State Implementation & Scaling-up of Evidence-based Practices

Scaling-up Brief

October 2014
Number 4

Dean Fixsen, Caryn Ward, and Barbara Sims

Exploration Stage

Initiation of meaningful change in organizations and systems begins with the Exploration Stage of implementation. Exploration Stage processes are designed to assure mutually informed agreement to proceed with use of an innovation; both the Implementation Team and the organization understand what is to be done, how it will be done, and the resources and timelines for doing it.

Exploration Stage activities require discipline. For the sake of "getting things done" or responding to crises, there is a tendency for organization and system leaders to select units and (gently or authoritatively) require them to participate. While this may be necessary at times, this often is costly in three ways:

1. The chances of success are reduced
2. The costs in terms of wasted resources are increased
3. The costs in terms of lost opportunities are increased

A recent study helps to explain why many organizations do more and spend more but do not accomplish more. Romney, Israel, and Zlatevski (2014) assessed outcomes and costs for organizations that were attempting to use an evidence-based innovation. Some of the organizations completed Exploration Stage activities and arrived at an informed decision to proceed with the use of an innovation. Other organizations were told by their funder to participate. As shown in the Table below, organizations that completed Exploration Stage activities produced substantially better outcomes at significantly less cost. In Assigned organizations, fewer trainees successfully completed the activities required to develop competencies, and the cost for each outcome was substantially higher.

Success and Costs Related to Exploration Stage Activities

	Trainee Completion	Cost/Completed Trainee	Cost/Improved 1-Yr. Outcome
Exploration	65%	$1,052	$365
Assignment	13%	$7,811	$924

Romney, Israel, and Zlatevski (2014)

Effective implementation capacity is essential to improving education. The State Implementation & Scaling-up of Evidence-based Practices Center supports education systems in creating implementation capacity for evidence-based practices benefitting students, especially those with disabilities.

Similar to Romney, Israel, and Zlatevski's findings, Nutt (2001) found that edicts (assignment) produced poor outcomes. Nutt (2001) examined implementation approaches and outcomes in 376 organizations (public, private, profit, non-profit). Nutt found that active implementation approaches (intervention/facilitation; participation/internal team) were used less often but produced superior outcomes within reasonable timelines during a two-year follow up study. Edicts consisted of leaders deciding what needed to be done, announcing the decision, and describing the compliance requirements. Persuasion also was a top-down process with leaders engaging in a process to "sell" the innovation to staff by providing extensive information about the benefits, meeting with staff groups, and inviting experts to confirm the needs and benefits.

Implementation Outcomes Related to Implementation Approach

Approach	Usage	Success	Months
Intervention/ Facilitation	8%	87%	14
Participation/ Internal Team	18%	73%	16
Persuasion	37%	47%	21
Edict	37%	35%	15

Nutt (2001)

Nutt also examined the effects of crisis vs. non-urgent decisions, high resource vs. low resource requirements, internal vs. external pressures to act, and support from top level vs. middle level leaders. These factors had little or no impact on success outcomes. High resource innovations took more time and top level leadership support reduced time to put the innovation in place. These data underscore the importance of the Exploration Stage activities for producing eventual outcomes in a timely and cost-efficient manner.

The opportunity costs only become evident over time. Failing to engage in Exploration Stage activities creates black holes that consume leadership time dealing with continuing crises, scarce resources, and so-called 'resistance to change'. These outcomes distract leaders and produce shortages of resources (time, energy, funding) that hinder well-planned initiatives. Thus, opportunities are lost to invest in initiatives that might produce much improved outcomes.

Dimensions of the Exploration Stage of Implementation

As demonstrated in the data cited above, how an organization begins the process of using an innovation determines a great deal of the outcome. Fixsen and Fixsen (in preparation) examined over 40 frameworks that summarize implementation concepts and practices in a variety of domains (e.g. education, health, business). Exploration Stage processes are a prominent feature of nearly all of the frameworks. According to the authors of the frameworks, there are many areas that should be considered during the Exploration Stage.

Kilbourne, Neumann, Pincus, Bauer, & Stall (2007) advise ensuring feasibility in organizations. In this regard, Implementation Team members should meet with the staff members from a participating organization, introduce the innovation, and conduct an assessment of potential barriers to its use. Such meetings foster buy-in and understanding of the benefits of participation, from competency development opportunities to potential cost savings (i.e. the "business case"). During these meetings, Implementation Team members should not only describe the innovation but also collect information about organization capacity including resources and functioning characteristics that may directly affect how the innovation might be used and the types of support that might be needed (e.g., staffing, scope of work, management characteristics, information technology capability).

Damschroder, Aron, Keith, Kirsh, Alexander, and Lowery (2009) described the Exploration Stage as the time to consider all salient contextual factors–both modifiable and non-modifiable. Workarounds can be developed for identified non-modifiable factors, and strategies can be designed to change factors that can be modified (e.g. repurpose organization resources to support the innovation). The level of resources dedicated for implementation supports for ongoing use of an

innovation including money, training, education, physical space, and time also need to be identified and considered.

Van Meter and Van Horn (1973) advise Implementation Teams to pay attention to the nature of the innovation to be carried out according to two distinguishing characteristics. First, Exploration Stage decision-making will be affected by the extent to which the innovation deviates from standard practice. Second, the decision-making process will be influenced by the amount of organizational change that is required. In addition, Implementation Teams should pay attention to the degree of conflict or consensus regarding goals and objectives. To what extent do organization leaders agree on the goals of the innovation and implementation supports? Initiatives fail when organization leaders or staff members refuse to do what they are being asked (told) to do. Goals and objectives may be rejected for numerous reasons: they offend personal values or extra-organizational loyalties, they violate self-interests, or they alter features of the organization and its procedures that others desire to maintain. Successful implementation also may be hindered by overworked and poorly trained staff, insufficient information and financial resources, or impossible time constraints.

Hall and Hord (2011) state that important prerequisites for use of an innovation are that the intended users are aware of the innovation; have sufficient information about what it does and how to use it; and are clear about how the innovation would affect them personally. Greenberg, Domitrovich, Graczyk, & Zins (2005) expand on these themes and name seven system factors that should be considered in the pre-planning of any innovation: (a) need for change; (b) readiness for change; (c) capacity to effect change; (d) awareness of the need for change; (e) commitment or engagement in the change process; (f) incentive for change; and (g) history of successful change.

Damschroder et al. (2009) emphasize assessing leadership engagement to assure commitment, involvement, and accountability of leaders and managers to follow through. They note that one important dimension of organizational commitment is managerial patience (taking a long-term view rather than short-term) to allow time for the inevitable reduction in productivity until the intervention takes hold. Padua et al. (2014) expand on this point and note that assets and resources typically are focused on the mission of any organization. Initiatives that do not have leadership support generally receive inadequate resources to support their initial and ongoing success. As a result, it is imperative to obtain leadership buy-in and support for innovations and to ensure that an organization's leadership is committed to supporting the use of any innovation; permission should be negotiated in advance of attempting to use an innovation.

Exploration Stage Processes

Implementation Teams work with organizations to facilitate the Exploration process. The organization needs to make an informed decision to proceed or not with the use of an innovation. Organizations decide if the need is great enough and the advantages of the innovation are substantial enough to merit changing standard practices and administrative supports in ways required to use the innovation. The Implementation Team needs to make an informed decision to proceed or not with providing support to the organization regarding its use of an innovation. Implementation Teams decide if an organization has the leadership and capacity to incorporate active implementation supports for use of an innovation with fidelity and good outcomes.

Implementation Teams engage organizations in an Exploration process to reach a mutually informed decision. The process consists of exchanges of information, meetings with senior leadership and stakeholders, and detailed examination of the innovation, implementation supports (competency, leadership, and organization Drivers), resource requirements, and timelines for assessments and action. Detailed information on Exploration Stage processes is available on the Active Implementation Hub. See:

- *Exploration Stage*
- *Exploring with The Hexagon Tool*

Once a decision is reached to proceed, the Implementation Team and the leadership and staff of the organization identify and develop resources (Installation Stage) and begin providing the innovation to intended recipients and assessing fidelity and recipient outcomes (Initial Implementation Stage). Even though the work expands (Installation) and the use of the innovation begins (Initial Implementation), experienced Implementation Teams know that Exploration never ends.

It is common for organizations to re-examine the decision to engage in the process. The realities of changing organization practices to embed the use of implementation supports and innovations, expenditures of resources, negative staff reactions to change, changes in leadership and key staff, and so on lead to abandoning the attempt (e.g. Massatti et al., 2008) or recommitment to using innovations to produce improved outcomes. Massatti et al. found that organization decisions to abandon an attempt to use an innovation often were based on lack of adequate funding, inability to recruit and retain appropriate staff, lack of compatibility with organization mission and goals, and lack of adequate support from an Implementation Team.

Given the costs (time, effort, funding) required to reach the Initial Implementation Stage, these reasons for abandonment need to be given special attention during the Exploration Stage. It is a waste of scarce resources (opportunity costs) for organizations to attempt to use an innovation under less than adequate conditions. Implementation Team resources are better spent on creating readiness in those organizations.

See: *Scaling-Up Brief 3 - Readiness for Change*

Summary

Exploration Stage processes help systems use resources to maximize the benefits of innovations. Desired outcomes for recipients are more likely to occur when organizations go into the process armed with information about the innovation, implementation supports, resources, risks, and time required to reach the goal of using an innovation with fidelity to produce improved outcomes.

About SISEP

Effective implementation capacity is essential to improving education. The State Implementation & Scaling-up of Evidence-based Practices Center supports education systems in creating implementation capacity for evidence-based practices benefitting students, especially those with disabilities. For more Information visit us on the web at: https://sisep.fpg.unc.edu

IDEAs that Work
U.S. Office of Special Education Programs

nirn National Implementation Research Network

References

Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science*, 4(50). doi: 10.1186/1748-5908-4-50.

Domitrovich, C. E., Bradshaw, C. P., Poduska, J. M., Hoagwood, K., Buckley, J. A., Olin, S., . . . Ialongo, N. S. (2008). Maximizing the Implementation Quality of Evidence-Based Preventive Interventions in Schools: A Conceptual Framework. *Advances in School Mental Health Promotion, 1*(3), 6-28. doi: 10.1080/1754730X.2008.9715730

Fixsen, D. L., and Fixsen, A. A. M. (in preparation). *Implementation frameworks: e pluribus unum*. National Implementation Research Network, University of North Carolina, Chapel Hill, NC.

Greenberg, M. T., Domitrovich, C. E., Graczyk, P., & Zins, J. E. (2005). *The study of implementation in school-based preventive interventions: Theory, research and practice* (Volume 3). Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.

Hall, G. E., & Hord, S. M. (2011). *Implementing change: Patterns, principles and potholes* (4th ed.). Boston: Allyn and Bacon.

Kilbourne, A. M., Neumann, M. S., Pincus, H. A., Bauer, M. S., & Stall, R. (2007). Implementing evidence-based interventions in health care: Application of the replicating effective programs framework. *Implementation Science*, 2(42). doi: 10.1186/1748-5908-2-42

Massatti, R., Sweeney, H., Panzano, P., & Roth, D. (2008). The De-adoption of Innovative Mental Health Practices (IMHP): Why Organizations Choose not to Sustain an IMHP. *Administration and Policy in Mental Health and Mental Health Services Research, 35*(1-2), 50-65. doi: 10.1007/s10488-007-0141-z

Nutt, P. C. (2001). Contingency approaches applied to the implementation of strategic decisions. *International Journal of Business*, 6(1), 53-84.

Romney, S., Israel, N., & Zlatevski, D. (2014). Effect of exploration-stage implementation variation on the cost-effectiveness of an evidence-based parenting program. *Zeitschrift fur Psychologie*.

Padua, D. A., Frank, B., Donaldson, A., Motte, S. d. l., Cameron, K. L., Beutler, A. I., . . . Marshall, S. W. (2014). Developing and implementing a preventive training program: Lessons learned from JUMP-ACL and beyond. Clinical Sports Medicine. doi: http://dx.doi.org/10.1016/j.csm.2014.06.012

Van Meter, D. S., & Van Horn, C. E. (1975). The policy implementation process: A conceptual framework. *Administration & Society*, 6, 445-488.