DEVELOPING GLOBAL LEADERS VIA ACTION LEARNING PROGRAMS: A CASE STUDY AT BOEING

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Introduction

Organizations are faced with the growing challenge of increasing the capabilities of their leaders with less time and financial resources (Bennis & Nanus, 1997; Dotlich & Cairo, 2002). A new and wider array of skills and competencies are needed by leaders in the 21st century (Marquardt & Berger, 2000). Most leadership development programs, whether corporate or academic, have been ineffective and expensive (Pfeffer & Fong, 2002). Mintzberg and Gosling (2002) opine that "contemporary business education focuses on the function of business more than the practice of managing" (p. 28). As a result, organizations are beginning to look at new, less traditional ways for training their managers.

More and more companies around the world are turning to action learning as the most effective and powerful tool to develop its leaders (Keys, 1994; McNulty & Canty, 1995; Inglis, 1994, Pedler, 1996; Dotlich & Noel, 1998; Yorks, O'Neil, & Marsick, 1999, Marquardt, 1997a, 2001, 2004). However, except for Hii & Marquardt (2000), most of the research on action learning and leadership development is anecdotal and focuses on advocacy rather than evidence.

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Boeing, like many companies around the world, has been seeking to develop an effective leadership program that would enable its executives to think and act globally. In 1999, it debuted the Global Leadership Program, a key component in Boeing's determination "to operate as a global company and to grow businesses worldwide by developing leadership competencies within the executive population" (Boeing, 2002). Boeing decided to utilize action learning as a key ingredient of the Global Leadership Program, thus following a path being chosen by a growing number of global companies who have abandoned more traditional executive development programs for action learning.

Theoretical Framework

The theoretical framework for this article is framed around the constructs of global leadership development and action learning.

a. Global Leadership Development

As organizations moved from the international to multinational to global stages of corporate evolutions (Marquardt, 1998), numerous practitioners and theorists (Hofstede, 1990; Rhinesmith, 1993; Bennis & Nanus, 1997; Gregersen, Morrison & Black, 1998; Conner, 2000) point out the different skills needed by global managers leading global companies. Central to global management for Rhinesmith (1993) was developing and possessing a global mindset, mindset being defined as the filter through which we look at the world. People with global mindsets seek to continually expand their knowledge, have a highly developed conceptual capacity to deal with the complexity of global organizations, are extremely flexible, strive to be sensitive to cultural diversity, are able to intuit decisions with inadequate information, and have a strong capacity for reflection. A person with a global mindset thinks and sees the world globally, is open to exchanging ideas and concepts across borders, is able to break down one's provincial ways of thinking. The emphasis is placed on balancing global and local needs, and

being able to operate cross-functionally, cross-divisionally, and cross- culturally around the world.

Gregersen, Morrison, & Black (1998) discovered in their research of global companies across Europe, Asia and North America that global leaders needed to exhibit character, embrace duality, and demonstrate savvy. Inquisitiveness is a central force underlying these three characteristics. The authors also listed four strategies that, when properly used, are effective at developing global leaders: travel, teams, training, and transfers.

Petrick, Scherer, Brodzinski, Quinn, & Ainina (1999) identified four global management practices as necessary for improving an organization's strategic competitiveness: global leadership skills, executive oversight responsibilities for global corporate reputation, an annual global reputational audit, and global awards and rankings. In addition, excellent global leaders have a leadership style that generates superior corporate performance by balancing four competing criteria of performance: (1) profitability and productivity, (2) continuity and efficiency, (3) commitment and morale, and (4) adaptability and innovation. Maznevski & DiStefano (2000) and Yeoung & Ready (1995) pointed out the importance of global leaders being team players. Marquardt & Berger (2000) in their survey of 12 global leaders identified eight common attributes: (1) an ability to develop and convey a shared vision, (2) a service/servant orientation, (3) commitment to risk-taking and continuous innovation, (4) a global mindset, (5) comfort and confidence with technology, (6) competence in systems thinking, (7) recognition of the importance of ethics and spirituality in the workplace, and (8) a model for lifelong learning.

More recent theories on leadership emphasize the need for managers to lead in an era of "white water" change (Vail, 1998), to handle complex adaptive systems (Mathews, White, & Long, 2000), and work in chaos (Wheatley, 1992). Vail (1991) points out the need for today's managers to have both a high level of action and reflection. Pfeffer and Fong (2002) note that the most important skills

of leaders include interpersonal and communication skills as well as the ability to solve problems and take action. The workplace needs transformative leaders who, according to Sashkin and Sashkin (2003), possess four transformative leadership behaviors: (a) communications skills (b) reliability and integrity, (c) response and concern for others, and (d) the ability to create opportunities and learn from failure. Bennis and Nanus (1997) identified four areas for leadership competency: attention through vision, meaning through communication, trust through positioning, and deployment of self through positive self-regard. Leaders need to be able to define the problem or understand the environment before attempting to engineer a solution.

Most organizational theorists and practitioners agree that new leadership skills are needed. Styles and skills that may have worked in stable, predictable environments are no longer adequate (Marquardt & Berger, 2000). Collins (2001) notes that leaders of great companies have an ability to be humble and persistent. Schon (1983) and Argyris (1982) both proclaim the ability to reflect as a key leadership skill. Equipping people to become reflective practitioners will help them become better leaders. They distinguish between reflection in action, which is reflecting while doing, and reflection-on-action, which is the reviewing that occurs after the event.

Most leadership development programs, whether corporate or academic, global or domestic, have been ineffective and expensive (Pfeffer & Fong, 2002). The weakness of traditional leadership development program are caused by a number of factors, most notably, (a) teachers and not practitioners are the purveyors of knowledge, (b) a separation exists between the learning and action, (c) very little learning get transferred to the workplace, (d) the business environment is changing so fast that the knowledge gained from the programs are too slow and inadequate, and (e) the absence of reflective thinking in the education process (Dilworth, 1998; McNulty & Canty, 1995). Mintzberg and Gosling (2002) observe that

"contemporary business education focuses on the function of business more than the practice of managing" (p. 28).

Dilworth (1998) writes that global leadership development, as practiced by most organizations "produce individuals who are technologically literate and able to deal with intricate problem-solving models, but are essentially distanced form the human dimensions that must be taken into account. Leaders thus may become good at downsizing and corporate restructuring, but cannot deal with a demoralized workforce and the resulting longer-term challenges" (p. 49). Typical leadership development programs provide little of the social and interpersonal aspects of the organizations and tend to focus on tactical rather than strategic leadership (Lynam, 2000). Conner (2000), in her discussion of global leaders at Colgate Palmolive as well as Neary & O'Grady (2000), in their case study of TRW, noted that developing global leadership skills requires combining local-based classroom teaching with real life learning experiences from often-uncomfortable locations around the world.

These limitations and shortcomings in global leadership development have caused organizations to seek more effective ways to develop their leaders. Action learning has quickly become the leadership development methodology of choice for thousands of organizations such as Boeing, Caterpillar, Novartis, Dupont, Nokia, Canadian Royal Mounted Police, and the U.S. Army (Pedler, 1996; Dotlich & Noel, 1998; Yorks, O'Neil, & Marsick, 1999, Marquardt, 1997b, 1999, 2000).

b. Action learning

Marquardt (1999) describes action learning as an HRD tool that simultaneously solves problems and develops leaders and teams. Revans, considered the father of action learning, recognized that managers in classrooms were relatively passive and lacking in energy, but came to life when they discussed their own "back home" problems with one another. Managers are people of action who learn from action. Fellow managers, in the right environment are prepared to help

one another and share their "limitations." In action learning, mangers learn as they manage (Revans, 1980). Keys (1994) notes that action learning represents a "new and revolutionary" type of executive development that has become the leadership choice of organizations who "seek to both teach and learn from their managers" (p. 50).

Action learning differs from normal leadership training in that its "primary objective" is to ask appropriate questions in conditions of risk, rather than to find answers that have already been precisely defined by others - and that do not allow for ambiguous responses because the examiners have all the approved answers (Revans, 1982, p. 65). Action learning does not isolate any dimension from the context in which managers work; rather it seeks to develop the whole leader for the whole organization. What leaders learn and how they learn cannot be dissociated from one another, for how one learns necessarily influences what one learns.

Dilworth (1998) notes how action learning provides leadership skills that encourage fresh thinking, and thus enable leaders to avoid responding to today's problems with yesterday's solutions while tomorrow's challenges engulf us. McGill and Beatty (1995) point out how action learning provides managers the opportunity to take "appropriate levels of responsibility in discovering how to develop themselves" (p. 37). Fox (1998) describes the powerful impact of training Motorola global managers using action learning.

Bass (1985) points out changes in attitudes, assumption, and values requires reflection on the leader's own mental models. Without change in mental models through continuous reflection, it is impossible for a leader to change. Densten and Gray (2001) assert that reflection assists the development of leaders by enabling them to gain insight and to take into account the complexities of situations. Using action learning to develop leaders results in questioning insight as a way of life. This habit of seeking insight is the basis for the ability to retool the most basic element of leadership development, i.e., ourselves.

Marquardt and Berger (2000) describe how action learning develops seven significant attributes of leaders including systems thinking, change, innovation, visioning, and mentoring. Dilworth (1998) stresses how action learning provides leadership skills that encourage fresh thinking, and thus enable leaders to avoid responding to today's problems with yesterday's solutions while tomorrow's challenges engulf us. McGill and Beatty (1995) point out how action learning provides managers the opportunity to take "appropriate levels of responsibility in discovering how to develop themselves." (p. 37). Marsick and Cederholm (1988) notes the limitations of most management development programs in that they typically focus on a single dimension, unlike action learning which "derives its power from the fact that it does not isolate any dimension from the context in which the managers work." (p. 7).

One important factor in any difficult decision is the character of the manager who makes it; since all mangers are different, development of the individual cannot be taught but must be learned. This represents a unique strength of action learning (McNulty & Canty, 1995). Action learning graduates have a greater aptitude to listen, to negotiate, to resolve conflict to stand tall in the "face of change" (Hii & Marquardt, 2000).

Mumford (1995) believes action learning works because it incorporates the following elements in management development:

* Learning occurs more as result of taking action than merely diagnosing and analyzing or recommending action as most leadership development programs do

* Working on significant meaningful projects of the manager herself creates greater learning

* Managers learn better from one another than from instructors who are not managers or who have never managed

Leadership via Action Learning at Boeing

Research questions

In developing a new program for its global leaders, Boeing sought to test the following:

* Would action learning be an effective methodology for training high level executives to think and act globally?

* What would be the key global leadership competencies needed by Boeing leaders?

* How can the impact of the transfer of learning be measured? What is the appropriate role of an action learning coach? Can an executive serve in this role? Can it be rotated among group members?

Research Design and Methodology

a. Description of Program

The Boeing Company is the world's leading aerospace company, being a global market leader in missile defense, human space flight, and launch services. In terms of sales, Boeing is the largest U.S. exporter. Total company revenues for 2002 were nearly $60 billion. The global reach of the Chicago-based company includes customers in 145 countries, employees in more than 60 countries and operations in 26 states. Worldwide, Boeing and its subsidiaries employ over 170,000 people. As a global learning organization, Boeing seeks employees who take an active interest in their own development through lifelong learning, recognizing that this is the only way it can maintain a leadership position in the global aerospace industry (Boeing, 2002)

The Global Leadership Program represented a significant investment by the Boeing Company. As with all corporations, a reasonable return on that investment was a requirement. Historically, however, quantifying the return on investment for leadership training has been difficult. Thus Boeing set out to develop a

program that not only served as a leadership development tool, but also served to provide the Boeing Company decision makers, through an action learning model, with quality information concerning a real time issue.

The Global Leadership Program debuted in 1999 as one of several tools to enhance Boeing's ability to operate as a global company and to develop leadership competencies within the executive population. As a first step, the Boeing Leadership Center set out to identify executive competencies that were most important for the success of global leaders. The result was a reorganization of 19 executive competencies into three categories of global competencies: (1) most critical competencies (adapting, thinking globally, building relationships, inspiring trust, leading courageously, aligning the organization, influencing and negotiating), (2) very important competencies (shaping strategy, fostering open and effective communication, attracting and developing talent, driving for stakeholder success, demonstrating vision, using sound judgment) and (3) important competencies (driving execution, inspiring and empowering, working cross-functionally, focusing on quality and continuous improvement, applying financial acumen). Based on leadership competency prioritization, Boeing adopted action learning as the methodology since it fit the objective of enhancing the most critical global competencies. Action learning appeared to be able to produce a forum for senior level executives to learn while being challenged with real corporate issues related to the international environment they were placed.

The Global Leadership Program had five key goals for its global executives:

* Practice working together as one global company;

* Value and seek understanding of the history, culture, politics, and customs of countries/regions;

* Appraise the business practices, issues, and competitive dynamics within a country/region;

* Assess business opportunities in a prospective country/region;

* Understand the opportunities for international joint ventures and partnerships.

b. Participant Selection Process

All participants of the Global Leadership Program were senior executives of The Boeing Company, typically directors, division directors and vice presidents. In addition, GLP participants were potentially identified on a company succession plan to be considered for the top company leadership assignments. The result was an extremely rigorous action learning environment designed to strengthen executive global competencies at the highest level of corporate influence. Program participation was by nomination only through the candidate's business unit.

c. Format of Program

The program was divided into three sections: introduction, in-country, and report-out. The introduction consisted of approximately three days in a location within the United States. These three days were filled with introductions, orientation and guest speakers within, and outside of Boeing. The speakers addressing the group were subject experts that also had international credentials. In addition, experts within Boeing addressed the participants and provided them with insight from a US perspective and a Boeing Perspective. The second phase of the program was spent entirely within the country selected by the corporate executive board as a strategically important country. The three weeks were spent traveling to major portions of the country, interviewing business leaders, hearing from country experts and immersion into the culture and people. After approximately 10 days into this phase, the executives were introduced to a specific business issue that had been specifically selected by the corporate executive board as an important and current issue for the company. The participants formed teams to develop solutions and recommendations to present to corporate decision makers. The participants returned to the United States for the final two days of the program. These days were spent reviewing, refining and practicing their team's presentation before the Executive Committee at a regularly scheduled session. The Executive Committee

considered recommendations presented by the participant teams for action.

At various points in the Global Leadership Program, action learning coaches worked with the teams to help members reflect on how they could improve their capabilities as a team and how they could transfer their learnings to other aspects of Boeing operations. The action learning coaches received an intensive two-day training course prior to serving as an action learning coach and guidance during the initial facilitations of the Boeing teams. Both HRD staff as well as Boeing managers with no previous group facilitation background served as action learning coaches.

d. Data Collection Process

In an effort to ensure that the training program was effective in meeting its objective of enhancing Boeing's ability to operate as a global company, the Global Leadership Program developed an aggressive and comprehensive evaluation process. The questions posed were carefully worded and designed to measure specific usefulness, applicability and learning transfer. All data was held strictly confidential. The evaluation design was developed by experienced I/O psychologists, researchers and evaluators of the Boeing Leadership Center as well as outside consultants knowledgeable in program evaluation methods. The follow-up evaluation instruments were developed by first linking the carefully worded questions with program objectives. Questions were also developed using an appreciative inquiry approach (Cooperrider & Srivastva, 1987), and a combination of qualitative open ended questions and requests for quantitative responses. Graduates were asked if they have used and applied what they had learned, and if so, how. This approach allowed for respondents to convey "success stories" as well as specifically identify what parts of the program were most useful and what parts of the program could be made even more useful. The follow-up evaluations at the end of each program, as well as the follow-up evaluations conducted at three months and one year after graduation, were compiled, analyzed and reported to the Boeing Executive Council. Analysis was conducted by both internal and external

Boeing evaluators. Potential bias was minimized through independent data analysis. In addition, participants business units are required to pay for the majority of their program expenses, increasing the likelihood that confidential responses would represent true "value added" opinion.

During the program, the participants completed five different formative evaluations. The collected data were immediately read by the program staff and provided them with real time feedback and the ability to quickly react to emerging issues. The results were organized and shared with the appropriate program partners. On the final day, the participants were also asked to provide a comprehensive summative evaluation of the entire program. The resulting feedback was analyzed for content and was used to develop an executive summary report that was shared with the Boeing Executive Council.

In addition, follow-on interviews have been conducted with a sample population of each program. The interviews were conducted at three months and one year following completion. Each interview was approximately 30 minutes in length, conducted with approximately 66% of the participants, and was a mixture of qualitative and quantitative questions. The follow-up interviews were designed to measure learning transfer in terms of the objectives of the program. This data was analyzed and resulted in an executive summary report that was also shared with the Boeing Executive Council.

Finally, interviews have been conducted with business issue sponsors to follow up with the specific business issues addressed during the program. This data is being used to ensure that there is return to The Boeing Company in the form of quality recommendations as well as a learning experience for the participants.

Results and Findings

Overall results show that the Global Leadership Program has been successful in providing participants with enhanced skills in those competencies targeted as most critical to doing business globally.

a. During program results

The feedback gathered during the seven programs to date has served to modify the structure of the program as it occurs. Because each program is content specific to the country being visited, adjustments to the content, pace and venue are time sensitive and dependent on current events both in the country and within the group. The participants have been very direct in their comments and have commented not only on the program content, but also on their teammates. Based on this feedback, assigned teams have been rearranged, content has been adjusted, logistical issues have been addressed, travel arrangements altered, and program pace amended. This feedback has been often quite personal and has shown to be very useful to the program staff. Team dynamic, group dynamic and individual personalities have surfaced and the data used as a tool to enhance the learning process. On occasion, issues have surfaced that are potentially detrimental to the program. Through the use of immediate feedback, these issues can also be addressed before they become distracting. Typical questions asked during the program are:

1. On a scale of 1-5, please rate speaker #1. Please explain (each speaker or panel is rated). What was most useful? What was least useful?

2. How useful did you find the trip to (insert cultural event)? (each event is rated). What was most useful? What was least useful?

3. Overall comments?

b. End of program results

On the final day of each of the seven GLP programs, one hour has been set aside for participants to reflect on the entire program and provide comprehensive feedback to specific open-ended questions asked. Results and sample responses to the ten questions are as follows:

1. Please rate the overall value of the program to you. (This is a quantitative question using a 5 point Likert scale). The overall rating from this question is 3.74. This rating has stayed relatively stable throughout the two years of the GLP and reflects a high level of value of the Program to the participants.

2. What elements of the program were most valuable to you?

Overwhelmingly, participants commented that the cultural experience of being in-country was critical to the success of the program. Secondly, networking was seen as a key take-away. In addition, the process of working a real business issue was cited as very valuable.

3. What elements of the program were least valuable to you?

The responses to this question were mixed. However, some significant changes to the program have been made as a result of this question. The use of action learning coaches has been modified due to comments concerning "poor fit." At the beginning of the program, external learning coaches were incorporated into each team. Now, the teams, with some guidance from key staff members, are allowed to select a team leader. The team leader has gained support through nomination from team members and has been more successful in influencing team dynamic.

4. Please rate the overall usefulness to you of the 5 days of interviews?

This is a quantitative question that has an overall score of 3.97. The interviews are conducted on site and participants are guests of the business leaders they are visiting. These experiences have been strongly supported by participants as having both cultural and business value. Many comments have focused on learnings relating to interview skills in a cultural context, general people skills within a cultural context, and an awareness that perceptions held are often inaccu-

rate and at times detrimental. Participants notice (even those participants that have traveled internationally prior to the program) that they have a US perspective and that it is not always accurate or complete.

5. How valuable to your learning experience was being within the country?

The responses to this question are very high (4.45). Participants quickly realize that being in the country dramatically enhances the learning. Many comments also refer to the realization that they are gaining global competencies that are transferable to the global environment in general and not country specific.

6. How did working in a team composed of several business units affect your experience? Were you able to work effectively as a team? What, if anything, was missing from the team process?

Participants are formed into teams comprised of members that do not know each other and are from various business units within Boeing. Each team member brings a skill and perspective that varies from the typical environment members come. In addition, many of the responses to this question suggest that the members realize that leadership is as much about following as it is leading. As all of the participants in this program are high level executives that are used to leading, the team dynamic forces them to new roles of cooperation with peers. Leaders emerge at various times during the program. Each team is tasked with finding a way to work together to solve a real issue while realizing their conclusions are accountable to the executive board. The program has been successful in providing a balance between a safe learning environment, a real issue to solve, and accountability for the decisions they make - all important components of action learning. The responses to this question demonstrate that the participants are learning about teaming.

7. Overall, what are the 2-3 most significant insights/learnings you have gained as a result of this program?

The responses to this question are predominately personal, based on the participants' experience. The comments range from general awareness of global competencies to very specific learning such as patience, humility, and stamina. This question also has generated responses that demonstrate participants are learning those leadership lessons that are related to the global competencies targeted.

8. How confident are you that you can apply your learning from GLP back on the job? Please explain your answer.

The aggregate score is 3.30. This question has garnered mixed responses. This is at least in part to the participants' current involvement in a global business assignment. Some participants rate their response low because they are not currently in a global assignment. However, most of these executives will also state that they see value in the program even as they can apply it to their current job that is not global in nature. The leadership competencies learned are applicable universally.

9. To what extent will this learning increase you effectiveness as a leader? Please explain.

Responses have included comments such as:" Part of being a good leader involves synthesizing environmental inputs and taking the right folk in the organization to address specific areas of concern. This program reinforced my knowledge of establishing vision and getting the team behind it." And "I am continuing to push my openness to alternative points of view." "I see the value of silence as an effective intervention" I now use power of inquiry." These statements demonstrate the learned value of asking good questions, reflecting and being patient.

10. Anything else you would like to say?

Sample responses to this open question include: "This was simply the most valuable learning experience I have had as a Boeing employee. Thank you!" "The chance to work on a real business issue was appreciated. I'd encourage GLP to continue to include a diversity of positions, as I saw some of the non-technical

folks adding a lot of value and learning to think more outside business lines." "This was a fantastic experience; it exceeded my expectations by far. My only comment would be that we need to be careful not to let the deliverable overshadow the learning experience."

There is clearly evidence that the program is successful in engaging the executives through the use of action learning and being taken to a new cultural environment. By being placed into a new environment and asked to learn through doing, executives truly experiencing and demonstrating their learning.

c. Follow on evaluations

Approximately three months after and then again one year following the completion of the program, a sampling of graduates were interviewed in an effort to determine whether there had been any significant transfer of learning to the workplace. Graduates were asked whether they have used what they have learned, and how. Using Kirkpatrick's four levels of learning as a quantitative measure (Kirkpatrick, 1998), the responses are coded as demonstrating awareness, learning, behavior changes, or performance stories. All respondents showed an increased awareness of the global environment. 90% of the respondents demonstrated at least one new learning about themselves or their job. 40% could identify a behavior change since they have been back on the job and 8% identified specific and quantifiable performance stories that have been a result of the program. One participant credited the Global Leadership Program for being instrumental in his successful negotiation of a new international business venture that was worth multi-millions of dollars in new business. He cited the fact that being in a new country, part of a working team, learning reflection techniques, and cultural awareness, all directly contributed to the global competencies he needed to be successful.

The questions asked the participants after they have been back on the job require respondents to reflect on, and identify ways that they have specifically applied what they have learned. For example; "Now that you have been back on

the job for 3 months, what have you learned or done differently as a result of the program?

1. Can you tell me a story or give me an illustration of these lessons?

2. To what extent have you seen a shift in your performance back on the job? (Likert scale) (please explain)

3. Have you seen a shift in the performance of your work group?

4. Is there anything that you intend to do differently over the next few months?

5. To what extent has the program had an impact on your operating group? (Likert scale) (please explain)

As success stories are heard, the interviewer probed for as much detail as possible. At times, and with the permission of the respondent, quotes and success stories are used. This qualitative data is combined with the quantitative responses and shared with the program manager and the Boeing Executive Council. Subsequent follow-up interviews and data collection has shown significant financial benefits of the action learning programs to Boeing.

Conclusions and Recommendations

Based on these findings, the Global Leadership Program has been considered a great success in helping Boeing executives develop the global competencies identified as critical in undertaking Boeing's business. In spite of the relatively high training costs of placing a group of senior executives in another country, the return to the company in the form of enhanced global competencies is considered a wonderful return on investment.

Evidence of success

In addition to the qualitative stories of return on investment attributable to program learning, nearly 50% of all participants can specifically identify behavior change of global competencies as a result of the program. In addition, 90% identify learning from the program and all graduates (remember these are senior executives whose budgets absorb the program costs) support the continuation of the program. The methodology of action learning has also proven to be high effective. As one graduate notes, "I have been to university based programs in the past and they are not nearly as effective as being in country and having a real life issue to work." The Action Learning model is clearly effective in enhancing the transfer of learning in this case. Overwhelming positive responses from graduates after they have been back on the job are strong evidence that they are using what they have learned and believe that the 28 days they spent away from family and job was of significant value.

Recommendations

a. Based on the responses from graduates, the Global Leadership Program should continue in its current form. In order to assure program effectiveness, Boeing must send the right people who will become part of a global assignment or be scheduled for a global assignment. This is important to a sustained learning transfer. It is also recommended that careful attention be placed on the evaluation process and especially the follow on interviews. The questions must be carefully worded to obtain qualitative data that can be coded to reflect quantitative results. Kirkpatrick's four levels of learning is a good framework for this process.

b. Action learning is a process that enhances learning for senior executives as leaders at this level are typically goal oriented. The action learning approach is adaptable to the needs of the corporation, the individual and the program staff. In addition, action learning creates a learning environment that re-

quires participants to learn while creating real solutions through real life issues.

c. The facilitation roles of the action learning coach are critical for the success of leadership development. However, this role can be implemented within and rotated among members of the group.

d. It is recommended that there also be a follow up process concerning the business issues chosen by the program. Participant feedback included many inquiries about the status of their particular issue. After presenting their recommendations to the executive council, many of the participants were not kept informed as to the status. Graduates were very interested in learning the outcome of their issue.

e. The Boeing Leadership Center has begun to incorporate the action learning model throughout their programs. Boeing has been convinced that transfer of learning is enhanced through this model and intends to incorporate real issues into the curriculum whenever possible. This is being done for all leadership programs from the 1st level management curriculum, mid level training and executive programs. The ability to measure results is also being incorporated as part of curriculum development. The result is leadership training that is measurable in terms of transfer of learning. Boeing is also incorporating benchmark scoring so that metrics can be developed as standards of performance. Action learning has proven to be ideal as a framework for this process.

Contribution to Research and Field of Leadership Development

There are a number of learnings from this case study of global leadership via action learning that could be beneficial to researchers and practitioners in the field of global leadership:

* Action learning is a powerful methodology that has proven to be an effective tool to develop global leadership competencies both in U.S. and overseas locations. Organizations should seek to employ this approach in leadership development programs.

* The role of the action learning coach is critical to successful leadership development Group members, through reflection initiated by the coach, see when and how they are, or are not, practicing leadership skills. The questions raised by action learning coaches can be used for leadership development in other executive development programs.

* With fairly minimal training and practice, managers with no previous training in facilitation skills can become effective action learning coaches. HRD professionals should explore opportunities to diversify the facilitation role among group members.

* Action learning provides an opportunity for significant and targeted leadership development with minimal outside time or costs. Unlike academic programs which have difficulty in applying what is learned back at work, action learning can be and should be built on actual global challenges faced by the organization.

* Action learning provides an opportunity for significant and targeted leadership development with minimal outside time or costs. Unlike academic programs which have difficulty in applying what is learned back at work, action learning is built around back-home problems and solutions (Marsick and Cederholm, 1988, Dilworth, 1998)

* Action learning has proven to be an effective leadership program for government environments (Dilworth and Willis, 2003).

* Leaders are able to work on his/her own leadership deficiencies in their office situations (Revans, 1980, Mumford, 1995).

* Developing leaders via action learning results in leaders with a greater aptitude to listen, to negotiate, and to resolve conflict, greater ability in the face of change (Hii & Marquardt, 2000).

* Reflective inquiry skills which are so essential to leaders can be developed via action learning (Marquardt, 2004)

References

Argyris, C. 1982. *Reasoning, learning and action.* San Francisco: Jossey-Bass

Bass, B. M. 1985. *Leadership and performance beyond expectations.* New York: Free Press.

Bennis, W. & Nanus, B. 1997. *Leaders: Strategies for taking charge.* New York: HarperCollins.

Boeing corporate webpage (2002)

Collins, J. 2001. *Good to great.* New York: Harper Business.

Conner, J. (2000). Developing the global leaders of tomorrow. *Human Resource Management* 39 (2), 147-157.

Cooperrider, D.L. & Srivastva, S. 1987. Appreciative inquiry in organizational life. In R. Woodman & W. Pasmore (eds.) Research in *Organizational Change and Development*: Volume 1 (pp. 129-169). Greenwich: JAI Press.

Densten, I., & Gray, J. 2001. Leadership development and reflection: What is the connection? *The International Journal of Education Management* 15 (3), 119-124.

Dilworth, L. 1998. Action learning in a nutshell. *Performance Improvement Quarterly* 11 (1), 28-43.

Dilworth, L. & Willis, V. 2003. *Action learning: Images and pathways.* Malabar: Krieger Publishing.

Dotlich D. and Noel, J. 1998. *Action learning.* San Francisco: Jossey-Bass.

Dotlich, D., & Cairo, P. 2002. *Unnatural leadership.* San Francisco: Jossey-Bass.

Fox, M. 1998. Closing the global leadership competency gap: The Motorola GOLD process. Organization. *Development Journal* 16 (4), 5-12.

Gregersen, H., Morrison, A., & Black, J. 1998. *Developing leaders for the global frontier.* Sloan Management Review 40 (1) 21-32.

Hii, A., & Marquardt, M. 2000. Action learning and conflict management in Malaysia. In K.P. Kuchinke (Ed.), Proceedings of *Academy of Human Resource Development* (pp.886-893). Baton Rouge, LA: AHRD.

Hofstede, G. 1998. Attitudes, values and organizational culture: Disentangling the concepts. *Organization Studies* 19 (3), 477-493.

Keyes, L. 1994. Action learning: Executive development of choice for the 1990s. *Journal of management development* 12 (8), 50-56.

Kouzes, J., & Posner, B. 1997. *The leadership challenge.* San Francisco: Jossey-Bass.

Lynam, S. 2000. Leadership development: A review of the theory and literature. In Peter Kuchinke (Ed.) *Proceedings of Academy of Human Resource Development.* (12-1: pp 1-8) Raleigh, North Carolina.

Lynam, S. A. 2000. Leadership development: A review of the theory and literature. In P.K. Kuchinke (Ed.), *Proceedings of Academy of Human Resource Development* (pp. 285-292). Baton Rouge, LA: AHRD.

Marquardt, M. 1996. Action learning: Foundation for organizational learning and corporate success. *Training & Development in Australia*, 11, 7-12.

Marquardt, M. 1997a. *Action learning.* Alexandria: ASTD Press.

Marquardt, M. 1997b. *Action Learning* - An essential tool for corporate success. *HRD Focus*, 6, 6-8.

Marquardt, M. 1998. *The global advantage.* Houston: Gulf Publishing.

Marquardt, M. 1999a. *Action learning in action.* Palo Alto: Davies-Black.

Marquardt, M. 1999b. *Action learning in The Resource Guide to Performance Interventions.* San Francisco: Jossey-Bass.

Marquardt, M. 2000. Action learning and leadership. *The Learning Organization*, 7 (5), 233-240.

Marquardt, M. 2004. Optimizing the power of action learning. Palo Alto: Davies-Black.

Marquardt, M. & Berger, N. 2000. *Global leaders for the 21st century.* Albany: SUNY Press.

Marsick, V. & Cederholm, 1988. Developing leadership in international managers - An urgent challenge. *Columbia Journal of World Business 23 (4), 3-11.*

Mathews, M., White, M., & Long, R. (2000). The problem of prediction and control in theoretical diversity and the promise of the complexity sciences. *Journal of Management Inquiry* 8 (1), 17-31.

Maznevski, M. & DiStefano, J. (2000) Global leaders are team players: Developing global leaders through membership on global teams. *Human Resource Management* 39 (2) 195-208.

McGill, I., & Beaty, L. (1995). *Action learning: A practitioner's guide.* London: Kogan Page.

McNulty, N. & Canty, G. (1995) Proof of the pudding. *Journal of Management Development.* 14 (1), 53-66.

Mintzberg, H., & Gosling, J. (2002). Reality programming for MBAs. Strategy and Business 26 (1) 28-31.

Morrison, A. 2000. Developing a global leadership model. *Human Resource Management* 39 (2) 117-131

Mumford, A. 1995. *Developing others through action learning.* Industrial and Commercial training, 27 (2), 19-27

Neary, D. & O'Grady, A. (2000). The role of training in developing global leaders: A case study at TRW Inc. *Human Resource Management*; 39 (2), 185-193

Pedler, M. 1996. *Action learning for managers.* London: Lemos & Crane.

Petrick, J., Scherer, R., Brodzinski, J., Quinn, J. & Ainina, M. 1999. Global leadership skills and reputational capital: Intangible resources for sus tainable competitive advantage. *The Academy of Management* Executive 13 (1), 58-69.

Pfeffer, J. & Fong, C. (2002) The end of business schools? Less success than meets the eye. *Academy of Management Learning and Education 1* (1) 78-95.

Revans, R. 1980. Action learning: *New techniques for management.* London: Kogan Page.

Revans, R. 1982. What is action learning? *Journal of Management Development 1* (3), 64-75.

Rhinesmith, S. 1993. *A manager's guide to globalization.* Homewood, IL: Irwin Publishing.

Sashkin, M., & Sashkin, 2003. *Leadership that matters.* San Francisco: Berrett-Koehler.

Schon, D. 1983. *The reflective practitioner: How professionals think in action.* New York: Basic Books.

Tough, A. 1982. *Intentional changes.* Chicago: Follet.

Vail, P. 1991. *Managing as a performing art.* San Francisco: Jossey-Bass.

Wheatley, M. 1992. *Leadership and the new science.* San Francisco: Berrett-Koehler.

Yeoung, A. & Ready, D. 1995. Developing leadership capabilities of global corporations: A comparative study in eight nations. *Human Resource Management 34* (4), 529-547.

Yorks, L., O'Neil, J., & Marsick, V. (eds.) 1999. *Action learning: Successful strategies for individual, team and organizational development.* San Francisco: Berrett-Koehler.