A PRELUDE TO PLANNING

ROBERT H. BEACH

SYNOPSIS

Planning is presented as a process for developing desired organizational change focused on creating an alternative future more conducive and different from the one anticipated. A general planning template as well as five recognized and two emerging processes for planning are presented with a discussion of their uses; they are Rational Comprehensive, Bounded Rational, Mixed Scanning, Incremental, Goal-Free, Scenario, and Experience-Based planning. Issues arising from the nature of the unknown futures flowing from change are also discussed. The competition that can arise from the manipulation of such futures is noted.

SEVERAL EDUCATIONAL PLANNING MODELS: THOUGHTS ABOUT PLANNING

This article suggests how our planning activities in the present might influence the future. This is really what planning and its designed changes are all about. When we plan, we are creating a design that may allow us to move into a different future, and by the implementation of our plans change arises. A new, changed future emerges from the many possible and from the one that otherwise might be coming. A desired future is hopefully better suited to our individual and the organization's interests. In general terms, such futures begin with processes for the creation of a plan for implementing change. The processes are not in themselves change; rather, they bring into existence ideas that are blueprints for the creation of change.

The beginning of planning relevant to current educational activity is lost in history and generally pertinent from about 1800 AD and really only for the better part of the last 75 years. For example, tools such as the Critical Path Method (CPM) and the Program Evaluation and Review Technique (PERT) evolved in the 1950s. Everett Rogers' (1995) seminal work on the diffusion of innovations was first published in 1962. Since this time, theories of planning and their approaches to creating change have been evolving and, in some cases, they have done so profoundly. These approaches to planning can lead to different outcomes. Consider them as different futures.

When a new school is needed, plans are designed. But nothing has changed other than that the plans exist. Only when some positive action relative to the plan's implementation occurs, such as a school foundation being laid, is the future changed. The reality here is that anything that affects the plans can change the future. Even the passage of time itself can change things. In reality, everything is in flux.

Time stretches from where we are now, the present, forward into a future only partially knowable. If we could see into the future, we might find a brighter one that may be coming. Also, we can experience foreshadowing that is cast backward to the present and could raise concerns with what may be coming. What is coming may not be in our best interest. So, we may seek to bring about change derived from plans that create a different future, one more favorable.

Multiple and varied processes exist for creating change. Figure 1 illustrates one basic generalized process for the creation of plans designed to bring about change. While not being drawn

to scale, it presents a simple universal process with five components for creating change. These are preplanning, thinking about making the change; readiness, ensuring that the major elements of the organization are ready to take on the change process; planning, creating the designs for generating the change components; implementation, putting the change components in place; and institutionalization, ensuring that the initial implementation has taken hold. These five components constitute a basic, generalized, and workable change process. The first three involve the design process itself. Implementation and institutionalization involve actions of putting the plan into place and the integration of nascent change into the organizational culture -- "this is the way we do things here."

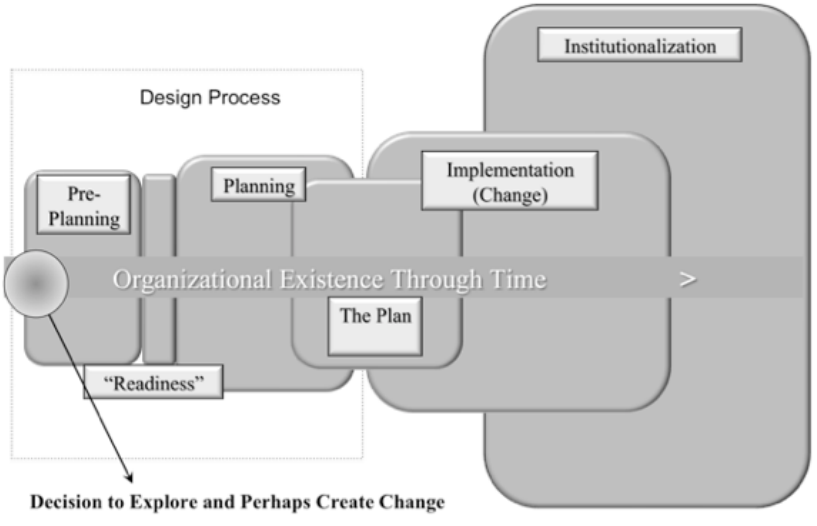

Figure 1: A planning process for creating organizational change.
Adapted from "Overall Knowledge Bases Underlying the Organizational Improvement Process", by author, Planning and Changing, 2004 Volume 35/number 1&2, Beach, R. H. & Lindahl R. A., Page 11, extended and improved.

This is not to suggest that much change is actually attempted by processes such as this. Most planning is ad hock, attempted by well-meaning but inexperienced change agents and, thus, only partially successful. However, it is generally touted as successful. A planning process must define plans that anticipate what will be undertaken in the future, even before that future is known! This opens the plan to problems, even failure, when the anticipated future does not arrive.

Generally, simple changes are easy to undertake by definition; however, most change is not simple. Mostly it is convoluted, tortuous with parts rolling together, politicized, and impacted on by both individual and group desires and hopes. Not all change efforts are totally successful. Perhaps the major portion of these efforts will, at least partly, falter. Change may not be desired for some of these efforts; rather, they are simply to satisfy a political request to document that the organization is doing something. However, some efforts can result in positive happenings.

It is not my belief that some magic process for creating change exists, and that to be successful one must capture the wizard and learn the secrets. Every change effort is different,

even when designed from the same template–for example, the many responses to a state-mandated "improvement" or "reform" program.

A change effort will involve people who are different, that is, different backgrounds, different skills, and different perspectives, each having desires that may differ from those of individuals in other groups. The desired change, and the composite elements of such change plans, will adapt and morph under your feet, and the program will require continued customization; that's if things are going well before implementation. So, while the planning process illustrated in Figure 1 promises change and can deliver, there is no guarantee that the future designed will be forthcoming.

It is important to stress that the change discussed here is about intentionally and purposefully shaping the future. However, futures are formed in many ways, some of which are neither intentional nor purposeful. When a stone-thrower's rock drops into a pool, the splash is interesting but what happens as a result of the ripples?

Some of your change efforts will not fail but just damage the surroundings. Consider what happened along the St. Lawrence River where the demographics of many school populations changed dramatically. This arose from the increase of enrollments that occurred for several years as a result of the influx of construction workers and their children. The parents were engaged in creating a fantastic canal leading into and from the Great Lakes. Overall, the canal was undoubtedly intentional, purposeful, and a successful change; however, school-wise the related change was not always positive, intentional or purposeful--there was collateral damage. School buildings were remodeled and renovated, including expansion, to accommodate the children of the construction workers. After several years the canal was finished, construction ended, and the workers and their children left. Now overbuilt and half-empty buildings had to be carried financially by local taxpayers for years. While this is on a larger scale, it is typical of many educational change efforts. The result was just one more of those unintended consequences.

SEVEN SPECIFIC PROCESSES FOR CREATING EDUCATIONAL PLANS

There are many processes for creating educational plans to bring about change. About as many different processes exist as there are planners. These plans typically go into greater detail than the process shown in Figure 1. Some are touted as *the* process. Five are well recognized in the literature and two are newer and emerging. All are outlined below. Multiple variants of most also exist. As an example, Strategic Planning is a variant of the rational models.

Educational planning processes can be thought of as falling on a continuum, one based on the intensity of a plan's information and analysis needs that create demands on time and other resources. Figure 2 depicts a continuum of these processes. Other than the experience-based model, all are well known in the literature.

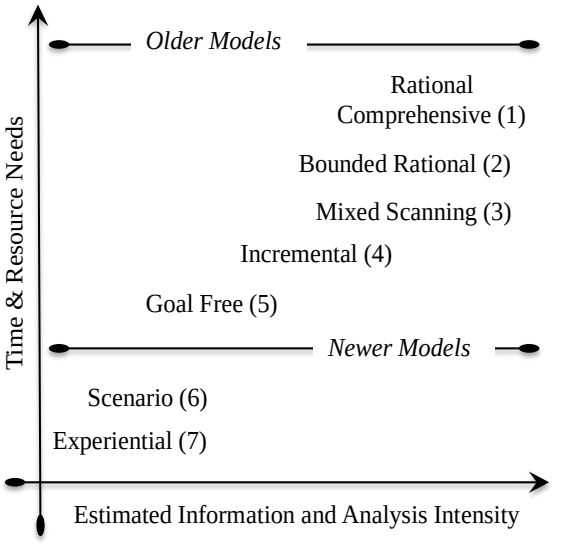

Figure 2. A taxonomy of approaches to some planning and change models. Graphic design developed in 2020 by author.

Although people have engaged in thinking about planning for thousands of years, the top five models illustrated in Figure 2 have emerged over time from continuous, informal development beginning about the time of the World Wars. They are the results of reflection and experience. They can be thought of as modern. They were not derived scientifically and they have changed over time morphing into different formulations, and Rational Comprehensive models can be thought of as being obsolete. The Scenario and Experience-Based models are newer with the latter being almost new.

It is important to note that the literature discusses many such planning models. Some are profound; some are bush-league in the extreme. All, including those presented here, vary widely in operation. All of these models can overwhelm a novice potential user. However, these archetypes are few in number and most are discussed here. These models center on planning for educational purposes focusing on educational concerns. There are other planning processes that have a different focus. Examples noted on Amazon are: wedding planning, obviously planning focused on weddings; focus group planning; planning for interest groups; kitchen planning; retirement planning, etc. So, seven basic processes directly relating to educational planning are presented here. Perhaps six or seven can individually or collectively be applied to most topic areas, thus, giving rise to any number of different "planning" application theories. What follows is a discussion of the planning archetypes as seen in relation to education.

Rational Comprehensive Planning

Rational comprehensive planning largely arose, or evolved, from ideas and planning efforts emerging from multiple sources about the time of World Wars I and II. The fundamental concept behind this approach, and the several variants that exist, is that the users identify a primary goal, generate a comprehensive list of alternative paths or solutions to attain that goal, and then "rationally" select the best alternative(s) for goal achievement. By *no* means does this terminology suggest that

other approaches to planning are "irrational." It merely conveys that the selection among alternatives should be based upon pre-established, agreed upon, and measurable criteria. The earliest articulation of rational planning has become formally known as Comprehensive Rationalism and is considered as the seminal and perhaps the best expression of this model. In the model, goals and the means for their attainment are clearly defined. A logical series of steps, often linear, are typically prescribed. Ends and means are assumed to be separable and capable of eliciting widespread organizational support. The postulates of this theory require that all solutions to the problems of the proposed change be examined and that the "optimal" solution be chosen. Three basic objections to any pure form of this model exist. First, can *all* solutions really be examined? What is around the next corner? Second, the future consequences of any plan can only be assumed; they, of course, lie in the future. Third, given human psychological issues such as biases or bounding (limiting the problem's parameters), the form of the problem's presentation, i.e., how it has been framed (presented) and memory recall, etc., all raise questions as to the true rationality of educational organizations or, in fact, any of their decisions and plans.

In reality, the complexities of each institution's changing environment, its internal strengths and weaknesses, the readiness for change, the requirements for complete comprehensiveness, culture, needs, the specific planning variation (that is the alternative being used), and the stakeholders make this model's application a vastly intricate process. This was a template for a comprehensive rationalism known as *strategic planning*. Current thinking has evolved a strategic planning template or model that is more concerned with creating greater stakeholder involvement and therefore a model more in tune with other formulations.

Many variations of rational planning can be found such as short- and long-term planning. Although there are a plethora of specific formats for these models, most contain more or less the same basic elements, and without question the most familiar variant is *strategic planning*. Many accreditation agencies and states have required their public schools and universities to engage in a strategic model. There are a large number of specific formats or models for such use.

Bounded Rational Planning

Herbert Simon (1957) recognized that the comprehensive approach was so complex, resource intensive, and time consuming that it was generally impractical for most situations. He noted that the future consequences of most plans could only be partially forecast. Therefore, determining which solution among all possible is the optimal solution, a primary tenant of comprehensive rational planning, is difficult at best. He also accepted that human beings can only gather, analyze, and process a finite amount of information and, in selecting among alternative solutions, choices are often unduly influenced by emotions and/or psychological factors, rather than being truly "rational" or objective. These considerations led him along the steps illustrated in Figure 3 to develop a model that came to be known as the bounded rational approach, a more feasible, yet related, alternative.

1	Establish goals	6	Analyze alternatives
2	Need assessment	7	Establish goals
3	Identify resources	8	Develop objectives and implement
4	Determine objectives	9	Evaluate processes and performance
5	Search for alternatives	10	Adjust process

Figure 3. A basic bounded rational planning model in linear (step) form.
An interpretation from Brieve, Johnston and Young by author. After A. P. Johnston.

In a bounded rational model, limits are set on the range of alternatives and on the criteria that will be used to select among them. For example, cost limits might be set, as might time limits for implementation, minimum performance goals to be met, or particular organizational values that cannot be compromised. Then, rather than attempting to identify the "optimal" solution, the planning team would settle for a feasible or an acceptable solution, a compromise Simon termed *satisficing*. For example, although under a comprehensive rational approach it might be "optimal" (in terms of knowledge gain, networking, and future employment opportunities) for the teacher striving to become a school administrator to enroll full time at a premier university like Columbia, Harvard, or Stanford, it could be problematic for budgetary or convenience reasons and better to *satisfice* and attend a local university on a part-time basis while continuing to teach. Similarly, the university considering adding a doctoral program in educational leadership might "bound" its considerations to an Ed.D. program due to lack of faculty prepared with the strong research and statistical skills needed for operating a research-based Ph.D. program. In addition, the university might dismiss from consideration any distance education components due to lack of technological resources or a deeply held university value for "high touch" rather than "high tech" instruction.

Mixed Scanning

Amitai Etzioni (1967) saw the value in combining some concepts of the bounded rational and incremental (see below) models in an organization's overall planning process, capitalizing on the strengths of each. The model reflects Etzioni's recognition that an organization's planning process does not need to be monolithic. There are aspects of the planning process, such as divining a future, which may best be served by the incremental model; however, for other aspects a bounded rational planning process could be more appropriate.

Perhaps an organization's budget can be planned incrementally. However, some budget categories require more complex, rational planning approaches, such as the purchase of property for future construction, the construction of new facilities, or even major renovations. In this scenario, budget planning would then follow a mixed scanning model. However, planning without some reasonable understanding as to where one is going can preclude, by early decisions and without greater attention to goals, where the organization ultimately could have gone more effectively. Purchasing property for an elementary school only to find out later that it is a middle or secondary school that will be needed is a classic situation and an example of inappropriate planning. The property size for most elementary schools is generally small and would be inappropriate, even illegal, for the typical high school.

Incremental Planning

The primary author associated with *incremental planning* was Charles Lindblom (1959) who thought of it as "the science of muddling through." This model reduces the amount of information and decision-making required. Basically, it accepts the status quo as the baseline and calls for small (incremental) advances in the direction of organizational goals. Initially this was known as the model of Successive Limited Comparisons. In this formulation, the planner builds on past and current achievements and designs plans that, when implemented, will proceed in small incremental steps. This is viewed as the art of the possible. Organizational goals are seen as flexible, changing, and achievable only, if at all, by small sequential steps taken in the direction of solutions to such goals. The planner may just consider past policies and plans and make marginal changes for a future course of action.

Incremental planning is most commonly used in education to plan annual budgets. This model is used rather than developing a zero-base budget, where the organization essentially begins "from scratch" each year. Much of an educational budget can be assumed to vary only minimally from year to year. For example, usage of electricity can generally be assumed to be roughly the same from last year unless new facilities are added, so budgeting for this is as easy as simply augmenting last year's costs by the anticipated inflation rate. The same approach is used to determine health insurance contributions, fuel for the buildings and vehicles, general supplies, and salaries. This greatly simplifies the financial aspects of planning and the operations engaged in under the plan.

Developmental or Goal-Free Planning

David Clark (1981) referred to this model as goal-free, and this term can be deceptive to school leaders not well versed in planning. Organizations that employ goal-free planning have goals; they are just less specific and can be articulated further along in the planning process as a means of reducing conflict, thereby generating greater stakeholder involvement than in those organizations using more rational forms of planning.

The model is in reality a process that focuses less on the early identification of highly specific, quantifiable organizational goals and the unified action required to attain those goals and more on the identification of shared positive values, beliefs, and organizational visions. The model emphasizes the promotion of a variety of individual and group efforts that are in touch with those shared values, beliefs, and visions. When working from a goal-free model, the planner perceives goals as only one element, and a flexible element at that, in the mix of organizational change concerns. To this extent, the process is non-rational in the sense that organizational change is not seen as exclusively achieved through primary goal attainment. In a comprehensive or bounded rational model, stakeholders may disagree over goals when some individuals would be disadvantaged by the impact of these goals. This may give rise to resistance, either openly expressed or privately held, by a subset of stakeholders. Rather, the goal-free model suggests that by delaying goal formulation or articulation, more time is available to resolve tensions and potential goal conflicts by their adjustment following stakeholder input. Goals that prevent or are inhibiting can evolve during planning and implementation and may sometimes be necessary, but they are not desirable, especially in education. For example, a highly specific school-wide goal to improve reading scores by 100% may threaten budgets; time with students; or even the existence of elementary school physical education, art, and music programs. This conceivably will cause some resistance from teachers and even parents. Under a goal-free planning model, the future directions envisioned would tend to be broader, such as "students should be more actively engaged with literacy activities." In

this case, physical education teachers might contribute to moving in that direction with student work assignments related to the rules and histories of the various sports being taught. Art teachers might assign students a task to create biographical sketches of artists or solicit written critiques of artworks examined. Music teachers might do similar activities related to various forms of the music being studied. Resistance to a specific goal thereby might be reduced without prejudice to impacted students. Each stakeholder's unique contribution to the literacy vision could be planned, implemented, examined, supervised, and evaluated on an individualized basis.

Scenario Planning

Woody Wade (2012) viewed planning as a means of helping to prepare for an uncertain, ambiguous future that certainly will bring new realities. We see this form of planning more in terms of a futures model where the planner is exploring several possible simultaneous results and how they can be dealt with. Scenarios are flexible and identify alternative possible future conditions. Typically, several scenarios may be explored at one time. The underlying premise of scenario planning is that there are multiple key factors that interact in complex ways to influence the future.

Scenario models begin with the identification of key questions to be answered and a time frame established for the plan. Major stakeholders would then brainstorm and debate on the key uncertainties and the variables to be considered, perhaps using a tool such as a Delphi Process. This is a multiple three-round questionnaire process. Each round works to improve consensus by letting everyone see what the anonymous summary of previous rounds indicate; then each individual reconstructs their responses for the next round. The process tends to narrow variability, thereby creating greater consensus. When a holdout's responses do not change and continue to differ from the group, unknown information may be revealed when the holdout is queried and responds, such as "The property for the new school will be right next to the prison being constructed."

Choices are then narrowed to a few scenarios, perhaps two. These should be relevant, challenging, and complementary but generally not polar opposites. Angela Wilkinson and Roland Kupers (1923) wrote, "Tell stories that are memorable yet dispensable." These are alternative possibilities of a future, not a prediction. Obviously, scenario planning would need to be combined with other, more operational, models of planning.

The most appropriate use of this model, at least in education, probably is as a subset of the pre-planning and readiness components in Figure 1. When used early in the overall process, it may provide an opportunity to create positive working relationships and better familiarity with the tasks to be undertaken at a time when nothing has been set in concrete.

When designing scenarios, it is important to remain mindful about best practices, for they should underlie all school improvement efforts. David Hopkins, Alma Harris, Louise Stoll, and Tony Mackay (2011) stated that although innovation can contribute to the continual improvement of student learning, ensuring that research-based best practices are consistently followed is the real key. Among these practices, they featured moving from prescription to professionalism and balancing top-down and bottom-up change.

Experience-based Planning

A most recent planning model by Kristian Hammond (1990) is known as *case-based* planning, which some prefer to call *experience-based* planning. Although the model was originally developed and used for planning artificial intelligence systems, its principles apply well to educational planning. James March and Herbert Simon (1959) gave early recognition to the role of

memory in planning, noting that what is stored in memory can be recalled when similar problems are being addressed. This can be done without substantial new inquiry.

The basic premise of this approach is that past experiences, augmented by reflective analysis of situations, successes, and failures, can be recalled to address current planning situations. What occurred in the past is at least a novice plan. This facilitates, to some degree, the anticipation and avoidance of current and future plan failures. Hammond presented a sequential six-process model for this approach. The first process is *problem anticipation*, in which the current situation is critically examined to detect features that relate to any past planning problems. The next process is *plan retrieval*, during which the planner searches mental and recorded memory (history) for a previous plan or plans that come close to satisfying current goals, while avoiding predicted negative problems. While the term memory is used here, keep in mind that for most planning addressed in this work, the term really references some form of recorded memory. This "memory" can be held in books, reports, recordings, etc. As noted, memory of activities undertaken in the past is, by the very fact of its occurrence, intrinsically usable as a recursive plan. The *plan modification* process follows, during which the previous experiential plan(s) is altered to address any current goals and problems not already addressed. The *plan repair* process calls for the planner to fix a faulty plan by developing a causal explanation for its failures and by establishing strategies for modifying the plan accordingly. In the *credit assignment* process, the planner uses this causal explanation to reflect upon the organizational and environmental conditions that may have led to plan success or failure, so that these may be used as predictors of similar future situations. In the final process, *plan storage*, the plan and causal explanations are placed into the organization's repertoire of planning processes for future reference.

This model suits both individuals and schools well because it builds upon their prior experiences, which make changes far less daunting. For example, planning a wedding can be intimidating, but if you have already planned one or helped a friend plan one, much can be extracted from that experience, and modified as necessary, to make the planning of the second wedding far easier. The same applies to schools. While implementing "new math" can be a massive change, if the school has recently implemented other substantive curricular changes, e.g., hands-on science or integrated language arts, many of their successes can be mimicked.

Unconsciously, this model is often the choice for individuals and schools. If a teacher is faced with a particular student behavior problem, one can fall back on memories of other students with similar behaviors and construct a plan based on what worked best with those students. Large school districts periodically build new schools (or close existing ones), both of which are highly complex endeavors. Rather than approaching this through highly complex, rational planning processes, past memories and past plans of what was successful and what was not (and why not) can greatly facilitate the planning process. This approach is at the heart of scenario planning.

A REALITY WHEN PLANNING: UNKNOWN FUTURES

Planning is, as Dan Inbar (2011) noted, a process of constructing maps to futures. This is done as a way of charting different futures, perhaps better and improved, from those which otherwise would be coming. We look into the future we believe is coming and plan to bring about changes that are more desirable than where we are now and where we expect to be. Our plans anticipate that future, twist and turn that future by ongoing forward-looking activity, until our plans (our maps) look more favorable. Initially the plan is only in the planner's mind or on some media. Unless planning is taking place as changes are made, nothing has been implemented. Implementation to a

large extent flows from the fourth step in the process illustrated in Figure 1. This is the point when the process begins to merge with the future. The merging references the future that the plans have anticipated, at least for a while. But the plan and the reality are not the same thing. The future that emerges will be a blend of the plans and of a fluid future, and the result may or may not yield the anticipated future.

Throughout this work the processes discussed relate to planning and changing the future. But, can this truly be done? What exactly is it that can be changed about any future? Can we really discern what a changed future would be? The illustration in Figure 4 suggests that when the future is entered into, or begins to engulf us, it fuses with the present and what is coming is basically unknown, blending and becoming obscure. Perhaps it will just seem to fade into something different. This future place may be a derivative of happenings in the present.

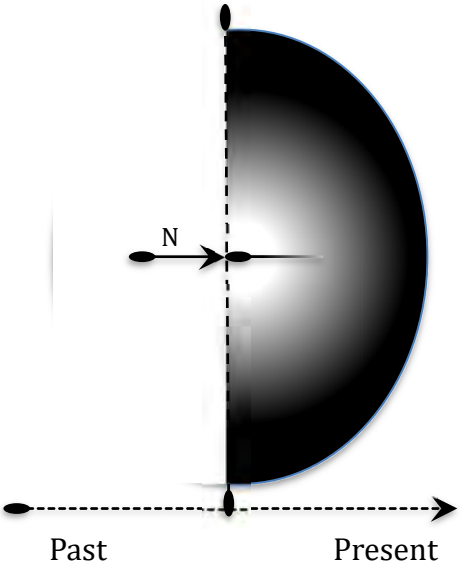

Figure 4: Moving deeper into a future of expanding uncertainty**.**
Graphic design developed in 2020 by author.

And this place, as noted, can cast shadows backward into our present, raising concerns with the details of what may be coming. A shadow such as, "How will this change impact my raise next year? What is coming may or may not be in my best interest." Or possibly it is an even brighter future that is out there. So, realizing this we may seek the means to bring about change to obtain this better future. This is really what planning and its designed changes are all about. When we plan we attempt a design that may allow us to bring forward this better future. By implementing our plans, change begins. Perhaps our desired future, the one that is hopefully better suited to the individual and the organization's interests can be achieved. A new future arises from the many possible and from the one that otherwise would be coming.

Not all possible futures bring improvements. Keep in mind that when you reach into the future to shift what might be coming, you may find evidence of other hands already active, bringing about not your future, but theirs. The future does not deny access to others, and their hands can be reaching into the same future (your future). Only, their efforts will be directed at improving their

versions of the future. A future that may be antithetical to what you hope for. Conflict can arise as the alternate futures compete equivalently with our plans and even surpass our efforts.

And the further out, that is the deeper out in time, the more uncertain the future will be, and therefore the less appropriate our corresponding plans are likely to be. Can we really know such futures and prepare for them? And that uncertainty is not uniform. Some of the expected changes can occur at different rates and with different shifts in boundaries. When implementing plans, you are attempting a landing in the fog.

Also, the sustainability of the change we make is not a given. Change seems to create change. What can we draw from all this? Three things present themselves, 1) change itself is a destroyer of change, 2) change is an emerging derivative from the detritus of past change, and 3) change is universal; it is the very milieu of planning's existence. Finally, at the level of speculation these can be planned for; at a specific level, effects and impacts of change are generally unknowable. Perhaps a new word is required; such events are *unex**plan**able*.

REFERENCES

Brieve, F., Johnston, P., & Young, K. (1958). *Educational planning*. Worthington, OH: Charles A. Jones.

Clark, D. L. (1981). In consideration of goal-free planning: The failure of traditional planning systems in education. *Educational Administration Quarterly, 17*(3), 42 60.

Etzioni, A. (1967). Mixed scanning: A "third" approach to decision making. *Public Administration Review, 27,* 385-392.

Etzioni, A. (1968). The active society: A theory of societal and political processes. New York, NY: The Free Press.

Etzioni, A. (1986). Mixed scanning revisited. *Public Administration Review, 46*(1), 8-14.

Hammond, K. J. (1986). CHEF: A model of case-based planning. Retrieved from www.aaai.org/Papers/AAAI/1986/AAAI86-044.pdf

Hammond, K. J. (1990). Case-based planning: A framework for planning from experience. *Cognitive Science, 14,* 385-443.

Harris, A. (2003). Teacher leadership as distributed leadership: Heresy, fantasy, or possibility? *School Leadership & Management, 23*(3), 313-324.

Harris, A. (2005). Leading or misleading? Distributed leadership and school improvement. *Journal of Curriculum Studies, 37*(3), 255-265.

Hopkins, D., Harris, A., Stoll, L., & Mackay, T. (2011). *School and system improvement: State of the art review.* Retrieved from http://www.icsei.net/icsei2011/state of the art/state of the art

Inbar, D. (2011, reprinted from 1975). Educational planning and implementation: The concept of degrees of freedom. *Educational Planning, 19*(3), 1-11.

Lindblom, C. E. (1959). The science of "muddling through." *Public Administration Review, 19,* 79-99.

March, J. G. (1994). A primer on decision making. New York, NY: The Free Press.

March, J. G., & Simon, H. A. (1959). *Organizations.* Cambridge, MA: Blackwell Publications.

Rogers, E. M. (1995). *Diffusion of innovations* (4th ed.). New York, NY: The Free Press.

Simon, H. A. (1955). "A behavioral model of rational choice." *Quarterly Journal of Economics, 69,* 99-118.

Simon, H. A. (1957). *Administrative behavior* (2nd ed.). New York, NY: The Free Press.

Wade, W. (2012). *Scenario planning: A field guide to the future.* Hoboken, NJ: John Wiley & Sons.

Wilkinson, A., & Kupers, R. (2013). *Living in the futures. Harvard Business Review, 5.* Retrieved from https://hbr.org/2013/05/living-in-the-future