

Making Emotionally Intelligent Work life: A Technical Report on the Training Approaches to be taken to build Emotionally Intelligent Workforce.

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Current interest in "emotional intelligence" has raised the question of whether it is possible to improve the social and emotional competence of adult workers. Research in training and development, sports psychology, and behaviour change suggests that it is possible, but the typical approach used in corporate training programs usually is flawed. Social and emotional learning is different from cognitive and technical learning, and it requires a different approach to training and development.

This report presents 22 guidelines for developing emotional intelligence in organizations, based on the best knowledge available on how to promote social and emotional learning. We have estimated that Global business each year loses between 5.6 and 16.8 billion dollars by not consistently following these guidelines. The basis for this estimate can be found in the last section of the report.

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Bringing Emotional Intelligence to the Workplace

When the book, Emotional Intelligence, appeared in 1995, many business leaders agreed with the basic message that success is strongly influenced by personal qualities such as perseverance, self-control, and skill in getting along with others(1). They could point to "super sales persons" who had an uncanny ability to sense what was most important to the customers and to develop a trusting relationship with them. They could point to customer service employees who excelled when it came to helping angry customers to calm down and be more reasonable about their problems with the product or service. And they also

could point to brilliant executives who did everything well except get along with people, or to managers who were technically brilliant but could not handle stress, and whose careers stalled because of these deficiencies. Business leaders well understood how valuable these "emotionally intelligent" employees are to an enterprise(2).

But what about the many workers who lack these important emotional competencies? Is it possible for adults to become more socially and emotionally competent? Many business leaders are less certain about this question. For instance, the dean of a major business school, when asked about the importance of emotional intelligence at work, enthusiastically agreed that it was crucial. But when we asked him how his school attempted to improve the emotional intelligence of MBA students, he said, "We don't do anything. I don't think that our students' emotional intelligence can be improved by the time they come here. They're already adults, and these qualities are developed early in life."

On the other hand, there are those who seem to claim that they can raise the emotional intelligence of a whole group of employees in a day or less. Scores of consultants now are selling workshops and seminars designed to help people become more emotionally competent and socially skilled. Some of these programs are quite good, but others make unrealistic claims. The worst ones are those that involve a heavy reliance on inspirational lectures or intense, short-lived experiences – and little else.

So who is right – the sceptics who believe that nothing can be done to improve emotional competence after the age of 15, or the hucksters who claim that they can turn emotional dunces into emotional Einsteins in an afternoon? As usual, the answer lies somewhere in between.

A growing body of research on emotional learning and behaviour change suggests that it is possible to help people of any age to become more emotionally intelligent at work.

However, many programs designed to do so fail to recognize the difference between two types of learning.

Two Types of Learning

Training and development efforts in industry have not always distinguished between cognitive learning and emotional learning, but such a distinction is important for effective practice(3). For instance, consider the example of the engineer whose career was stymied because he was shy, introverted, and totally absorbed in the technical aspects of his job. Through cognitive learning, he might come to understand that it would be better for him to consult other people more, make connections, and build relationships. But just knowing he should do these things would not enable him to do them. The ability to do these things depends on emotional competence, which requires emotional learning as well as cognitive learning.

Emotional incompetence often results from habits deeply learned early in life. These automatic habits are set in place as a normal part of living, as experience shapes the brain. As people acquire their habitual repertoire of thought, feeling, and action, the neural connections that support these are strengthened, becoming dominant pathways for nerve impulses. Connections that are unused become weakened, while those that people use over and over grow increasingly strong(4). When these habits have been so heavily learned, the underlying neural circuitry becomes the brain's default option at any moment – what a person does automatically and spontaneously, often with little awareness of choosing to do so. Thus, for the shy

engineer, diffidence is a habit that must be overcome and replaced with a new habit, self-confidence.

Emotional capacities like empathy or flexibility differ from cognitive abilities because they draw on different brain areas. Purely cognitive abilities are based in the neocortex. But with social and emotional competencies, additional brain areas are involved, mainly the circuitry that runs from the emotional centres – particularly the amygdala – deep in the centre of the brain up to the pre frontal lobes, the brain's executive centre. Effective learning for emotional competence has to re-tune these circuits.

Cognitive learning involves fitting new data and insights into existing frameworks of association and understanding, extending and enriching the corresponding neural circuitry. But emotional learning involves that and more – it requires that we also engage the neural circuitry where our social and emotional habit repertoire is stored. Changing habits such as learning to approach people positively instead of avoiding them, to listen better, or to give feedback skilfully, is a more challenging task than simply adding new information to old.

Motivational factors also make social and emotional learning more difficult and complex than purely cognitive learning. Emotional learning often involves ways of thinking and acting that are more central to a person's identity. A person who is told, for instance, that he should learn a new word processing program usually will become less upset and defensive than if he is told that he should learn how to better control his temper or become a better listener. The prospect of needing to develop greater emotional competence is a bitter pill for many of us to swallow. It thus is much more likely to generate resistance to change.

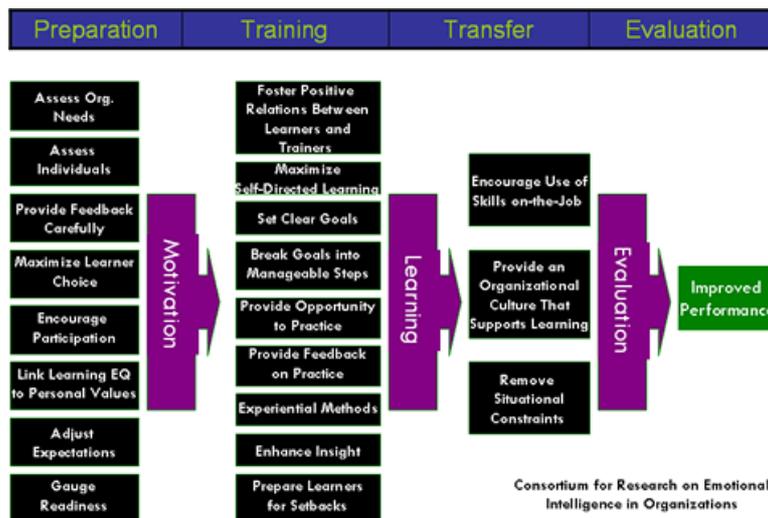
What this means for social and emotional learning is that one must first unlearn old habits and then develop new ones. For the learner, this usually means a long and sometimes difficult process involving much practice. One-day seminars just won't do it(5).

Those who study training "have tended to consider all training the same, without regard to the purpose of the training or the type of learning involved(6)." Some of the previous thinking about training, based largely on cognitive learning, is valid for social and emotional learning as well. However, the principles for social and emotional learning differ greatly from those that apply to purely cognitive abilities. A better source of guidance comes from research that examines social and emotional change processes more directly. Such research comes from many different fields, including sports psychology, psychotherapy and behaviour change, and personal development. This research suggests a set of guidelines for the design of effective social and emotional learning(7). These guidelines point to components that are additive and synergistic; to be effective, social and emotional learning experiences need not adhere to all of these guidelines, but the chances for success increase with each one that is followed.

Guidelines for Effective Social and Emotional Learning: An Overview

The guidelines for social and emotional training are presented schematically in Figure 1. They are arranged in the form of a flow chart that describes the optimal process for helping individuals to increase their emotional competence in personal and interpersonal contexts.

FIGURE 1 The Optimal Process for Developing Emotional Intelligence in Organizations



The flow chart suggests that there are four basic phases to the training process. The first occurs even before the individual begins formal training. This initial phase, which is crucial for effective social and emotional learning, involves preparation for change. This preparation occurs at both the organizational and individual levels. The second phase, training, covers the change process itself. It includes the processes that help people change the way in which they view the world and deal with its social and emotional demands. The third phase, transfer and maintenance, addresses what happens following the formal training experience. The final phase involves evaluation. Given the current state of knowledge about social and emotional learning, the complexity of programs designed to promote such learning and the great unevenness in the effectiveness of existing programs, evaluation always should be part of the process.

Phase One: Preparation for Change

Motivation is especially important in social and emotional learning(8). Such learning can be challenging for adults who already have established a way of relating to themselves and others, and people need to be strongly committed to the change process for an extended period of time. So what can managers and trainers do to increase learners' motivation prior to the start of the change process? The first set of guidelines addresses this question.

1. Assess the Organization's Needs. Good training begins with a needs assessment(9). For social and emotional training, there are two particular challenges that must be addressed at this point in the process. First, many people in the organization will be sceptical about the link between emotional intelligence and the bottom line. A systematic and rigorous study can help show that such a link exists. For instance, in one large financial services company, there was considerable scepticism about the value of training in "emotional competence" until top executives saw the results of a study showing that financial advisers who coped better with the emotional aspects of work with clients sold more life insurance policies. Once they saw the connection between this particular type of emotional competence and the bottom line, the executives encouraged advisers to participate in an emotional competence training program.

The second challenge in applying this guideline to social and emotional training efforts is to identify all of the particular competencies that are important for success.

Sometimes it is easy to miss crucial ones. For instance, an initial needs assessment in one airline began with

a consideration of the airline's business strategy. Because airlines are similar in price structure, a competitive advantage depends particularly on how well passengers are treated by airline personnel. As a result, the way in which flight attendants handled passengers became the focus for training efforts. Research then indicated that superior performers had two types of competencies: self-management (resilience, efficiency, adaptability) and interpersonal (caring for and managing customers well, and teamwork). However, two other competencies, self-awareness and empathy, help support the self-management and interpersonal competencies. So the training program also needed to include these. Only a careful assessment of the work situation, informed by an understanding of the nature of emotional competence, enabled the consultant to identify both the surface-level and deeper competencies that affected performance.

2. Assess Personal Strengths and Limits. Two challenges confront those who wish to assess the social and emotional competence of individuals. First, people usually are less aware of skill weaknesses in the social and emotional domains(10). They may realize, for example, that the interpersonal aspects of leading a work group are difficult and frustrating. But they may not be able to pinpoint the emotional skills they need in order to improve their functioning in this area. They are probably even less aware of the underlying attitudes and ways of thinking that get them into trouble, or how those ways of thinking trigger complex emotional response patterns that impede their effectiveness in dealing with difficult employees, customers, or co-workers

Second, these competencies are manifested primarily in social interaction. Therefore, the best approach usually involves ratings by those who interact with the person. However, the beliefs, motives, and feelings of the rater influence ratings of social and emotional competence. The boss's view of a manager's self-awareness or ability to empathize may be very different from the perspective of the manager's peers and subordinates. The best assessment approach for initiating social and emotional learning thus is usually based on multiple ratings conducted from multiple perspectives, such as 360-degree assessments that include boss, peer, and subordinate ratings(11).

"Three-sixty feedback" now is used regularly in industry for a variety of purposes, and organizations vary in how well they use this tool. When not managed well, it can create resistance rather than readiness. In the most effective development programs, the participants are helped to review these ratings and then use them to identify the competencies that should be the focus of training efforts. Ultimately, however, the motivating power of an assessment is affected by how credible it is to the learners. The trainees need to have faith in the assessment method(12).

3. Provide Feedback with Care. Motivation for change can be enhanced when people are given feedback on the assessment results(13). However, there are many pitfalls in giving people feedback on their social competence. These competencies are closely linked to a person's identity and self-esteem. It is one thing, for example, to be told that you need to work on the back-swing of your chip shot in golf, but it is quite another to be told that you need to handle stress better. If the feedback is not provided with sensitivity and skill, people often become defensive.

People are more likely to respond positively to feedback when they trust and respect the person who gives it. People also are more likely to be motivated to

change when they believe that the feedback is constructive and accurate(14). and they are helped to identify the specific steps they can take to improve(15). People also need sufficient time to think about the information and its implications. And in social and emotional development efforts, it is especially important that the feedback occur in an atmosphere of safety.

The understood purpose of the feedback also affects its motivational and emotional impact. When, for instance, it is used for appraisal purposes, and one's supervisor gives the feedback, the impact often is negative. On the other hand, when it is used for development purposes and the person giving the feedback is viewed as a disinterested individual whose motivation is to help, then the consequences tend to be much more positive(16). For instance, in a large computer software company, an executive development specialist provides the individual with the results of a 360-degree assessment strictly in confidence, one-to-one. No copies of the results are kept. The feedback is used only as a development tool.

4. Maximize Learner Choice. People generally are more motivated to change when they freely choose to do so(17). In social and emotional training, however, choice is particularly important. Because these competencies are so close to the essence of what makes us the people we are, it is better if we are free to choose whether or not to engage in such training. It also is better if the choice is real. If trainees are given a choice but not assigned to the training they initially chose, they will be less motivated to learn than those who were given no choice(18).

5. Encourage Participation. Because social and emotional learning is viewed as "soft" and thus somewhat suspect, employees will tend not to choose to participate in it unless they believe that the organization's management strongly endorses it. The words and actions of supervisors are especially important. Trainees are more willing to participate in development activity if their supervisors indicate that they support it. In a large financial services company, a training program in emotional competence was popular in part because several regional vice presidents encouraged their management groups to participate and then attended the program with them.

The same has been true for "crew resource management training," a program that teaches airline crews the social and emotional skills that help them to work better as a team. When senior management has demonstrated a real commitment to this program by providing intensive and recurrent training, there has been greater acceptance of it among the crews. Acceptance also has increased when check airmen and instructors emphasize concepts from the training during other training and checking(19).

6. Link Learning Goals to Personal Values. People will be most motivated to learn and change if they believe that doing so will help them achieve goals that they value(20) For instance, in teaching airline crews how to work better in the cockpit as a team, it usually is more effective to teach them "how to get a team off to a good start," and "how to address conflicts among members constructively," rather than to teach them about "behavioural styles"(21).

Often the most salient personal values will be work-related, but they need not be. Trying to motivate learners by showing them that training will contribute to career success will be difficult if success is unimportant to them(22). Fortunately, other incentives for social and emotional learning are not difficult to find. In one popular emotional competence program, many participants reported that the skills they learned were as valuable in managing relationships at home as they were at work.

7. Adjust Expectations. Expectations about performance can become self-fulfilling

prophecies. People who are confident that they can succeed in a training program will tend to be more motivated and, not surprisingly, more successful(23).

Unfortunately, in the case

their social and emotional behaviour manifests itself. In fact, because self-awareness is a core competence, those who need the most help in emotional competence programs may be particularly weak in this area. Thus, they need even more focused and sustained feedback as they practice new behaviours(37).

8. Rely on Experiential Methods. More active, concrete, experiential methods, such as role plays, group discussions, and simulations, usually work better than lecturing or assigned reading for social and emotional learning. In order to reprogram neural circuits connecting the amygdala and neocortex, people need to actually engage in the desired pattern of thought, feeling, and action. A lecture is fine for increasing understanding of emotional intelligence, but experiential methods usually are necessary for real behaviour change.

A study of managerial and sales training programs offered in a large corporation demonstrated the superiority of experiential methods for social and emotional learning. The programs that used experiential methods produced twice as much improvement in performance, as rated by supervisors and peers, as did the other programs. Furthermore, the return on investment for the experiential programs was seven times greater(38).

A particularly good example of experiential learning is the teaching approach used in Cockpit Resource Management. Much of the training involves "flying missions" in a highly realistic flight simulator. To learn more about how they interact with one another and the effects it has on their performance, the crew is videotaped while they perform the mission, and then they view the tape with an instructor and focus on their interactions(39).

9. Build in Support. Change is enhanced through ongoing support from individuals and small groups. Such support is especially valuable for people who are trying to improve their social and emotional competence. Coaches and mentors, as well as individuals who are going through the same change process, can help sustain a person's hope and motivation(40). Social and emotional training programs usually are more effective when they encourage the formation of groups where people give each other support throughout the change effort(41).

In a stress management program designed for a group of middle managers in a high tech firm, the trainers assigned the participants to a "support group" early in the first session. All small group work during the course of the program took place in these support groups, and facilitators included activities that helped the group members get to know one another better. The participants were encouraged to meet with others in their support groups in between sessions and after the program formally ended. The participants reported that the conversations they had in their support groups about life style and priorities were the most important factors in helping them to make positive changes in their work and personal lives.

10. Use Models. Seeing the desired behaviour modelled is particularly valuable in social and emotional learning. One cannot learn to solve quadratic equations by watching someone else do so, but one can learn a great deal about how to discuss a conflict with a co-worker by observing a model do it. Learning is further enriched when trainers encourage and help learners to study, analyse, and emulate the models(42).

Enhance Insight. Even though experiential interventions seem to be especially productive for social and emotional learning, insight also can play a useful role(43).

Insight serves as a natural link between situations, thoughts and feelings. It enhances self-awareness, the cornerstone of emotional intelligence. And insight often paves the way for meaningful behaviour change(44).

The most effective training combines experiential methods and the development of insight. For instance, one program taught managers to be more aware of how their employees irritated them and to become more effective in setting limits with employees. The trainer began the lesson by showing an excerpt from a popular comedy film in which one character continually annoyed another one by infringing on his personal space in various ways. After showing the film, the trainer helped the participants to shift the focus from the film to themselves, and they began to see how they often allowed some of their employees to bother them in similarly annoying ways. After acquiring more insight into their own emotional reactions, the participants were ready to learn some emotional and social skills that could help them to deal with these annoying behaviours

11. Prevent Relapse. The essence of relapse prevention is to prepare people mentally to encounter slips, to recognize at the outset that setbacks are a normal part of the change process. Relapse prevention is especially important in social and emotional learning because participants attempting to develop these competencies are likely to encounter many setbacks as they attempt to apply new behaviours on the job. Without preparation for these setbacks, they can easily become discouraged and give up before the task of neural relearning has reached the point where the new, learned response is the automatic one.

In relapse prevention training, people are helped to re frame slips as opportunities to learn in order to reduce the likelihood of slipping again in the future. For dealing with situations in which a mistake is likely, they also are helped to develop practical strategies such as taking a "time out" to consult with a mentor(45). Through relapse prevention, trainees learn how to identify and overcome potential obstacles to applying new skills on the job.

They also learn to monitor their progress and use methods of self-reinforcement to maintain motivation(46).

For example, in one program a trainer leads the participants through a discussion about a hypothetical situation in which a participant who has followed all the rules for effective, supportive feedback receives an angry response when talking with a staff member. The trainer then asks the group to describe how they would feel in this situation and to consider what they could do to overcome this particular obstacle. The trainer then praises the participants for their ideas on how to bounce back from this setback. Later, the trainer asks the participants to write down on one side of a sheet of paper descriptions of setbacks they might encounter when they try to apply a skill they have learned, and to generate possible solutions for overcoming these setbacks on the other side of the paper. The participants then share these strategies with the rest of the group(47).

Phase Three: Transfer and Maintenance

Transfer and maintenance of learned skills is a particular challenge in social and emotional learning. When learners return to their natural environments, there are likely to be many cues and reinforcers that support the old neural pathways that training was designed to weaken. Further, there may be significant barriers to the use of some of the new social and emotional competencies that still have a fragile neural foundation(48). Well-designed training programs cannot be effective if the larger organizational system in which they are rooted is not supportive of the training goals. Recent research has pointed to several aspects of the organizational

environment that seem to be helpful in facilitating transfer of social and emotional learning.

Encourage Use of Skills on the Job. There are many different ways that supervisors, peers, subordinates, and others in the work environment can

12. Encourage learners to apply what they have learned. The best methods involve either reminding people to use the skills or reinforcing them when they do so(49).

Reinforcement is a particularly good way to encourage trainees to apply their new skills on the job and to continue doing so. In the workplace, reinforcement by one's supervisor can be especially powerful(50). Consider the difference in outcomes for two supervisory training programs(51). In both, the participants liked the programs and successfully learned the new skills(52). But follow up showed that the participants from the first program applied their skills on the job, while those in the second did not. The biggest difference between the two programs was that the trainees in the first one were "directed and encouraged by their supervisors to use the new skills." In fact, two of the participants were removed from their jobs for not using the new skills.

Supervisors can reinforce the use of new skills on the job in less drastic ways. For instance, they can encourage trainees to use learned skills on the job simply by cueing them to do so(53). Also, a follow-up assessment of skills learned during training can make the trainees feel more accountable and increase transfer of learning(54). For example, the airlines have "check pilots" observe flight crews during flights and then give them feedback in order to encourage the crews to use the teamwork, communication, and leadership skills that they previously learned(55).

The behaviour of a supervisor, or any high status person, is crucial for the transfer and maintenance of new emotional and social competencies. The models to which learners are exposed when they return to the work environment are even more powerful than those they encountered during training. Social and emotional behaviour seems to be especially sensitive to modelling effects, and high status persons are influential models for this kind of behaviour in the workplace(56). For instance, in one supervisory training program, the participants were taught to adopt a more supportive leadership style. After they returned to their jobs, only those trainees whose own supervisors had such a style transferred what they had learned to their jobs(57).

In addition to modelling and reinforcement, reflection can help learners transfer and maintain what they have learned. It can be particularly helpful for supervisors to set aside some time periodically to help learners reflect on what they have done to apply the skills, and to consider what have been the barriers and facilitating factors. Because self-awareness is a cornerstone of social and emotional competence, reflection can be especially valuable during the transfer and maintenance phase(58).

Although supervisors are especially salient sources of reinforcement and encouragement, other individuals and groups in the work environment can be important as well. For instance, in a supervisory skills program, the supervisors' employees were trained at the same time as the supervisors(59). This additional component of the program helped create an environment that encouraged the supervisors to practice and use the new behaviours(60).

13. Provide an Organizational Culture that Supports Learning. Transfer and maintenance of specific skills seems to be affected by the extent to which the organization values learning and development in general(61). Challenging jobs, social support, reward and development systems, and an emphasis on innovation and competition influence these perceptions and expectations.

The climate of the work environment is particularly important for transfer of social and emotional learning to the job. One study found that participants in a human relations training program who returned to a supportive climate performed better on objective performance measures and were promoted more often than those in an unsupported climate. Furthermore, these effects were not observed until 18 months after training, highlighting the importance of a supportive environment for the development of social and emotional competencies over time(62).

Phase Four: Evaluating Change

14. Conduct on-going evaluation research. Evaluation is essential for promoting effective training. Research suggests that many training programs do not fulfil their promise(63). Only through evaluation can poor programs be improved and effective ones retained. By evaluation, we mean a process that focuses on continuous improvement rather than just a "pass-fail" test in which individuals associated with a program win or lose credibility. When an evaluation suggests that a program falls short in achieving its goals, it should not be used to punish an individual or group. Rather, it should be used as a guide for improving the training that is offered. Evaluation should be linked to learning and the continual pursuit of quality.

Evaluation has received increased attention of late because of the recognition that training departments in modern organizations need to be held more accountable(64). Instead of cost centres, training departments now are viewed as profit centres Unfortunately, the field has been slow to meet this challenge. An October, 1997 survey of 35 highly regarded "benchmark" companies conducted by the Global Society for Training and Development found that of the 27 companies that said they tried to promote emotional competence through training and development, more than two-thirds made no attempt to evaluate the effect of these efforts. Those that did attempt to evaluate their efforts relied primarily on measures such as reactions to training and employee opinion surveys(65).

Good evaluation of social and emotional learning efforts has been especially rare. One reason seems to be a widespread belief that programs designed to promote "soft skills" cannot be evaluated. Although this may have been true at one time, we now have the tools necessary to conduct rigorous evaluations of most training programs for social and emotional competence(66).

It can be difficult to include every aspect of the ideal evaluation design in many organizations, but there are examples of evaluation studies that come close. One is a study of eleven management training programs offered in a large pharmaceutical company(67). The evaluators utilized pre- and post-assessments of those who went through the programs, and these assessments included ratings of the participants' performance on the job by bosses, peers, and subordinates. They also calculated the costs and benefits of the programs. They found that three of the eleven programs were worthless. On the other hand, five programs had a return-on-investment ranging from 16 to 492 percent, and one time management program had a return-on-investment of 1,989 percent. The four year study cost \$500,000, which was only .02 percent of the \$240 million that the company spent on training

during that period. As a result of this evaluation, the company has eliminated the ineffective programs and retained the ones that more than pay for themselves. Another example was an evaluation of a supervisory training program conducted in a forest products company(68). This study used a control group and pre- and post-measures. The program's impact on the supervisors' competence was measured through subordinate ratings, and the study also assessed the program's impact on absenteeism, turnover, and productivity. The results showed first that the trained supervisors were using all of the interpersonal skills covered in the program significantly more than did the controls during the six months following training. Second, the average daily production of the trained supervisors' employees, relative to controls, increased over 20 percent. Third, turnover and absenteeism significantly declined among the employees of the trained supervisors, relative to the controls. The evaluation study thus provided strong evidence that the training program had the desired effects on both supervisor competencies and the bottom line.

These two examples show that while it is not easy to evaluate social and emotional competence training programs, it now is possible to do so with much greater rigour and precision than ever before. By making evaluation an integral part of the process, training programs will gradually become more effective.

Conclusion

It is possible for people of all ages to become more socially and emotionally competent. However, the principles for developing this type of competence differ greatly from those that have guided much training and development practice in the past. Developing emotional competence requires that we unlearn old habits of thought, feeling, and action that are deeply ingrained, and grow new ones. Such a process takes motivation, effort, time, support, and sustained practice, as the guidelines presented in this article make clear. The guidelines also suggest that the preparation and transfer-and-maintenance phases of the training process are especially important. Yet too often these phases are neglected in practice.

Organizations increasingly are providing training and development that is explicitly labelled as "emotional intelligence" or "emotional competence" training. However, the guidelines presented here apply to any development effort in which personal and social learning is a goal. This would include most management and executive development efforts as well as training in supervisory skills, diversity, teamwork, leadership, conflict management, stress management, sales, customer relations, etc.

Ideally, efforts to develop emotional competence would include all the elements we have identified here, but we realize that it often will not be practical to do so. Fortunately, the effect of adhering to the guidelines is multiplicative and synergistic: the more guidelines that trainers can follow, the greater and more lasting will be their impact.

If the current interest in promoting emotional intelligence at work is to be a serious, sustained effort, rather than just another management fad, it is important that practitioners try to follow guidelines based on the best available research. Only when the training is based on sound, empirically based methods will its promise be realized.

Notes

1. "Emotional intelligence" as we use the term here refers to about two dozen social and emotional abilities that previous research has shown to be linked to successful performance in the workplace. These abilities can be grouped into five core areas: self-awareness, self-regulation, self-motivation, social awareness, and social skills. For research on the link between these abilities and performance, see L. M. Spencer, Jr., D. C. McClelland, and S. Kelner, "Competency Assessment Methods History and State of the Art," paper presented at a meeting of The Consortium for Social and Emotional Competence in the Workplace (1997)
2. Many studies have confirmed that the so-called "soft skills" are critical for a vital economy. For instance, see Secretary's Commission on Achieving Necessary Skills (SCANS), "What Work Requires of Schools," (1991), U.S. Department of Labor; A. P. Carnevale, L. J. Gainer, and A. S. Meltzer, "Workplace basics: The skills employers want," *Training & Development Journal*, 42 (1988): 22-26; Spencer, et al., op. cit.; R. E. Boyatzis, *The Competent Manager: A Model for Effective Performance* (New York: John Wiley & Sons, 1982). See also the work of Hall, who has argued that executive development increasingly involves "personal development" – i.e., how the individual deals with work/life issues, stress, and health. See D. T. Hall, "Executive careers and learning: Aligning selection, strategy, and development," *Human Resource Planning*, 18 (1995):
3. D. Goleman, *Working with Emotional Intelligence* (New York: Bantam, 1998)
4. G. Edelman, *Neural Darwinism: The Theory of Neuronal Group Selection* (New York: Basic Books, 1987).
5. The distinction between cognitive and emotional learning is similar to the one that Hall makes in discussing executive learning. He suggests that executive learning can be either short-term or long-term, with either a task focus or a personal focus. Using this typology, social and emotional learning involves a personal focus requiring a long-term perspective. See D. T. Hall and P. H. Mirvis, "The New Protean Career: Psychological Success and the Path with a Heart," in D. T. Hall, ed., *The Career Is Dead: Long Live the Career* (San Francisco: Jossey-Bass, 1996).
6. S. I. Tannenbaum and G. Yukl, "Training and development in work organizations," *Annual Review of Psychology*, 43 (1992): 399-441.
7. These guidelines emerged from a review of research conducted under the auspices of the Consortium for Research on Emotional Intelligence in Organizations, originally funded by the Fetzer Institute of Kalamazoo, Michigan. Consortium members were: Richard Boyatzis, Ph.D., Professor of Management and Associate Dean, Weatherhead School of Management, Case Western Reserve University; Robert Caplan, Ph.D., Professor and Director of the Organizational Psychology Program, George Washington University; Cary Cherniss, Ph.D., Professor of Applied Psychology, Rutgers University; Daniel Goleman, Ph.D., author and CEO of Emotional Intelligence Services; Marilyn Gowing, Ph.D., Director of Resources and Development, U. S. Office of Personnel Management, Washington, DC; Kathy Kram, Ph.D., Associate Professor of Management, Boston University; Richard Price, Ph.D., Professor of Psychology, University of Michigan; Mary Ann Re, Ph.D., Manager of AT&T Corporate Employee Research, AT&T; and Lyle Spencer, Jr., Ph.D., Hay Group Research Fellow, Author (*Competence at Work*), and Consultant.
8. Several studies have found a relationship between motivation to learn and learning performance. For instance, W. D. Hicks, "The process of entering training programs and its effects on training outcomes," *Dissertation Abstracts International*, 44(11-B) 3564 (1984); and D. H. Ryman and R. J. Biersner, "Attitudes predictive of diving training success," *Personnel Psychology*, 28 (1975): 181-188, found a relationship between motivation to learn and dropout rates. See also R. A. Noe and N. Schmitt,

"The influence of trainee attitudes on training effectiveness: Test of a model," *Personnel Psychology*, 39 (1986): 497- 523; W. D. Hicks and R. J. Klimoski, "Entry into training programs and its effects on training outcomes: A field experiment," *Academy of Management Journal*, 30 (1987): 542-552; J. E. Mathieu, S. I. Tannenbaum, and E. Salas, "The influence of individual and situational characteristics on training effectiveness measures," *Academy of Management Journal*, 35 (1990): 828-847. Numerous studies on social and emotional change in psychotherapy also have found a strong link between motivation and success. See for instance D. D. Burns and S. Nolen-Hoeksema, "Coping styles, homework compliance, and the effectiveness of cognitive-behavioral therapy," *Journal of Consulting & Clinical Psychology*, 59 (1991): 305- 311; C. R. Marmar, L. Gaston, D. Gallagher, and L. W. Thompson, "Alliance and outcome in late-life depression," *Journal of Nervous and Mental Disease*, 177 (1989): 464-472.

9. Irwin L. Goldstein, *Training in Organizations* (3rd Edition), (Pacific Grove, CA: Brooks/Cole, 1993)
10. This point is supported by research on empathy. For example, M. Davis and L. Kraus, "Personality and accurate empathy," in W. Ickes, ed., *Empathic Accuracy* (New York: Guilford Press, 1997) have found that there is no correlation between people's estimates of their empathy and their scores on objective tests of empathy.
11. Spencer, et al., (1997) op cit.
12. Noe and Schmitt, op cit.
13. D. A. Kolb, S. K. Winter, and D. E. Berlew, "Self-directed change: Two studies," *Journal of Applied Behavioral Science*, 4 (1968): 453-471.
14. D. R. Ilgen, C. D. Fisher, and M. S. Taylor, "Consequences of individual feedback on behaviour in organizations," *Journal of Applied Psychology*, 64 (1979): 349-371
15. M. A. Korsgaard and M. Diddams, "The effect of process feedback and task complexity on personal goals, information searching, and performance improvement," *Journal of Applied Social Psychology*, 26 (1996): 1889-1911; J. R. P. French, H. H. Meyer, and E. Kay, "Participation and the appraisal system." *Human Relations*, 19 (1966): 3-20; Latham and Yukl, op. cit.; G. A. Bassett and H. H. Meyer, "Performance appraisal based on self review," *Personnel Psychology*, 21 (1968): 421-430.
16. R. E. Boyatzis, "Self-directed Change and Learning as a Necessary Meta-competency for Success and Effectiveness in the 21st Century," In R. Sims and J. G. Verese, eds., *Keys to Employee Success in the Coming Decades* (Westport, CN: Greenwood Publishing, 1998)
17. Hicks (1984), op cit.; C. S. Clark, G. H. Dobbins, and R. T. Ladd, "Exploratory field study of training motivation," *Group & Organizational Management*, 18 (1993): 292-307; J. E. Mathieu, S. I. Tannenbaum, and E. Salas, op cit.; M. A. Quinones, "Pretraining context: Training assignment as feedback," *Journal of Applied Psychology*, 80 (1995): 226-238; Ryman and Biersner, op cit.
18. T. T. Baldwin, R. J. Magjuka, and B. T. Loher, "The perils of participation: Effects of choice of training on trainee motivation and learning," *Personnel Psychology*, 44 (1991): 51-65; R. J. Magjuka, T. T. Baldwin, and B. T. Loher, "The combined effects of three pretraining strategies on motivation and performance: An empirical exploration," *Journal of Managerial Issues*, 17 (1994): 282-296.
19. R. L. Helmreich and H. C. Fourshee, "Why crew resource management? Empirical and theoretical bases of human factors training in aviation," in E. L. Wiener, B. G. Kanki, and R. L. Helmreich (Eds.), *Cockpit Resource Management* (New York: Academic Press, (1993), pp. 3- 46). See also T. T. Baldwin and R. J. Magjuka, "Organizational training and signals of importance: Effects of pre-training perceptions on intentions to transfer," *Human Resources Development*, 2 (1991): 25-36; Clark et al., op. cit.; J. D. Fecteau, G. H Dobbins, J. E. A. Russel, R. T. Ladd, and J. D.

Kudisch, "The influence of general perceptions of the training environment on pretraining motivation and perceived training transfer," *Journal of Management*, 21 (1995): 1-25; T. J. Maurer, B. A. Tarulli, "Investigation of perceived environment, perceived outcome, and person variables in relationships to voluntary development activity by employees," *Journal of Applied Psychology*, 79 (1994): 3-14; R. A. Noe, "Is career management related to employee development and performance?" *Journal of Organizational Behavior*, 17 (1996): 119-133.

20. See D. B. Peterson, "Executive coaching at work: The art of one-on-one change," *Consulting Psychology Journal*, 48 (1996): 78-86
21. J. R. Hackman, "Teams, leaders, and organizations: New directions for crew-oriented flight training," in Wiener et al., op cit., p. 51.
22. . Noe and Schmitt, op cit.
23. Ryman and Biersner, op. cit.; M. E. Gist, C. Schwoerer, and B. Rosen, "Effects of alternative training methods on self-efficacy and performance in computer training," *Journal of Applied Psychology*, 74 (1989): 884-891; L. Froman, "Some motivational determinants of trainee effort and performance: An investigation of expectancy theory," *Dissertation Abstracts International*, 38(5-B) 2411 (1977); S. Moitra, "A pre-program evaluation model determining training effectiveness, based on the expectancy theory of work-motivation," *Dissertation Abstracts International*, 38(3-B) 1455 (1977). Research on change processes in psychotherapy also suggests that efficacy expectations play a crucial role in motivation for change. For instance, L. M. Grencavage and J. C. Norcross, "Where are the commonalities among the therapeutic common factors?" *Professional Psychology: Research and Practice*, 21 (1990): 372-378, reviewed 50 publications on diverse forms of psychotherapy in order to distill common change factors. They found that the most frequent client characteristic mentioned was "positive expectancies and hope for improvement." See also A. Bandura, N. Adams, and J. Beyer, "Cognitive processes mediating behavioural change," *Journal of Personality and Social Psychology*, 35 (1977): 125-139; C. R. Marmar, L. Gaston, D. Gallagher, and L. W. Thompson, "Alliance and outcome in late-life depression," *Journal of Nervous & Mental Disease*, 177 (1989): 464-472.
24. The trainer's expectations also are important. In several studies, the trainees learned more when their trainers were told they had trainees with very high success potential. See D. R. Eden and G. Ravid, "Pygmalion versus self-expectancy: Effects of instructor- and selfexpectancy on trainee performance," *Organizational Behavior and Human Decision Processes*, 3 (1982): 351-364; and D. R. Eden and A. B. Shami, "Pygmalion goes to boot camp: Expectancy, leadership, and trainee performance," *Journal of Applied Psychology*, 67 (1982): 194-199.
25. . R. D. Caplan, A. D. Vinokur, and R. H. Price, "From Job Loss to Reemployment: Field Experiments in Prevention-focused Coping," in G. W. Albee and T. P. Gullotta (Eds.), *Primary Prevention Works: Issues in Children's and Families' Lives* (Volume 6), Thousand Oaks, CA: Sage, 1997, pp. 341-379.
26. J. O. Prochaska, J. C. Norcross, C. C. DiClemente, *Changing For Good: The Revolutionary Program that Explains the Six Stages of Change and Teaches You How to Free Yourself From Bad Habits* (New York: W. Morrow, 1994).
27. In a study of 50 articles on factors associated with change in psychotherapy, the researchers found that "development of a therapeutic relationship or working alliance" was the most frequently cited (Grencavage and Norcross, op cit.). A meta-analysis of 24 studies found an average effect size of $r=.26$ for the link between the quality of the therapeutic alliance and outcome (A. O Horvath, B. D. Symonds, "Relation between working alliance and outcome in psychotherapy: A meta-analysis," *Journal of Counseling Psychology*, (1991): 139-149.
28. . J. D. Ford, "Therapeutic relationship in behaviour therapy: An empirical analysis,"

Journal of Consulting and Clinical Psychology, 46 (1978): 1302-1314.

- 29.** There has not been much research on the link between trainer qualities and training outcomes in the context of work organizations. What little research there is has examined academic classroom learning, and it has identified ideal trainer qualities such as, "Is well organized," and "Answers questions clearly and thoroughly." (Goldstein, op cit.). On the other hand, research on behaviour change in other contexts has amply documented the link. See, for example, S. J. Blatt, D. C. Zuroff, D. M. Quinlan, and P. A. Pilkonis, "Interpersonal factors in brief treatment of depression: Further analyses of the National Institute of Mental Health Treatment of Depression Collaborative Research Program," *Journal of Consulting and Clinical Psychology*, 64 (1996): 162-171; D. D. Burns and S. Nolen-Hoeksema, "Therapeutic empathy and recovery from depression in cognitive-behavioral therapy: A structural equation model," *Journal of Consulting & Clinical Psychology*, 60 (1992): 441-449; W. P. Henry, T. E. Schacht, and H. H. Strupp, "Structural analysis of social behaviour: Application to a study of interpersonal process in differential psychotherapeutic outcome. Special Issue: Psychotherapy research," *Journal of Consulting & Clinical Psychology*, 54 (1986): 27-31; G. G. Kolden, "Change in early sessions of dynamic therapy: Universal processes and the generic model of psychotherapy," *Journal of Consulting and Clinical Psychology*, 64(1996): 489-496; S.K. Valle, "Interpersonal functioning of alcoholism counselors and treatment outcome," *Journal of Studies on Alcohol*, 42 (1981): 783-790.
- 30.** W. R. Miller, R. G. Benefield, and J. S. Tonigan, "Enhancing motivation for change in problem drinking: A controlled comparison of two therapist styles," *Journal of Consulting & Clinical Psychology*, 61 (1993): 455-461. Other researchers have found negative associations between outcome and behaviours such as "blaming and belittling" (Henry, Schacht, and Strupp, op cit.) and "attacking" (L. M. Najavits and H. H. Strupp, "Differences in the effectiveness of psychodynamic therapists: A process-outcome study," *Psychotherapy*, 31 (1994): 114-123).
- 31.** Caplan et al., op cit.
- 32.** Although there is some research support for self-directed change in the training and development literature (e.g., C. A. Frayne and G. P. Latham, "Application of social learning theory to employee self-management of attendance," *Journal of Applied Psychology*, 72 (1987): 387-392; M. E. Gist, C. K. Stevens, A. G. Bavetta, "Effects of self-efficacy and posttraining intervention on the acquisition and maintenance of complex interpersonal skills," *Personnel Psychology*, 44 (1991): 837-861; D. A. Kolb and R. E. Boyatzis, "Goal setting and self-directed behaviour change," *Human Relations*, 23 (1970): 439-457; L. M. Spencer and S. M. Spencer, *Competence at Work: Models for Superior Performance* (New York: John Wiley & Sons, Inc., 1993); Tannenbaum and Yukl, op cit.), the strongest support for this approach comes from research on behaviour change. See, for instance, J. L. Sonne and D. Janoff, "The effect of treatment attributions on the maintenance of weight reduction: A replication and extension," *Cognitive Therapy & Research*, 3 (1982): 389-397. Research on the processes that people use to change on their own also supports the notion that change is facilitated by self-control. Stories of successful life change attempts, compared to unsuccessful ones, were more likely to involve self-reward and self-reinforcement. And the successful changers were more likely to feel they had control over their behaviour, and greater self-control in general (T. F. Heatherton P. A. Nichols, "Personal accounts of successful versus failed attempts at life change," *Personality and Social Psychology Bulletin*, 20 (1994): 664-675).
- 33.** In one early study of the use of goals in training, D. A. Kolb, S. K. Winter, and D. E. Berlew, "Self directed change: Two studies," *Journal of Applied Behavioral Science*, 4 (1968): 453-471, found that self-directed change was enhanced when the method was modified to emphasize conscious goal-setting. In the organizational behaviour literature, goal-setting has been shown to improve performance across a wide range of domains (E. A. Locke, G. P. Latham, *A Theory of Goal Setting and Task*

Performance (Englewood Cliffs, NJ: Prentice-Hall, 1990); K. N. Wexley, T. T. Baldwin, "Posttraining strategies for facilitation positive transfer: An empirical exploration," *Academy of Management Review*, 29 (1986): 503 - 520).

34. C. R. Snyder, *The Psychology of Hope* (New York: Free Press, 1993); A. Bandura and D. Cervone, "Self-evaluative and self-efficacy mechanisms governing the motivational effects of goal systems," *Journal of Personality and Social Psychology*, 45 (1983): 1017-1028; Douglas T. Hall, *Careers in Organizations*, (Santa Monica, CA: Goodyear, 1976).
35. The principles of distributed rather than massed practice, and overlearning, are well established in the experimental research on learning (T. T. Baldwin J. K. Ford, "Transfer of training: A review and directions for future research," *Personnel Psychology*, 41 (1988): 63- 105; F. N. Dempster, "The spacing effect: A case study in the failure to apply the results of psychological research," *Global Psychologist*, 43 (1988): 627-634. Research on the "doseresponse effect" in psychotherapy also shows that the longer people work at changing, the more durable the change will be. Most people do not show stable changes until they have completed at least a dozen or more sessions (K. Howard, S. M. Kopta, M. S. Krause, D. E. Orlinsky,. "The dose-effect relationship in psychotherapy," *Global Psychologist*, 41 (1986): 159-164.).
36. Goldstein, op. cit., In a study of self-development groups conducted for students attending a business school, the amount of feedback individuals received from other group members during the last half of the group was one of two factors that predicted success. Improving the change method to enhance feedback increased the percentage of learners who successfully attained their goals from 5 to 61 percent (Kolb, Winter, and Berlew, op cit.). See also the study by J. L. Komaki, R. L. Collins, and P. Penn, "The role of performance antecedents and consequences in work motivation," *Journal of Applied Psychology*, 67 (1982): 334-340.
37. Ilgen and his colleagues have suggested that providing too much feedback can backfire because it might reduce the learner's sense of personal control and make the learner more dependent on feedback. However, trainers are more likely to provide too little feedback rather than too much. See D. R. Ilgen, C. D. Fisher, and M. S. Taylor, "Consequences of individual feedback on behaviour in organizations," *Journal of Applied Psychology*, 64 (1979): 349-371.
38. L. Spencer, in L. J. Bassi and D. Russ-Eft, eds., *What Works*, (Alexandria,, VA: ASTD, 1997). Research on change processes in psychotherapy also has pointed to the superiority of experiential methods. An example was a study of the components of cognitive therapy associated with change. The results suggested that concrete methods predicted positive change in mood; but less focused, more abstract discussions did not (C. J. Robins, A. M. Hayes, "An appraisal of cognitive therapy," *Journal of Consulting and Clinical Psychology*, 61 (1993): 205-214). Research in neuroscience has reached similar conclusions, suggesting that emotional learning is more likely to occur when novelty, dramatic retreat settings, and powerful stimuli that engage all the senses mark the experience. (S. M. Kosslyn and O. Koenig, *Wet Mind: The New Cognitive Neuroscience* (New York: Free Press, 1995).
39. Wiener, et al., op cit.
40. K. E. Kram, "Improving the mentoring process," *Training and Development Journal*, 39 (1985): 40-43, found that mentors, in addition to helping people to get ahead, also serve as valuable role models and sources of support. In doing so, they help people to develop the social and emotional competencies that are particularly important for success. For other research on the value of mentoring, see C. Orpen, "The effects of mentoring on employees' career success," *Journal of Social Psychology*, 135 (1995): 667-668; T. Scandura, "Mentorship and Career Mobility: An empirical investigation," *Journal of Organizational Behavior*, 13 (1992): 169-174; and E. Fagenson, "The Mentor Advantage: Perceived career/job experiences of proteges vs. non-proteges," *Journal of Organizational Behavior*, 10 (1989): 309-320.

- 41.** There is a large research literature showing how the support provided by self-help groups can be a powerful lever for behaviour change. See for instance: L. H. Levy, "Self-Help Groups: Types and Psychological Processes," *Journal of Applied Behavioral Science*, 12 (1976): 310-322; M. A. Lieberman and L. Borman, *Self-Help Groups for Coping with Crises: Origins, Members, Processes, and Impact* (San Francisco: Jossey-Bass, 1979); B. S. McCrady and W. R. Miller (Eds.), *Research on Alcoholics Anonymous: Opportunities and Alternatives* (New Brunswick, NJ: Rutgers Center for Alcohol Studies, 1993); G. A. Hinrichsen, T. A. Revenson, and M. Shinn, "Does Self-Help Help? An Empirical Investigation of Scoliosis Peer Support Groups," *Journal of Social Issues*, 41 (1985): 65-87; and T. J. Powell (Ed.), *Understanding Self-Help: Frameworks and Findings* (Newbury Park, CA: Sage, 1994)
- 42.** There is a sizable body of research on the value of models in learning. See, for example, A. Bandura, *Social Learning Theory* (Englewood Cliffs, NJ: Prentice Hall, 1977); Tannenbaum and Yukl, *op. cit.*
- 43.** Insight was an important component in A.T.&T.'s career development program for executives. See, for instance, D. W. Bray, "The Assessment Center Method," in R. L. Craig (Ed.), *Training and Development Handbook*, (New York: McGraw-Hill, 1976).⁴⁴ In a study of those who attempted some kind of life change, 20 percent of those who successfully made changes "gained new understanding of (their) situation through a sudden flash of insight into their behaviour" They also were more likely to describe themselves as having discovered "a new sense of self-knowledge and understanding." By contrast, none of the non-changers expressed any type of insight at all (Heatherton and Nichols, *op cit.*).
- 44.** Kram, *op cit.*, 1985.
- 45.** For instance, one study showed that adding relapse prevention to a management training program helped increase transfer of skills to the job (A. Tziner, R. R. Haccoun, A. Kadish, "Personal and situational characteristics influencing the effectiveness of transfer of training improvement strategies," *Journal of Occupational Psychology*, 64 (1991): 167-177). See also L. Burke, T. Baldwin, "Improving transfer of training: A field investigation of the effects of relapse prevention training and transfer climate on maintenance outcomes," *Dissertation Abstracts International, Section A: Humanities & Social Sciences. Vol 57(4-A), Oct 1996, 1725.* ; M. E. Gist, A. G. Bavetta, and C. K. Stevens, "Transfer training method: Its influence on skill generalization, skill repetition, and performance level," *Personnel Psychology*, 43 (1990): 501-523; Gist, et al. (1991), *op cit.*; R. A. Noe, J. Sears, A. M. Fullenkamp, "Relapse training: Does it influence trainees' post training behaviour and cognitive strategies?" *Journal of Business and Psychology*, 4 (1990): 317-328; A. D. Vinokur and Y. Schul, "Mastery and inoculation against setbacks as active ingredients in the JOBS intervention for the unemployed," *Journal of Clinical and Consulting Psychology*, 65 (1997): 867-877.
- 46.** C. A. Heaney, R. H. Price, and J. Rafferty, "The Caregiver Support Program: An Intervention to Increase Employee Coping Resources and Enhance Mental Health," in L. R. Murphy, J. J. Hurrell, L. S. Sauter, and G. P. Keita, Eds., *Job Stress Interventions* (Washington, D. C.: Global Psychological Association, 1995); M. L. Davis-Sacks, A. Weine, and C. Heaney, "The Caregiver Support Program: A Descriptive Account (Ann Arbor, MI: Institute for Social Research, University of Michigan, 1988).
- 47.** The difficulty of transferring and maintaining social and emotional learning was demonstrated in a study of an assertion training program. Gains from the training had disappeared when the participants were tested two months following the end of training. The author concluded that long-term behavioural maintenance requires special intervention, such as training in self-management skills and restructuring the individual's natural environment (J. D. Ford, "Therapeutic relationship in behaviour therapy: An empirical analysis," *Journal of Consulting and Clinical Psychology*, 46

(1978): 1302-1314, p. 1311).

48. J. Z. Rouiller and I. L. Goldstein, "The relationship between organizational transfer climate and positive transfer of training," *Human Resource Development Quarterly*, 4 (1993): 377-390.
49. T. T. Baldwin, J. K. Ford, "Transfer of training: A review and directions for future research. *Personnel Psychology*, 41 (1988): 63-105; R. A. Noe, "Trainees' attributes and attitudes: Neglected influences on training effectiveness," *Academy of Management Review*, 11 (1986): 736-749.
50. One program was described in G. P. Latham and L. M. Saari, "Application of social learning theory to training supervisors through behavioural modelling," *Journal of Applied Psychology*, 64 (1979): 239-246. The other was described in J. S. Russell, K. N. Wexley, and J. E. Hunter, "Questioning the effectiveness of behaviour modelling training in an industrial setting," *Personnel Psychology*, 37 (1984): 465-81.
51. Russell et al., op cit., p. 477.
52. Rouiller and Goldstein (1993), op. cit.
53. Baldwin and Magjuka (1991), op cit.
54. Wiener et al., op cit. For another example, see J. Komaki, A. T. Heinzmann, and L. Lawson, "Effect of training and feedback: Component analysis of a behavioural safety program," *Journal of Applied Psychology*, 65 (1980): 261-270.
55. C. C. Manz, H. P. Sims, "Beyond imitation: Complex behavioural and affective linkages resulting from exposure to leadership training models," *Journal of Applied Psychology*, 71 (1986): 571-578; H. M. Weiss, "Subordinate imitation of supervisor behaviour: The role of modelling in organizational socialization," *Organizational Behavior and Human Performance*, 19 (1977): 89-105.
56. E. A. Fleishman, "Leadership climate, human relations training, and supervisory behaviour," *Personnel Psychology*, 6 (1955): 205-222.
57. For a good discussion of some of the recent work being done on managerial reflection as a development tool, see M. W. Daudelin, "Learning from Experience Through Reflection," *Organizational Dynamics*, 24 (1996): 36-48; and K. Seibert, "Experience Is The Best Teacher, If you Can Learn From It: Real Time Reflection and Development," in D. T. Hall, ed., *The Career Is Dead: Long Live the Career* (San Francisco: Jossey-Bass, 1996).
58. M. Sorcher and R. Spence, "The InterFace Project: Behavior modelling as social technology in South Africa," *Personnel Psychology*, 35 (1982): 557-581.
59. R. K. Flemming and B. Sulzer-Azeroff, "Peer management: Effects on staff teaching performance," Paper presented at the 15th Annual Convention of the Association for Behavioral Analysis, Nashville, TN. (1990). Specially designed support groups, coaches, and mentors also can provide reinforcement and encouragement, as noted above. In one training program, the trainers paired up the trainees with someone who helped them with feedback and encouragement, following the end of training. Data on the program indicated that pairing trainees up led to greater transfer of training.
60. J. B. Tracey, S. I. Tannenbaum, and M. J. Kavanagh, "Applying trained skills on the job: The importance of the work environment," *Journal of Applied Psychology*, 80, (1995): 239- 252; P. Senge, *The Fifth Discipline*. (New York: Doubleday/Currency, 1990).
61. H. H. Hand, M. D. Richards, and J. W. Slocum, "Organizational climate and the effectiveness of a human relations training program," *Academy of Management Journal*, 16 (1973): 185-195.

62. Baldwin and Ford, (1988) op cit
63. K. Kraiger and K. M. Jung, "Linking training objectives to evaluation criteria," in M.A. Quinones and A. Ehrenstein (Eds.), *Training for a Rapidly Changing Workforce: Application of Psychological Research* (pp. 151-175) (Washington D. C.: Global Psychological Association, 1997).
64. Global Society for Training and Development, "Benchmark Survey" [get full citation]; Tannenbaum and Yukl, (1992), op. cit., also found that few companies evaluate their training efforts, and those that do rely on student evaluation sheets or anecdotes.
65. Goldstein (1993), op cit.; Spencer et al. (1997), op cit.
66. C. C. Morrow, M. Q. Jarrett, M. T. Rupinski, "An investigation of the effect and economic utility of corporate-wide training," *Personnel Psychology*, 50 (1997): 91-119.
67. J. I. Porras, B. Anderson, "Improving managerial effectiveness through modeling-based training," *Organizational Dynamics*, 9 (1981): 60-77. 69 We are indebted to Lyle M. Spencer, Jr. for his help with this part of the research
68. See M. Burke & R. Day, "A Cumulative Study of the Effectiveness of Managerial Training," *Journal of Applied Psychology*, 71 (1986): 232-245; A. J. Falcone, J. E. Edwards, & R. R. Day, "Meta-Analysis of Personnel Training Techniques for Three Populations," paper presented at the Annual Meeting of the Academy of Management, Chicago, IL (1986); and C. C. Morrow, M. Q. Jarrett, & Rupinski, M.T., "An investigation of the effect and economic utility of corporate-wide training," *Personnel Psychology*, 50 (1997): 91-119.
69. J. E. Hunter, F. L. Schmidt, & M. K. Judiesch, "Individual Differences in Output Variability as a Function of Job Complexity," *Journal of Applied Psychology*, 75 (1990): 28-42.
70. L. M. Spencer & C. C. Morrow, "The Economic Value of Competence: Measuring ROI," paper presented at the Conference on Using Competence-Based Tools to Enhance Organizational Performance, Boston, MA, 1996.

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