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RESPONSE

Peeling the Onion: Getting Inside Experience-Based Leadership Development

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Abstract

There doesn't seem to be much disagreement that experience should be at the heart of leadership development. The energy in the commentaries was around building on the existing foundation of knowledge about experience-based leadership development, bolstering certain areas to make it more complete and usable. I examine more closely several of the issues raised in the commentaries: the role of training and education in leadership development, increasing the probability that the desired learning from experience actually happens, and the transfer of learning.

> There is one great difficulty with a good hypothesis. When it is completed and rounded, the corners smooth and the content cohesive and coherent, it is likely to become a thing in itself, a work of art. It is then like a finished sonnet or a painting completed. One hates to disturb it. Even if subsequent information should shoot a hole in it, one hates to tear it down because it was once beautiful and whole (Steinbeck, 1951, p. 180).

Writing an article for *Industrial and Organizational Psychology: Perspectives on Science and Practice* is a bit like sticking one's jaw out and saying, ''Go ahead. Take your best shot.'' As remarkable as the opportunity is to have the community of scholars read and react to one's work, there is a trace of anxiety waiting for the commentaries to come in, and more than a little defensiveness when they finally do. There is a temptation to respond with ''that's not what I said'' or ''that's not what I meant'' or ''I addressed that somewhere else'' or, worse, ''did you even read the damned article?'' It can be scary putting one's ideas on the line, but the thoughtfulness and insight of these commentators has at once supported, questioned, and extended the discussion of experience-based leadership development. Some solid ground has been identified, a few gaping holes exposed, and important new angles suggested.

I suspected a strong reaction when I said ''there is really no need to do more research on this topic,'' referring to the identification of powerful developmental experiences and what they teach. I was right about the reaction, and it is obvious that more can be learned from further investigation. However, how far is far enough? Ultimately each person is unique and every experience is different, so each life is a journey uniquely traveled. Certainly

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more experiences can be found and the list of lessons lengthened, but is that where we will get the greatest return on our efforts? That there are other more productive things to explore is clear, I think, from the issues raised in these commentaries. Among them there doesn't seem to be much disagreement that experience should be at the heart of leadership development, and what we have learned so far about experience and what it teaches provided these authors a reasonable foundation on which to build. Although application of these ideas in a specific corporation or country would require additional research, or at least renaming elements to fit the setting, longer lists and tailored language may not advance our understanding very much. The energy in the commentaries was not around reinforcing the foundation, but rather it was around building on it, bolstering certain areas to make the edifice more complete and usable.

Responding to my lament that more organizations don't put experience at the core of their development efforts, Wilson and Yip (2010) suggested that research on experience ''has failed to deliver theoretical and practical insights that are sophisticated and yet simple enough to be valuable to practitioners.'' To be both sophisticated and simple is no small accomplishment, but the commentaries clearly move us in that direction. Among the thrusts:[1]

- Don't be too quick to dismiss the role educational experiences and programs play in development—they can prepare people for experiences, help people learn more while having them, and provide a process for understanding what was learned when the experiences are over (Jackson & Lindsay, 2010).
- Don't be too quick to abandon traditional human resource tools and approaches—with some tweaking they can significantly enhance how much is learned from experience (Smerek, 2010; Yost & Plunkett, 2010).
- Don't neglect cognitive structure, learner agency, and what we know about adult learning and the acquisition of expertise—ultimately it is up to the learner to learn from experience, and we need to understand how that happens and what can be done to help (Day, 2010; DeRue & Ashford, 2010; Dominick, Squires, & Cervone, 2010).
- Don't ignore cultural differences and special circumstances—there are real differences in which experiences matter and what is learned from them (Baran & Adelman, 2010; Wilson & Yip, 2010).
- Don't underestimate the challenge in the transfer of learning on several levels (Ligon & Hunter, 2010).
- Bring more rigor into research on the key issues now that the general framework has been developed (Hezlett, 2010).

Each of these papers is thought provoking and each of the issues raised deserves serious attention. Doing justice to them all would require writing an article longer than the original piece, which is not an option. Besides, each stands alone as a contribution to this evolving way of thinking about development, so I have chosen to address only a few of the issues that particularly interest me. I begin with the training and educational programs because I think some of our earlier work led to serious misunderstanding of the role they do and sometimes can play in development. I'd like to clarify what we learned in light of the excellent article on leadership education by Jackson and Lindsay (2010). Then I take on a much larger issue that, from where I sit, is a critical element in experience-based learning and central to most of the commentaries: how to increase the probability that the desired learning from experiences actually happens. In the framework I developed in *High Flyers* (McCall, 1998), I labeled efforts

1. Many of the articles address more than one of these issues, but I have tried to keep it simple by listing them in the one area that got my attention.

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to enhance learning from experience ''catalysts,'' but labeling and actually understanding them are quite different problems. The commentaries that address catalysts offer a host of promising perspectives.

The third area I address follows from the previous one because the effective transfer of learning from one experience or set of experiences to similar and novel future situations is not automatic. One might even hope that an individual's learning might somehow be institutionalized as part of the larger concept of a learning organization.

The Role of Training and Educational Programs

Over the years our finding that less than 10% of the experiences executives reported as ''key events'' or ''shaping events'' came from traditional educational or training programs[2] has been consistently misconstrued and misinterpreted. Indeed, many of the experiences that mattered were small percentages of the total (e.g., ''starting from scratch,'' a significant developmental assignment was only 5.5% of the ''key events''), although when compared with the sum total of the different kinds of assignments (55.8%), other work- and career-related events (15.6%), and encounters with other people (about 20%), coursework events were a relatively small proportion (various kinds of educational experiences were a higher, but still small, percentage of the events described in the global study[3]). The real issue is not about percentages but about what makes an experience a powerful learning event. In the case of programs and training, the more they take on the characteristics of other powerful learning experiences, the more likely they are to matter. As traditionally designed, many educational programs require largely passive and abstract learning and, relatively speaking, do not engage the learner the way a challenging job assignment would. But they *can* be powerful: In our international study, for example, many of the executives mentioned attending an international program or course that was extremely valuable, not because of the content so much as because of the demands made by living and working in a country other than their own (McCall & Hollenbeck, 2002). Those classroom experiences amounted to immersion in a foreign culture and were, for all practical purposes, expatriate assignments with the same kinds of challenges and the same kinds of lessons as job assignments in foreign countries.

The military academies understand leadership development better than most other kinds of organizations, and the article by Jackson and Lindsay (2010) makes some excellent points about how educational experiences can get people excited over a potential leadership career, prepare them for leadership experiences, and give them frameworks for learning more from their experiences. The authors make a compelling case that educational settings can offer advantages rarely present in individual online experiences—for example, educational experiences are available to a wider audience, can be designed for specific learning objectives, and focus on learning rather than simply getting results. I couldn't agree more with the authors that ''educational programs, and specifically postsecondary education, not only *could* contribute to [leadership development from assignments] but *with some deliberate changes could* significantly alter the impact education has on overall leadership development'' (italics added).

It seems to me that educational experiences, whether short-term or longer programs, can contribute significantly to leadership development in at least three ways: by preparing people to choose more wisely among and get more out of experiences, by providing people with experiences they cannot get otherwise (e.g., flight simulators), and by helping people make better sense of the experiences they are having or have had (e.g., after action reviews—see DeRue & Ashford, 2010;

2. In the original study ''coursework'' was 6.2% of events (Lindsey, Homes, & McCall, 1987), not the oft cited 10% of the misleading 70-20-10 dictum.
3. 9% (McCall & Hollenbeck, 2002).

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Ligon & Hunter, 2010; Baran & Adelman, 2010). Unfortunately, this potential is rarely realized, in large part because the programs themselves are seen as the primary development tool (as opposed to being designed to support what is happening on the job) and are often based on competency models rather than on the lessons of actual experience.

Finally, I would suggest that when educational interventions contain the elements of powerful experiences (cf. McCauley, Ruderman, Ohlot, & Morrow, 1994) they can be effective surrogates for experience if they also provide effective support for assessment of and feedback on the *learning* that takes place. Action learning projects, where significant organizational problems are tackled under senior executive sponsorship, have that potential (though in my experience the learning side of such projects is often ineffective), as do simulations that create meaningful challenges (McCall & Lombardo, 1979a, 1979b). Some contemporary simulations combine voice recognition, interactive gaming technology, and cinematic arts to create exceedingly realistic, real-time, interactive environments for training soldiers to face the challenges of combat situations.[4] This kind of training would seem to provide possible answers to Baran and Adelman's (2010) concerns about the difficulty of using experience to prepare people for crises and the unexpected.

Getting More Out of Experience

The most common theme among the commentaries is understanding the process of learning from experience and finding catalysts (McCall, 1998) to insure that people learn as many of the right things as they can from the experiences that they have. Catalysts can inspire or ignite developmental reactions when added to the interaction of person and experience. Training and programs, for example, can be catalytic when viewed, designed, and timed with that purpose in mind.

Even though Yost and Plunkett (2010) suggest that I think human resources practices and processes are a dead horse, and Smerek (2010) claims I dismiss them as ''not experience,'' the HR arsenal contains many tools that can enhance learning from experience. As I stated in the article, when development is centered around experience, a little tweaking and refocusing turns 360-degree feedback, performance management, coaching, and the other interventions mentioned by Smerek into useful catalysts. Yost and Plunkett here and in previous work (Yost & Plunkett, 2009) have creatively added a variety of tools and approaches specifically tailored to development online.

The point is that such efforts must be linked explicitly to making experience a more effective learning venue. Performance management can be a powerful tool for setting learning objectives prior to an experience and holding people accountable for achieving them, as well as for providing relevant feedback on actual development during and after the experience. Some 360-degree feedback processes can be very useful in tracking and providing feedback on growth toward specific learning objectives and, more generally, growth over time. Appropriately timed coaching by qualified teachers can be critical to learning (McCall & Hollenbeck, 2008). Succession planning can be an indispensable tool in identifying candidates and matching them to specific jobs not just according to their strengths but in recognition of their developmental needs.

More intriguing than simply recasting existing human resource tools and processes to support experience is the emphasis in some of the commentaries on the individual differences and cognitive variables that affect learning from experience. Day (2010), for example, presents a terrific analysis of the problems associated with

4. The Institute for Creative Technologies at the University of Southern California (ict.usc.edu) has created under U.S. Army grants a series of powerful immersion experiences using digital interactive virtual environments to prepare soldiers for combat in Iraq and Afghanistan.

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learning from experience and points out that ''any learning from experience in the context of ongoing work would likely be happenstance and ad hoc at best.'' That, of course, is the greatest danger in using online experience because, for the variety of reasons they discuss, learning the ''right'' things from challenging experiences is anything but automatic. By focusing on the translation of ''deliberate practice''[5] from the acquisition of professional expertise to the development of leadership, Day has made a crucial contribution to experience-based development (see also McCall & Hollenbeck, 2008). I firmly believe that this is a direction we need to take, building on Day's suggestions, and continuing to explore how practice—deliberate practice—can be translated into experience-based leadership development.

DeRue and Ashford (2010) pursue a related theme in their discussion of ''mindful engagement,'' placing the burden of learning from experience on the person in the experience. By emphasizing how a person can prepare (''frame,'' set goals) for an experience, behave during the experience (e.g., seek feedback and experiment), and reflect afterward, DeRue and Ashford provide useful clues as to how we might help others take charge of their own learning. The evidence is actually quite convincing that development is significantly enhanced when individuals proactively take charge of their own learning from experience (DeRue & Wellman, 2009; Dragoni, Tesluk, Russel, & Oh, 2009; Spreitzer, McCall, & Mahoney, 1997), and the deep dive into cognitive processing by Dominick et al. (2010) provides a partial explanation not only for when and how experience is internalized, but how cognitive structure and process develops experientially.

There is no doubt that learning from experience is ultimately up to the person having the experience, so furthering our understanding of central individual variables such as readiness, motivation, perseverance, cognitive structure, learning orientation, and others can be extremely valuable in selecting people for experiences and for coaching them in how to make more of the experiences they have. That said, organizations still create the context that supports or thwarts development by the ways they identify challenging experiences, identify who will get those experiences, get people who need them into the experiences they need, provide appropriate feedback and support, hold people accountable for learning objectives, and see to it that the person with the most direct influence over experience-based development, the immediate boss, lives up to expectations.

Transfer of Learning

Most of the attention on experience-based learning has focused on what developmental experiences are, the lessons they offer, and what can be done to enhance learning from an experience. These are substantial issues, worthy of considerable attention, but to develop leadership requires one to apply lessons learned from one experience to future challenges and to modify them for use in situations different from the ones that taught them (Wilson & Yip, 2010). Transfer of learning takes on many dimensions: from the experience to the person in it, from one experience to the next, from similar experiences to different ones. Wilson and Yip add an additional dimension by suggesting that transfer of learning also should include a link from the individual to the organization, taking its place as part of a learning organization.

Obviously learning from experience is not just a one-shot deal, so adding the longitudinal dimension is crucial theoretically and pragmatically. Indeed, as Day (2010) reminds us, developing world-class expert status in any field requires a minimum of 10 years or 10,000 hours of deliberate

5. Day, drawing on Ericsson, defines ''deliberate practice'' as ''pursuing a new challenge that pushes someone to go beyond his or her current achievement level, ideally in a safe learning environment that provides immediate and high quality feedback.'' Clearly this is quite difficult to achieve in real-time managerial experience.

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practice (see also Colvin, 2008). Even considering multiple experiences over time as opportunities for deliberate practice, using experience to develop leadership requires a career long perspective and is anything but certain.

Adding the time dimension raises a host of different issues that somehow have to be incorporated in an experience-based approach. We know from research on derailment,[6] for example, that there are four dynamics that can derail career progress (e.g., McCall, 1998): Strengths that lead to success can become weaknesses later on; flaws that have not been a problem become central in a different situation;[7] self-confidence, essential to becoming a leader, morphs into arrogance; and bad luck reveals fatal flaws or leads to counterproductive behavior. In short, development is not a steady, linear path of increasing ability but rather is marked by a series of critical transitions that require, to varying degrees, building on strengths, giving up strengths, fixing flaws, and acquiring new strengths (Bridges, 1980; Charan, Drotter, & Noel, 2001; Dotlich, Noel, & Walker, 2004; Hill, 1992). Once again the article by Dominick et al. (2010) provides the beginning of a framework for understanding the cognitive demands of learning from experience and how cognitive structures might evolve over time.

The implications for organizations, as noted in the focal article, are daunting. Not only must there be some way of tracking individual development over time (including but not limited to experiences had and lessons learned) and across bosses, but intervention at crucial transition points can spell the difference between successful growth and derailment. Even identifying where the crucial transitions are requires a fundamentally different understanding of experiences and the challenges they present.

Experience-Based Development in Different Cultures

Wilson and Yip (2010) are concerned that cultural differences have not been taken sufficiently into account in understanding experiences, the lessons they teach, and how different cultural contexts change the dynamics of learning from experience. They give intriguing examples of specific findings from India, China, and Singapore that suggest that ''event categories are weighted differently, new event types emerge and other event types are absent.'' Their data seem to confirm what we learned in our study of global executives (McCall & Hollenbeck, 2002), although our conclusions about the implications of the cultural differences are rather different.

What struck us after interviewing 101 international executives from a variety of corporations and countries was how similar the events and lessons were to those found in the earlier study of predominately U.S. executives (McCall, Lombardo, & Morrison, 1988) and how well the framework developed to explain experience (McCall, 1998) held up for developing global executives.[8] To be sure, things are more complicated in an international context: As Wilson and Yip note, we found some different experiences (e.g., culture shock and stint at headquarters) and some different lessons learned (e.g., coping with cultural differences and overcoming language barriers), as well as some different weightings and even some different lessons learned from some experiences (coping with cultural differences sometimes overwhelmed job challenges). But the similarities far outweighed

6. Defined as when a talented person has achieved much success and is expected to continue to be successful, but something goes wrong.
7. These first two dynamics are the reason that following the popular advice to ''play people to their strengths'' is a good way to stop development in its tracks and derail potential leaders. See Kaiser (2009) for a series of articles making the case for not staying with strengths.
8. The framework originally presented in *High Flyers* (McCall, 1998) is significantly more complicated when considered in a global context, but its essential components are the same. See McCall and Hollenbeck (2002).

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the differences,[9] and we concluded that putting experience at the core of leadership development is still justified even though there are cultural differences (both geographic and corporate) to take into account. For global corporations, as for any other kind, the business strategy should determine how many of what kinds of executives are needed and consequently what experiences their talented future leaders will need. Cultural differences, as well as differing nationalities in the high potential pool, simultaneously complicate and enrich the possibilities.

Hence?

> There will be lots of disputing among the experts over what is certain and what not; perhaps the heat and duration of dispute could be adapted for the measurement of uncertainty. In any case, once a set of suitable questions becomes agreed upon, these can be approached by the most systematic methods of applied science (Thomas, 1974, p. 139).

I somewhat brashly stated in the original article that there were seven ''sure bets'' in this business of developing leadership through experience. Obviously ''sure'' is a relative term in this instance, and Hezlett (2010) lays out a research agenda that she hopes will fill in the gaps, enabling practitioners to more effectively implement experience-based development. Her focus on how to enhance learning from experience, both from the learner's perspective and from manipulating context, is absolutely on target. By bringing together research on skill acquisition, coaching, feedback, individual characteristics, supervisor support, goal setting, and a variety of other relevant factors, we may finally get a handle on the kinds of interventions needed to enhance the probability that learning will occur. Further, her call for research on individual differences in motivation to learn, learning orientation, and readiness to learn is spot on with what we know about the acquisition of expertise in other areas (e.g., Ericsson, Charness, Feltovich, & Hoffman, 2006) and dovetails nicely with Day's (2010) discussion of deliberate practice as applied in the context of learning from experience. For all that organizations can do to create a climate and context for learning, and despite all the resources and support they may throw at it, it is, in the end, up to the individual to take advantage of the opportunity and grow.

As gratifying as it is to see such rigorous thinking and creative ideas applied to experience-based leadership development, and as optimistic as I am that eventually organizations will begin designing their leadership development processes with experience at their center, I do not believe that the science will ever result in a mechanistic formula for such development. The passion to lead and the capacity and opportunity to learn the needed skills will never be programmable. Even as our understanding of how people learn grows, and as we get better and better at creating effective contexts for learning, the best we can hope for is making better decisions than we have in the past about how to identify potential leaders and provide them the opportunity to realize their talent.

9. Readers can draw their own conclusions by looking in McCall and Hollenbeck (2002, Table 4-1, pp. 94–97), which compares ''lessons learned'' for the United States and international studies, and Table C-5 in the Appendix (pp. 237–240), which compares the experiences cited in the two studies. The contrast between the original framework based largely on U.S. samples and the more complex version based on the global sample is found in Chapter 8, Figures 8–1 through 8–5.

References

Baran, B., & Adelman, M. (2010). Preparing for the unthinkable: Leadership development for organizational crises. *Industrial and Organizational Psychology: Perspectives on Science and Practice, 3*, 45–47.

Bridges, W. (1980). *Transitions: Making sense of life's changes*. Reading, MA: Addison-Wesley.

Charan, R., Drotter, S., & Noel, J. (2001). *The leadership pipeline*. San Francisco: Jossey-Bass.

Colvin, G. (2008). *Talent is overrated*. New York: Portfolio.

https://doi.org/10.1111/j.1754-9434.2009.01200.x Published online by Cambridge University Press

Day, D. (2010). The difficulties of learning from experience and the need for deliberate practice. *Industrial and Organizational Psychology: Perspectives on Science and Practice, 3*, 41–44.

DeRue, D. S., & Ashford, S. (2010). Power to people: Where has personal agency gone in leadership development? *Industrial and Organizational Psychology: Perspectives on Science and Practice, 3*, 24–27.

DeRue, D. S., & Wellman, N. (2009). Developing leaders via experience: The role of developmental challenge, learning orientation, and feedback availability. *Journal of Applied Psychology, 94*, 859–875.

Dominick, P., Squires, P., & Cervone, D. (2010). Back to persons: On social-cognitive processes and products of leadership. *Industrial and Organizational Psychology: Perspectives on Science and Practice, 3*, 33–37.

Dotlich, D., Noel, J., & Walker, N. (2004). *Leadership passages*. San Francisco: Jossey-Bass.

Dragoni, L., Tesluk, P., Russel, J., & Oh, I. (2009). Understanding managerial development: Integrating developmental assignments, learning orientation, and access to developmental opportunities in predicting managerial competencies. *Academy of Management Journal, 52*, 731–743.

Ericsson, K. A., Charness, N., Feltovich, P., & Hoffman, R. (Eds.) (2006). *The Cambridge handbook of expertise and expert performance*. Cambridge: Cambridge University Press.

Hezlett, S. (2010). Suggestions for new research on experience-based learning. *Industrial and Organizational Psychology: Perspectives on Science and Practice, 3*, 56–60.

Hill, L. (1992). *On becoming a manager*. Boston: Harvard Business School Press.

Jackson, R. J., & Lindsay, D. (2010). Lessons *for* experience: Why wait? *Industrial and Organizational Psychology: Perspectives on Science and Practice, 3*, 48–51.

Kaiser, R. (Ed.) (2009). *The perils of accentuating the positive*. Tulsa, OK: Hogan Press.

Ligon, G., & Hunter, S. (2010). Putting the development into experiential development. *Industrial and Organizational Psychology: Perspectives on Science and Practice, 3*, 28–32.

Lindsey, E., Homes, V., & McCall, M. (1987). *Key events in executives' lives* (Technical Report 32). Greensboro, NC: Center for Creative Leadership.

McCall, M. (1998). *High flyers: Developing the next generation of leaders*. Boston: Harvard Business School Press.

McCall, M., & Hollenbeck, G. (2002). *Developing global executives*. Boston: Harvard Business School Press.

McCall, M., & Hollenbeck, G. (2008). Developing the expert leader. *People & Strategy, 31*, 20–28.

McCall, M., & Lombardo, M. (1979a). *Looking Glass, Inc.: An organizational simulation* (Technical Report No. 12). Greensboro, NC: Center for Creative Leadership.

McCall, M., & Lombardo, M. (1979b). *Looking Glass, Inc.: The first three years* (Technical Report No. 13). Greensboro, NC: Center for Creative Leadership.

McCall, M., Lombardo, M., & Morrison, A. (1988). *The lessons of experience: How successful executives develop on the job*. Lexington, MA: Lexington Books.

McCauley, C., Ruderman, M., Ohlot, P., & Morrow, J. (1994). Assessing the developmental components of managerial jobs. *Journal of Applied Psychology, 79*, 544–560.

Smerek, R. (2010). The nature of knowledge, reflective practitioners, and the value of experience. *Industrial and Organizational Psychology: Perspectives on Practice and Science*, 3, 38–40.

Spreitzer, G., McCall, M., & Mahoney, J. (1997). Early identification of international executive potential. *Journal of Applied Psychology, 82*, 6–29.

Steinbeck, J. (1951). *The log from the Sea of Cortez*. New York: Viking.

Thomas, L. (1974). *The lives of a cell*. New York: Bantam.

Wilson, M., & Yip, J. (2010). Grounding leader development: Cultural perspectives. *Industrial and Organizational Psychology: Perspectives on Science and Practice, 3*, 52–55.

Yost, P., & Plunkett, M. (2009). *Real time leadership development*. Chichester, UK: Wiley-Blackwell.

Yost, P., & Plunkett, M. (2010). Ten catalysts to spark on-the-job development in your organization. *Industrial and Organizational Psychology: Perspectives on Science and Practice, 3*, 20–23.

https://doi.org/10.1111/j.1754-9434.2009.01200.x Published online by Cambridge University Press