R. J. (Eds.) (2004). Handbook of leadership. Thousand Oaks, CA: Sage.

Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Reexamining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. Journal of Occupational and Organizational Psychology, 72, 441-462.

Baltes, P. B., Smith, J., & Staudinger, U. M. (1992). Wisdom and successful aging. In T. Sonderegger (Ed.), Nebraska Symposium on Motivation (Vol. 39, pp. 123-167). Lincoln, NE: University of Nebraska Press.

Baltes, P. B., & Staudinger, U. M. (1993). The search for a psychology of wisdom. Current Directions in Psychological Science, 2, 75-80.

Baltes, P. B., & Staudinger, U. M (2000). Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. American Psychologist, 55, 122-135.

Baltes, P. B., Staudinger, U. M., Maercker, A., & Smith, J. (1995). People nominated as wise: A comparative study of wisdom-related knowledge. Psychology and Aging, 10, 155-166.

Bandura, A. (1996). Self-efficacy: The exercise of control. New York: Freeman. Bass, B. M. (1985). Leadership and performance beyond expectations. New York: Free

Bass, B. M. (1998). Transformational leadership: Industrial, military, and educational impact. Mahwah, NJ: Lawrence Erlbaum.

Bass, B. M. (2002). Cognitive, social, and emotional intelligence of transformational leaders. In R. E. Riggio, S. E. Murphy, & F. J. Pirozzolo, Multiple intelligences and lead-ership (pp. 105-118). Mahwah, NJ: Lawrence Erlbaum.

Bass, B. M., & Avolio, B. J. (Eds.) (1994). Improving organizational effectiveness through transformational leadership. Thousand Oaks, CA: Sage.

Bass, B. M., Avolio, B. J., & Atwater, L. (1996). The transformational and transactional leadership of men and women. *International Review of Applied Psychology*, 45, 5-34.

Binet, A., & Simon, T. (1905). Méthodes nouvelles pour le diagnostic du niveau intellectuel des anormaux [New methods for the diagnosis of the intellectual level of subnormals]. L'Année Psychologique, 11, 191-336.

Burns, J. M. (1978). Leadership. New York: Harper & Row.
Caruso, D. R., Mayer, J. D., & Salovey, P. (2002). Emotional intelligence and emotional leadership. In R. E. Riggio, S. E. Murphy, & F. J. Pirozzolo, Multiple intelligences and leadership (pp. 55-74). Mahwah, NJ: Lawrence Erlbaum.

Conger, J. A., & Kanugo, R. N. (1998). Charismatic leadership in organizations. Thousand Oaks, CA: Sage.

- Demetriou, A. (2002). Tracing psychology's invisible g-iant and its visible guards. In R. J. Sternberg & E. L. Grigorenko (Eds.), The general factor of intelligence: How general is it? (pp. 3-18). Mahwah, NJ: Erlbaum.
- Fiedler, F. E. (2002). The curious role of cognitive resources in leadership. In R. E. Riggio, S. E. Murphy, & F. J. Pirozzolo, Multiple intelligences and leadership (pp. 91-104). Mahwah, NJ: Lawrence Erlbaum.
- Fiedler, F. E. & Link, T.G. (1994). Leader intelligence, interpersonal stress, and task performance. In R. J. Stemberg & R. K. Wagner (Eds.). Mind in context: Interactionist perspectives on human intelligence (pp. 152-167). New York: Cambridge University
- Frensch, P. A., & Sternberg, R. J. (1989). Expertise and intelligent thinking: When is it worse to know better? In R. J. Sternberg (Ed.), Advances in the psychology of human intelligence (pp. 157-188). Hillsdale, NJ: Lawrence Erlbaum.
- Gardner, H. (1995). Leading minds. New York: BasicBooks.
- Goleman, D. (1998a). Working with emotional intelligence. New York: Bantam.
- Goleman, D. (1998b). What makes a good leader? Harvard Business Review, November-December, 93-102.
- Grigorenko, E. L., & Sternberg, R. J. (Eds.). (2001). Family environment and intellectual functioning: A life-span perspective. Mahwah, NJ: Lawrence Erlbaum. Hedlund, J., Forsythe, G. B., Horvath, J. A., Williams, W. M., Snook, S., & Sternberg, R.
- J. (2003). Identifying and assessing tacit knowledge: Understanding the practical intelligence of military leaders. Leadership Quarterly, 14, 117-140.
- Janis, I. L. (1972). Victims of groupthink. Boston: Houghton Mifflin.
- Jensen, A. R. (1998). The g factor. Westport, CT: Greenwood/Praeger. Jensen, A. R. (2002). Psychometric g: Definition and substantiation. In R. J. Sternberg &
 - E. L. Grigorenko (Eds.), The general factor of intelligence: How general is it? (pp. 39-53). Mahwah, NJ: Erlbaum.
- Kaufman, A. (2000). Tests of intelligence. In R. J. Sternberg (Ed.), Handbook of intelligence (pp. 445-476). New York: Cambridge University Press.
 Kuhn, T. S. (1970). The structure of scientific revolutions (2nd ed.). Chicago: University of Chicago Press.
- Lubart, T. I., & Sternberg, R. J. (1995). An investment approach to creativity: Theory and data. In S. M. Smith, T. B. Ward, & R. A. Finke (Eds.), The creative cognition approach (pp. 269-302). Cambridge, MA: MIT Press.
 Neisser, U. (1979). The concept of intelligence. In R. J. Sternberg & D. K. Detterman
- (Eds.), Human intelligence: Perspectives on its theory and measurement (pp. 179-189). Norwood, NJ: Ablex.
- Norwood, N.: Adiex.
 Riggio, R. E., Murphy, S. E., & Pirozzolo, F. J. (2002), Multiple intelligences and leadership. Mahwah, NJ: Lawrence Erlbaum.
 Sashkin, M. (1988). The visionary leader. In J. A. Conger & R. N. Kanugo (Eds.), Charismatic leadership: The elusive factor in organizational effectiveness (pp. 122-160).
- matic teadership: Ine emistive factor in organizational effectiveness (FP) 2-2 San Francisco: Jossey-Bass.

 Sashkin, M. (2004). Transformational leadership approaches: A review and synthesis. In J. Antonakis, A. Cianciolo, & R. J. Sternberg (Eds.), The nature of leadership (pp. 171-196). Thousand Oaks, CA: Sage.

 Spearman, C. (1927). The abilities of man. London: Macmillan.

 Staudinger, U. M., & Baltes, P. M. (1996). Interactive minds: A facilitative setting for wisdom-related performance? Journal of Personality and Social Psychology, 71, 746-762
- Staudinger, U. M., Lopez, D. F., & Baltes, P. B. (1997). The psychometric location of wisdom-related performance: Intelligence, personality, and more? *Personality & Social Psychology Bulletin*, 23, 1200-1214.
- Staudinger, U. M., Smith, J., & Baltes, P. B. (1992). Wisdom-related knowledge in life review task: Age differences and the role of professional specialization. Psychology and Aging, 7, 271-281.

 Sternberg, R. J. (1985). Beyond IQ: Toward a triarchic theory of intelligence. New York:
- Cambridge University Press.
- Sternberg, R. J. (1997). Successful intelligence. New York: Plume.
- Sternberg, R. J. (1998a). Abilities are forms of developing expertise. Educational Researcher, 27, 11-20.
- Sternberg, R. J. (1998b). A balance theory of wisdom. Review of General Psychology,
- Sternberg, R. J. (1999a). Intelligence as developing expertise. Contemporary Educational Psychology, 24, 259-375.
- Sternberg, R. J. (1999b). A propulsion model of types of creative contributions. Review of General Psychology, 3, 83-100.
- Sternberg, R. J. (1999c) The theory of successful intelligence. Review of General Psychology, 3, 292-316.

- Sternberg, R. J. (2000a). Creativity is a decision. In B. Z. Presseisen (Ed.), Teaching for intelligence II: A collection of articles (pp. 83-103). Arlington Heights, IL: Skylight Training and Publishing.
- Sternberg, R. J. (Ed.) (2000b). Handbook of intelligence. New York: Cambridge University Press.
- Sternberg, R. J. (Ed.) (2002a). Psychologists defying the crowd. Washington, DC: American Psychological Association.
- Sternberg, R. J. (2002b). Successful intelligence: A new approach to leadership. In R. E. Riggio, S. E. Murphy, & F. J. Pirozzolo (Eds.), Multiple intelligences and leadership (pp. 9-28). Mahwah, NJ: Lawrence Erlbaum.
- Sternberg, R. J. (2003a). What is an expert student? Educational Researcher, 32(8), 5-9. Sternberg, R. J. (2003b). WICS: A model for leadership in organizations. Academy of Management Learning and Education, 2, 386-401.
- Sternberg, R. J. (2003c). Wisdom, intelligence, and creativity, synthesized. New York: Cambridge University Press.
- Sternberg, R. J., & Davidson, J. E. (Eds.). (1986). Conceptions of giftedness. New York: Cambridge University Press.
- Sternberg, R. J., Forsythe, G. B., Hedlund, J., Horvath, J., Snook, S., Williams, W. M., Wagner, R. K., & Grigorenko, E. L. (2000). Practical intelligence in everyday life. New York: Cambridge University Press.
- Sternberg, R. J., & Grigorenko, E. L. (Eds.) (1997). Intelligence, heredity, and environment. New York: Cambridge University Press.
- Sternberg, R. J., & Grigorenko, E. L. (1999). Myths in psychology and education regarding the gene environment debate. Teachers College Record, 100, 536-553.
- Sternberg, R. J., & Grigorenko, E. L. (Eds.). (2001). Environmental effects on cognitive abilities. Mahwah, NJ: Lawrence Erlbaum.
- Sternberg, R. J., & Grigorenko, E. L. (Eds.) (2002). The general factor of intelligence: How general is it? Mahwah, NJ: Erlbaum.
- Sternberg, R. J., & Hedlund, J. (2002). Practical intelligence, g, and work psychology. Human Performance, 15, 143-160.
- Sternberg, R. J., Kaufman, J. C., & Pretz, J. E. (2002). The creativity conundrum: A propulsion model of kinds of creative contributions. Philadelphia, PA: Psychology
- Sternberg, R. J., Kaufman, J. C., & Pretz, J. E. (2003). A propulsion model of creative leadership. Leadership Quarterly, 14, 453-473.
- Sternberg, R. J., & Lubart, T. I. (1995). Defying the crowd: Cultivating creativity in a culture of conformity. New York: Free Press.
- Sternberg, R. J., & Lubart, T. I. (1996). Investing in creativity. American Psychologist, 51(7), 677-688.
- Sternberg, R. J., & O'Hara, L. A. (2000). Intelligence and creativity. In R. J. Sternberg (Ed.), Handbook of intelligence (pp. 609-628). New York: Cambridge University
- Sternberg, R. J., & Vroom, V. H. (2002). The person versus the situation in leadership. Leadership Quarterly, 13, 301-323.
- Sternberg, R. J., & Wagner, R. K. (1993). The g-ocentric view of intelligence and job performance is wrong. Current Directions in Psychological Science, 2(1), 1-4.
- Sternberg, R. J., Wagner, R. K., & Okagaki, L. (1993). Practical intelligence: The nature and role of tacit knowledge in work and at school. In H. Reese & J. Puckett (Eds.), Advances in lifespan development (pp. 205-227). Hillsdale, NJ: Lawrence Erlbaum Associates
- Sternberg, R. J., Wagner, R. K., Williams, W. M., & Horvath, J. A. (1995). Testing common sense. American Psychologist, 50(11), 912-927.
- Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. Journal of Psychology, 25, 35-71.
- Wagner, R. K. (1987). Tacit knowledge in everyday intelligent behavior. Journal of Personality & Social Psychology, 52(6), 1236-1247.
- Wagner, R. K., & Sternberg, R. J. (1985). Practical intelligence in real-world pursuits: The role of tacit knowledge. Journal of Personality and Social Psychology, 49, 436-458.
- Weber, M. (1968). Max Weber on charisma and institutional building (S. N. Eisenstadt, Ed.). Chicago: University of Chicago Press.
- Wechsler, D. (1939). The measurement of adult intelligence. Baltimore: Williams & Wilkins
- Williams, W. M., & Sternberg, R. J. (1988). Group intelligence: Why some groups are better than others. Intelligence, 12, 351-377.