An Introduction from CLST

Responding to the call for effective leadership training:

Worldwide, leadership development is perceived to be the most urgent training need with U.S. organizations allocating a majority of their training budgets to leadership development programming (Ho, 2016). To put this in perspective, it is estimated that a budget of $1252 per employee is spent on training annually. This means, for example, if a company has 93,000 employees, that they spend $116,436,000 per year on employee training. Further, evidence suggests that organizational funds allocated to leadership training are increasing over time (Gibler, Carter, & Goldsmith, 2000; O' Leonard, 2014).

Despite the acknowledged need for better leaders and increased spending on leadership training, few businesses have confidence in the effectiveness of their organization's leadership development programming (Schwartz, Bersin, & Pelster, 2014). Looking to higher education, there is little difference: each of the top 50 universities listed in the 2018 U.S. News and World Report offer leadership development at both the undergraduate and graduate level, yet there is a lack of understanding regarding program effectiveness (Reyes et al. 2019, pg. 1).

Leadership program designers must place a greater focus on what is working within current leadership development programs and what needs to be included in future iterations of these programs.

The Center for Leadership and Strategic Thinking (CLST) at the U.W. Foster School of Business is responding to this demand in an effort to be a definitive resource on what works, what does not, and what remains to be evaluated within the leadership development (LD) programming arena. Thus, we have developed this review to help inform effective leadership program design, program facilitation, program coaching, and program evaluation for ensuring high quality participant experiences and outcomes moving forward.

This review examines two key meta-analyses of LD intervention design strategies and the overall effectiveness of said strategies (Lacerenza, Reyes, Marlow, Joseph, and Salas, 2017; Reyes, Dinh, Lacerenza, Marlow, Joseph, and Salas, 2019). Both studies aim to provide evidence-based analysis and recommendations for increasing the impact of, and ability to evaluate, each design component considered when building LD programs.

Key Concepts

Term	Definition
Leadership Development Intervention	"Programs that have been systematically designed to enhance leader knowledge, skills, abilities, and other components." (Lacerenza, p.1687). Individuals who engage in these programs can enhance their leadership potential or effectiveness in either a formal or informal leadership role via: • Coaching • One-on-one training • In-class • Virtual • Hybrid • Using Technology Applications
Kirkpatrick's Theory of Training Evaluation (see Lacerenza et al. p.1688)	
Reaction	Reflects the extent to which trainees enjoyed or perceived the training as useful relative to how they initially believed they would enjoy or perceive it as useful. Reaction reflects the attitude of the trainee toward the effectiveness of the training and reflects their motivation to learn.
Learning	Reflects any change in knowledge or skill following training, and can be affective-, cognitive-, or skill-based.
Transfer	Reflects any behavior the trainee will do, or the extent to which the knowledge or skills are utilized in job performance following training.
Results	Reflects a training program's impact on achieving organizational goals. (These studies categorize results as either organizational outcomes or subordinate outcomes.)

Executive Summary

Objectives:

These two studies relied on Kirkpatrick's model of training evaluation to review a dataset of 335 leadership development training interventions and assess overall impact. Using Kirkpatrick's four evaluation areas (reaction, learning, transfer, and results) they assessed 15 moderators of program design and delivery for impact. In addition, Lacerenza et al. included analysis of both organizational and subordinate (follower) outcomes.

Highlights of Findings:

LD programs are substantially effective, with a variety of implications on how to develop them. Both studies showed LD programs increase learning, behaviors on-the-job, overall job performance and satisfaction, and outcomes at both the organization and follower level to varying degrees. Overall, current approaches for measuring transfer of what is learned in training may not fully capture the extent of transfer.

Focusing on program design in the education space, Reyes et al. indicated that there is still room to improve overall effectiveness by utilizing more of the design components (p. 10). Key findings suggest that educators may be paying too much attention to learning outcomes and not enough to teaching students how to transfer these skills.

Limitations:

It is probable that effective leadership development training programs may be disproportionately reflected in the data and results may be upwardly biased (Lacerenza, pg. 1704). Results showed that LD programs within higher education do work, however most of these studies had endogeneity concerns (i.e. correlation does not prove causation) (see Reyes et al., pg. 13).

Conclusions:

When looking at the effectiveness of LD training, these findings call attention to the higher impact in learning as compared to the lower impact on transfer for participants, the essential role of needs analysis, and the need to improve ways of evaluating programs as key focal points for improving program design for greater impact.

Applications:

LD program developers should be asking: Where do we see high level of transfer from participants in our programs? How can we design to increase transfer impact in our programs? Are the development frameworks, models, and tools we use the best for the organization's context? How are we measuring impact of each of these components?

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Components of Effective LD Program Design

Moderator	Finding
Needs Analysis	Programs developed from needs analysis resulted in greater learning and transfer. *** +**
Training Attendance Policy	Voluntary programs enhance trainee reactions, learning, and transfer to a greater degree than involuntary programs. Mandatory attendance yields greater results. *** +**
Training Location	Programs hosted on-site display a greater effect on trainee reactions, learning, transfer and results. *****
Training Setting	Face-to-face is considered most effective. With little evidence on the effectiveness of virtual technology, it is continuing to advance and will need further evaluation to determine the degree of effectiveness as a method of delivery. *****
Spacing Effect	Distributed sessions were not shown to improve outcomes but did affect transfer. Programs with multiple sessions over time resulted in greater transfer than sessions massed delivery. *****
Trainee's Level of Leadership	Programs administered to all levels (mid, low, high) of leadership exhibited greater effects on reactions, learning, transfer and results. This implies all levels of leaders are as motivated to learn and improve individually and organizationally. *****
Training Instructor	Self-administered programs are less effective versus those administered by an external trainer. *****
Practice-based delivery methods	Programs incorporating information-, demonstration-, and practice-based methods demonstrate greater effects on reactions, learning, transfer and results in comparison with programs implementing only one or two methods. *****
Feedback	Feedback significantly improves the onset of transfer of affective, cognitive, and skill-based knowledge following a training program. This includes 360 evaluations, pre and post timing of feedback, and program evaluations as examples. Typically, most LD program feedback for the participant has been via self-evaluation. *****
Source of Feedback	Programs reporting the use of 360-degree feedback display a greater effect on results compared to single-source feedback, though source of feedback was not found to be significant overall. *****
Program length	Longer programs yielded a greater effect on results. *****
Training Evaluators	Programs evaluated by a team of academics and practitioners exhibited significantly greater learning and transfer outcomes versus those evaluated by academics or industry experts only. This finding lends to support the argument that the scientist-practitioner model is necessary for producing superior work. *****

Ideas for Application

1. **Improve ways to increase the transfer of what is learned in the intervention into the workplace**

Findings indicate that results are higher for what a leader *can* do, (their learning), than in what a leader *will* do (their ability to transfer learning to work).

Suggestions for improving the transfer of learning into the workplace:

➤ Increase time for the practice of development frameworks, models, and tools in sessions.
➤ Use of a larger variety of methods of practice such as the use of real-time polling, online discussion before, during, and after sessions, and reflective practice as examples for reinforcing the practice of learning.
➤ Use of peer coaching in program design as a means for accelerating and increasing participant use and practice of inquiry skills, self-awareness, and insight into the development process.
➤ Intentional inclusion of 'teach back' strategies for the workplace in sessions where participants understand the significance of transferring the knowledge gained in sessions.
➤ Further examination of where we see higher levels of transfer from participants in programs and understanding of how and why.
➤ Intentional focus on increasing both organizational and subordinate (follower) outcomes in program design.
➤ Further examination to understand what contributes to and will increase trickle-down effect in the workplace.
➤ Intentional design for trickle-up and down outcomes as a means for increasing transfer of training.
➤ Design for participants to share key program activity with both leaders and followers such as leadership development action plans, assessment results, and key models, and frameworks.
➤ Use of action learning projects in program design as a means of creating personally relevant leadership experiences which contribute to positive impact in the workplace.

2. Conduct needs analysis to improve program design and outcome effectiveness

Needs analysis should be conducted in order to avoid a 'one-size fits all' approach, which is *not* effective for program design, delivery, and implementation (See Lacerenza et al., p.1703-4; Reyes et al., p.10).

Suggestions for improving needs analysis and program design:

- ➢ Examination of what is and what is *not* currently working in the organization.
- ➢ Increase the use of design elements based on what is shown to be working.
- ➢ Inclusion of organizational context in needs analysis as consideration in design criteria.
- ➢ Use of technology solutions, such as polling and discussion groups.
- ➢ Collaboration with industry experts in program design for providing relevant, meaningful insight for the development of exercises, scenarios, and case studies used in programs.

3. Design a wholistic program evaluation approach

Findings indicate that conducting in-depth program evaluations could yield more accuracy around the effect of these design, delivery and implementation elements on all outcomes.

LD program designers should clearly identify which outcomes are being assessed in order to potentially gauge the degree of design considerations involved, and to properly evaluate how the outcomes are being met.

Suggestions for improving evaluation:
- ➢ Identify outcomes which warrant assessment and evaluation based on program design intentions in order to gauge the degree of outcome effectiveness.
- ➢ Increase the collaboration between a team of academics, industry and program practitioners for evaluating program effectiveness.
- ➢ Include pre and post measurement of key focus areas of capability development such as use of listening, inquiry, and taking different perspectives.
- ➢ Use a comparison group to help ensure that any changes that occur are due to the training program.

References

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