



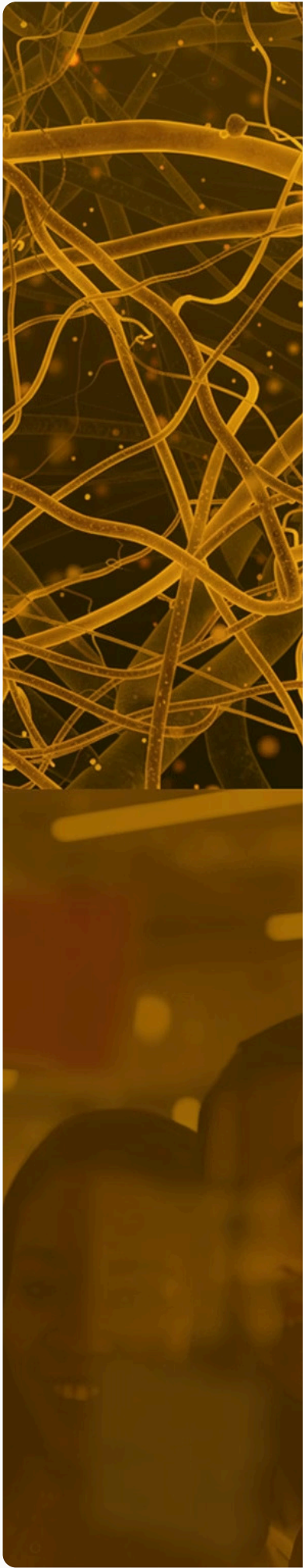
WHITE PAPER

Designing High-Impact Training Programs with the Brain & Context in Mind

 How to create sustainable impact using a multidimensional approach to leadership learning and development design

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MARCH 2026



Executive Summary

One-time instructional events can increase knowledge, and awareness, but rarely produce lasting developmental change on their own. Such designs tend to under account for the realities that shape leadership growth: individual differences, personal meaning-making, prior knowledge, learning preferences, role demands, organizational structures, and the broader systems in which leaders operate.[1]

Recent reviews of leadership development and workplace learning suggest that developmental change is better understood as a longitudinal, contextual, and relational process than as a one-time instructional event.[2] Leadership development therefore can have greater alignment in impact if designed considering the intersection of **self, structures, and systems**.

In this framing, considering the **self** includes that of individual differences, developmental readiness, personal learning styles and preferences, identity, motivation, and existing knowledge. **Structures** include the formal and informal conditions that support or constrain development, such as role design, feedback processes, manager support, incentives, time, access to stretch opportunities, and organizational norms. **Systems** include the wider relational, cultural, and environmental variables that shape what leadership is for, how it is enacted, and what kinds of learning are reinforced over time.

The framework presented here integrates insights from adult learning, experiential learning, consulting psychology, and applied neuroscience to create a more comprehensive architecture for designing leadership development training programs and initiatives. By synthesizing multidisciplinary insights the framework offers a repeatable methodology that can be adapted to diverse organizational contexts and various leader populations. The goal of this approach and framework is to facilitate learning that is deeply embedded in the daily flow of work and fundamentally relational in its execution. Ultimately, this framework supports transformational growth and long-term adaptive capacity by ensuring that development is inherently connected to the systems leaders actually inhabit.[3]

The Core Problem With Traditional Training Programs

Many training programs are still built around event-based assumptions. Learning is treated as a transfer problem: if people are exposed to the right content, models, or competencies, they will improve. This approach can be helpful for knowledge acquisition and building shared language, but it often falls short because **leadership, learning, and development are not simply knowledge acquisition tasks**. They are a meaning-making, behavioral exchange, and systems-navigation social process. Furthermore, workplace learning research shows that leader behavior, relational support, and negotiated meaning strongly affect whether learning is actually taken up in practice.[4]

⚠ When learning and development are disconnected from context, several problems can emerge

No Transfer

Participants often depart with valuable insights, yet the initial momentum fades quickly, leaving new skills unused and behavioral patterns largely unchanged.

Competencies-Heavy

Programs may overemphasize competencies while underemphasizing identity, mindset, and developmental readiness.

Overlooked Differences

Learning design can overlook how people differ in prior experience, processing style, and capacity for ambiguity.

Structural Inhibition

Organizational structures may actively inhibit the very behaviors the program works to develop.

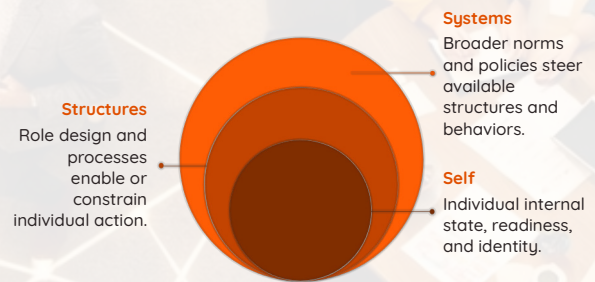
Unaddressed Systemic Pressures

Working with systemic pressures, such as culture, power dynamics, workload, and competing incentives, remain unaddressed.

① Meaningful learning and developmental growth requires more than exposure to new information. It requires conditions that help people examine assumptions, test new behaviors, regulate themselves under pressure, receive feedback, reflect on experience, and make sense of increasingly complex demands. It also requires enough contextual support for those new capacities to be used and reinforced in daily work.[5]

A More Complete Lens: The Self-Structures-Systems Framework

SELF-STRUCTURES-SYSTEMS FRAMEWORK



A more effective approach begins **by treating leadership development as a multi-level design challenge**. Growth does not occur in the individual alone, nor is it fully determined by context. It **emerges through the interaction between the person, the structures around them, and the systems they inhabit**.^[6]

Understanding the 3 Dimensions of the *Self-Structures-Systems Framework*

The **self** encompasses the internal architecture of the individual, including developmental readiness, identity, motivation, and existing cognitive frameworks.

This dimension acknowledges that every individual processes information and challenges through unique filters shaped by past experiences and personal learning styles.

Prioritizing the 'Self' is essential because lasting behavioral change cannot take root if it does not align with or evolve the individual's core sense of identity and purpose.

Structures refer to the immediate environment surrounding the individual, such as role design, feedback mechanisms, direct manager support, and the presence of stretch assignments.

These elements serve as the scaffolding for development, determining whether someone has the tangible space and support to practice new behaviors safely.

Without intentional alignment of these structures, even highly motivated individuals may find their growth constrained by rigid job descriptions or an absence of formative feedback loops.

The **system** dimension represents the broader organizational and external environment, including cultural norms, power dynamics, market conditions, and institutional equity.

This dimension sets the 'climate' in which learning and leadership occurs, often exerting subtle pressures that can either catalyze or stifle individual development.

Recognizing the systemic layer is critical because it highlights how external factors like change fatigue or competing stakeholder expectations can influence the feasibility of applying new leadership capacities.

Why an Integrated Framework Is Needed

4 AREAS OF KNOWLEDGE

Learning and Leadership development are most effective when they are both person-centered and context-aware. An integrated self-structures-systems approach allows organizations to move from generic programming to intentional developmental design. This framework draws from **four areas of knowledge**.



Adult Learning

Adults learn best when content is relevant, self-directed, and experience-linked, as prior knowledge shapes how they interpret new information. Consequently, developmental design should respect learner agency and invite active meaning-making rather than passive consumption.^[12]



Experiential Learning

Leadership capability grows through a cycle of experience, reflection, and experimentation, requiring development to extend beyond the classroom into real-world conditions. Structured reflection is essential to support the mindset shifts and behavior change required for transformative learning.^[13]



Consulting Psychology

Consulting psychology explains how identity, motivation, relationships, and culture interact, viewing development as a process of surfacing assumptions and expanding one's repertoire rather than simple skill acquisition. It also highlights how relational support and workplace conditions determine whether developmental gains take hold in real settings.^[14]



Applied Neuroscience

Applied neuroscience provides a useful lens on how developmental growth is taken up and sustained, showing that transformation is not simply a matter of exposure to ideas. Instead, development depends on how experience is perceived, practiced, and integrated over time.^[15]

Self

- ① The **self** dimension recognizes that leadership development is filtered through individual differences.

Leaders do not enter development as blank slates. They bring histories, identities, assumptions, strengths, stress patterns, aspirations, and established ways of learning. Designing development without attention to the self risks creating interventions that are technically sound but psychologically mismatched.[7]

Key factors to consider within the **self** dimension include:

Individual Differences

Design for variations in motivation, awareness, temperament, personality, cognitive style, emotional tendencies, tolerance for ambiguity, and developmental stage. How individuals tend to process information, experiment, reflect, and integrate learning.

Existing Knowledge

Design for inquiry around what someone already knows, what has worked before, and where prior success may either support or limit future growth.

Identity and Self-Concept

Design space for sense-making around how individuals understand themselves as leaders and learners, what roles they believe they are permitted to occupy, and what change may feel threatening to that identity.

The self dimension is a critical design input because people experience and interpret the same design through vastly different psychological lenses. For example, a single stretch assignment may energize one individual, overwhelm another, and reinforce defensive habits in a third, while a feedback conversation might act as a growth catalyst for one person yet function as a significant threat trigger for another. Such variability implies that effective development requires deliberate differentiation and information from assessment rather than a one-size-fits-all curriculum. Ignoring these inherent individual differences often results in programs that function effectively for a subset of participants while potentially alienating or failing those whose developmental needs are not met. Ultimately, taking the self dimension seriously requires shifting toward personalized infrastructure that makes space for acknowledging how each person's unique internal state dictates the conditions necessary for transformative growth.

Structures

- ① The **structures** dimension addresses the organizational conditions that enable or constrain development.

Even highly motivated learners struggle to grow if their surrounding structures do not provide reinforcement, opportunity, and support.[8]

Structures are a critical design input because development is not sustained by compelling ideas alone; it depends on an environment that enables learning to endure. In the absence of such support, learning can fade when pressure rises, and individuals often return to established patterns of behavior.

Key factors to consider within the **structures** dimension include:

Role Design

Whether roles are structured to provide meaningful challenges and a safe space for agency an active laboratory for skill acquisition; whether nascent capabilities can take root and transform into durable, high-impact practice.

Manager and Sponsor Support

Whether influential others encourage experimentation, reflection, and honest dialogue; whether reflection, coaching, peer dialogue, and deliberate practice are treated as legitimate work.

Learning & Feedback Cultural

Whether candor, vulnerability, accountability, and learning from failure are genuinely supported; whether the system reinforces short-term output only, or also values learning, collaboration, and long-range development.

Where supportive structures are lacking, people may lose motivation to grow, interpreting that absence as a signal that development is not an organizational priority. By embedding support systems into routine practice, leaders show that an organization's commitment to change is reflected less in the sophistication of its training and more in the conditions it creates to reinforce new learning. Attending to structure, therefore, is just as important as attending to content or instructional method. Structure provides the foundation through which ideas become sustained, practiced capability. [9]

In practice, this requires translating structural realities into explicit design criteria—for example, clarifying manager expectations before launch, aligning sponsors around the purpose of the program, building feedback loops into application cycles, protecting time for reflection and coaching, and ensuring participants have real opportunities in their roles to use what they are learning.

Systems

- ① The **systems** dimension expands the focus beyond immediate organizational mechanisms to the wider network of relationships, interdependencies, and contextual forces that shape how behaviors show up in practice.

Leaders and learners are never neutral; they're embedded in systems of meaning, power, culture, and adaptation. These structures influence their perception, viable strategic options, and interpretation by others. They act as active constraints and enablers, shaping change's boundaries. Development designs must account for these realities to ensure sustainable individual growth in an aligned environment.^[10]

Key factors to consider within the **systems** dimension include:

Culture and Complexity

- Organizational culture and subcultures
- Cross-functional interdependence and complexity
- Historical patterns and legacy assumptions

Power and Equity

- Power dynamics and decision rights
- Equity, inclusion, and belonging dynamics
- External stakeholder expectations

Uncertainty and Stress

- Market conditions and strategic uncertainty
- Change fatigue, stress load, and collective sense-making demands
- Unaddressed systemic challenges or trauma

Systems matter because leadership is not merely about individual capability, but about increasing the collective capacity of groups to interpret complexity, respond adaptively, and create sustainable impact. When development designs ignore these systemic forces, leaders often return to unchanged cultures where historical power dynamics reassert themselves and persistent equity issues stifle progress. Failing to account for these environmental variables risks leaving underlying patterns of ineffective behavior untouched, essentially asking individuals to thrive in a context that is structurally misaligned with their growth. Taking the systems dimension seriously as a design input requires shifting the focus toward the networks of relationships and interdependencies that inform how work actually gets done. By embedding systemic analysis into the development process, organizations can cultivate the conditions necessary to transform individual insights into broader, institutionalized change.^[11]

Design Principles of the Self-Structures-Systems Framework

Rather than treating development as a one-size-fits-all curriculum problem, this framework organizes design around **five principles that facilitate application of the framework in practice** to help ensure that the design is developmentally sound, contextually grounded, and sustainable over time.[24]

- Principle 1: Design for the Self as a Developing Learner
- Principle 2: Design the Structures That Hold and Reinforce Development
- Principle 3: Design for the Real Systems Leaders Must Navigate

PRINCIPLE 1

Design for the "Self" as a Developing Learner

Leadership development should begin with the self as learner, not the curriculum as product. **Programs must attend to the learner's developmental readiness and identity; growth depends on relevance, self-direction, and how identity and regulation shape the processing of developmental work.**[7] [12][13][17][18][29]

Assessing learner identity and developmental readiness prevents psychological misalignment, fostering more relevant, engaging, and effective growth.[24][25]



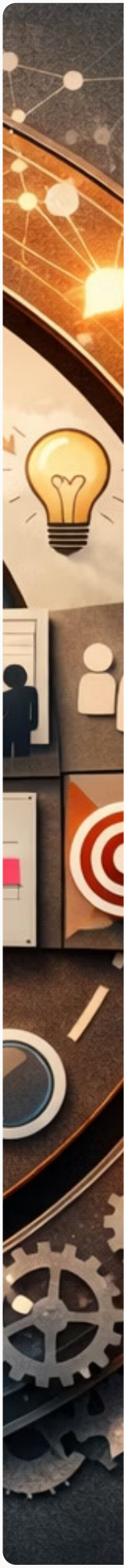
- Principle 4: Design for Cycles of Experience, Reflection, and Adaptive Experimentation Across All Levels
- Principle 5: Design for Sustainable Impact Through Alignment Across Self, Structures, and Systems

PRINCIPLE 2

Design for Structures That Reinforce Development

Curriculum alone is insufficient; surrounding structures must enable learning through scaffolding, feedback, trust, and psychological safety.[8][9][16][17][18][21][27]

In practice, this principle means **designing structural supports—such as manager involvement, coaching, and feedback loops—that translate insights into sustained practice beyond formal instruction.**[27][32][34]



5 DESIGN PRINCIPLES

Design Principles of the Self-Structures-Systems Framework *continued*

PRINCIPLE 3

Design for the Real Systems Leaders Must Navigate

Leadership development must be integrated into the systems leaders inhabit, drawing on adult and experiential learning to ground growth in real-world challenges. Consulting psychology and applied neuroscience further highlight how organizational dynamics, culture, and environmental conditions shape and limit how leaders adapt.[10][11][14][15][20]

In practice, this principle means **designing experiential learning activities using live organizational dilemmas, cross-boundary work, team dynamics, cultural tensions, and strategic ambiguity as material for leadership learning**. Rather than teaching systems thinking in abstraction, programs help leaders interpret the patterns, incentives, and relationships operating in the systems they inhabit.[28][39]

PRINCIPLE 5

Design for Sustainable Impact Through Alignment Across Self, Structures, and Systems

Leadership development must align the learner, their surrounding structures, and the broader system by integrating adult learning's focus on relevance, collaborative inquiry, systemic dynamics, and adaptive capacity.[21][23][37][38][39][41]

Sustainable impact depends on whether development helps reshape patterns of interaction and sensemaking across self, structures, and systems, not only whether participants enjoyed the program.[40][41][42]

In practice, this principle means evaluating whether development is changing not only individual insight or behavior, but also feedback norms, developmental opportunity, collaboration, inclusion, decision quality, and adaptive capacity across the wider system.

PRINCIPLE 4

Design for Cycles of Experience, Reflection, and Experimentation Across All Levels

High-impact leadership development organizes growth as an iterative cycle across self, structures, and systems, integrating reflection and experiential learning to enable experimentation, and repeated practice for durable change.[13][16][18][19][25][26][30][33]

This principle requires **designing dynamic cycles that bridge action and reflection** while enabling the organization to evolve alongside the individual's development.

Applying the Design Principles Across Self, Structures, and Systems

Organizations can use the framework through **a six-step process** designed to operationalize the **five principles** that integrate **four knowledge areas** across the **three self, structures, and systems dimensions**. The aim is not simply to run a program, but to translate the design principles into concrete choices about diagnosis, learning architecture, delivery, contextual support, and evaluation.

1. Assess the Current State and What Is Needed Across Self, Structures, and Systems
2. Translate the Principles Into Design Criteria
3. Build the Learning Architecture Across Self, Structures, and Systems
4. Pilot, Test Delivery, and Refine in Use
5. Reinforce Learning and Adapt Over Time
6. Evaluate Impact Across Self, Structures, and Systems

1. Assess the Current State and What Is Needed Across Self, Structures, and Systems

Begin by assessing all three dimensions. The goal is to understand not only what leaders need to learn, but what in the person, the structure, and the system is currently enabling or constraining that learning.^[31]

At the level of **self**, assess developmental readiness, role transition demands, identity-related challenges, prior knowledge, motivation, learning preferences, and current patterns of self-regulation. This shows what kinds of developmental stretch are realistic and what kinds of learning experiences are most likely to be relevant and usable.^{[24][25]}

At the level of **structures**, assess whether the environment currently supports development. Examine manager involvement, sponsor support, access to stretch opportunities, feedback loops, coaching availability, peer connection, workload, incentives, and time for reflection and practice.^{[27][32]}

At the level of **systems**, assess the larger context in which leadership is enacted. Examine organizational culture, cross-boundary dynamics, patterns of power and inclusion, strategic complexity, change pressures, and the broader relational field in which leaders must operate.^{[28][39]}

Once the landscape is understood, translate the five principles into explicit design criteria for the initiative. Across all three levels, ensure the design criteria also reflect iterative learning cycles and sustainable alignment, not just content coverage.[25][33][41]

2. Translate the Principles Into Design Criteria

For **self**, determine how the program will account for learner agency, developmental readiness, identity, reflective capacity, and adaptive behavior change. This may shape choices about assessment, pacing, coaching, reflection prompts, developmental grouping, and the degree of stretch built into the experience.[7][13][29]

For **structures**, determine what support and reinforcement must surround the program. This may include manager briefings, sponsor alignment, peer learning processes, coaching, protected time, feedback architecture, and follow-through expectations.[8][9][27]

For **systems**, determine how the design will engage the actual organizational context. This may involve using live business challenges, cross-functional problems, culture and inclusion dynamics, or team-based work as developmental material. It may also involve clarifying which systemic outcomes matter most, such as stronger collaboration, better decision-making under complexity, or improved adaptive capacity.[10][11][41]

3. Build the Learning Architecture Across Self, Structures, and Systems

With the design criteria defined, build the learning architecture so that all three dimensions are addressed together rather than sequentially. The result should be an integrated learning architecture in which personal development, contextual reinforcement, and systemic relevance are designed as mutually reinforcing features of one initiative.

For **self**, include elements that foster reflection, self-observation, coaching, guided feedback, emotional regulation, and repeated experimentation with new behaviors.[25][26][30]

For **structures**, build in the mechanisms that hold and reinforce learning: manager involvement, coaching, peer consultation, developmental assignments, application cycles, reflection practices, and progress reviews.[17][18][27][33]

For **systems**, ensure the architecture uses real organizational material. This may include action learning, live case consultation, team-based inquiry, cross-boundary projects, or facilitated work on adaptive challenges.[20][28]

Before scaling broadly, test how the design principles function in delivery. This step helps the organization refine the design before full implementation and increases the likelihood that the principles will work in practice, not just in theory.

4. Pilot, Test Delivery, and Refine in Use

At the level of **self**, pilot whether the developmental stretch, pacing, reflection practices, and coaching supports feel relevant and usable for the target learners. Watch for signs of overload, disengagement, defensiveness, or poor developmental fit.^{[17][21][37]}

At the level of **structures**, test whether managers are actually sponsoring development, whether feedback loops are active, whether workload permits participation, and whether the support mechanisms are functioning as intended.^{[32][34]}

At the level of **systems**, test whether the live challenges, cases, and contextual material are sufficiently connected to the real organizational environment and whether the program remains relevant as conditions shift.^{[39][41]}

5. Reinforce Learning and Adapt Over Time

As the program continues, reinforce learning and adapt the design as human and organizational realities evolve. This step recognizes that high-impact development is iterative. Effective programs are not only well designed at the beginning; they are reinforced and adapted over time.

At the level of **self**, continue strengthening reflective practice, self-regulation, and adaptive experimentation through coaching, feedback, guided reflection, and repeated application.

At the level of **structures**, maintain the systems of reinforcement that make learning sustainable: manager follow-through, peer accountability, reflection rhythms, developmental assignments, and progress reviews.

At the level of **systems**, keep the program connected to the changing organizational context. Strategic change, cultural tensions, leadership transitions, and shifting cross-boundary demands may require the initiative to evolve in order to remain relevant.^{[21][32][39]}

Evaluation should examine whether the design principles produced meaningful effects across all three dimensions. This final step ensures that the framework is evaluated in the same multidimensional way in which it was designed. Success is not defined only by participant satisfaction or content recall, but by whether the design principles produced sustainable developmental effects across self, structures, and systems.

6. Evaluate Impact Across Self, Structures, and Systems

At the level of **self**, assess changes in self-awareness, reflective capacity, emotional regulation, judgment, confidence, adaptive behavior, and developmental readiness for broader responsibility.^{[29][40]}

At the level of **structures**, assess whether the program strengthened feedback quality, manager support, developmental opportunity, coaching uptake, reinforcement practices, and the transfer of learning into day-to-day work.^{[27][32]}

At the level of **systems**, assess whether there were meaningful changes in collaboration, inclusion, decision quality, cross-boundary coordination, team climate, and organizational adaptability. Also ask whether the program influenced how leadership is collectively enacted and supported, not merely how individuals rated the experience.^{[39][41][42]}

What This Approach Makes Possible?

When leadership development is designed through the combined lens of self, structures, and systems, several important shifts become possible.

More Targeted

Development becomes more **targeted**. It accounts for who leaders are, what they already know, and what their growth actually requires.

More Embedded

Development becomes more **embedded**. Learning is connected to work, relationships, and real organizational demands.

More Equitable

Development becomes more **equitable**. Designers pay greater attention to the structural and systemic conditions that shape access, reinforcement, and inclusion.

More Adaptive

Development becomes more **adaptive**. It helps leaders navigate ambiguity and complexity rather than merely repeat known techniques.

More Sustainable

Development becomes more **sustainable**. Because the supporting environment is part of the design, growth is more likely to continue beyond the formal program.^[39]

Implications for Organizations

Interdependence+ Reinforcement

These three dimensions do not operate in isolation; they exist in a state of constant, dynamic interaction. The self influences how a leader navigates the structures of their role, while the systems they inhabit dictate the range of available Structures. When a program intentionally bridges these layers, the result is a feedback loop: a confident Self is better equipped to challenge dysfunctional Structures, and supportive Structures can, in turn, nudge the System toward more inclusive and effective cultural practices.

Organizations seeking stronger leadership pipelines and healthier cultures should reconsider the assumptions underlying their development efforts. The question is not whether leadership can be taught through a workshop. The better question is what conditions make meaningful leadership growth most likely.

This does not mean abandoning efficiency or consistency. It means using them wisely, **in service of development that is deep enough to matter.**

A **self-structures-systems** approach suggests several implications:

- Leadership development should be viewed as an organizational design issue, not only a training issue.
- Programs should be tailored to developmental needs and contextual realities, not just standardized for scale.
- Relational and reflective practices should be treated as essential, not optional.
- Organizational structures must be examined for whether they support or undermine the desired forms of leadership.
- Systemic conditions, including culture, equity, power, and complexity, should be addressed as part of the developmental agenda.

A Meaningful Shift in Perspective

Adopting this integrated lens represents a fundamental departure from the traditional, event-based models that treat leadership as a discrete skill set to be acquired in a workshop. By moving away from a 'transfer of content' mindset and toward a multi-level design challenge, organizations can shift the focus from episodic training to sustained developmental infrastructure. This holistic approach acknowledges that leadership is not merely a personal performance, but a collective phenomenon shaped by the intersections of individual agency, organizational design, and systemic context.^[6]



Conclusion

Leadership development is most effective when it is designed with a full view of the human and organizational realities involved. Leaders grow not in isolation, but through the interplay of self, structures, and systems. Individual differences matter. Personal learning styles matter. Existing knowledge matters. The organizational structures that support or limit development matter. The wider systemic variables shaping behavior and meaning-making matter.[40]

Recent peer-reviewed literature reinforces this overall argument: leadership development unfolds over time, is strengthened by workplace and relational conditions, and is more likely to endure when challenge, reflection, support, and reinforcement are intentionally designed.[41] An integrated framework grounded in adult learning, experiential learning, consulting psychology, and applied neuroscience provides a more realistic and effective foundation for leadership development. It offers a repeatable approach for designing experiences that foster transformational growth, adaptive capacity, and sustainable impact.[42]

Used well, this approach can help organizations move beyond one-time “boot camps” toward leadership learning that is **embedded, relational, and designed for intentional impact**.

3

Core Dimensions

Self, Structures, and Systems
— the three lenses through which all leadership development should be designed.

4

Knowledge Domains

Adult learning, experiential learning, consulting psychology, and applied neuroscience integrated into one framework.

5

Design Principles

Two principles each for Self, Structures, and Systems — forming a complete and repeatable design logic.

6

Process Steps

Assess, translate, build, pilot, reinforce, and evaluate across self, structures, and systems.

Endnotes

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