



Diffusion of Innovations and Science-Based Practices to Address Barriers to Learning & Improve Schools:

A Series of Information Resources on Enabling System Change

As calls for addressing barriers to student learning and improving schools increase, new directions are imperative. And, this involves more than tinkering with prevailing approaches. The need is for developing major innovations (e.g., comprehensive school-level prototypes) and taking them to scale throughout a school district.

The success of all this depends on stakeholders in public education becoming more knowledgeable about the complexities and strategies related to diffusion of innovations, enabling major systemic changes, and developing a *sophisticated* understanding of the role of empirically-based practices.

To these ends, the Center is producing a series of resources, such as this one, to provide informational aids for use as tools in policy and practice analyses, research, education, and school improvement planning.

Making and Disseminating Recommendations is Not Sufficient

While dissemination and diffusion can occur informally, formal efforts require well-designed interventions. In particular, they involve application of strategies that address recipients' interests and capabilities.

To amplify a bit, this document

- highlights some strategies related to both dissemination and diffusion and
- suggests some references for learning more.

Making and Disseminating Recommendations is Not Sufficient

Good ideas and missionary zeal are sometimes enough to change the thinking of individuals; they are rarely, if ever, effective in changing complicated organizations (like the school) with traditions, dynamics, and goals of their own.

Seymour Sarason

It's not terribly hard to formulate ideas and recommendations for improving schools. And, in moving them toward acceptance and action, the first concern is *dissemination*. Dissemination entails the many challenges involved in getting ideas and recommendations to the right individuals, groups, and organizations. Acceptance and action, however, require focusing on *diffusion*. Diffusion is the process by which recipients are mobilized to learn and use what has been disseminated. Understanding what enables successful diffusion helps in designing and implementing dissemination strategies in ways that promote recipient use.

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Dissemination

The process is that of distribution or circulation. This is accomplished through various delivery mechanisms (e.g., in person and online presentations, hard copy mailing, email, webinars, websites).

Dissemination alone, however, does not guarantee the content is communicated or that recipients will understand it or that they will do anything with what they receive. And, widespread dissemination does not increase the likelihood of any of this. Thus, while dissemination is a necessary precursor, it is insufficient with respect to assuring understanding, never mind mobilizing action.

With a view to use and action, some guidelines in developing dissemination strategies include:

- (1) Clearly convey the *credibility* of both the content and the sender.
- (2) As much as feasible, provide free and ready *access*.
- (3) *Target specific audiences*. With reference to strategically targeting audiences to promote organizational change, it should be noted that Greenlaugh and colleagues (2004) stress that organizational use and action is more likely when (a) an organization has identified a need, (b) an organization has spent a significant amount of time planning for the adoption of an innovation, including addressing potential problems that may arise from implementation, (c) there is a wide base of support within an organization, as well as high-ranking organization members backing it, and (d) there are sufficient resources for adoption, implementation, and formative evaluation.
- (4) *Personalize* for each targeted audience the design of what is disseminated and, as feasible, send it in a personal way.
- (5) *Succinct Overview*. Provide an enticing one paragraph overview to stimulate the interest of recipients and increase the likelihood of their paying attention to what is sent. The key here is to underscore the potential value to them.
- (6) *Use Networks*. Start with developed networks and over time establish new ones (e.g., networks that include targeted audiences; networks of colleagues who have agreed to help with dissemination).
- (7) *Use News Outlets*. Send a news release to relevant listservs, organizational newsletters, clearinghouses, Centers, and so forth.

- (8) *Encourage Sharing*. Encourage all recipients to share *at least* the one paragraph overview with others they think might be interested. Alternatively, encourage them to indicate who else should be sent the ideas, recommendations, resources.
- (9) *Follow-up*. Did it arrive? Was it understood? Any questions or concerns that need to be addressed? Need guidance to help with use?

Diffusion

This is the process by which recipients are mobilized to learn and use what has been disseminated. The content focus of formal diffusion efforts may be on motivating and facilitating

- (a) acquisition of information and knowledge
- (b) adoption/adaptation of a specific innovation (e.g., a new practice, a new policy),
- (c) pursuit of major reforms and transformative innovations requiring systemic changes.

The figure below illustrates the differences in focus as related to dissemination and diffusion.

		<i>Examples of Content Focus</i>			
		Information/ Knowledge	New Practice	New Policy	System Change
<i>Process</i>	Dissemination (distribution, dispersion)				
	Diffusion (mobilizing recipients to learn and use)				

It should be stressed that the complexity involved in diffusion increases when the focus is on innovation and systemic change because of the many contextual variables that play a role in change. For example, schools, neighborhoods, and agencies are all organized settings with well-established institutional cultures and infrastructures that usually must be accounted for and which are not easily changed. In established organized settings, those who set out to diffuse policies and practices that have been found efficacious are confronted with the enormous and complex tasks of producing systemic changes and going to scale. From this perspective, the implementation problem involves much more than assuring fidelity of application and calls for a high degree of commitment and relentlessness of effort.

Diffusion of innovation research offers some help in thinking about what all of us might consider in developing dissemination and diffusion strategies that connect more effectively with our audiences. Extrapolating from the work of E.M. Rogers (2003) and Greenlaugh and colleagues (2004), strategies should be designed to enhance perceptions of:

- (1) *Benefits*. This includes delineating what is to be gained from use and action (e.g., how ideas and recommendations meet an organization's needs). With respect to new information or innovations, Rogers emphasizes the concept of *relative advantage*. The degree to which an innovation is perceived as better than the idea it supercedes. The greater the degree of perceived relative advantage, the more rapid its rate of adoption.
- (2) *Compatibility* (fit, match). This refers to the degree to which an idea or recommendation is perceived as consistent with the existing values, past experiences, and needs of potential adopters. Rogers states that the more compatible it is, the more rapidly it will be adopted.

- (3) *Usability*. Language and design should maximize the likelihood that what is sent can be readily understood by the intended audience. The content should highlight use, including how ideas and recommendations might be integrated into existing activity and leverage available resources. Rogers emphasizes the concept of *trialability*. This is the degree to which an innovation may be experimented with on a limited basis. An innovation that is triable represents less uncertainty as it is possible to learn by doing.
- (4) *Evidence of impact*. Clearly, references should be included to data, opportunities to observe demonstrations, or any other ways to convey the potential impact of acting on recommendations.

Resources and References

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The Center's Series of Information Resources on Enabling System Change

Diffusion of Innovations and Science-Based Practices to Address Barriers to Learning & Improve Schools

- >Brief Overview of a Major Review by L.W. Green, et al. (2009) entitled: Diffusion Theory and Knowledge Dissemination, Utilization, and Integration in Public Health
- >Brief Overview of Major Concepts from E.M. Rogers' Work on Diffusion of Innovations
- >Brief Overview of Malcolm Gladwell's Concept of the Tipping Point
- >Some Key Terms Related to Enabling System Change
- >Systemic Change for School Improvement
- >Change Agent Mechanisms for School Improvement: Infrastructure not Individuals
- >System Change and Empirically-Supported Practices: The Implementation Problem
- >Policy Implications for Advancing Systemic Change for School Improvement
- >Some Key References Related to Enabling System Change
- >Dissemination Focused on Diffusion: Some Guidelines
- >Diffusion: In Pursuit of Action
- >Excerpts from Child Trends' series of Research-to-Results Briefs on Adopting, Implementing, Sustaining, and Replicating Evidence-Based Practices
- >Making and Disseminating Recommendations is Not Sufficient
- >Intro to Multi-Level Community Based Culturally Situated Interventions