

# Change in Higher Education: Understanding and Responding to Individual and Organizational Resistance

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## ABSTRACT

In many fields, the ability of educators and practitioners to cope with rapid change is essential to sustained success. In veterinary medical education, as in other scientific disciplines, meaningful change is challenging to achieve and subject to resistance from many individual and organizational norms. Individual concerns often relate to fears of instability or uncertainty, loss of current status, or effects on individual time and workload. Sources of organizational resistance may include a conservative culture, fierce protection of current practices, and prevalence of disciplinary or territorial viewpoints. In academia, especially in scientific or medical fields, individuals appear to be strongly independent and conservative in nature, and generally skeptical of educational change. In this environment, a highly participatory process, with regular communication strategies and demonstrations or evidence that supports proposed changes, can be useful in facilitating change. An understanding of the nature of complex change, as well as of the reasons underlying resistance to change, and some methods to overcome these barriers are highly valuable tools for educational leaders.

Change is learning, loaded with uncertainty.  
—Michael Fullan

facilitating change in the unique environment of medical education are also described.

## INTRODUCTION

Nothing seems to strike individuals, emotionally and professionally, as powerfully as the edict “Change is coming!” Despite the fact that change in many aspects of our personal lives is perceived with excitement—think of an anticipated vacation, a new car, or the pursuit of a new skill or hobby—dramatic change in one’s daily habits and patterns is always stressful and threatening. With an explosion of transferable knowledge, rapid transmission of information, and accelerated advances in technology, as well as the globalization of news, education, and the economy, the pace of change is more remarkable today than ever before.<sup>1</sup> The ability to cope with constant change is now a key requirement for success in life and work. As Fullan<sup>2</sup> argues, “Society... expects its citizens to be capable of proactively dealing with change throughout life both individually as well as collaboratively.” Indeed, one of the dominant contemporary themes in workplace and organizational development is the concept of the learning organization.<sup>3</sup>

Educators at all levels are called to meet this challenge and to prepare students with multiple skills, including the ability to promote and embrace change. Leaders in professional education also face the challenge of leading groups of diverse faculty members toward shared goals. Resistance can be strong among busy, conservative intellectuals found in academic centers. In this review, faculty responses to proposed educational change are viewed in the context of (1) individual behavioral responses to change; (2) features of change in educational organizations; and (3) features of change in health professional education. Suggestions for

## INDIVIDUAL RESPONSES TO CHANGE

Why is change so difficult? For the individual, change of any type creates a sense of *loss* for the past and a sense of *anxiety* about the future.<sup>4</sup> Lewin’s application of field theory to human motivation suggests that an individual’s behavioral responses result from an interpretation of the various opposing forces at play in his or her environment (or “field”). Lewin proposed that most people seek a balance, or “psychological equilibrium,” between driving and resisting forces.<sup>5</sup> In other words, most subscribe to the adage “If it ain’t broke, don’t fix it.” Lewin’s theory also points out that resistance is highest in environments with very high (potentially volatile) or very low (too comfortable or apathetic) existing stress levels. Bandura<sup>6,7</sup> added the influence of personal characteristics to this field theory of behavioral learning, suggesting that such components as prior experience, vision and goals, observations, reflections, and self-standards influence one’s actions and reactions. Getzels and Guba<sup>8</sup> added the variable of *role* to the behavioral model: role orientation, follower or leader style, interpersonal relationships, and position within an organizational structure all affect responses to change.

## RESPONSES TO CHANGE IN ORGANIZATIONS

Similar observations apply to organizations facing change, whether the change affects individuals, groups or organizational units, or the organization as a whole (see Table 1).<sup>2,3,9,10</sup> Loss and anxiety are key organizational tensions surrounding change. Groups also fear the loss

**Table 1: Factors contributing to resistance to change in individuals or organizations**

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Fear of loss of status, time, power, or traditional symbols
Very high or very low existing levels of tension
Perceived attack on current status or conditions
Complexity of, degree of, and uncertainty surrounding proposed change
Minimal perceived value of proposed change
Lack of time to become familiar with proposed change

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of symbolic meanings and traditions of the past. Change proposals upset the structural framework of an organization, creating instability.<sup>10</sup> A press for change also implies that the current situation is somehow flawed, which can trigger defensive reactions.<sup>11</sup> In addition, change is a complex, unpredictable, dynamic, non-linear process.<sup>9</sup> Although some change models suggest that there is an orderly, stepwise approach to successful change, more often the process cannot be precisely planned and guided, and thus involves too much uncertainty for many individuals to risk embarking. Resistance is virtually assured when complex change is proposed; one cannot simply be told to make a major change, no matter how rational or necessary it may be.<sup>9,12</sup> The strongest resistance to new ideas can be expected from those with poor coping skills and those who lack a risk-taking mentality.<sup>9</sup>

Initial reactions to change are often centered in self-preservation. Most major changes create potential “winners and losers”—those who benefit from the new order and those who lose benefits enjoyed under the previous system. This win/loss mentality inevitably leads to conflict.<sup>10</sup> In addition, the potential losses are very obvious at first, whereas the potential long-term gain is much more intangible and theoretical. Hall and Hord<sup>13</sup> applied Fuller’s Concerns Theory, in which concerns relate to *self, task, or impact*, to facilitate change in schools. They propose that understanding and attending to the evolving relative intensity of teachers’ concerns is the key to successful change. Importantly, the early concerns tend to be self-concerns: “What will this change mean for me?”; later, concern shifts to more pragmatic questions of implementation, impact, and consequences.

The manner in which an idea infiltrates an organization, discipline, or population is the subject of *diffusion research*, a conceptual model that spans such fields as sociology, public health, education, and marketing.<sup>14</sup> In this model, (1) *Innovators* are those individuals who are always eager to try new ideas; (2) *Early Adopters* also become involved fairly early in the process and provide organizational credibility to the idea; (3) *Early Majority* individuals are slightly more cautious, but become willing to adopt innovations based on cues from the early adopters; (4) *Late Majority* individuals are more skeptical and unlikely to adopt change unless significantly pressured to do so; and (5) *Laggards* are very traditional individuals who are unlikely to adopt change at all. Similarly, Gladwell’s popular book *The Tipping Point* follows the phenomenon of change in society by tracing the impetus behind trends, fads, and

“hot” products. In Gladwell’s analysis, a few key individuals can launch widespread behaviors. These individuals include “connectors,” those people who seem to know *everyone*; “mavens,” those who seem to know *everything* and want to share their information with everyone; and “salesmen,” those individuals with charismatic and persuasive influence.<sup>15</sup> Meyerson describes “tempered radicals,” those individuals who quietly create change in an organization, largely by sticking to a few core principles.<sup>16</sup>

The nature of a proposal also affects resistance. If there is minimal *perceived value* in a proposal, the time and energy required to pursue and implement change appear disproportionately high.<sup>9</sup> The *degree of proposed change* also affects readiness.<sup>17</sup> Rogers describes five characteristics of innovations that influence resistance to change: (1) the complexity of the innovation; (2) the compatibility of the innovation with existing beliefs and prior experience; (3) the relative advantage of the innovation over current practice; and the (4) observability and (5) trialability of the innovation.<sup>14</sup> Finally, the context and attractiveness of an idea play into its acceptance.<sup>14</sup> Gladwell calls this the “stickiness” factor, while others simply refer to the “power” of an idea.<sup>15</sup> Regardless of the perceived value or magnitude of a change, too, many individuals will resist change if they have not had *time* to become familiar with a proposal.<sup>18</sup>

## RESISTANCE TO CHANGE IN ACADEMIA

Educational institutions are characterized by conservatism in practice, goals, and culture. Indeed, a strength of higher education has been its effort to preserve traditional culture and values, resisting changes that may not have staying power. Conservatism is especially prevalent in the scientific disciplines. Thomas Kuhn, in the epic *The Structure of Scientific Revolutions*, described the tenacity of the dominant theory in science, bringing us the term “paradigm,” implying habits of thinking that are exceptionally hard to break.<sup>19</sup>

The socialization of professors reinforces conservatism in educational practice, as senior mentors guide graduate students through the scientific method and as protégés emulate the teaching methods by which they were taught. In this process, academic socialization also creates strongly independent individuals. Based on long-term studies of managers, Schein describes several possible *career anchors* that contribute most to one’s professional self-image.<sup>20</sup> Of these, the *autonomy/independence* anchor predominates in academia, where long training periods reinforce and reward individual achievement and self-reliance. Thus, with respect to teaching and curricula, faculty are uniquely independent and immensely possessive of their courses, their contact time, and their discretionary time, all of which may be sacrificed with curricular change.<sup>21</sup>

Among elementary and high school teachers, independence is somewhat overshadowed by isolationism, cited as a barrier to reform in schools. Teachers spend much of their day in their own isolated classrooms, with little meaningful professional interaction with other teachers.<sup>2,9</sup> This lack of interaction limits teachers’ access to new ideas and “imposes a ceiling [effect] on learning new things.”<sup>2</sup> Traditionally, professors in colleges and universities have also worked and taught in an isolationist vacuum—what they do in the classroom is rarely seen by or discussed with others.

Higher education instructors, like schoolteachers, feel that their students and events in their classrooms are their own business.<sup>12</sup> Faculty can even fall back on the tenets of academic freedom to resist change in teaching practices.<sup>22</sup>

In addition, the overall academic culture has traditionally rewarded isolationism in research and scholarly productivity.<sup>9,23</sup> Most damaging in such an isolated culture, open discussion of teaching practice can be perceived as dangerous, as if any attempt to learn from others is seen as evidence of inadequacy.<sup>12</sup> Public criticism, conflict, and confrontation over educational matters also tend to be suppressed in higher education by leaving most educational matters in the individual professor's hands.<sup>23</sup>

Modification of behavior or teaching practice is challenging in higher education. Lucas surveyed 55 department chairs regarding their success in improving faculty performance. Less than 40% reported success in motivating languishing mid-career faculty, and even fewer (< 30%) had succeeded in motivating improvement in difficult colleagues or poor teachers.<sup>24</sup> Educational development consultants have noted the particularly conservative characteristics of faculty in the "hard" scientific disciplines.<sup>25</sup> Faculty members in scientific fields often have little exposure to educational theory and practice, and tend to pass down the dominant educational paradigm (usually heavily dependent on lectures and transfer of content knowledge) to successive generations of students. Because of the long-prevailing paradigms in both content and pedagogy, faculty members are often teaching as they were taught, and any challenge to the method may be perceived as challenging the credibility of their own training and their previous teaching efforts.<sup>17,26</sup> Furthermore, the university culture stratifies "hard/pure" science well above the "soft/applied" science of education in status and credibility, giving educational ideas a lower perceived value than scientific ideas.<sup>25</sup> Faculty members often assume that new curricular proposals represent an administrative whim or an educational fad that will pass if ignored long enough.<sup>24</sup>

Faculty in the sciences are slow to embrace change in education without carefully elaborated hypotheses appropriately and rigorously tested with hard data. Science (and medicine) relies on and rewards predictability rather than creativity.<sup>27</sup> Faculty members will fall back and insist, "Let's wait and see someone else do it first."<sup>27</sup> Indirectly, individuals may stall the process by requesting endless details or providing endless irrelevant data, or by reciting multiple logistical issues that are seen to affect the practicality of the plan.<sup>21</sup>

Finally, the time and energy available for change efforts will influence resistance. Educators at all levels lead busy lives, limiting the time available for contemplating new curricular ideas. The crunch of existing commitments impedes the addition of new projects related to teaching, especially when faculty are being evaluated and rewarded primarily for other efforts, such as research.

## RESISTANCE TO CHANGE IN HEALTH PROFESSIONAL EDUCATION

In medical education, these barriers to change are accentuated. Faculty autonomy, strong professional identity,

**Table 2: Factors contributing to resistance to change in academia and health professional education**

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Strong existing traditions or paradigms
Lack of perceived need for change
Autonomy and independence of individuals involved
Strong professional or disciplinary identification of faculty members
Departmental or disciplinary protection of curricular time
Conservative educational practices
Skepticism of educational theory or alternative pedagogical views
Perceived attack on training or current teaching practice
Lack of experience or "hard" data to support proposal
Lack of reward for innovations in teaching or curricular change efforts
Lack of time to study or implement changes
Ineffective curriculum-committee structure
Fear of loss of resources
Fear of loss of accreditation
Fear of impact on students' examination performance (e.g., national board examinations)

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skepticism of educational proposals, time constraints, and inflexible reward systems contribute to resistance (see Table 2). In a 1997 forum on the future of academic medicine, sponsored by the American Association of Medical Colleges (AAMC), participants articulated perceived barriers to curricular change, including the lack of a perceived crisis, a governance and tenure system that values individual achievement and research, and general resistance to change in public institutions.<sup>28</sup> Paradoxically, however, changes in medical practice (and in other health professions) have occurred at a dizzying pace.<sup>29-31</sup> Neufeld, based on interviews with medical faculty around the world, has suggested a counterproductive reaction to the whirlwind of change, whereby traditional educational practice is entrenched in an effort to maintain some stability and familiarity in the profession.<sup>32</sup> Bloom points to the focus on intellectual knowledge acquisition, a controlling and discipline-based curriculum, a large bureaucratic organization, and reliance on self-regulation as features of medical schools that inhibit change.<sup>31</sup> Cuban studied curricular change at the Stanford School of Medicine, as well as at the university's history department.<sup>26</sup> Despite busily "tinkering" with curricula in both settings—modifying and rearranging courses and updating course content—the fundamental curricular structure remained, leading to a long history of "reform without change." Cuban cites traditional, entrenched beliefs about faculty roles, reinforced by faculty members' own training as learner/protégés, as the norm that prevented real change.<sup>26</sup> Eyre describes similar institutional inertia in veterinary colleges: "Changing long-established cultures and behaviors is very hard, and overcoming the negative

pressure from 'old' alumni and the resistance of long-tenured faculty can be a daunting task."<sup>33</sup>

Although faculty may seek stability and tradition, Curry strikes out at the complacency evident in the health professions: "This complacency, or willful misperception, or arrogance, is indefensible because the context for professional school graduates has changed so rapidly and so thoroughly in the past decade the likelihood is great that both curricula and organization need attention."<sup>27</sup> Indeed, leaders in academic medicine, as well as a majority of clinical faculty, have acknowledged a need for fundamental reform.<sup>34</sup> Approaching the turn of this century, many medical schools did take up the gauntlet of major curricular reform; their experiences exposed the major features of faculty resistance and methods for managing that resistance.<sup>22,35</sup> Faculty resistance was most commonly attributed to general pedagogical disagreements (usually over problem-based learning), territorial protection of power and status in the institution, fear of losing control of the curriculum, a perceived lack of time to study and assess proposed innovations (again, primarily problem-based learning), and academic freedom.<sup>22,35</sup> Other barriers included a lack of perceived need for reform, an ill-defined method for proceeding, and concerns about effects on resource allocation and promotion of faculty.<sup>35</sup>

The biggest organizational barrier to change in medical education centers is on allocation of resources and curricular time among fiercely competitive disciplinary departments.<sup>11</sup> In a curriculum fixed in size, "How student time is or should be allocated is the single most potent source of internecine strife in medical schools. Departmental status and power are at stake..."<sup>18</sup> Departmental structure reflects faculty members' professional identity,<sup>11</sup> and departmental ownership of courses or clinical rotations is a persistent and long-standing tradition. Any loss of curricular time represents a loss of power and status.<sup>36</sup> This departmentalization of curricula has been fostered, in many schools, by the traditional curriculum committee. Members of these committees are selected to best represent their departments' interests, and the committee itself usually has little authority and few resources to implement change.<sup>37,38</sup>

Another strong brake on enthusiasm for educational change is the perceived lack of reward for educational efforts. This factor is particularly relevant in the health professions, where advancement, recognition, and salary are tied to research or hospital service productivity.<sup>11,29,36,39</sup> These income-generating activities are usually prioritized over teaching responsibilities. Rewards for teaching, when they can be found, are both less visible and less lucrative. Furthermore, individuals may have observed, or been involved in, past educational innovations that were not rewarded appropriately.<sup>17,27</sup> This limitation is widely recognized and universally disappointing. In a survey of more than 1,300 medical school deans, department heads, and faculty members on reform needs, the most strongly supported reform was a system for evaluating and rewarding teaching excellence.<sup>34</sup> Difficulty in retaining and promoting clinical faculty was seen as a strong force for changing the view of teaching efforts in several medical schools revising promotional criteria.<sup>39</sup>

In professional schools, a final political argument worth mentioning is based on concerns that students may become

disadvantaged for post-graduate positions, or in passing certification examinations, if educational innovations change the tried-and-true content or method.<sup>40</sup> This argument has been particularly potent in veterinary education, where state licensure is still granted on generalist terms, limiting schools' willingness to allow specialization in student tracks.<sup>33</sup> From an institutional standpoint, accreditation standards may also be a significant political and practical barrier to change. Veterinary leadership has been particularly resistant to challenging the conservative norms captured in accreditation requirements, even in newly established schools.<sup>33,41</sup>

## HOW TO RESPOND TO FACULTY RESISTANCE AND FACILITATE CHANGE (TABLE 3)

### Seek First to Understand

Despite the many nuances underlying resistance to change, the root issues revolve around power, control, and vulnerability.<sup>21</sup> Understanding the interplay of individual, departmental, and organizational factors during the process of reform is the first step toward managing this process effectively. The ability to understand the meaning of change for others, to internalize and validate others' concerns and viewpoints, is essential. "Neglect of the phenomenology

**Table 3: Suggestions for overcoming resistance to change**

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Manage the process
Convey the importance or urgency of the need for change
Acknowledge and protect the strengths of the current system
Educate the organization on the nature of complex change
Seek to understand fears and concerns
Assess levels of resistance over time and plan accordingly
Acknowledge and manage conflict appropriately
Maintain knowledgeable, consistent leadership
Provide sufficient time for complex change to be planned and implemented
Create a strong proposal
Provide evidence to support proposals where available
Break large changes into smaller units for clarity
Use demonstrations and pilot studies where appropriate to convey value of proposal
Communicate frequently
Encourage wide participation, including that of external stakeholders
Communicate effectively, using multiple methods to collect and convey information
Appeal to both intellectual and emotional concerns
Use various individuals (students, junior faculty, senior faculty, leaders) as opinion leaders to help build consensus
Maximize face-to-face communication as much as possible

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of change—that is, how people actually experience change as distinct from how it might have been intended—is at the heart of the spectacular lack of success of most social reforms.”<sup>9</sup> A working understanding of the process of change will at least alleviate some of the anxiety of the participants as conflict, derailment, and delay take place. It is also useful to be able to assess the current level of faculty receptivity and to structure discussions, development activities, or interventions appropriately.<sup>17</sup> Simply acknowledging the painfulness of the process can be useful in helping others feel understood.<sup>21</sup>

Creating an organizational climate in which change processes are understood is also key. Chauvin points to a *normative-reeducative model of planned change* as the preferred strategy for sustained, long-lasting change. In this model, the organization is developed to be adaptive, communicative, and collaborative, with clearly defined procedures and structures that facilitate change. Individual needs and concerns are a focus of such a model, whereas *empirical-rational* (knowledge- or research-based change process) and *power-coercive models* largely ignore personal concerns.<sup>17</sup>

The final stage of understanding is the reciprocal journey toward *shared meaning*, usually before the details have all been worked out. Indeed, one of Fullan’s “lessons” for complex change is that “premature clarity is a dangerous thing.”<sup>1</sup> Meyerson touts the value of a “blurry vision” that allows flexibility for change agents.<sup>16</sup> For change facilitators, shared meaning first means a realization that their ideas are not likely to be adopted in their original form.<sup>9</sup> Shared meaning also facilitates ongoing progress; those who share an understanding of the overall goals and organization of their work are more likely to adopt new instructional ideas.<sup>42</sup> In veterinary medicine, for example, diverse opinions regarding departmental structure, curriculum, and teaching methods may fall along lines distinguishing disciplinary background, years of experience, and veterinary school attended. To mitigate these divisions, data could be gathered and presented to highlight the common goals of the faculty as a whole.

### Manage Conflict

Conflict and problems must be uncovered and faced if any meaningful change is to occur. Embracing the problems, embracing the opponents, and embracing the setbacks are keys to surviving and enjoying the change process. Avoiding or shrugging off opposing voices will inevitably lead to discontent and backlash.<sup>2,36</sup> Conflict and problems, in fact, are often the motivating forces for change—individuals must be pushed out of equilibrium to stimulate behavioral change. Some sense of urgency or tension is wise; overdoing it can destroy morale and credibility. As Dannefer et al. affirm, “Leaders need to articulate the rationale and substance of proposed changes and at the same time reaffirm the strengths of the current system.”<sup>43</sup> Change can be triggered by critical program reports or in response to the updated requirements of external agencies such as accrediting bodies. In other instances, urgency can be conveyed by citing the future needs of students or other stakeholders, appealing to the students’ best interests, or uncovering and tackling the perceived inadequacies of the current system. In veterinary medicine, current societal needs in public practice, rural practice, and research should

be powerful motivators for change in education, policy, and practice. As tempting and logical as it seems, however, the rational and intellectual argument for change is rarely successful alone.<sup>9</sup> In addition to outlining available evidence, innovators may also find it necessary to expose and appeal to emotional reactions, rather than simply providing factual data or task-force reports. Faculty can also be reminded of the risks of not changing, including an increasingly outdated curriculum, perceived underperformance related to more progressive colleges, and loss of stakeholder support.<sup>27</sup> Too negative a spin on the push for change can backfire, however, as Chedelin points out: “Colleagues will resist anything that feels like punishment.”<sup>21</sup>

During the planning stages, conflict and resistance may be quite instructive and can be used to see problems and solutions differently. Starting with the primary “gripes” about the curriculum and examining competing values and practices within the organization was a useful method of working through curricular reform at one medical school.<sup>44</sup> Opponents of a proposal may reveal potential traps in the prevailing mode of thinking and provide valuable insights into a problem or proposal. The change facilitator must do more than just listen to dissent: he or she must truly respect different opinions and actively try to see others’ perspectives.<sup>24</sup>

### Create a Participatory Process

The responsibility of all participants to engage in the change process must be emphasized. “Faculty members who are not invested in the innovation are inclined to focus on what they may lose rather than on what students may gain. Inclusion and ownership are key.”<sup>22</sup> Frequent discussions about curriculum, especially including interdepartmental discussions and ongoing progress reviews, have long been recommended as key in promoting change in medical education.<sup>29</sup> Discussions that include students and other stakeholders must be involved as well.<sup>21</sup> Using stakeholder input adds credibility to the process, diffuses blame away from individuals or groups within the organization, and enriches the process. Proactive attention to external pressures also enables the organization to better serve society: “we will not survive for long without a dialectical relationship with external events.”<sup>2</sup> Fullan notes that both individualistic and collaborative processes are important during change. Individuals can bring fresh, well-described, and thoroughly studied ideas from their knowledge and skill base. Groupthink may allow a bandwagon mentality to suppress intuition and experiential knowledge of group-mates. However, teams of individuals working toward a goal are usually much more effective than single-agent processes. Teams can divide the workload and diffuse resistance.<sup>36</sup>

### COMMUNICATION STRATEGIES

Broad-based involvement at all levels is recommended, along with clear formal and informal communication channels.<sup>43</sup> Hallway conferences, one-on-one meetings, unit meetings, and large faculty discussion meetings or retreats can all be used to “take the pulse” of the organization. Surveys, or other instruments designed to determine readiness or to log concerns regarding the proposal, can be administered periodically to increase systematic,

anonymous input. All feedback collected needs to be shared with the organization at large.<sup>40</sup> Multiple methods must be employed for two-way communication, including repeated announcements, postings, or newsletters; it is far too easy now to rely on one, usually electronic, method of dissemination and assume that information is reaching the entire organization.<sup>43</sup>

Students should be included in communications regarding planned changes. McLean<sup>45</sup> describes the misconceptions that can occur when students receive information through the grapevine rather than through informed channels. Obviously the same effect can be found among faculty and staff members. Mennin and Krachov also point out the power of rumor in reform efforts and suggest addressing rumors directly to minimize their impact.<sup>40</sup> McLean suggests ensuring regular communication to students, and even to applicants to the program—in particular, assurances that accreditation and licensing standards will not be jeopardized by curricular change.

Many authors stress the importance of face-to-face meetings to clarify ambiguities and to promote “buy-in.” Fullan points to the “primacy of personal contact.”<sup>9</sup> Gale and Grant bluntly prescribe the intensive individual contact required:

There is no effective substitute for talking to people directly and explaining to them what is going on, how they are affected and what will happen next... In thinking about any change, a sufficient budget of time and energy must be set aside to go round and talk to all the key individuals who can affect the outcome of the change initiative, not once but several times.<sup>36</sup>

Identifying and cultivating opinion leaders throughout the community is essential. These should include faculty leaders and department heads, but also faculty who work through less formal channels, junior faculty, staff members, and student leaders. Students can be effective opinion leaders and may reach networks or naysayers in a different manner than faculty colleagues do.<sup>29</sup>

With all these communication strategies, however, a loss of clarity can doom the project. While most large-scale change requires a fundamental shift in organizational thinking, changes must ultimately be framed in specific and personal terms before many individuals will commit. One also must avoid propagating an overwhelming sense of information or change overload—for example, changes that are exceedingly complex, seem unrealistic, or require skills most individuals do not possess—in order to avoid creating a high-stress environment. A receptive audience perceives that the proposed change is a realistic plan to remedy a problematic or inadequate current practice.<sup>17</sup> Some authors recommend breaking large changes into smaller units, particularly in academia, where faculty feel less threatened by incremental than by sweeping change.<sup>46</sup> In curricular reform, Curry suggests a timely “capstone” report when appropriate, summarizing what the new curriculum promises to all those involved.<sup>27</sup>

### **Use Demonstrations and Pilot Projects**

Faculty development activities can be planned to reduce anxiety about new teaching methods or technological

advances.<sup>29</sup> If feasible, pilot projects that demonstrate the “doability” of a change are useful during the decision-making process.<sup>46</sup> Sufficient resources must be committed to enable wider applications if desired. Pilot projects can allow an institution to build toward majority adaptation. Recall that Rogers’ Early Majority individuals become willing participants after observing and interacting with the more adventurous Innovator and Early Adopter groups.<sup>14</sup> Sustained change requires buy-in of this group and eventual acceptance from as many individuals as possible. Successful, focused, and doable projects (“small wins”) can be leveraged to create greater change. For example, a series of small wins can be bundled to create a larger change in organizational practice; a key “small win” can be powerfully symbolic if it really demonstrates a turn from the established organizational culture or language.<sup>16</sup>

### **Provide Consistent, Knowledgeable Support from Leadership**

Administrators must ensure that the governance structure and management systems in place allow for effective planning and implementation of change (e.g., power of curriculum committee, other chairs, or academic deans). The structure and responsibility for curricular oversight must be clear: “who owns the curriculum”<sup>22</sup> is not always understood. Although top-down directed change is rarely effective, vocal support from the top (usually the dean) is key, particularly in fostering an entrepreneurial or risk-taking spirit and in commitment of resources to the effort and the outcome. Incentives and rewards for pursuing and implementing change must also be clear; faculty members who put significant time and energy into curricular reform are likely to suffer in traditionally measured areas of productivity such as service or research.

### **Provide Sufficient Time for Meaningful Change**

Strong and enthusiastic leadership must be combined with empowerment of others and sufficient *time* for eventual buy-in to the idea: “ownership is something that develops over time if the ideas are good and if people have the capacity and opportunity to make informed judgments.”<sup>9</sup> The time factor cannot be discounted;<sup>40,46</sup> most organizations find that significant change initiatives take much longer than intended, and rigid deadlines can frustrate and short-circuit the process.

## **SUMMARY**

Change is a difficult, stressful process, threatening individual and organizational assumptions about power, role, status, and control. Change is also energizing and essential for healthy individuals and organizations. Sustained change can be achieved with time, patience, and robust attention to individual concerns. If learning and changing are commonplace within the organization, the effects of any single change will be less painful. Where educational innovation and creativity are the norm, faculty members are most likely to keep up with the rapidly changing world and routinely seek out innovative ideas.<sup>17</sup> As Senge<sup>3</sup> implies, if we can approach our lives and work from a creative rather than a reactive perspective, we will continually clarify purpose and vision and adapt proactively to produce valued results.

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