

**Leader/ship Development: Moving in Place or Moving Forward:**  
A Review of Theories, Methods and Effectiveness of Leader/ship Development

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## **Abstract**

This article reviews the current research and practice in leadership development. Definitions of leadership, leader development and leadership development vary across the literature. Most descriptions of leader and leadership development focus on the development of individual leaders rather than the development of organizational leadership. With recent leadership theories incorporating the perspectives of followers, however, the trend is towards distinguishing between the terms. Based on the work of Day, Zaccaro, and Halpin (2004) and Van Velsor, McCauley and Ruderman (2010), leader development is defined as enhancing individual leader capacity whereas leadership development is the growth of leadership capability (e.g 'social capital' and relationships) of the organization.

The article examines the methods and effectiveness of leadership development programs. The review highlights that there are many different definitions and models of leadership and suggests leadership programs need a definition of leadership before an effective program can be designed. An integrated model of leadership is also needed that incorporates previous, validated models of leadership and management. The Integral leadership and management model is described as an inclusive framework that provides a perspective suitable for the commercial, social, intellectual and spiritual challenges of the 21<sup>st</sup> century.

Three meta-reviews show moderate support that leadership programs lead to individual development but few studies examined or showed organizational improvement. A summary of the methods most often used for leadership development is included. Finally suggestions are made on how leadership development can be improved in the future including the need for longitudinal research that includes the impact on organizational outcomes.

## **Introduction**

What does it mean to develop leadership? This paper investigates methods used, processes and outcomes of leader and leadership development. It also explores how leader/ship development is conceptualized and the content of leader/ship development experiences. The purpose of this article is first to explore the major questions facing the field of leadership development and then review the current field of leadership development including the models of leadership that most influence their design, the most used methods and how effective leadership development programs are. Finally, recommendations are made regarding what should be considered in order to design an effective leadership program

## **Leader and Leadership Development**

Rost (1990) points out that there are almost as many definitions of leadership as there are individuals studying the topic. Understanding and describing leadership development presents a similar problem. There are many articles and studies on the key traits and competencies of successful leaders. A review of the current literature on leadership development shows that one of the first problems encountered is the lack of definition. An overview of the past 20-30 years of the leadership development field (Hernez-Broome and Hughes, 2004) and a review of current trends by (Riggio, 2008) both point out that many authors fail to provide the definition of leadership before discussing leadership development and that many leadership development programs do not start with a definition of leadership.

Ardichvili and Manderscheid identify leadership theories “which often form a foundation of leadership development practices in today’s organizations – theories and models [that] are based on impressions gained from practical work in industry and discussions with industry practitioners” (p. 621). They list Leader-Member Exchange (LMX), servant leadership, complexity theory, authentic, situational and transformational leadership as theories most used.

Some authors (Gentry and Leslie, 2007; Killian, 2010) recommend identifying leadership competencies as a way to guide development of a leadership program. However, as Gentry and Leslie note, “it may be confusing for some to determine the competencies to be used for leadership development purposes given numerous theories about leadership and leadership development [and] no clear ‘model’ or ‘framework’ for determining competencies”(p. 38). In addition, leadership development should allow for the uniqueness of each organization.

The uniqueness of each organization combined with the need to provide some consistency in leadership perspectives points to the need for an integrated, yet flexible framework of leadership. This integrative, flexible framework modifiable is required to provide for a core set of leadership competencies that could be added to with specific organizational competencies related to the challenges facing each organization while developing the *capacity* of its leaders and leadership (Bennis and Goldsmith, 2010; Heifetz, 1994; Linkage Inc., 2009). The Integral leadership and management framework described later in this paper could be a candidate which fulfills this requirement.

### **Leader vs Leadership Development?**

Distinguishing *leader development* from *leadership development* and *training* from *development* are problematic across the literature. In the education and development field, training usually refers to the acquisition or expansion of a set of skills whereas development is about altering one’s way of making meaning (Boyatzis, 2008; Cook-Greuter, 2004). Day, Harrison, and Halpin (2008) state, “training can be thought of as those procedures and processes used to teach proven solutions to known problems ... [whereas] development is a longer-term endeavor in which the purpose is to enhance individuals’ capacity for being able to quickly make sense of the environment and adapt effectively by learning their way out of problems” (p. 129). Hence, while

authors believe they are describing leader/leadership development research and practices, there is a focus on *training* as opposed to *development* (Kegan and Lahey, 2009).

With the advent of leadership theories incorporating the perspectives of followers, Day, Zaccaro, and Halpin (2004) and Day et al. (2008) describe a trend towards differentiating these terms. Specifically, leader development is about enhancing individual capacity. Leadership development, on the other hand, refers to “a function of between-individual processes [and] involves the creation of social capital primarily at the group, team and organizational level” (Day et al., 2008, p. 159). Leader development is thought to precede leadership development because “individuals must first have the basic kinds of skills to be able to build effective relationships with others before social capital that is embedded in those relationships can be realized” (Day et al., 2008, p. 26). The Center for Creative Leadership (CCL) also differentiates leader development as “the expansion of a person’s capacity to be effective in leadership roles and processes... [and] leadership development as the expansion of the organization’s capacity to produce direction, alignment and commitment” (Van Velsor et al., 2010, p. 26).

One implication of the distinctions made between leader development and leadership development is that the processes for developing the capacity of the individual are different from those that develop team and organizational capacity. Nonetheless, a significant amount of the leader/leadership development literature focuses on the training and development of the individual and therefore is about developing individual capacity.

### **Trends in Leadership Development Programs**

Hernez-Broome and Hughes (2004) note that the most significant trends of the past 20 years fall under two general headings: (1) proliferation of leadership development methods and (2) importance of a leader's emotional resonance with and impact on others. The authors identify a shift from a sole focus on classroom training to the inclusion of developmental experiences. The

original goal of leader development practice was about producing more and better leaders. The second trend, the emphasis on the emotional resonance with others, arose because there wasn't a clear distinction between leading and managing. Twenty years ago, the general approach and understanding of leadership was transactional and focused on leadership tasks and relationships. Over time, there has been a shift to transformational leadership which meant tapping into follower values, supporting a sense of higher purpose and engendering higher level commitment. Success was based the leader's ability to motivate followers to improve performance and align individual actions with the organizational vision.

The advent of new transformational leadership theories and research shifted the focus from behavior (what leaders to do) to leadership as relational process. This shift presents a challenge to the design of leadership programs that are more innovative yet practical. Becoming a leader is more than just being a good manager; the practices used in the past either had to be revised to inspire and motivate. The basic approaches used in the previous decades are still used today, but now focus on *integration* which means linking individual development and objectives with organization objectives to achieve greater collective impact (Hernez-Broome and Hughes, p. 28). Hence there is increased attention to experiential learning in context. Furthermore, there is recognition that leader development is an on-going process, not a series of one-shot events (Hernez-Broome and Hughes, p. 28; Linkage Inc., 2009, p. 19). Hernez-Broome and Hughes state that, "although the field is moving away from viewing leadership and leadership development solely in terms of leader attributes, skills, and traits, leadership competencies remain a core dimension of leadership development activities in most organizations" (p. 28). There is a growing realization that not all leaders within an organization need to develop the same competencies – what is to be developed is specific to the needs and challenges being

addressed. This shifts the outcomes of leader development from tasks/behaviors of leadership to relevant outcomes.

Heifetz (1994) sees the need for leaders in the future who can deal with adaptive challenges. There is less of a need for the “Lone Ranger” type of leader and for more individuals who can motivate, coordinate and connect. The work of leadership will be conducted in uncertain environments and require different roles for leaders (Bennis and Goldsmith, 2010; Heifetz et al., 2009; Hernez-Broome and Hughes, 2004). This increased need to develop organizational and individual capacity “will require a deeper understanding of the role of organizational systems and culture in leadership development” (Hernez-Broome and Hughes, p. 31).

### **Theories and Frameworks Influencing Leader Development**

A number of experts in the area of leadership development have identified key issues necessary for consideration of leadership development (Riggio, 2008, Allen and Wergin, 2009, Dalakoura, 2010, Day, Harrison and Halpin, 2008, and McGonagill and Pruyn, 2010). They include:

- a need for research and theory to guide model and/or program development,
- accounting for individual differences in leader development, and
- effective leadership development techniques.

While there is general consensus in the literature that no shared theory of leader development exists (Avolio and Hannah, 2008; Day, 2000; Riggio, 2008), there is some consensus around a set of frameworks that are informing current work in the field of leader development.

A theoretical framework “guides research by relying on formal theory...[uses] an established, coherent explanation of certain phenomena and relationships” (Eisenhart, 1991, p. 205). The literature describes early forays into leader development (e.g. 20+ years ago), and current programs, as relying on practical frameworks in that “there is an assumption that leadership is a sort of generic set of skills or abilities that all leaders, regardless of the organization or the situation in which they lead, need to possess to become more effective” (Riggio, 2008, p. 385).

Hence, a general training model is used to identify gaps and create the learning objectives in which there is an increase in what one knows but not necessarily how one knows what s/he knows.

**Theoretical frameworks.** Three theoretical frameworks most prominent in the leader development literature come from work on cognition, developmental psychology (especially identity development) and sociology (e.g. social identity, social learning theory). These frameworks are the foundational elements that drive the content of a particular program and/or that comprise larger conceptual frameworks. Each is described in brief below.

***Developmental psychology.*** About 30-40 years ago, some researchers in development psychology began to push against the notion that individual development stopped at adolescence (Allen and Wergin, 2009). According to Allen and Wergin (2009), Erik Erikson was one of the first to suggest that adults do continue to development; they experience a “change in ways that lead to greater complexity or quality of life” (p. 4). An essential component of this thinking relates to how identity continues to be shaped and informed by experience. A portion of the leader development literature draws heavily on identity theory to understand how one develops identity as a leader and what supports or limits that development. Gronn and Lacy (2004) discussing leader formation state:

The construction and management of identity, or sense of oneself as a leader, comprises ...one of three key developmental requirements experienced by prospective leaders. ...A key dimension of identity development is awareness of oneself. (p. 410)

Hall (2004) makes a distinction between identity and self-awareness, two important aspects of leader development.

*Identity* relates to the way an individual perceives himself or herself in relation to ‘others’ in the environment...Identity is more a description of what the sense of self *is*, whereas self-awareness contains more of an evaluative component, referring to the *quality* and *accuracy* (i.e. agreement with ‘others’) of those self-perceptions. (p. 154)

Day and Harrison (2007) describe three levels of identity that are important for leader development: individual (least inclusive), relational, and collective (most inclusive). As Lord and Hall (2005) explain,

*Individual level identities* emphasize ones uniqueness and differentiation of the self from others. *Relational identities*, in contrast, define the self in terms of specific roles or relations, often including others in the definition of one's own self-identity.... *collective identities* define the self in terms of specific collectives such as groups or organizations, creating a desire to develop in oneself the qualities that are prototypical of these collectives.(p. 596; italics in original)

Research and theory support the conclusion that experiences that help a leader reflect on their existing self-schema can prompt further help integration (Day et al., 2008, p. 66).

**Cognition.** Cognition refers to how people learn. Bransford, Brown, and Cocking state that the current “view of learning is that people construct new knowledge and understandings based on what they already know and believe” (p. 10). In other words, “the knowledge that one derives from available information is limited and shaped by one’s fundamental assumptions about the world and by one’s ability to make sense of that information” (Day et al., p. 85).

In the leader development literature, the focus of the use of cognition research is on developing leader skills requiring (1) time, (2) use of reflection, and (3) expanding one’s strengths, not just working to overcome weaknesses (Day et al., 2008; Kegan, 1994; Kegan and Lahey, 2001). Developing leadership expertise is seen as more than just acquiring new knowledge and skills, but is also about increasing the complexity of thinking which includes learning both horizontal (new skills) and vertical (increased complexity) ways (Cook-Greuter, 2004; Day et al., 2008; Kegan, 1994; Kegan and Lahey, 2001).

The learning styles work of Kolb and Kolb (2005) are used often to support experiential learning processes in leader development programs. Likewise, Day et al. (2008) describe a model of learning which emphasizes learning how to learn and shows that certain kinds of learning (natural,

formal, personal) may be better suited to certain contexts for learning (interactive, directed, self-initiated). Day states it is not the “quantity or quality of the experience that matters in the long-term development of skill; rather, it is a direct function of the amount of deliberate practice that is undertaken over a considerable period of time” (Day, 2010, p. 42).

**Sociology.** The sociological perspective in the leader development literature focuses attention on the individual in interaction with others, the interpersonal realm. Leader-Member Exchange (LMX) theory was identified as a major leadership perspective that focuses on the needs of the follower as an important dimension in authentic and transformational leadership (Avolio et al., 1996; Avolio et al., 2010; Luthans and Avolio, 2003; Uhl-Bien, 2003).

Social learning theory and social identity theory are the two topic areas within sociology cited most often. Social learning theory posits that individuals learn by observing others and adopting their behaviors (Day et al., 2008, p. 152). Mentoring and apprenticeships are examples of processes supported by social learning theory used in leadership development. Social identity theory helps to explain how an individual develops a team and organizational identity (Hogg, 2001; Lord and Hall, 2005; Uhl-Bien, 2006) and that one’s social identity will be developed in ways similar to one’s individual identity (Lord and Hall, 2005).

Information from developmental psychology, cognition, and sociology are prevalent across the leader development literature. While these have described here as separate entities, they are used in combination in leader development programs.

**Conceptual frameworks.** Individual theoretical frameworks have been combined to form larger conceptual frameworks as in the case of adult development and integral theory. Adult development is put into the category of conceptual frameworks to separate it from the more general discussions of individual development.

**Adult development.** Adult development, as articulated by Moshman and cited in Day et al. (2008) is an umbrella theory incorporating identity development, moral development, and epistemic cognition. Erikson (as cited in Allen and Wergin, 2009) states adults need to face three dilemmas to reach optimum quality of life:

- Intimacy vs isolation – ability to establish deep/meaningful relationships;
- Generativity vs self-absorption and stagnation – guiding the next generation; and
- Ego integrity vs despair – acceptance of the ups and downs of life.

As a staged approach to development, these dilemmas must be faced in order, such that success at one stage is the foundation for achieving the next. Levinson also endorsed a stage approach that included 10 stages that are to be traversed from age 1 to 65+. The implications for leader development include: (1) how a person responds in a given situation probably depends on their stage in life and (2) being able to learn requires that individuals are supported in moving from one stage to the next (Allen and Wergin, 2009; Cook-Greuter, 2002). Baltes and Staudinger, on the other hand, view adult development as a change in adaptive capacity (1999, p. 479) and suggest that “any process of human development involves an orchestration of selection, optimization, and compensation [SOC]” (Baltes and Staudinger, 1999, p. 483). Selection is about setting goals and identifying outcomes, optimization is about obtaining and using relevant resources, and compensation is about how one deals with loss (Baltes and Staudinger, 1999; Day et al., 2008). The idea that development can have an element of loss (decline as opposed to growth) is an important understanding resulting from their work. The SOC processes can be considered fundamental for leader development. Change and compensation strategies support long-term leader development through building persistence and behavioural models (Day et al., 2008, p. 218). Teaching SOC skills, especially early in one’s career may be useful in leader development.

***Integral theory.*** Integral theory emerged from the work of Ken Wilbur and has been building in prominence in the leadership development literature during the last 10 years. Integral theory “describes four quadrants of reality, eight levels of development and a number of other useful ideas about human and organizational functioning” (Cacioppe, 2009, p. 3). The four quadrants, created by the intersection of two dimensions (interior/exterior and individual/collective) provide an approach for understanding the world, a kind of map for orientation to the world. For example, a person oriented to the individual-exterior quadrant focuses on observable behaviors. If this individual is a manager, then s/he might gravitate towards leader development activities that focus on behavioral outcomes. Cacioppe (2009) has modified the integral framework by adding a third axis, relationship/results. This results in a leadership and management framework that incorporates the major theories of leadership.

One can use this framework to work backwards and determine within which orientation(s) a particular leader development program operates. The eight levels of development describe the stages of a person’s self identity and meaning-making system. According to Cook-Greuter, stage or vertical development “describes increases in what we are aware of, or what we can pay attention to, and therefore what we can influence and integrate” (2004, p. 276). One of the challenges in the leader development field is the insufficient attention to vertical development (Cacioppe, 1998; Cacioppe and Edwards, 2005; Day et al., 2008; Kegan and Lahey, 2001; Kegan and Lahey, 2009). Integral theory applied to leadership development has the potential of integrating theories of leadership and management and the various approaches to leadership development (Cacioppe, 2009).

Integral theory’s levels of development can also be used to determine what is or could be happening with the leader development experiences created. The recent advent of Integral theory

is showing promise as a meta-theory for understanding and integrating current theories in leadership and leadership development into one over-arching framework.

### **What Gets Developed in LDR-DEV?**

One way to consider what gets developed in leader development is related to how leadership is defined. When leadership is defined as *what people do*, their skills and abilities, what gets developed is about *doing*. If the understanding about leadership is directed towards *what people know*, their level of expertise, then *knowing* gets developed. Knowledge, in this sense, could either be expertise in a certain domain (e.g. science, marketing) or more general knowledge about the organization, industry, human dynamics, or the like (Anderson and Ackerman-Anderson, 2001; Day et al., 2004). And, if the view of leadership is about *ways of being*, “the aggregate expression of one’s mindset, emotions, and behavior” then the emphasis of leader development will be about *becoming* (Anderson and Ackerman-Anderson, 2001, p. 189). Another way to understand what drives the curriculum has to do with organizational outcomes of leadership such as: direction, alignment and commitment; the ability to address complex problems; managing change; or organization strategy. These two drivers of curriculum (leadership definition or outcomes) may be influenced by any of the frameworks discussed earlier; sometimes this is evident and sometimes it is not.

A review of the literature on leadership development shows an emphasis on building competencies as the most prevalent. Whether talking about authentic leaders (Avolio et al., 2010; Garger, 2008; Graen and Uhl-Bien, 1995), change leaders (Anderson and Ackerman-Anderson, 2001), or managerial leaders (Gentry and Leslie, 2007; Horwitz, 2010; Kotter, 1990) the bulk of leader development programs/activities focus on skills and competencies. There is great variability in what those competencies might be and Table 1 lists the most common ones found in the literature.

**Table 1.** Competencies for leadership development

<b>Competency</b>	<b>Reference</b>
Interpersonal, facilitation, and dialogic skills	(McGonagill and Pruyn, 2010)
Communication, conflict management, team building	(Killian, 2010)
Delegation, idea generation, communication, listening, collaboration	(Gentry and Leslie, 2007)
Relationship and team building	(Hirst et al., 2004)
Strategic thinking, communication, relationship building, talent development	(Linkage Inc., 2009)
Leading self, leading others, leading the organization	(Van Velsor et al., 2010)
Mastering context, knowing yourself, vision creation, communication, building trust, intentional action	(Bennis and Goldsmith, 2010)

Several challenges of adhering solely to a competency approach to leader development are: (1) the components that support building capacity are often not in the same place; (2) the impression of a single set of attributes that one needs for leadership is perpetuated; and (3) the relational and influencing complexity of leadership is often overlooked (McCall and Hollenbeck, 2010; McCall, 2010b). Moreover, the design of the program may be such that there is no integration or scaffolding of competencies in a way that results in optimal transfer of learning. Therefore, it is often the case that what results is leader training that does not result in leader development.

When a developmental lens is applied along side a competency lens then the focus of leadership development shifts. According to Day, Harrison and Halpin because the act of leadership requires “applying appropriate competence and expertise in addressing complex challenges,” preparation for leadership is more than just learning technical skills (p. 171). Achieving leadership mastery requires the “process of outgrowing one system of meaning by integrating it as a subsystem into a new system of meaning” (Allen and Wergin, 2009, p.10). Just as with

adult development, leader development is a life-long process that entails developmental experiences and the ability to learn from those experiences (Allen and Wergin, 2009; Day et al., 2008; McCall and Hollenbeck, 2010; Van Velsor et al., 2010). Adopting this perspective results in the following implications for leader development:

- Programs need to emphasize the ability of leaders to “appreciate the importance of balancing forces in their lives – challenge and support, connection and independence” (Allen and Wergin, 2009, p. 9).
- One’s developmental stage will determine best how one approaches learning and change. It will also limit what one perceives and how one makes meaning.
- Programs need to meet people where they are which may require differential approaches even within one group of participants.
- Learning about adult development and associated theories can aid in participants’ reflection of self.
- Individuals need to understand the influences of their life experiences.

A leader development program based on developmental concepts will include activities that:

- Provide for assessment of one’s developmental level (Allen and Wergin, 2009; Van Velsor et al., 2010)
- Recognize that perspective-building is as important as skill building (Cacioppe, 1998; Kegan and Lahey, 2009)
- Provide for modeling of behavior (Allen and Wergin, 2009; Day et al., 2008; McCall, 2010a)
- Focus on self-efficacy and sensitivity to balance between challenge and support (Allen and Wergin, 2009; Kegan, 1994)
- Emphasize and distinguish leader and leadership development (Day et al., 2008; Van Velsor et al., 2010)
- Acknowledge that development requires a desire to change (Day et al., 2008; Day, 2010)

Leader development is not linear nor is it mechanistic (McCall and Hollenbeck, 2010). Leader development is a complex dance of acquiring skills, expanding thinking and transformation. It acknowledges that experience is a multifaceted event crossing many domains and that teaching skills and competencies alone is insufficient for long-term development (Day et al., 2008).

### **Tools of Leader Development**

The tools, approaches and/or methods of leader development are numerous and are a fairly similar set of techniques that have evolved over time. They include: coaching, networking, mentoring, feedback (solo and multi-rater), experiential learning, project work, stretch

assignments, cross-functional experiences, skill building, simulations, case studies, personal or self development, and formal instruction such as college courses or leadership development programs (Cacioppe, 1998; Dalakoura, 2010; Hernez-Broome and Hughes, 2004; Van Velsor et al., 2010). These tools have been used for some time and have scientific support for their effectiveness. But as Riggio (2008) laments,

Noticeably lacking [are] ... new techniques, or new variations on techniques, for leadership development. ... So, the answer to the question of whether there is anything new in leadership development methods and technologies is “no” and “yes.” “No,” there have been no significant methodological breakthroughs. We still consider simulations, such as assessment center exercises, leadership/management games, and working on company-based, action learning projects as state-of-the-art methods. (p. 387)

Table 2 shows the techniques, a general description, and the leadership perspectives addressed.

**Table 2.** Tools/methods used for leader development (listed alphabetically)

<b>Tool/method</b>	<b>Description</b>	<b>Perspective</b>	<b>Source</b>
Action learning	Involves selection of a strategic problem of importance to the organization; done with a team.	What leaders do	(Horwitz, 2010; Moore, 2004; Yeo, 2006)
Assessment centers, simulations	A method involving job-related simulations; sometimes personal assessments and interviews are incorporated. Typically focused on future performance, not current.	What leaders do	(Byham, 2006; Cacioppe, 1998; Riggio, 2008; Van Velsor et al., 2010)
Case studies	Teaching method using in-depth investigations (cases) of individuals, groups, organizations or events.	What leaders do	(Cacioppe, 1998; McGonagill and Pruyn, 2010)
Developmental experiences	Stretch assignments (something that requires the application of current skills in new ways); job rotations; job transitions.	What leaders do; ways of being	(Cacioppe, 1998; Dalakoura, 2010; Manderscheid, 2008; Polsfuss and Ardichvili, 2008; Van Velsor et al., 2010)
Developmental relationships (e.g. coaching [peer and personal], mentoring,	Focuses on individual needs around technical or strategic challenges; serves to enhance individual’s potential within	What leaders do; what leaders know; ways of	(Cacioppe, 1998; Gibson, 2008; Horwitz, 2010; Linkage Inc., 2009; Moore, 2004;

communities of practice	and across contexts.	being	Van Velsor et al., 2010)
Executive coaching	An offshoot of general coaching that is targeted to the senior individuals in an organization.	What leaders do; ways of being	(McGonagill and Pruyn, 2010; Riggio, 2008; Van Velsor et al., 2010)
Experiential learning;	Board and/or volunteer service, job rotation, committee involvement.	What leaders do	(Dalakoura, 2010; Moore, 2004; Santora et al., 2010)
Feedback: 360-degree feedback; multi-source feedback; performance appraisal	Provides data for increasing self-awareness.	What leaders do; Ways of being	(Cacioppe, 1998; Horwitz, 2010; Van Velsor et al., 2010)
Formal programs	Typically classroom-based or involving some classroom and field work. Mostly a service used external to the organization unless it is a large one. Could also include university programs.	What leaders know	(Cacioppe, 1998; Linkage Inc., 2009; Santora et al., 2010; Van Velsor et al., 2010)
Networking	Making connections with colleagues internal and external to the organization.	What leaders know	(Dalakoura, 2010; Van Velsor et al., 2010)
Personal development plan	Specific, usually job-related, areas for the focus of learning and development.	What leaders do	(Horwitz, 2010; Linkage Inc., 2009)
Self-development	Reading; attending colloquia/conferences.	What leaders know	(Cacioppe, 1998; Cacioppe, 1998; Van Velsor et al., 2010)
Skill building	Expanding capability in a particular area.	What leaders do; what leaders know	(Horwitz, 2010; Van Velsor et al., 2010; Yeo, 2006)

For more complete definitions of each technique see Cacioppe (1998), Santana (2009), and Van Velsor, McCauley and Ruderman (2010). Moore (2004) describes four categories of leader development goals for which the various techniques might be used. Table 3 summarizes his perspective.

**Table 3. Mapping leader development goals to leader development techniques**

<b>Goal</b>	<b>Most suitable technique (s)</b>
Building bench-strength; succession planning	Job assignments, coaching, mentoring, and formal programs
Transforming business practices	Action learning

Helping leaders become more effective at what they already do	Skills training
Helping leaders through transitions	Formal program, coaching

Source: Moore (pp. 8-9)

Cacioppe (1998) and Yeo (2006), like Moore, stress the importance of identifying outcome goals for leader development in order to utilize the most appropriate technique. Day et al. (2008) and McGonagill (2010) look at the level of learning that is indicative of a particular technique.

Using that perspective, leader development techniques would be divided into those that focus on intrapersonal work, interpersonal work, and team/organization work.

The shift in perspectives of what becomes essential for leadership in the 21<sup>st</sup> century (Cook-Greuter, 2002; Heifetz et al., 2009; Hernez-Broome and Hughes, 2004; Rooke and Torbert, 2005; Wheatley, 2005) is spurring creativity in either adapting the tried-and-true methods or applying techniques from other domains. Table 5 lists some recent and emerging methods being used in leader development.

**Table 5.** New, promising, or emerging techniques in leader development (listed alphabetically)

Tool/method	Description	Perspective	Source
Appreciative Inquiry	“Increases leaders’ capacity to regenerate their roles through inner work and working inside-out.”	Ways of being	(Ardichvili and Manderscheid, 2008, p. 626; Kaye Hart et al., 2008)
Leader assimilations	“A planned leadership development intervention used to help leaders accelerate their adaptation to a new organization and their new team.”	What leaders do	(Manderscheid, 2008, p. 686)
Mindsets work	A developmental perspective that specifically is about shifting the ways individuals view the world. It is an element of AI, identified separately because of increasing understanding that it requires a different type program design.	Ways of being	(Anderson and Ackerman-Anderson, 2001; Cacioppe, 1998; Cook-Greuter, 2002; Cook-Greuter, 2004; Rooke and Torbert, 2005; Yeo, 2006)

Three principles psychology	A psycho-educational method; designed to move leaders beyond motives, values, aspirations to greater understanding of their own psychological functioning.	What leaders know; ways of being	(Polsfuss and Ardichvili, 2008)
World wide web; technology	Currently viewed as possible delivery mechanisms. For example, e-coaching, game simulations, social media, etc.		(Backus et al., 2010; McGonagill and Pruyn, 2010; Yeo, 2006)

The process of leader development is complex. The frameworks that inform design and establishment of programs are varied and have implications for the focus or content of a leader development experience. While the set of core techniques has not changed dramatically over the last 25 years, leader development practitioners are experimenting with how these techniques are deployed. The advent of new technologies (eg. iPads, applications) such as social media (eg. LinkedIn, Yammer, Twitter etc.) could have a significant impact on delivery as well as content (Day et al., 2008; Riggio, 2008; Van Velsor et al., 2010).

### **Impact of Leader Development Programs**

Individuals and organizations put a lot of faith and money into leader development programs. According to a report by Bersin and Associates, in 2008 companies spent an average of \$3000 per person on leadership development. Depending on the size, total costs for some companies reached as high as \$1.3 million (O'Leonard, 2009). Despite so much being spent, substantive evidence about their impact is lacking (Avolio et al., 2009; Black and Earnest, 2009; Collins, 2001; Riggio, 2008). For example, Russon and Reinelt (2004) reporting the results of a study of leadership development programs commissioned by the W.K Kellogg Foundation, found disconnects between program goals and program outcomes. In addition, while many programs wanted to be able to measure long-term impact, insufficient resources, lack of expertise, and time constraints resulted in most of the programs evaluating short-term outputs (Russon and Reinelt,

2004, p. 105). As noted earlier, programs use frameworks in varying degrees to influence program design so evaluation plans are limited in their ability to determine their efficacy.

Where evaluations are available, they tend to focus on individual outcomes, typically knowledge, skills, and attitudes (Collins, 2001; Hannum et al., 2007; Russon and Reinelt, 2004). Collins and Holton (2004) point to a lack of priority for demonstrating organizational outcomes in evaluation. Hannum, Martineau and Reinelt point out that “leadership development is a particularly complex process; it is not something that is fully knowable in a short period of time” (p. 8).

### **Do Leadership Development Programs Make a Difference?**

In order to gain a broader perspective on the extent to which these programs work and why, three meta-reviews of leader/leadership training and development provide insight on the effectiveness of programs from the mid- 20<sup>th</sup> century to the present.

Burke and Day conducted a meta-analysis of 70 published and unpublished managerial training program studies covering the period 1952-1982 to “determine the effectiveness of managerial training” as there was a lack of evaluative research on such programs (p. 232). The study attempted to answer questions about the general efficacy of programs, program type (e.g. classroom, roleplay, discussion), and program focus (e.g. self-awareness, problem solving, decision-making) and also sought to understand the relative effectiveness of combinations of program type and focus. Across studies, success was evaluated in terms of improved job performance and knowledge. The results from their study indicated that “different methods of managerial training are on average moderately effective in improving learning and job performance”. In addition, Burke and Day note that researchers need to do a better job in reporting their evaluation/research statistics since this lacking limits follow-up analysis.

Collins conducted a meta-analysis of published leadership development studies covering 1982-2000 to “determine if leadership development programs have changed from a focus on individual performance to a focus on performance at the organizational level” (Collins, 2001, p. 44). Collins found an increase in the number of studies in the analysis for which organizational impact was a stated outcome (30% of the sample as opposed to 3% in the Burke and Day sample); even so, the predominant focus continued to be individual performance. Collins also noted that strategic leadership and team management appeared as new content in ~~LDR-DEV~~ leader development programs which makes sense given the emergence of new leadership theories during the period between studies. In terms of efficacy, Collins and Holton found that “managerial leadership development programs varied widely; some programs were tremendously effective, and others failed miserably” (Collins and Holton III, 2004, p. 232). Collins also found that “research on the effectiveness of leadership development programs [continues to be] sparse” (p. 51) and there is a greater need for programs to incorporate organizational systems impacts as an outcome.

Avolio, Reichard, Hannah, Walumbwa, and Chan (2009) conducted the third major meta-analytic review identifying published and unpublished studies regarding leadership interventions; Studies selected span from the 1920s to the 2000s. They were interested in comparing the various methods used for leader development to determine not only the overall efficacy but also “by what models or methods and with which outcomes” were programs successful (p. 766). Their research questions investigated (1) training/development approach versus all other approaches (e.g. roleplay, scripts, scenarios), (2) underlying leadership theory (traditional, new,

Pygmalion<sup>1</sup>), and (3) degree to which a specific theoretical lens influenced program outcomes (affective, behavioral, cognitive).

Avolio et al.'s findings support the general effectiveness of leadership development interventions. Specifically, "participants in the leadership treatment condition broadly defined, had on average a 66% chance of positive outcomes compared to only a 34% chance of success for the comparison group" (Avolio et al., 2009, p. 778). So leadership programs make a difference; although not all programs are equal, a finding similar to Collins and Holton (2004). Regarding the type of intervention, Avolio et al.'s analysis showed a stronger effect for non-developmental approaches and suggest that this may be due to the amount of work required for intrapersonal change. According to the analysis, there was little difference in whether a traditional or newer theory informed the program; both had moderately positive impact. What was surprising is that Pygmalion style leadership had the largest effect when compared with traditional and new leadership styles. However, they note that due to wide variation in effects this latter finding should be interpreted with caution. Programs built upon newer theories showed larger effects for affective and cognitive outcomes than ones based on traditional theories. Those based on traditional theories had larger effects on behavioral outcomes. This makes sense given traditional theories' focus on the behavior of leaders. Finally, programs utilizing Pygmalion leadership had larger effects for behavioral and cognitive outcomes than either new or traditional theories but were similar to newer theories when looking at affective outcomes (Avolio et al., p. 780). These findings support the suggestions for using theory to inform program design in order to better realize desired outcomes and impacts.

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<sup>1</sup> Traditional = theories dominant up to the 1970s (e.g. behavioral, contingency); New = theories dominant in the 1980s (e.g. charismatic, transformational); Pygmalion = "leader expectations for subordinate performance can subconsciously affect leader behavior and subordinate performance"; a.k.a. self-fulfilling prophesy (White and Locke, 2000, p. 389)

These three meta-studies provide a broad understanding of the impact of leader development programs since the 1950s. In general, leader development programs work, although there is a great deal of variation in terms of what works and why. Despite continued reference to the need for programs to use systematic ways to monitor their successes, more work is still needed. Program outcomes remain focused on individual impact and less on organizational impact. The continuing and prevailing myth seems to be that if programs focus on individual outcomes and impact, organizational outcomes will follow (Collins and Holton III, 2004; Day et al., 2008; Russon and Reinelt, 2004). However, with very few studies reporting organizational outcomes, this assumption may be misguided. These meta-studies also show, however, that definitional issues continue; programs labeled as leadership development tended to be about leader development. Furthermore, evaluation is directed more at assessing learning, not development.

### **Leadership Development Evaluation and Future**

Evaluating leader development programs has become more complex as time has passed. When the focus was on enhancing skills and knowledge, evaluation designs focused primarily on change pre- and post- intervention. It appears that the state of evaluation has not kept pace with the increasing need and desire to understand more about individual developmental outcomes and organizational outcomes. This comes at a time when it is essential that leader/leadership development practitioners and providers “justify [their] existence” (Riggio, 2008, p. 389).

Where should future evaluations focus? There is consensus across the literature that more effort needs to go into designing and implementing longitudinal studies (Avolio et al., 2009; Gentry and Martineau, 2010; W. K. Kellogg Foundation, 2002). Longitudinal studies are better suited to investigating developmental outcomes, a focus area barely visible in the literature. More investigation of the specific techniques used in programs has also been called for (Avolio et al., 2009; Day et al., 2008; Harris and Cole, 2007). Dalakoura (2010) suggests evaluations that help

demonstrate return-on-investment are also needed. Transfer of learning, application of new knowledge and skills in the workplace, is another area where greater understanding is required (Burke and Collins, 2005; Day, 2010). Hannum et al. list several possible domains or levels for evaluation including: individuals, groups and teams, organizations, communities, fields, networks, and societies/systems (2007, p. 10). With such a diverse landscape to explore, the possibility of more robust evaluation efforts is endless.

**Moving in Place or Moving forward?**

*Leader development and leadership development are connected and each is necessary. Doing one without the other is less than a complete initiative. (Santana, 2009, p. 60)*

In summary, our understanding of leadership has shifted through the years. Prior to the 1980s the primary understanding of leadership as what a person does led to a focus on leader behavior and style (Boaden, 2006). During the 80s the pace of business accelerated and with it a need to respond quicker to changing events. Understanding of leadership at that time led to a focus on relationships and transformational leadership was the major new theory. Moving into the 90s, issues of complexity were recognized and were resistant to the previous solutions. Once again, new understandings of leadership including strategic leadership emerged to address that landscape. Today we are in the midst of another transition in our understanding of leadership. Collective forms of leadership (shared, distributed team leadership) are being researched to see what promise they hold for meeting the complex challenges of today and beyond.

Along with these changes, there have been shifts in how leader development takes place. These shifts have taken the form of new approaches and techniques, content, outcomes, and even locations for development. Table 6 (Fulmer, 1997) summarizes these shifts.

Table 6. The evolving paradigm of leadership development

	<b>Past</b>	<b>Transition</b>	<b>Future</b>
Participants	Listener	Student	Learner
Program design	Event	Curriculum	Ongoing process

Purpose	Knowledge	Wisdom	Action
Period	Past	Present	Future
Players	Specialists	Generalists	Partners
Presentations	Style	Content	Process/outcome
Place	University campus	Corporate facility	Anywhere

Source: Fulmer (1997)

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Unfortunately, while there has been an abundance of research on *leadership*, comparable attention has not gone into research on *leader/leadership development*. As noted above, early focus of leader development was on the individual leader effectiveness. Shifts in the content and what constitutes appropriate impacts for leader development programs have lagged behind our understanding of leadership such that we know little about program effectiveness in terms of team and organizational level impacts (Avolio et al., 2009; Collins and Holton III, 2004; Van Velsor et al., 2010). These require new ways of deploying the various tools currently available as well as creating new tools. We also know little about program effectiveness related to development (Day et al., 2008). Again, new ways of thinking about program design and evaluation are needed to address this gap in knowledge (Casserley and Critchley, 2010; Cook-Greuter, 2004; Gentry and Martineau, 2010). This latter issue is further challenged due to the time and resources necessary to conduct the programs and the type of evaluation and research needed.

There are other important questions that need to be examined in regard to leadership development: Is there an approach to leader development that is most effective with leaders at different levels in an organization? How do current programs serve the need for leaders and organizations in transition? For example, Manderscheid (2008) notes there is little empirical research documenting the impact of leadership development interventions early in a leader's transition. How do gender and/or country of origin affect the methods selected for development? What would a fully developed or 'integral' leader/ship development program look like?

A climate for development is a necessary ingredient for supporting leader/ship development (Dalakoura, 2010; Hotho and Dowling, 2010; Riggio, 2008; Van Velsor et al., 2010). Van Velsor, McCauley and Ruderman (2010) and Dalakoura (2010) list several factors that need to be in place including well articulated management priorities, communication, and a culture that values leadership behavior at all levels. The literature has suggested that individuals need to be at a certain stage of development (Cook-Greuter, 2004; Rooke and Torbert, 2005) before they can adapt their meaning making systems and capitalize on the learning opportunity. The developmental level of an organization may also influence its capacity to support and sustain leader and leadership development efforts.

The intent of this paper was to provide a picture of the state of leader/leadership development. Specifically, it sought to understand how leader/leadership development is defined, how programs are formed, what informs their design, and the extent to which programs improve individual leaders and organizational leadership capability. One surprise is that most of what is labeled leadership development is actually individual leader development. This may have occurred because of a strong Western and American-based influence in modern organizations and academic research which continue to focus on the leader as a person. Therefore this paper has focused mainly on individual leader development. However, attention to the process of developing leadership capacity needs to go alongside further improvements into the way we think about developing individuals. Continued focusing on one side of the equation, the leader, without the other side, leadership, may keep us moving in place instead of moving forward.

This paper has practical implications for organization development programs by highlighting the need for a clear definition of leadership and for an integrating theory like the Integral framework to provide a coherent perspective of leadership that allows for the uniqueness of the organization.

There are several practical implications that arise from this review;

- 1) A leadership program needs an agreed, relevant definition of leadership prior to design.
- 2) An integrated theory of leadership with relevant competencies is needed to shape program objectives and design. The Integral AQAL framework has potential to fit this requirement.
- 3) Each organisation may have unique and current environmental, social and economic challenges that need to be built into the leadership competency model and program.
- 4) Leadership programs need to focus less on developing the individual, heroic. 'Lone Ranger' type of leader and develop leadership capability including self-awareness, interpersonal/other skills, the ability to creatively solve problems, build teams and strategically and commercial skills.
- 5) Longitudinal research based on solid leadership and leadership development theory is needed to discover what models and methods most effectively develop the individual and capability of the organization.

The complex economic, social and global complex problems and challenges facing leaders and modern organizations make the development of leaders an important topic worthy of interest and effort. There is a significant need for a more coherent, integrated and all encompassing approach to leadership development. By reviewing the current state of the field, its key issues and shortcomings, what is needed, and what has been most effective, it is hoped that this article has provided some guidance in what direction to go in and what is needed to move forward.

## References

- Allen SJ and Wergin JF (2009) *Leadership and Adult Development Theories: Overviews and Overlaps*. Claremont, CA: Kravis Leadership Institute.
- Anderson D and Ackerman-Anderson LS (2001) Developing Conscious Change Leaders. In: Anonymous *Beyond Change Management : Advanced Strategies for Today's Transformational Leaders*. San Francisco: Jossey-Bass/Pfeiffer, 181-197.
- Ardichvili A and Manderscheid SV (2008) Emerging Practices in Leadership Development. *Advances in Developing Human Resources* 10(5): 619-631.
- Avolio BJ and Hannah ST (2008) Developmental Readiness. *Consulting Psychology Journal: Practice and Research* 60(4): 331-347.
- Avolio BJ, Griffith J, Wernsing TS and Walumbwa FO (2010) What is authentic leadership development? In: Garcea N (ed) *Oxford Handbook of Positive Psychology and Work*. New York, NY US: Oxford University Press, 39-51.
- Avolio BJ, Jung DI, Murry W and Sivasubramaniam N (1996) Building highly developed teams: Focusing on shared leadership processes, efficacy, trust, and performance. *Advances in Interdisciplinary Studies of Work Teams* 3: 173-209.
- Avolio BJ, Reichard RJ, Hannah ST, Walumbwa FO and Chan A (2009) A meta-analytic review of leadership impact research: Experimental and quasi-experimental studies. *The Leadership Quarterly* 20(5): 764-784.
- Backus C, Keegan K, Gluck C and Gulick L (2010) Accelerating leadership development via immersive learning and cognitive apprenticeship. *International Journal of Training & Development* 14(2): 144.
- Baltes PB and Staudinger UM (1999) Lifespan psychology: Theory and application to intellectual functioning. *Annual Review of Psychology* 50(1): 471.
- Bennis W and Goldsmith J (2010) *Learning to Lead: A Workbook on Becoming a Leader*. New York, NY: Basic Books.
- Black AM and Earnest GW (2009) Measuring the Outcomes of Leadership Development Programs. *Journal of Leadership & Organizational Studies* 16(2): 184-196.
- Boaden RJ (2006) Leadership development: does it make a difference? *Leadership & Organization Development Journal* 27(1): 5-27.
- Boyatzis RE (2008) Leadership Development from a Complexity Perspective. *Consulting Psychology Journal: Practice and Research* 60(4): 298-313.

Bransford J, Brown A and Cocking R (2000) *How People Learn : Brain, Mind, Experience, and School*. Washington, D.C.: National Academy Press.

Burke MJ and Day RR (1986) A Cumulative Study of the Effectiveness of Managerial Training. *Journal of Applied Psychology* 71(2): 232-245.

Burke V and Collins D (2005) Optimising the effects of leadership development programmes: A framework for analysing the learning and transfer of leadership skills. *Management Decision* 43(7/8): 975.

Byham W (2006) *The Assessment Center Method and Methodology: New Applications and Technologies* Pittsburgh, PA: Development Dimensions International.

Cacioppe R (2009) *Integral Potential: An Introduction to Integral Theory and Practice*. Churchlands, Western Australia: Integral Development Associates Pty Ltd.

Cacioppe R (1998) An integrated model and approach for the design of effective leadership development programs. *Leadership & Organization Development Journal* 19(1): 44-53.

Cacioppe R (1998) Leaders developing leaders: an effective way to enhance leadership development programs. *Leadership & Organization Development Journal* 19(4): 194-198.

Cacioppe R and Edwards MG (2005) Adjusting blurred visions. *Journal of Organizational Change Management* 18(3): 230-246.

Casserley T and Critchley B (2010) A new paradigm of leadership development. *Industrial and Commercial Training* 42(6): 287.

Collins DB (2001) Organizational Performance: The Future Focus of Leadership Development Programs. *Journal of Leadership & Organizational Studies* 7(4): 43-54.

Collins DB and Holton III EF (2004) The effectiveness of managerial leadership development programs: A meta-analysis of studies from 1982 to 2001. *Human Resource Development Quarterly* 15(2): 217-248.

Cook-Greuter S (2004) Making the case for a developmental perspective. *Industrial and Commercial Training* 36(7): 275-281.

Cook-Greuter S (2002) *A Detailed Description of the Development of Nine Action Logics in the Leadership Development Framework: Adapted from Ego Development Theory*. : Cook-Greuter.com.

Dalakoura A (2010) Differentiating leader and leadership development: A collective framework for leadership development *Journal of Management Development* 29(5): 432-441.

Day DV (2010) The Difficulties of Learning From Experience and the Need for Deliberate Practice. *Industrial & Organizational Psychology* 3(1): 41-44.

Day DV (2000) Leadership development: A review in context. *The Leadership Quarterly* 11(4): 581-613.

Day DV and Harrison MM (2007) A multilevel, identity-based approach to leadership development. *Human Resource Management Review* 17(4): 360-373.

Day DV, Harrison MM and Halpin SM (2008) *An Integrative Approach to Leader Development: Connecting Adult Development, Identity, and Expertise* New York, NY: Routledge Academic.

Day DV, Zaccaro SJ and Halpin SM (2004) *Leader Development for Transforming Organizations: Growing Leaders for Tomorrow* Mahwah, NJ: Lawrence Erlbaum Associates.

Eisenhart M (1991) *Conceptual Frameworks for Research Circa 1991: Ideas from a Cultural Anthropologist; Implications for Mathematics Education Researchers* Blacksburg, VA: Psychology of Mathematics Education.

Fulmer RM (1997) The Evolving Paradigm of Leadership Development. *Organizational Dynamics* 25(4): 59-72.

Garger J (2008) Developing authentic leadership in organizations: some insights and observations. *Development and Learning in Organizations* 22(1): 14-16.

Gentry WA and Martineau JW (2010) Hierarchical linear modeling as an example for measuring change over time in a leadership development evaluation context. *The Leadership Quarterly* 21(4): 645-656.

Gentry WA and Leslie JB (2007) Competencies for Leadership Development: What's Hot and What's Not When Assessing Leadership-Implications for Organization Development. *Organization Development Journal* 25(1): 37-46.

Gibson SK (2008) The Developmental Relationships of Women Leaders in Career Transition: Implications for Leader Development. *Advances in Developing Human Resources* 10(5): 651-670.

Graen GB and Uhl-Bien M (1995) Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective *The Leadership Quarterly* 6(2): 219-247.

Gronn P and Lacey K (2004) Positioning oneself for leadership: feelings of vulnerability among aspirant school principals. *School Leadership & Management* 24(4): 405-424.

Hall DT (2004) Self-awareness, identity and leader development In: Day DV, Zaccaro SJ and Halpin SM (eds) *Leader Development for Transforming Organizations: Growing Leadership for Tomorrow* Mahwah, NJ: Lawrence Erlbaum Associates, 153-176.

Hannum K, Martineau JW and Reinelt C (2007) *The Handbook of Leadership Development Evaluation* San Francisco, CA: Jossey-Bass.

Harris SG and Cole MS (2007) A stages of change perspective on managers' motivation to learn in a leadership development context. *Journal of Organizational Change Management* 20(6): 774-793.

Heifetz RA (1994) *Leadership without Easy Answers*. Cambridge, Mass.: Belknap Press of Harvard University Press.

Heifetz RA, Grashow A and Linsky M (2009) Leadership in a (Permanent) Crisis *Harvard Business Review* 87(7): 62-69.

Hernez-Broome G and Hughes RJ (2004) Leadership Development: Past, Present, and Future. *Human Resource Planning* 27(1): 24-32.

Hirst G, Mann L, Bain P, Pirola-Merlo A and Richver A (2004) Learning to lead: the development and testing of a model of leadership learning. *The Leadership Quarterly* 15(3): 311-327.

Hogg MA (2001) A Social Identity Theory of Leadership. *Personality and Social Psychology Review* 5(3): 184-200.

Horwitz R (2010) Elements of a successful leadership development program. *Canadian HR Reporter* 23(5): 18.

Hotho S and Dowling M (2010) Revisiting leadership development: the participant perspective. *Leadership & Organization Development Journal* 31(7): 609.

Kaye Hart R, Conklin TA and Allen SJ (2008) Individual Leader Development: An Appreciative Inquiry Approach. *Advances in Developing Human Resources* 10(5): 632-650.

Kegan R (1994) *In Over our Heads: The Mental Demands of Modern Life*. Cambridge, MA: Harvard University Press.

Kegan R and Lahey LL (2009) *Immunity to Change : How to Overcome it and Unlock Potential in Yourself and Your Organization*. Boston, MA: Harvard Business Press.

Kegan R and Lahey LL (2001) *How the Way we Talk can Change the Way we Work : Seven Languages for Transformation*. San Francisco, CA: Jossey-Bass.

Killian S (2010) Designing leadership development initiatives: clarifying the why, who, what, how and when. *Development and Learning in Organizations* 24(5): 15.

Kolb AY and Kolb DA (2005) Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education. *Academy of Management Learning & Education* 4(2): 193-212.

Kotter JP (1990) *A Force for Change : How Leadership Differs from Management*. New York; London: Free Press; Collier Macmillan.

Linkage Inc. (2009) *Linkage Inc.'s Best Practices in Leadership Development Handbook : Case Studies, Instruments, Training*. San Francisco, CA: Pfeiffer ; Linkage,.

Lord RG and Hall RJ (2005) Identity, deep structure and the development of leadership skill. *Leadership Quarterly* 16(4): 591-615.

Luthans F and Avolio BJ (2003) Authentic leadership: A positive developmental approach. In: Cameron KS, Dutton JE and Quinn RE (eds) *Positive Organizational Scholarship*. San Francisco, CA : Barrett-Koehler, 241-261.

Manderscheid SV (2008) New Leader Assimilation: An Intervention for Leaders in Transition. *Advances in Developing Human Resources* 10(5): 686-702.

McCall MW, Jr. (2010a) Peeling the onion: Getting inside experience-based leadership development *Industrial and Organizational Psychology: Perspectives on Science and Practice* 3(1): 61-68.

McCall MW, Jr. (2010b) Recasting leadership development. *Industrial and Organizational Psychology: Perspectives on Science and Practice* 3(1): 3-19.

McCall MW, Jr. and Hollenbeck GP (2010) The not-so-secret sauce of the leadership development recipe. In: Bunker KA, Hall DT and Kram KE (eds) *Extraordinary Leadership : Addressing the Gaps in Senior Executive Development* San Francisco, CA: Jossey-Bass, 155-173.

McGonagill G and Pruyn PW (2010) *Leadership Development in the U.S.: Principles and Patterns of Best Practice*. Berlin, Germany: Bertelsmann Stiftung.

Moore J (2004) Where do you start with leadership development? *Development and Learning in Organizations* 18(5): 7-9.

O'Leonard K (2009) *Leadership Development - is it really Worth the Money?*

Polsfuss C and Ardichvili A (2008) Three principles psychology: Applications in leadership development and coaching. *Advances in Developing Human Resources* 10(5): 671-685.

Riggio RE (2008) Leadership Development: The current state and future expectations. *Consulting Psychology Journal: Practice and Research* 60(4): 383-392.

Rooke D and Torbert WR (2005) 7 Transformations of Leadership *Harvard Business Review* 83(4): 66-66.

Rost JC (1990) *Leadership for the 21st Century*. New York: Praeger.

Russon C and Reinelt C (2004) The results of an evaluation scan of 55 leadership development programs. *Journal of Leadership & Organizational Studies* 10(3): 104-107.

- Santana LC (2009) Making the Value of Development Visible: A Sequential Mixed Methodology Study of the Integral Impact of Post-Classroom Leader and Leadership Development. Antioch University.
- Santora JC, Sarros JC and Esposito M (2010) Small to mid-sized nonprofit leadership development initiatives: organizational lessons learned. *Development and Learning in Organizations* 24(6): 17.
- Uhl-Bien M (2006) Relational Leadership Theory: Exploring the social processes of leadership and organizing *The Leadership Quarterly* 17(6): 654-676.
- Uhl-Bien M (2003) Relationship development as a key ingredient for leadership development. In: Riggio RE (ed) *The Future of Leadership Development*. Mahwah, NJ US: Lawrence Erlbaum Associates Publishers, 129-147.
- Van Velsor E, McCauley CD and Ruderman MN (2010) *The Center for Creative Leadership Handbook of Leadership Development*. San Francisco, CA: Jossey-Bass.
- W. K. Kellogg Foundation (2002) *Evaluating the Outcomes and Impacts: A Scan of 55 Leadership Development Programs*. Battle Creek, WI: W. K. Kellogg Foundation.
- Wheatley MJ (2005) *Finding our Way : Leadership for an Uncertain Time*. San Francisco, CA: Berrett-Koehler Publishers.
- White SS and Locke EA (2000) Problems with the pygmalion effect and some proposed solutions. *The Leadership Quarterly* 11(3): 389-415.
- Yeo RK (2006) Developing tomorrow's leaders: why their worldviews of today matter? *Industrial and Commercial Training* 38(2): 63-69.