

WHITE PAPER

Readiness For Change

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Introduction

Individuals and organizations undertake change for a variety of reasons—to improve the human condition, increase efficiency and productivity, respond to new or altered social and political contexts and priorities, achieve personal or collective goals, or correct earlier missteps. Literature on change and change management abounds to accommodate the many spaces in which deliberate change is sought.

In the field of education, research and prescriptive literature has focused on several iterations of school improvement and education reform,¹ turning around low-performing schools,² and the use of programs and strategies grounded in scientifically-based research.³ Similarly, recent literature on change in both child welfare and juvenile justice has emphasized the implementation of evidence-based interventions and practices, those with systematic substantiation of effectiveness.⁴

Change management is likewise a matter of concern in other human service fields such as healthcare management and criminal justice. The healthcare management literature analyzes the trajectories of change, whether in the form of new practices, new technologies and innovations, organizational design to improve effectiveness and efficiency, or external contextual factors. In the criminal justice research and practice literature, reforms ranging from collaborative planning to community policing are the subject of study.

Across a variety of markets and disciplines, readiness for reform or organizational change is often said to be an important predictor of how successfully new policies, programs, or practices will be implemented.8 If people or groups are ready to embark on change, they are less likely to resist or actively sabotage its implementation. Moreover, when people are ready to undertake change, they will do so more energetically and thoughtfully than they might otherwise.

Common Conceptions of Readiness for Change: Buy-In, Knowledge, Compatibility, Leadership, Experience, and Multiple Dimensions

Although readiness for change is conceptualized variously in different fields, some elements are common to all. For example, research on the notion of buy-in suggests that when individuals or entities to be involved in a change effort are included in decisions about its implementation, implementation proceeds more successfully.9 Several perspectives on readiness incorporate the conception that people involved in adoption of a new practice or policy must have sufficient knowledge of the change to implement it effectively. 10 The compatibility of an innovation with potential users' worldviews or perspectives is also important to successful change, according to several literatures.¹¹. Moreover, many conceptions of readiness for change specify that readiness is

not simply lack of resistance, but instead a more active, engaged willingness and ability to adopt a new practice.¹²

The engagement of leadership in preparing for new undertakings is considered vital in many fields to facilitating readiness for change. Leaders can play a key role by identifying the need for change, determining how best to pursue reform, and selecting other formal and informal leaders to assist in building momentum for change. Not only do leaders bestow credibility on such efforts, their active involvement can ensure that sufficient resources are allocated and that those participating share a common vision of what is to be accomplished.¹³

Across several disciplines, researchers and practitioners find that if sites have engaged with change earlier, they tend to be more familiar with change processes and dynamics—and are therefore better prepared to undertake





new change efforts.¹⁴ Similarly, the ability to plan for change and coordinate among various participants is also important to the ultimate effectiveness of new endeavors.¹⁵

Another commonality is that most operationalizations are multidimensional, composed of several factors thought to contribute to readiness for change. ¹⁶ For example, one instrument assessing readiness for change includes subscales measuring motivational factors, availability of needed resources, staff attributes, and organizational climate. ¹⁷ The ways in which change readiness is conceptualized reflect a growing consensus that change is a complex process informed by a variety of social and contextual dynamics.

Readiness for Change: Individual, Collective, or Both?

The level at which researchers conceptualize readiness for change varies. Some view readiness as an individual psychological state, wherein individuals interact with potential change, develop a stance toward it, and then act accordingly.¹⁸ Components of individual readiness might involve self-efficacy, the perception that one will be able to undertake change successfully,¹⁹ or fear of the consequences of change.²⁰

Other research suggests that if individual work roles are unclear or in conflict with other organizational priorities, participants in change will be less able to undertake reform successfully because they are unclear about their job requirements or are constrained by inconsistent or competing organizational procedures.²¹ Similarly, when staff experience role overload—when work expectations are too many or exceed an individual's capacity—they will lack the time and energy required for effective change.²²

For some observers, readiness for change is an organizational, structural, or collective characteristic. Organizational conceptualizations focus, for instance, on program coherence,²³ availability of resources to support change,²⁴ effective group decision-making processes,²⁵ collective pressure for change,²⁶ or organizational

climate.²⁷ The way in which information about change is communicated across an organization may also influence readiness; poor communication about change may, in fact, inhibit readiness.²⁸

Still other perspectives approach readiness for change as both an individual and organizational or collective notion.²⁹ Some such conceptualizations additionally focus on the relational or networking aspects of change³⁰ or the influence of social relationships external to the change environment.³¹

Despite the wide and intuitive appeal of readiness, there is limited rigorous evidence of its association with successful implementations or analyses of the predictive validity of readiness measures. The evidence base tends instead to include case studies, small samples, program evaluations, and instrument development.³² On the other hand, only a very few studies suggest that readiness is irrelevant to the eventual success of change efforts.³³ As the literature on readiness for change continues to grow, additional investigations will further establish, or refine, the empirical grounds for attending to readiness when undertaking change and ensuring that it is assessed for evaluation purposes.

Selected Models of Change and Associated Views of Readiness for Change

Several conceptualizations of readiness for change inhere in models that attempt to describe or explain change itself. The following models represent a variety of perspectives, disciplinary foci, levels of development and specificity, and renown. Despite their differences, all represent attempts to understand the human components of change.

The Transtheoretical Model

According to one model of individual and organizational change, change is more likely to occur when forces in favor of change are greater than those opposed to it.³⁴ The "transtheoretical" model originated in the psychotherapy literature as a way to conceptualize individuals' willingness to undertake the change associated with therapy. But the model has been adapted to elucidate organizational change by researchers in child welfare, health, and mental health.³⁵

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To help stakeholders ready for change, the transtheoretical perspective suggests that change agents remove barriers to change and increase motivators, elements that may be structural or psychological. In addition, the model attends to the role of ambivalence toward change, noting that periods of readiness may be followed by periods of resistance or disengagement. Readiness for change in this perspective does not inhere in individuals but rather in the interaction between individuals and their organizations and other relevant contexts.

The model suggests that change is a process taking place over the course of six stages.³⁶ In the precontemplation stage, individuals do not intend to make change in the foreseeable future. There is no desire or interest in undertaking change. In the *contemplation stage*, people intend to undertake change within six months. During this stage, individuals consider the benefits and disadvantages of change and may decide to pursue change or not. In the *preparation* stage, people plan to undertake change in the immediate future. They have considered the rationale, processes, and anticipated outcomes of change and made a definite decision to engage in change. Throughout the action stage, people make specific behavioral changes and actively pursue change. At the maintenance stage, individuals strive to avoid resuming old behaviors. Internalization and institutionalization of change occurs. Finally, at the termination stage, people no longer worry about resuming old behaviors as the new behaviors have become habit.

Despite the wide application of the transtheoretical model, there is little empirical substantiation of its effectiveness in producing change.³⁷ Smoking cessation, pregnancy prevention, and sexually transmitted disease prevention programs based on the model do not appear to produce significantly better results than programs not grounded in the transtheoretical approach. Advocates of the model, on the other hand, argue that such analyses are underpowered or that programs tested fail to incorporate elements from the entire model.³⁸

Readiness to undertake change in this model is characterized by the preparation stage, at which point individuals have considered their options and made a decision to move forward with change.

Concerns Based Adoption Model

The Concerns Based Adoption Model (CBAM) originated in the field of education to help change agents assist districts, schools, and educators modify their practices.³⁹ CBAM is a conceptual framework that describes and predicts potential teacher concerns and behaviors throughout the school change process.⁴⁰

The model is based on a number of assumptions about how change occurs. First, CBAM developers suggest that change is a process rather than an event and therefore requires time to become institutionalized. Second, the model privileges individuals over other entities involved in change, that is, CBAM assumes change is implemented by individuals and organizations will not change unless individuals change first. Relatedly, the model suggests that change is a personal experience; although it posits that people progress through stages as they undertake change, individuals will experience the effort in unique ways. Finally, CBAM assumes that change is a developmental process of growth. As people undertake change, their feelings and attitudes will grow according to the model's Stages of Concern.

Three diagnostic dimensions of CBAM reflecting the model's theoretical basis and assumptions may be used to assess readiness and engagement with change as well as to monitor progress throughout the change process:

- Stages of Concern: Seven different stages of feelings and perceptions that educators experience when they are implementing a new program or practice
- Levels of Use: Eight behavioral profiles that describe a different set of actions and behaviors educators engage in as they become more familiar with and more skilled in using an innovation or adopting a change
- Innovation Configurations: Different ways an innovation may be implemented, shown





along a continuum from ideal implementation or practice to least desirable practice

The Stages of Concern are as follows.

- Awareness: Teachers have little concern or involvement with the innovation or change.
- Informational: Teachers have a general interest in the innovation and would like to know more about it.
- Personal: Teachers want to learn about the personal ramifications of the innovation. They question how the innovation will affect them.
- Management: Teachers learn the processes and tasks of the innovation. They focus on information and resources.
- Consequence: Teachers focus on the innovation's impact on students.
- Collaboration: Teachers cooperate with other teachers in implementing the innovation.
- **Refocusing:** Teachers consider the benefits of the innovation and think of additional alternatives that might work even better.

Stages of Concern may be compared with Levels of Use, which are below.

- Nonuse: The (potential) user has little or no knowledge of the innovation and no involvement with it and is not taking any steps to become involved.
- Orientation: The user has recently acquired or is acquiring information about the innovation or has recently investigated or is investigating its value orientation and its requirements for use.
- **Preparation:** The user is preparing for first use of the innovation.
- Mechanical Use: The user focuses most effort on the short-term use of the innovation with little time for reflection.
 Changes in use tend to be made to reflect user needs rather than client needs. The user makes stepwise attempts to master the tasks required to use the innovation, often resulting in disjointed and superficial use.

- Routine Use: Use of the innovation is stabilized.
 Few if any changes are made in ongoing use.
 Little preparation or thought is given to improving innovation use or its consequences.
- Refinement: The user varies innovation use to increase the impact on clients within immediate sphere of influence. Variations are based on knowledge of both short- and long-term consequences for clients.
- Integration: The user combines her/his own efforts to use the innovation with related activities of colleagues to achieve a collective impact on clients in their common sphere of influence.
- Renewal: The user re-evaluates the quality of use of the innovation, seeks major modifications of or alternatives to the innovations to achieve increased impact on clients, examines new developments in the field, and explores new goals.

In the CBAM model, readiness is an individual process, whereby people interact progressively with an innovation. Rather than a static state, readiness is related to the concerns practitioners have about the change. But the model does not clearly specify at what stage teachers are considered ready to embark on change, although they will not likely be prepared for a change about which they know nothing.

Diffusion of Innovation Model

Diffusion of Innovation theory considers how, for what reasons, and how quickly innovations spread through groups. The model is grounded in an epidemiological perspective and has been used to explain adoptions ranging from compulsory school attendance to the diffusion of hybrid corn. More recently, it has been widely applied to considerations of the adoption of various information and communications technologies and medical innovations.

The model suggests three types of decisions about innovation, as follows.

 Optional innovation-decision: The decision is made by an individual who is in some way distinguished from others in a social system.





- Collective innovation-decision: This decision is made collectively by all individuals of a social system.
- Authority innovation-decision: The decision is made for the entire social system by a few individuals in positions of influence or power.

The model also suggests that diffusion is a fivestep process.

- Knowledge: Individuals are first exposed to an innovation at this stage, but they lack information about it and are not yet interested in learning more about it.
- Persuasion: At this stage, people become interested in the innovation and actively seek further information.
- Decision: Individuals consider the advantages and disadvantages of using the innovation and decide whether to adopt or reject it.
- Implementation: At this stage, people use the innovation to varying degrees depending on their circumstances.
 Individuals determine the utility of the innovation in this stage and may seek additional information about it.
- Confirmation: At this stage, individuals finalize their decision to continue using the innovation and may use the innovation to its fullest potential.

The Diffusion of Innovation model considers the value of innovations to individuals who might consider their adoption. The relative advantage of an innovation is a comparison of how much it improves the previous generation of similar innovations. The *compatibility* of an innovation concerns how easily it can be assimilated into individuals' lives. The *complexity* of an innovation plays an important role in the likelihood that a change will be adopted. If a given innovation is too difficult to use, individuals will be less likely to adopt it. The trialibility, or how easily an innovation may be experimented with as it is adopted, also plays a significant role. If users face challenges in trying a new innovation, the likelihood that they will adopt it declines. A final

characteristic of innovations is their *observability*, or the extent to which their use is visible to others. A highly visible innovation will increase communication among the individual's peers and networks, which will in turn generate more reactions to the innovation.

The model additionally suggests that the rate at which innovations are adopted is related to categories of adopters. Innovators are the first to adopt an innovation. They tend to be willing to take risks, are younger that later adopters, have more financial resources, are very social, and have close contact with other innovators. Early adopters comprise the second fastest category of those adopting an innovation. These individuals tend have the highest degree of opinion leadership among the other adopter categories, meaning that they often translate information about new innovations to later adopters. Individuals in the *early majority* category adopt an innovation after a varying degree of time, which is nonetheless significantly longer than the time taken by innovators and early adopters to embrace a new innovation. Individuals in this category tend to have above average social status, are in contact with early adopters, and show some opinion leadership. People in the *late* majority category tend to adopt an innovation later, approaching an innovation with skepticism even after the majority of a group has adopted the innovation. The late majority tend to have fewer financial resources and do not serve as opinion leaders. *Laggards* are the last to adopt an innovation. They tend to be averse to change and are focused instead on tradition. They also tend to be older, less financially stable, and have limited social networks.

In the diffusion of innovation literature, readiness to adopt is related to one's relationship to a given innovation, characteristics of the innovation itself, and relationships with others who may or may not attempt the innovation. Thus, once individuals have decided to adopt an innovation, which they have determined to be a better option than other alternatives on various dimensions, and are in contact with other adopters, successful implementation is more likely.

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Complex Adaptive Systems

In contrast to stepwise or stage views of change are recent metaphors extending to change that, using insights from chaos and complexity theories in physics, focus on systems as organic, interdependent, and evolving entities.⁴⁴ In such a view, change is nonlinear and emergent as interrelated systems adapt to changing conditions and needs.⁴⁵ Within subsystems, actors behave according to certain rules, some of which require that actors adjust their behaviors to accommodate others. These adaptations eventually become orderly patterns of self-organization, some very complex. Change is thus "co-evolutionary," wherein systems constrain actors in some ways, but actors modify systems through their interactions with them. Nonetheless, change agents should be aware, according to this view, that outcomes may be unpredictable; it may not be possible to anticipate how change at one level of a system will influence change at another.

Key features of complex adaptive systems are as follows:⁴⁶

- Complex adaptive systems will be selforganizing, and new elements will emerge at various points. These changes may be incremental or dramatic as they adapt to reactions between subsystems and with other systems.
- Uncertainty is inevitable in an evolving system, rendering top-down control impossible. The views and experiences of those at a variety of points in an organization are necessary to gain an understanding of it.
- Spontaneous change occurs more readily where a range of different behavior patterns (microdiversity) exists.
- Agents within an organization act according to their own internal rules or mental models. Attractor patterns within the system will "frame" and limit change.
- Simple rules or guiding principles can lead to innovative emergent changes.
- Change can be stimulated by the encouragement of new generative

- relationships. These can produce new insights and solutions into complex problems.
- There will be simultaneous stability and instability at the edge of chaos—a requirement for the emergence of novelty.

This view of change is relatively new and has not been fully specified. However, readiness for change, according to this model, may be interpreted as a state in which individual actors, subsystems, and larger systems together move toward adopting an innovation or implementing a new practice.

The AVICTORY Model

The AVICTORY model was developed as a means to assess organizational readiness for change in hospitals and other healthcare systems,⁴⁷ but it has also been applied in human services and business. AVICTORY is an acronym for eight elements hypothesized to predict organizational readiness: Ability, Values, Information, Circumstances, Timing, Obligation, Resistance, and Yield. Each component is described in more detail below.

- Ability: This is an organization's ability to commit resources—including human, informational, and financial—necessary for implementation of the innovation.
- Values: This component concerns the congruence of the values of the organizational constituencies (e.g., school staff, families, students, and community agency staff) with the underlying assumptions of the innovation.
- Information: This represents the quality and credibility of the innovation and the availability of information to implement it.
- Circumstances: This component addresses the contextual and organizational attributes that influence change (e.g., role clarity and satisfactory interpersonal relationships).
- **Timing:** This element concerns the dynamic environmental and organizational factors that may influence implementation.
- **Obligation:** This component considers the degree to which key individuals in the





organization perceive a need or obligation to change current practice.

- **Resistance:** This is the presence of resistance to the change.
- Yield: This is the presence of incentives for engaging in the innovation.

Grounded in learning theory, the AVICTORY model suggests that a particular combination of human and contextual elements increases the likelihood that change will be instituted successfully. Individual and organizational motivation, including strategies for overcoming resistance to change and incentives supporting it, accompanied by facilitators such as resources, staff, and time, are important components. Ecological factors, such as the timing of change and the contextual circumstances informing efforts, are also significant in this view. The model developers ultimately suggest that organizations should consider not implementing change if all the model elements are not in alignment.

Although the model developers do not forward their approach as a stepwise implementation, they do suggest that organizations or change agents seeking to apply it should consider four key questions.

- Problem assessment: What are the problems and prospects involved in implementing change?
- Goal definition: What does the organization want to achieve in specific terms?
- Action: What are the steps necessary to bring about the desired change?
- Follow-through: What were the consequences of the effort, and what remains to be done?

This model focuses less on change processes overall and instead on what constitutes readiness for change. According to this model, an organization will be more ready for change if each of the above elements is present.

Conclusion

As the variety of perspectives on change demonstrates, change management is a complex endeavor and difficult to characterize and facilitate in a rapidly changing world populated by a staggering diversity of people, organizational missions and cultures, policies, and ecologies. Nonetheless, faced with an ethical obligation to make decisions with imperfect information and then act on such conclusions, leaders in public and private entities may find the guidance offered by theories of change helpful. In particular, models of change can assist leaders to consider how best to prepare their organizations, and the people enlivening them, for new ways of achieving their goals. Ultimately, however, change management may be more a highly skilled craft than a science, in which case the ambiguity of the contemporary research on change is unsurprising and the informed insights of practice are ever more valuable.





Endnotes

- 1 Brill, S. (2011). Class warfare: Inside the fight to fix America's schools. New York, NY: Simon & Schuster; Fullan, M. G. (1991). The new meaning of educational change. New York: Teachers College Press; Fullan, M. G., & Miles, M. B. (1994). Getting reform right: What works and what doesn't. In Changing education: Resources for systemic change, pp. 211–218. Washington, DC: U.S. Department of Education; Hall, G., & Hord, S. (1987). Change in schools: Facilitating the process. SUNY series in educational leadership. Albany, NY: SUNY Press; National Academy of Education. (2009). Standards, assessments, and accountability. Retrieved from http://www.naeducation.org/Standards_Assessments_Accountability_White_Paper.pdf; Tyack, D. & Cuban, L. (1995) Tinkering Toward Utopia: A century of public school reform. Cambridge, MA: Harvard University Press.
- 2 Duke, D. L. (2012). Tinkering and turnarounds: Understanding the contemporary campaign to improve low-performing schools. Journal of Education for Students Placed At Risk, 17(1/2), 9–24; Wahlberg, H.J. (Ed.) (2007). Handbook on restructuring and substantial school improvement. Lincoln, IL: Center on Innovation and Improvement.
- 3 Committee on Scientific Principles for Education Research (2002). Scientific research in education, Center for Education, Division of Behavioral and Social Sciences and Education, National Research Council, Washington, DC: National Academy Press; Marzano, R. (2003). What works in schools: Translating research into action. Alexandria, VA: Association for Supervision and Curriculum Development; Shavelson, R., J., & Towne, L. (Eds.). (2002). Scientific research in education. Washington, DC: Center for Education.
- 4 Chaffin, M., & Friedrich, B. (2004). Evidence-based treatments in child abuse and neglect. Children and Youth Services Review 26: 1097–1113. Retrieved from http://www.cachildwelfareclearinghouse.org/files/EBP%20in%20child%20abuse%20and%20 neglect—Chaffin%20and%20Friedrich.pdf; Kauffman Best Practices Project. (2004). Closing the quality chasm in child abuse treatment: Identifying and disseminating best practices. San Diego, CA: Children's Hospital-San Diego, Chadwick Center for Children and Families & National Call to Action, Retrieved from http://www.chadwickcenter.org/Documents/Kaufman%20Report/ChildHosp-NCTAbrochure.pdf; Lee, S., Aos, S., & and Miller, M. (2008). Evidence-based programs to prevent children from entering and remaining in the child welfare system: Benefits and costs for Washington. Olympia: Washington State Institute for Public Policy, Document No. 08-07-3901; Smith, P., Gendreau, P., and Goggin, C. (2004). Correctional treatment: Accomplishments and realities. In P. Van Voorhis, M. Braswell, and D. Lester (Eds.), Correctional Counseling and Rehabilitation, 5th Edition (pp. 285–294). Cincinnati, OH: Anderson Publishing.
- 5 Cain, M., & Mittman, R. (2002). *Diffusion of innovation in health care*. Oakland, CA: California Healthcare Foundation. Retrieved from http://www.chcf.org/documents/healthit/Diffusionoflnnovation.pdf; Shortell, S. M., & Kaluzny, A. D. (Eds.). (2000). *Health care management: Organization design and behavior* (4th ed.). Albany, NY: Delmar Thomson Learning.
- 6 Crime and Justice Institute. (2004). *Implementing evidence-based principles in community corrections: Leading organizational change and development*. Washington, DC: U.S. Department of Justice, National Institute of Corrections. Retrieved from http://www.nicic.org/pubs/2004/019344.pdf
- 7 Ford, J. (2007). Building capability throughout a change effort: Leading the transformation of a police agency to community policing. *American Journal of Community Psychology*, *39*: 3/4, 321–334. Retrieved from http://web.ebscohost.com/ehost/pdf?vid=27&hid=13&sid=a9a49918-fe0c-4582-be29-0154bb1643fa%40sessionmgr10
- 8 Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M. & Wallace, F. (2005). Implementation Research: A Synthesis of the Literature. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231). Retrieved 2009 from http://www.fpg.unc.edu/~nirn/resources/publications/Monograph/pdf/Monograph_full.pdf; Weiner, B., Amick, H., & Lee, S. (2008). Conceptualization and measurement of organizational readiness for change. Medical Care Research & Review, 65: 4, 379–436.
- 9 Fixsen, et al., 2005.
- 10 Adelman, H. S., & Taylor, L. (2003). On sustainability of project innovations as systemic change. *Journal of Educational and Psychological Consultation*, 14:1, 1–25; Prochaska, J. O., & Velicer, W. F. (1997). The Transtheoretical Model of health behavior change. *American Journal of Health Promotion*, 12: 38–48; Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York: Free Press; Sahin, I. (2006). Detailed review of Rogers' Diffusion of Innovations theory and educational technology-related studies based on Rogers' theory. *The Turkish Online Journal of Educational Technology*, 5: 2. Retrieved from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/3d/cb/47.pdf
- 11 Caldwell, S., Roby-Williams, C., Rush, K., & Ricke-Kiely, T. (2009). Influences of context, process and individual differences on nurses' readiness for change to Magnet status. *Journal of Advanced Nursing*, 65: 7, 1412–1422; Chreim, S. (2006). Postscript to change: survivors' retrospective views of organizational changes. *Personnel Review*, 35:3, 315–335; Holt, D. T., Armenakis, A. A., Field, H. S., & Harris, S. G. (2007). Readiness for organizational change: The systematic development of a scale. *Journal of Applied Behavioral Science*, 43: 232–255.
- 12 Armenakis, A., Harris, S., & Mossholder, K. (1993). Creating readiness for organizational change. *Human Relations*, 46: 6, 681–704; Weiner, et al., 2008.
- 13 Coetsee, L. (1999). From resistance to commitment. *Public Administration Quarterly*, 23: 2, 204–222; Fixsen, et al., 2005; Rafferty, A., & Simons, R. (2006). An examination of the antecedents of readiness for fine-tuning and corporate transformation changes. *Journal of Business & Psychology*, 20: 3, 325–350l Simpson, D. D. (2009). Organizational readiness for stage-based dynamics of innovation implementation. *Research on Social Work Practice*, 19: 5, 541–551; Simpson, D. D. (2002). A conceptual framework for transferring research to practice. *Journal of Substance Abuse Treatment*, 22:4, 171–182.
- 14 Flaherty, C., Collins-Camargo, C., & Lee, E. (2008). Privatization of child welfare services: Lessons learned from experienced states regarding site readiness assessment and planning. Children & Youth Services Review, 30: 7, 809–820; Ingersoll, G., Kirsch, J., Merk,





- S., & Lightfoot, J. (2000). Relationship of organizational culture and readiness for change to employee commitment to the organization. *Journal of Nursing Administration, 30*: 1, 11–20; Peterson, M. J. (1992). *When is a school district ready for change? An evaluation*. Paper presented at the Annual Meeting of the American Evaluation Association (Seattle, WA, November 5–7, 1992). Retrieved from http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/13/3d/fb.pdf
- 15 Bowe, C., Lahey, L., Kegan, R., & Armstrong, E. (2003). Questioning the "big assumptions." Part II: Recognizing organizational contradictions that impede institutional change. *Medical Education*, *37*: 8, 723–733. Retrieved from http://web.ebscohost.com/ehost/pdf?vid=44&hid=107&sid=71af6450-a6d2-4a0c-823b-e55e37811b39%40sessionmgr104; Curtis, M., & Stollar, S. (1996). Applying principles and practices of organizational change to school reform. *School Psychology Review*, *25*:4, 409; Valentine, E. P. (1991). *Strategic management in education: A focus on strategic planning*. Boston: Allyn & Bacon.
- 16 Chilenski, S., Greenberg, M., & Feinberg, M. (2007). Community readiness as a multidimensional construct. *Journal of Community Psychology*, 35: 3, 347–365.
- 17 Rampazzo, L., De Angeli, M., Serpelloni, G., Simpson, D., & Flynn, P. (2006). Italian Survey of Organizational Functioning and Readiness for Change: A cross-cultural transfer of treatment assessment strategies. *European Addiction Research*, 12: 4, 176–181.
- 18 Armenakis, et al. (1993); Hord, S., Rutherford. W. L., Huling-Austin, L., & Hall, G. (1987). *Taking charge of change*. Alexandria VA: Association for Supervision and Curriculum Development; Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research and Practice*, 20: 161–173; Prochaska, J. O., & Velicer, W. F. (1997). The Transtheoretical Model of health behavior change. *American Journal of Health Promotion*, 12: 38–48.
- 19 Cunningham, C., Woodward, C., Shannon, H., MacIntosh, J., Lendrum, B., Rosenbloom, D., & Brown, J. (2002). Readiness for organizational change: A longitudinal study of workplace, psychological and behavioural correlates. *Journal of Occupational & Organizational Psychology*, 75:4, 377–392; Madsen, S. (2008). Preparing faculty and staff for change. *Academic Leadership*, 6: 1, 2; Rafferty, A., & Simons, R. (2006). An examination of the antecedents of readiness for fine-tuning and corporate transformation changes. *Journal of Business & Psychology*, 20: 3, 325–350.
- 20 Weeks, W., Roberts, J., Chonko, L., & Jones, E. (2004). Organizational readiness for change, individual fear of change, and sales manager performance: An empirical investigation. *Journal of Personal Selling & Sales Management*, 24: 1, 7–17.
- 21 Madda, C., Halverson, R., & Gomez, L. (2007). Exploring coherence as an organizational resource for carrying out reform initiatives. *Teachers College Record, 109:*8, 1957–1979; Rice, G. (1984). The relationship of role ambiguity and role readiness among community college faculty to readiness for faculty development programs. (Doctoral dissertation, State University of New York-Albany, April 1984); Van Sell, M., Brief, A., & Schuler, R. (1981). Role conflict and role ambiguity: Integration of the literature and directions for future research. *Human Relations, 34*: 1, 43; Yousef, D. (2000). The interactive effects of role conflict and role ambiguity on job satisfaction and attitudes toward organizational change: A moderated multiple regression approach. *International Journal of Stress Management, 7*: 4, 289–303.
- 22 Conley, S. & Woosley, S. A. (2000). Teacher role stress, higher needs and work outcomes. *Journal of Educational Administration*. 38(2), pp. 179–201; Luongo, G. (2007). Re-thinking child welfare training models to achieve evidence-based practices. *Administration in Social Work, 31*: 2, 87–96.
- 23 Newmann, F. M., Smith, B., Allensworth, E., & Bryk, A. S. (2001). School instructional coherence: Benefits and challenges. Chicago, IL: Consortium on Chicago School Reform.
- 24 Collins, C., Phields, M. E., & Duncan, T. (2007). An agency capacity model to facilitate implementation of evidence-based behavioral interventions by community-based organizations. *Journal of Public Health Management and Practice*, 13: 1, 16–23.
- 25 Wheelan, S., & Conway, C. (1991). Group development as a framework to understand and promote school readiness to engage in an organizational development project. *Journal of Educational & Psychological Consultation*, 2: 1, 59.
- 26 Jessup, M. (2007). Organizational change in a perinatal treatment setting: Integration of clinical practice and policies on tobacco and smoking cessation. *Journal of Psychoactive Drugs*, 39: 4, 461–472. Retrieved from http://www.journalofpsychoactivedrugs.com/Articles/Jessup%20394.pdf
- 27 Bollar, S. (1996). The impact of organizational culture on employee work attitudes, readiness for change, and organizational performance. (Doctoral dissertation, Georgia Institute of Technology, September 1996); Goh, S., Cousins, J., & Elliott, C. (2006). Organizational learning capacity, evaluative inquiry and readiness for change in schools: Views and perceptions of educators. *Journal of Educational Change, 7:* 4, 289–318; Jones, R., Jimmieson, N., & Griffiths, A. (2005). The impact of organizational culture and reshaping capabilities on change implementation success: The mediating role of readiness for change. *Journal of Management Studies, 42:* 2, 361–386; Williams, R. Brien, K., Sprague, C., & Sullivan, G. (2008). Professional learning communities: Developing a school-level readiness instrument. *Canadian Journal of Educational Administration and Policy, 74:* 1–17.
- 28 Cinite, I., Duxbury, L., & Higgins, C. (2009). Measurement of perceived organizational readiness for change in the public sector. British Journal of Management, 20: 2, 265–277.
- 29 Austin, M., & Claassen, J. (2008). Implementing evidence-based practice in human service organizations: Preliminary lessons from the frontlines. *Journal of Evidence-Based Social Work, 5*: 1/2, 271–293; Chilenski, S., Greenberg, M., & Feinberg, M. (2007). Community readiness as a multidimensional construct. *Journal of Community Psychology, 35*: 3, 347–365; Eby, L., Adams, D., Russell, J., & Gaby, S. (2000). Perceptions of organizational readiness for change: Factors related to employees' reactions to the implementation of team-based selling. *Human Relations, 53*:3, 419–442; Kakefuda, I., Stallones, L., & Gibbs, J. (2008). Readiness for community-based bicycle helmet use programs: A study using community- and individual-level readiness models. *Journal of Health Psychology, 13*: 5, 639–643; Lehman, W. E. K., Greener, J. M., & Simpson, D. D. (2002). Assessing organizational readiness for change *Journal of Substance Abuse Treatment, 22*: 4, 197–209; Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York: Free Press.





- 30 Frank, K., Zhao, Y., & Borman, K. (2004). Social capital and the diffusion of innovations within organizations: The case of computer technology in schools. Sociology of Education, 77: 2, 148; Madsen, S., Miller, D., & Cameron, J. (2005). Readiness for organizational change: Do organizational commitment and social relationships in the workplace make a difference? Human Resource Development Quarterly, 16: 2, 213–233; Madsen, S., Miller, D., Cameron, J., & Warren, E. (2004). The relationships between an individual's margin in life and readiness for change. Paper presented at the Academy of Human Resource Development International Conference (AHRD) (Austin, TX, Mar 3–7, 2004). Retrieved from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1b/da/f0.pdf
- 31 Hanpachern, C., Morgan, G. A., & Griego, O. V. (1998). An extension of the theory of margin: A framework for assessing readiness for change. *Human Resource Development Quarterly, 9*: 4, 339–350; Madsen, et al., 2004.
- 32 Bridle, C., Riemsma, R. P., Pattenden, J., Sowden, A. J., Mather, L., Watt, I. S., Walker, A. (2005). Systematic review of the effectiveness of health behavior interventions based on the transtheoretical model. *Psychology and Health*, 20: 283–301. Retrieved from http://www2.warwick.ac.uk/fac/med/staff/bridle/download/ttm_interventions_ph_05.pdf; Fixsen, et al., 2005; Horowitz, S. M. (2003). Applying the transtheoretical model to pregnancy and STD prevention: A review of the literature. *American Journal of Health Promotion*, 17: 5, 304–28; Riemsma, R. P., Pattenden, J., Bridle, C., Sowden, A. J., Mather, L., Watt, I. S., & Walker, A. (2003). Systematic review of the effectiveness of stage based interventions to promote smoking cessation. *BMJ*, 326:1175–7. Retrieved from http://www.bmj.com/cgi/content/full/326/7400/1175; Weiner, et al., 2003.
- 33 Bloom, J., Devers, K., Wallace, N. T., & Wilson, N. (2000). Implementing capitation of Medicaid mental health services in Colorado: Is "readiness" a necessary condition? *Journal of Behavioral Health Services & Research*, 27: 4, 437; Richards, K. (2004). Assessment of organizational readiness to change and an intervention program. (Doctoral dissertation, University of South Florida, 2004).
- 34 Prochaska & DiClimente, 1982
- 35 Horwath, J., & Morrison, T. (2000). Identifying and implementing pathways for organizational change: Using the Framework for the Assessment of Children in Need and their Families as a case example. *Child & Family Social Work*, 5: 3, 245–254; Prochaska & Velicer, 1997; Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behavior. *American Psychologist*, 47: 1102–1114; Velicer, W. F, Prochaska, J. O., Fava, J. L., Norman, G. J., & Redding, C. A. (1998). Smoking cessation and stress management: Applications of the Transtheoretical Model of behavior change. *Homeostasis*, 38: 216–233.
- 36 Prochaska, & Velicer, 1997.
- 37 Bridle, et al., 2005; Horowitz, 2003; Riemsma et al., 2003.
- 38 Prochaska, J.O. (2006). Moving beyond the transtheoretical model. Addiction, 101: 6:768-74.
- 39 Hall, G. (1975). The effects of "change" on teachers and professors: Theory, research, and implications for decision-makers. Paper presented at the National Invitational Conference on Research on Teacher Effects: An Examination by Policy-Makers and Researchers (Austin, Texas, November 3–5, 1975). Retrieved from http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/36/51/82.pdf; Hall, G. & Loucks, S. (1979). *Implementing innovations in schools: A concerns-based approach*. Austin, TX: Research and Development Center for Teacher Education, University of Texas.
- 40 Hall, G., & Hord, S. (1987). Change in schools: Facilitating the process. SUNY Series in Educational Leadership. Albany, NY: SUNY Press; Hord, S., Rutherford. W. L., Huling-Austin, L., & Hall, G. (1987). Taking charge of change. Alexandria VA: Association for Supervision and Curriculum Development.
- 41 Roger, 2003.
- 42 Kautz, K., & Pries-Heje, J. E. (Eds.). (1996) *Diffusion and adoption of information technology*. London: Chapman & Hall; Sahin, I. (2006). Detailed review of Rogers' Diffusion of Innovations theory and educational technology-related studies based on Rogers' theory. *The Turkish Online Journal of Educational Technology*, 5: 2. Retrieved from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/3d/cb/47.pdf
- 43 Cain, M., & Mittman, R. (2002). *Diffusion of innovation in health care*. Oakland, CA: California Healthcare Foundation. Retrieved from http://www.chcf.org/documents/healthit/DiffusionofInnovation.pdf
- 44 Anderson, P. (1999). Complexity theory and organization science. *Organization Science*. 10: 3, 216–232; Brown, S. L., & Eisenhardt, K. M. (1997). The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. *Administrative Science Quarterly*, 42: 1–34; Harkema S. (2003). A complex adaptive perspective on learning within innovation projects. *The Learning Organization*, 10: 6, 340–346; Smith, P. (2003). Implications of complexity and chaos theories for organizations that learn. *The Learning Organization*, 10: 6, 321–324; Wheatley, M. (2006). *Leadership and the new science: Discovering order in a chaotic world*. San Francisco, CA: Berrett-Koehler Publishers.
- 45 Olsen, E. E. & Eoyang, G. H. (2001). Facilitating organization change: Lessons from complexity science. San Francisco, CA: Jossey-Bass/Pfeiffer.
- 46 Rowe, A., & Hogarth, A. (2005). Use of complex adaptive systems metaphor to achieve professional and organizational change. *Journal of Advanced Nursing*, *51*: 4, 396–405.
- 47 Davis, H., & Salasin, S. (1975). The utilization of evaluation. In E. Streunig and M. Guttentag (Eds.), *Handbook of evaluation research* (Vol. 1). Beverly Hills, CA: Sage; Robbins, V., Collins, K., Liaupsin, C., Illback, R., & Call, J. (2003). Evaluating school readiness to implement positive behavioral supports. *Journal of Applied School Psychology*, 20: 1, 47–66; Salasin, S. E., & Davis, H. R. (1977). Facilitating the utilization of evaluation: A rocky road. In I. Davidoff, M., Guttentag & J. Offutt (Eds.), *Evaluating community mental health services: Principles and practice* (pp. 428–443). Rockville, MD: National Institute of Mental Health, The Staff College.



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