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Welcome to the 21st century—a time when every school system in the world is preparing its children to be successful. As educators who face countless changes and requirements with technology and complexities hurtled our way, we can feel as though we are standing helpless in the middle of that Billy Joel song, *We Didn't Start the Fire*—the one with rapid-fire allusions to hundreds of headlines (Joel, 1989). Times are certainly complex, and this *complexity*, according to Michael Fullan, "means change, but specifically it means rapidly occurring, unpredictable, nonlinear change" (2001, p. ix). Innovation is one brand of change. We cannot innovate without doing things differently. Innovation done well, however, is more controlled than simply doing things differently; oftentimes, it can even be predictable. Innovation is planned change. Researchers from the 1970s describe it as "a deliberate, novel, specific change which is thought to be efficacious in accomplishing the goals of a system" (Nisbet & Collins, 1978, p. 6). According to the implications of that definition, stimulating innovation is as much about systemic change as it is about leadership and culture.

As much as we know about change, leadership, and culture now, we still find it difficult to leverage these factors toward the stimulation of focused, connected, and meaningful innovations within *and* across educational system hierarchies. More than 40 years ago, Simpkins and Miller (1972) explained why:

Disputes arise as to the order of priority of educational objectives which best meets the interests of the individual and society, and agreement is difficult to obtain on appropriate educational ideas and practices. At the point of

implementation, it is not easy to change educational principles and methods, which are well entrenched and sanctified by tradition. (p. 6)

If we compare that statement from 1972 to the current state of education in 2013, we would find little difference in our efforts to innovate except perhaps to acknowledge the impact of federal and state policy on the entire system's ability to fulfill program requirements *and* adequately tend to the personalization of support to districts, schools, and classrooms. States have increasingly more to do and much less to do it with. The good news? Innovation (connected to specific and clear goals) loves that particular challenge.

Why Is Innovation So Hard?

For a few years now, state education agencies have been building and refining their statewide systems of support. In some cases, states have completely reconfigured their approach to supporting the lowest achieving schools and evaluating their own effectiveness: "Successful state education agencies evaluate themselves—and their systems of recognition, accountability, and support—using the same rigorous performance metrics and evaluation tools that they apply to districts and schools" (Redding, 2013, p. 12). In other cases, these support systems continue to operate as individual, self-contained departments, coordinating one area of functional expertise with another area of functional expertise, often resulting in better coordination of what has always been done.

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>
> Redding, 2013, p. 12

In all cases, we have yet to see pervasive (or disruptive) transformations in the ways that states, districts, and schools operate and interact, transformations that effect and sustain dramatic and widespread improvements in teaching and learning. This is not to say that structures aren't supportive or improvement isn't occurring. They are. It is. But with so many priorities still to achieve, programs to run, and reports to submit, we too easily forget what we set out to do in the first place—continually provide students with new and effective learning experiences—let alone communicate how we go about it up and down and across system levels.

Michael Fullan observed that our problem is not lack of innovations, but rather "the presence of too many disconnected, piecemeal, superficially adorned projects" (2001, p. 109). States, districts, and schools are so busy trying to just keep up and "keep it together" that the thought of one more thing, even if it is the right thing, seems unbearable. The annual *MetLife Survey of the American Teacher: Challenges for School Leadership* polled a representative sample of 1,000

teachers and 500 principals in K–12 schools across the country and found that "teacher job satisfaction has hit its lowest point in a quarter of a century, and 75 percent of principals believe their jobs have become too complex" (Strauss, 2013). In this world of rapid change and accountability, educators spend more and more time connecting and reporting on moving dots. Change of most sorts is likely to face resistance, particularly when it's unrelated (and/or in addition) to all of the other dots educators are trying to manage and maintain.

In identifying the reasons that people resist change, regardless of the industry under discussion, studies cite the most common resistors to be uncertainty, concern over personal loss, group resistance, dependence, lack of trust in administration, and awareness of weaknesses in the proposed change (Fullan, 2009; Spector, 2011). Whether introducing, implementing, or stimulating new initiatives or innovations, awareness of and attention to these internal forces of resistance are essential, without question.

But there is another force of resistance that has crept onto the scene: fatigue—*innovation fatigue* to be exact. Innovation was once a concept full of meaning and excitement, but its overuse and broad application has created a situation in which many see the word as an empty cliché (everything is innovative and nothing is) or short for "we're going to pressure you for something new, without guidance, resources, or support" (Rehn, 2013, para. 2). Consider these characteristics of innovation fatigue identified by Rehn at each level of the educational system:

- **It's all a joke.** Just mentioning the word innovation or change gets people all riled up, eyes rolling, and guffawing. They've been there and done that with little to no results to speak of and have mentally turned away from the direction you are trying to steer them.
- **New initiatives are met with old solutions**. As Fullan points out, the problem isn't a lack of innovation, it's that there are too many ad hoc, disconnected priorities and programs. It's hard to get staff working in new ways when history tells them there will be another "initiative" or "innovation" right behind this one, so they figure out how to incorporate the new innovative priorities into their existing, comfortable approaches.
- **They beg you to stop**. This type of begging goes beyond the typical resistance factors that were described earlier and speaks more of desperation and hopelessness: "Please stop. There are no people to do it and no resources to support it. We can't do one more thing."
- **They've given up**. Maybe they still fake it, but more than likely, they have completely given up on innovation and real change. At worst, they have given up all together—on innovation, on making a difference in their part of the work; at best, they *only* care about their part of the work and turn all of their energy into doing what they can to improve teaching and learning.

To overcome innovation fatigue, we must get serious about making innovation meaningful again. Broadly, that means stop asking people to just "think outside the box" (another cliché) or "just do this one more thing, and you'll see, it'll be different." We need to make clear what it is that causes us to say things are not right or can be improved. Is there acknowledgement that some things *may* be working? Many may feel that they are asked to change even when they believe what they are doing works. For some, innovation translates into, "How do I fit what I want to do, or have been doing all along, into this call for change?" Stated differently, is there recognition that past innovations have yielded some practices that should be continued? Acknowledging what is working is as important as recognizing what needs to change. It suggests that there can be lasting effects of innovation and that it is not just the latest attempt to look up-to-date. We need to (a) start talking specifically about the role of innovation in the organization and how it connects to very clear goals and priorities; (b) begin eliminating things—programs, practices, processes, and even innovations—that aren't positively impacting teaching and learning; (c) start creating a culture that promotes innovation in both language and action; and (d) begin developing a process to support, manage, and measure innovation.

Education isn't the only field struggling in this endeavor. A 2007 survey conducted by McKinsey & Company, which gauged the practices and perceptions among more than 1,000 senior executives and lower-level management, revealed that 70% of respondents indicated that innovation was a "top priority" for their organization, yet felt that their company approached it in inconsistent and at times counterproductive ways. According to the report, "Although more than a third of top managers [senior VP level and higher] say innovation is part of the leadership team's agenda, an equal number say their companies govern innovation in an ad hoc way" (Barsh, Capozzi, & Mendonce, 2007, pp. 2–3). Episodic innovation is both ineffective and fatiguing. Innovation that works is disciplined and invigorating.

Remind Me, What Is Innovation Exactly?

Earlier, we described innovation as planned change, a simple enough definition. But there is little else about innovation that is simple: It is hard to do and easy to get wrong. Innovation comes in many shapes, sizes, and classes, but innovation becomes *meaningful* when it is connected to very clear and focused organizational and performance goals, when staff understand and see the value of it, when the evaluation criteria are not only understood but embraced, and when support exists and is evident at all levels of the educational system.

Nisbet defines innovation as "any new policy, syllabus, method, or organizational change, which is intended to improve teaching and learning" (1974, p. 2). Basset (1970, p. 4) classifies innovation into six categories:

a. new educational ideas or practices that were not previously known (inventing something new);
b. adaptations, extensions, or modifications of earlier ideas (adopting something that has been successful elsewhere, improving something that already exists);
c. changed conditions (e. g., class size, better materials, attracting innovative people) under which previously unsuccessful innovations may be successful;
d. changed attitudes on the part of teachers or administrators towards an idea;
e. new situations where the elements combine in new ways, resulting in a better mobilization of influences; and
f. changes that result from the spread of ideas which people had not previously understood or saw as potentially important (seeing something from a different perspective).

Apart from these *categories* of innovation, Clayton Christensen and other innovation experts believe there are (at least) two *kinds* of innovation: sustaining innovations and disruptive innovations. Both are critical to an organization's growth and success but require very different strategies to achieve. Sustaining innovations are intended "to sustain the core"—finding ways to do what is already being done, only better. Disruptive innovations create new markets or completely transform existing ones by focusing less on performance and focusing more on making things simpler, more affordable, more accessible, and/or more customizable. In education, this means new ways of creating and delivering learning environments that are not only different from the standard classroom, but also fundamentally change it. This includes the use of new technologies, such as tablets and interactive whiteboards; new means of research, such as search engines and direct access to outside resources via the Internet; new forms of collaboration made possible by social media; new means of delivering just-in-time learning that provides instruction right when it is needed; and the application of new principles derived from the laboratory, as well as the growing use of "big data" (see Layng & Twyman and also Baker in this *Handbook*).

During the writing of this chapter, the first author had very sick children for what seemed a very long winter. For one child or another, there were pediatrician's office visits every week or more for one reason or another, waiting in rooms on average for one hour or more. At one point, the author learned about a pediatric "minute clinic" that recently opened and promised minimal (almost nonexistent) wait times, a clean and fun environment, high-quality care, and the capacity to fill prescriptions (if needed) on the spot. Almost all insurances were accepted, and no appointment was needed. Employing retired pediatricians or pediatric nurses and physician's assistants looking for flexible work environments, this clinic is definitely disrupting the traditional pediatric care industry.

The two forms of innovation, sustaining or disruptive, "couldn't be more different," says Mark W. Johnson, chairman of Innosight, indicating that they achieve different outcomes and "need different levels of resources and different people who are rewarded in different ways" (Kelly, 2010, p. 2). According to Johnson, one of the biggest mistakes organizations make is treating them as the same. For example, people tasked with fueling the company's future are also expected to sustain the current offerings, splitting their time and resources in ad hoc ways. "Worse," says Johnson, "they subject both kinds of innovations to a single time scale and reward with the same incentives" (Kelly, 2010, p. 2). In his view, organizations need to carefully plan their sustaining innovations in order to maintain their relevance and meet needs in the short term but separately identify and pursue disruptive innovations that will create something new and change the game in productive ways for the future.

> *Innovation is planned change because it requires careful consideration of and alignment to system goals and priorities as well as constant and conscious effort to create a collaborative and supportive culture that promotes, values, and rewards creativity and innovation—sustaining and disruptive—and assigns the right people, the appropriate resources, and different timetables to each.*

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What Does a Culture That Supports Innovation Look Like?

Not all innovative cultures can offer rooftop garden terraces or foosball tables where employees meet to brainstorm and solve problems as does Google, but those things aren't necessarily what make a culture innovative. Despite the theme park-like work setting, Google's description of its culture states that it is really the people that make it the kind of company it is. The statement continues, "We strive to maintain the open culture…in which everyone is a hands-on contributor and feels comfortable sharing ideas and opinions…Our offices…

are designed to *encourage interactions between, within, and across teams* and to spark conversations about work" (italics added; Google, n.d., para. 2).

At Applied Minds, a company that relies exclusively on interdisciplinary approaches to "build things so small you have to look at them under an electron microscope. We design things the size of large buildings" (Jardin, 2005, para. 22), cofounders Bran Ferren and Danny Hillis, former engineers for Walt Disney's Imagineering, rely on artists, scientists, and engineers with wide-ranging skills in architecture, electronics, mechanics, physics, mathematics, software development, system engineering, and storytelling to invent, design, and prototype breakthrough products and services for industry and government (Jardin, 2005). The projects of Applied Minds range from toys and roller coasters to cancer treatments and sound scramble technologies, from buildings to algorithms, and from off-road vehicles to high-resolution displays (Jardin, 2005). Two more detailed examples include an interactive surface map of earth that comes alive with the sweep of a hand, zooming from continent, to country, to state, to city, to parking lot. A swipe of the finger takes you east, west, north, or south. Cupped hands turn the map into a globe that can spin. In 2005, Applied Minds was developing "an online search and collaboration system called Metaweb, a project to identify and match specific cancer treatments based on attributes of a patient's body chemistry" (Jardin, 2005, para. 15).

Hillis and Ferren believe that their cross-disciplinary approach, together with providing internal structures and opportunities that make cross-collaboration easy and expected, is essential to their success. As Hillis puts it, "There are plenty of people out there who could design electronics, psychologists who could tell you that meaning demands attention, and architects who could tell you we need to make open offices work better, but we think about all of these things together" (Jardin, 2005, para. 13).

As educators, we are not likely to benefit from (or require) gadgets that will create sonic privacy in workspaces without walls (another Applied Minds' innovation), but we can benefit from the cross-disciplinary and collaborative culture that Applied Minds has established to develop solutions, create opportunities, and explore possibilities.

Google and Applied Minds are examples of companies which support modern innovative cultures, but innovative cultures can be found in every century. Author Frans Johansson (2004), in his book *The Medici Effect: Breakthrough Insights at the Intersection of Ideas, Concepts, and Cultures*, shares his research (which supports other scholars' findings as well) on what sparked the 14th century Renaissance. Gabriel Kasper and Stephanie Clohesy (2008) use Johansson's research in their report to reveal lessons that hold valuable, 21st century relevance as well:

    a. Collaborate. Forget traditional boundaries and divisions and find ways to bring people together from a wide variety of fields and disciplines to work

and cocreate. Look both inside and outside your organization for innovative partnerships.

b. **Be systematic**. Develop a culture that supports, nurtures, and develops innovation in a systematic way. Creativity is only one part of the innovation picture. A disciplined yet flexible process is needed to launch new ideas and then scale them to the opportunity or need at hand.

c. **Use change agents**. Senior leadership support for innovation is essential. But an organization also needs people who can foster innovation throughout the organization, both around specific opportunities or needs and structurally to impact daily operations.

d. **Use technology**. German scribes mocked the early printing presses as unreliable "contraptions" that would never replace hand-written books. Innovative cultures should identify, accept, and support new technologies that can increase the flow and dissemination of knowledge and information and simplify operational work.

Silos and working within functional areas are not unique to the educational system; most organizations and companies operate this way. Increasingly, though, the innovative ones have figured out ways to slowly dismantle silos and work cross-functionally to eliminate duplicative or ineffective resources and requirements. Literature on innovation and practice over the last decade reveal that it is possible for an organization to be more systematic about innovation. What was once thought to be an art is actually more of a science, and the general outline of what it takes to successfully manage innovation is beginning to come into focus. Following intentional, repeatable processes can allow an organization to more effectively develop, test, implement, and share new ideas. Innovative organizations continuously engage in this process.

Cross-Functioning and Collaboration

In 2008, in an effort to redefine work priorities and approaches to identifying and delivering support and services to the lowest performing schools in a state of 24 school systems with proximal access to leading science, education, and technology centers, the Maryland State Department of Education (MSDE) launched the Breakthrough Center. An emphasis on "dismantling the silos" undergirded the development of the Breakthrough Center, with teams expected to work cross-functionally up and down the levels of the educational system to identify needs within the department and across districts and schools in the state (uniquely and commonly). Depending on the needs identified and their context, a cross-functional team would be established to cocreate solutions with districts, schools, and external partners, enlisting both top-down and bottom-up support. Learning from one another would be as valuable to the process as the contribution of expertise and skills.

In addition to its collaborations, the Breakthrough Center also serves as a broker of services between districts, schools, and organizations, as well as the driver of incentives to encourage and identify where exceptional (even innovative) practices are occurring within the state's schools and classrooms. Giving a nod to the idea that disruptive innovation does not happen overnight, the center has adopted a "go slow to go fast" approach to its growth. For all of the excitement that this new way of operating elicited, it generated uncertainty in the early stages as well. Four years into its launch, the center continues to navigate the complexities and nuances of an educational system that adheres to traditional mechanisms for operating, including the allocation and disbursement of funding and services. However, constant efforts to build trusting and collaborative relationships around a crystal clear and shared vision throughout the Maryland State Department of Education and into the districts and schools has resulted in more direct pathways through which teaching and learning have improved.

This type of approach becomes systematic when, as Michael Fullan (2013) observes,

> [A] cross-functional team of leaders from multiple departments begin talking about goals and what each department can contribute. They interact continuously in small and big ways and come to have a similar grasp of the core goals as well as the main strategies being employed. This concept is then extended to other levels—district and school. Pretty soon a critical mass of leaders at all levels begin to interact and act in consistent ways, learning from each other and extending learning to the rest of the organization. The system starts to work in a reinforcing way. (p. 62)

Other Ways of Thinking About Collaboration

Open innovation is another approach that is attracting broad attention in the problem-solving, solution-seeking world. Clayton Christensen, in a September 2012 web log, "Open Innovation and Getting Things Right" (Christensen, 2012), describes it this way, "Open innovation is a method of innovation that has arisen in recent years which allows companies to essentially source some of their innovation efforts to outside

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parties, often through contests [in which] individuals compete to develop the best solution to the innovation challenge the company has set forth" (para. 2). On a large scale, it involves crowd-sourcing problems to the world's best thinkers who compete to provide solutions to business, technical, policy, and social challenges. Companies like Google, Apple, NASA, and IBM use open innovation to solve some of their greatest challenges. NASA, for example, in trying to solve the problem of health-related issues for long-duration flights, opened this problem

up to the crowd—those within their agency that may not have otherwise been brought into the conversation and especially those outside the agency that may have no experience in space travel—in an effort to find the most innovative solution. Referred to as crowd-sourcing, NASA used this approach to solve another problem: how to preserve food for several years in space. The solution came from someone completely outside of the food or space industry ("How Open Innovation Is Solving," 2013).

Though the results of open innovation to overall success are mixed, Christensen, in his September 2012 web log, advises us to be cautious in adopting open innovation too quickly without a precise definition of what it is and how we aim to use it: "For example, open innovation can be an excellent means for innovating around specific technical challenges. In contrast, open innovation may be a less effective means for bigger, larger architectural or business model innovations" (para. 3).

In education, open innovation might just be the approach state education agencies could employ to identify, develop, and scale learning innovations within their state. For example, a district with resources to build and develop a robust curriculum and assessment program that meets the requirements of the Common Core could "sell" its product to the state or to a consortium of smaller districts and schools without the resources or expertise to build such a program on its own. In tough economic times, these external revenue-generating opportunities are attractive to districts with in-house capacity, yet provide an economical solution for states, districts, and schools without such capacity but who might share the cost in purchasing products, programs, or services.

On a smaller but critically important scale, open innovation might prove just the approach for engaging teachers in the innovation process—tapping into their skills and talents for new solutions or different approaches to personalize student learning, for example, and then coming up with creative ways to reward them. Great teachers innovate and personalize learning every day. Finding them is one step of the innovation process; the next and trickier part is identifying the specific practices they have innovated upon and coming up with effective ways to transfer that knowledge and those skills to others. There you have it: your first innovative challenge.

The concept of open innovation is an interesting one for educators. It has the potential to expand the practice of collaboration and interdisciplinary teaming within an organization as well as up and down the levels of its system even further—definitely into classrooms, maybe across state and national lines, possibly into different industries. Of course, as with most types of innovation, it should be approached carefully and be connected to clear and specific goals. It certainly provides new ways of thinking about resources,solving problems, and envisioning possibilities.

Motivation to Innovate in Education and the Consequences of Not Innovating

Innovation means change, and change has consequences. One consequence is clear: Change implies work. For districts, schools, principals, and teachers, additional work is the last thing they desire. It is important to understand the cost of change for all who are asked to innovate. Even attending a meeting to discuss innovation can be an extra burden. Innovation should be fun; that is, it should produce consequences that are worthwhile for all involved. Innovation policy needs to allow those consequences to have their effect. Israel Goldiamond (1974) noted that consequences often come in packages—a bundle of costs and benefits. Given an array of alternatives, people will distribute their behavior in accord with the costs and benefits contingent on each alternative (Goldiamond, 1984; Herrnstein, 2000). Policymakers may examine the costs and ignore the benefits, emphasize benefits and ignore the costs, or overlook alternative ways of doing things that provide the same benefits at less cost or have the same cost but greater benefits (Goldiamond, 1976).

Every day, educators are faced with these choices. They occur moment to moment—for example, "Do I use precious time to work with one child and forsake having a well prepared lesson for the many?" They also occur in terms of allocating time and effort to innovation. One approach is to make these consequences explicit; that is, describe the costs (including the effort it takes to change and implement change) and benefits of innovating as compared to the costs and benefits of current practices. An example of this can be found in Layng's (1977) analysis of telecommunication vs. transportation trade-offs when delivering instruction to students who must commute long distances to school. Often, the costs and benefits discussed are economic, that is, at least some form of monetary value may be assigned to the consequences under consideration (see, Layard & Glaister, 1994). However, there are other forms of costs and benefits that are consequences of a more personal nature.

There are two major types of personal consequences (Goldiamond, 1974; Layng, 2009). There are those that are extrinsic to the activity, extrinsic meaning that they are arranged by an outside agent, and there are those specific to an activity. Too often policymakers focus on the former and hope for the latter. B. F. Skinner (1953), commenting on why French was easier to learn in France than in the United States, said, "In an American school, if you ask for salt in good French, you get an A. In France, you get the salt" (p. 402). The latter is an example of the kind of built-in consequences Skinner advocated; the former is arranged by others and is extrinsic to the activity, what Skinner (1968) called a "spurious" consequence.

When incentives (benefits) are discussed, they are often only of the activity-extrinsic type, such as merit pay. While pay is important and critical to one's well

being, money-based incentives should allow for individual differences in activity-specific consequences. Free choice is defined by the consequences of choice, such as offering equal amounts of money for different activities, thus leaving the selector free to choose which activity is preferred. Consider Goldiamond's (1976) observation that prisoners given time off their sentences for participating in medical trials could not be considered to freely consent to those trials unless time off one's sentence was available for other activities as well. Only then could the costs and benefits for participation be fully considered by the inmate.

We assert that innovations that are embraced and maintained provide activity-specific consequences, while innovations that are transient and feel burdensome are often maintained by spurious, activity-extrinsic consequences. These spurious consequences include the cost of noncompliance, such as failing to appear as a team member or jeopardizing one's evaluation or career advancement, as well as benefits such as merit pay or gold star employee ceremonies. Activity-specific benefits are those for which we may see learner engagement, obvious *aha!* moments in the classroom, improved learner evaluations that demonstrate learner success and inform better practices rather than judge, unanticipated peer acknowledgement, and even paid adoption of teacher, school, or district innovations by others.

Costs can be activity-specific as well. These costs include learning new methods and technologies. For a principal, not only learning but managing these technologies imposes an added burden. There are inventory, storage, wiring, safety, and distribution issues, to name but a few, which when added to an already overwhelming list of responsibilities, make the job increasingly complex. Added complexity at all levels is a cost.

The benefits of innovation should be tangible, activity-specific, and frequent. The costs need to be recognized and minimized where possible. Teacher dissatisfaction may perhaps be traced to a decline in activity-specific benefits, a rise in the activity-extrinsic consequences of compliance or noncompliance (such as meeting new standards), as well as to increases in workload and complexity.

How can innovation be motivated? We offer three proposals.

a. **Conduct a workload audit**. One approach is to conduct what we would call a workload audit and to frame any suggested innovation in this context. For every new program, collaboration meeting, preparation to share best practices, classroom implementation, and so on, specify what is removed to make way for the change. Innovation should not be synonymous with increased workload. Those who are most affected by innovation should not be the ones who bear the brunt of the human cost of innovation. Removing this cost improves the likelihood that innovation benefits will be achieved.

b. **Identify the consequences.** Search for and identify as many activity-specific consequences as possible for those working at implementing

innovation at all levels. Ask, "If things were working as we would want them to, what would it look like to us? What would be happening that each of us (administrator, principal, teacher, student, parent) would be thrilled to see?" Those are likely the activity-specific consequences that will maintain innovative behavior.

c. **Plan for maximum benefits, minimum costs**. Devise an innovation plan that maximizes activity-specific benefits and minimizes activity-specific costs, while minimizing spurious consequences of all types.

Where Do We Go From Here?

Change is messy, even planned change. But to Fullan (2001) and other experts on change and innovation, "The experience of this messiness is necessary in order to discover hidden benefits—creative ideas and novel solutions are generated when the status quo is disrupted" (p. 107).

We have taken note of several of the innovations cited throughout this *Handbook*—some are programs, others practices, some entire systems of innovation. The context and conditions in which these innovations are most successful must not be overlooked. Therefore, before we specify action principles to stimulate innovation and make it meaningful again, we're going to get your creative brain thinking by asking you to consider the context and conditions of an innovation. Pick an innovation or two that you've read about in this *Handbook* and take a reverse approach in your examination of them. On your own, or with your team, ask yourselves:

a. How would this innovation disrupt the status quo in my organization?

b. What need does it address or possibilities does it create for teaching and learning?

c. What conditions (leadership, structures, flexibility, work load) would support the development and implementation of this innovation?

d. What language, actions, and beliefs need to be defined and agreed upon in order to successfully pursue this type of innovation and then make it happen?

e. What types of collaboration and communication occurred at each level of the educational system that enabled building credibility and enthusiasm for the innovation?

f. What motivated these educators to pursue this innovation? What were the possible consequences of not pursuing it?

g. What are the costs and benefits that need to be identified, both activity-specific and activity-extrinsic?

h. How can the benefits of the innovation outweigh its costs, as well as outweigh the benefits and costs of the status quo at every level of participation?

Action Principles

a. Consider context and culture. When planning for a successful, strategic innovation, think carefully about the context and culture in which it will be implemented and how each may influence the other. Identify ways to leverage the interplay between them.

b. Build an understanding. Communicate the specific role of innovation in your organization (its purpose, what it should achieve, how people will be supported in stimulating it) and connect innovation to very specific goals and priorities.

c. Build a culture of innovation. Simultaneous to building an understanding of what innovation is and what it should achieve, build a culture to support it. Create structures, opportunities, and common practices for people across and within teams or divisions to interact, create, develop new ideas, communicate them to all levels of the system, and scale them. A culture of innovation should be demonstrated at all levels of the system.

d. Make innovation concrete and recognizable. Specify the categories and types of innovation for staff so they begin to see it in tangible form and even start to recognize it in practices they currently employ (and maybe just haven't formalized or shared). Use the definitions and examples provided in this chapter and elsewhere in this *Handbook* to get started.

e. Point out past and ongoing successes. Demonstrate that past innovations have staying power by acknowledging what still works well and continuing it.

f. Differentiate the two types of innovation. Create distinct processes, timelines, and incentives for the two types of innovations—sustaining innovations (more effective and efficient ways of doing what is already being done) and disruptive innovations (creating something new and different, a game-changer for the future).

g. Look, identify, disseminate, and incentivize. Using established criteria for innovation, seek out where it is happening (in classrooms, offices, divisions), identify the specific practices being innovated upon, and establish pathways to transfer that knowledge and those skills to others. Identify the incentives for knowledge transfer.

h. Envision the potential and anticipate the problems. Be up front about the costs and benefits of innovation, identifying as many activity-specific consequences as possible. To start, ask, "If things were working as we would want them to, what would it look like to us? What would be happening that each of us (administrator, principal, teacher, student, parent) would be thrilled to see?"

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