



# **Beyond Personal Experience, Intuition, and Hunches: Information Strategy for Organizational Improvement<sup>1</sup>**

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Foreword by David Raney, MD, CEO of Nuventive

<sup>1</sup> This article was written to be used as a resource for the Nuventive/NCCI *Information: Getting from Concepts to Outcomes* program. The framework presented is based on the work published in Brent D. Ruben, *Sustainable Change in Higher Education: Principles and Practices of Collaborative Leadership*. Stylus/Routledge, 2022; and in *Excellence in Higher Education Guide: A Framework for the Design, Assessment, and Continuous Improvement of Institutions, Departments, and Programs*. Routledge/Stylus, 2016a.

## Forward

**Dr. David Raney, CEO of Nuventive**

As an admirer of NCCI, I know that continuous improvement in higher education has been a foundational goal in the work of the organization and its members. There is no question NCCI has made significant contributions to advance continuous improvement (CI) values and practices since its inception. For Nuventive, CI has also been a central theme. Our particular focus is on the pivotal role information, information platforms, and information strategy plays in pursuing and realizing the goals of decision-making and performance improvement.

An overview of the vital role of information in continuous quality improvement (CQI) is the theme of the article that follows. As an organization, we at Nuventive continue to look to clarify the ways in which information and information platforms can advance the goals we share with NCCI. Indeed, it is because of this shared commitment to CQI that our sponsor support of NCCI has been so important to us.

In particular, we have been very pleased to support the development of a Nuventive-NCCI partnered program on information strategy for organizational improvement, which has been offered exclusively to two pilot cohorts of NCCI members. The program offers five modules overviewing the information-improvement connection and goes on to introduce a number of themes that are essential to using information effectively.

I hope you enjoy the following paper by your esteemed co-founder Dr. Brent D. Ruben, and that you will consider joining us in the next offering of the joint Nuventive-NCCI professional development certificate program.

## Effective Outcomes and Continuous Improvement in Higher Education

In higher education institutions today, three of the most critical factors for enhanced performance and improvement are: (1) An understanding and leveraging the dynamics of organizational change; (2) A commitment to acquiring and applying competencies in collaborative leadership; and (3) success in advancing a clear and shared organizational vision (Ruben, 2022).

While personal experience, intuition, and hunches often become the default basis for decision-making, increasingly complex institutions and decisions call for systematic, communicable, and replicable methods to support decision-making. Both information and information navigators play an indispensable role in performance enhancement and continuous improvement, as will be discussed in the pages ahead.

### Information for What and for Whom?

Information is beneficial in decision-making by nearly everyone associated with a college or university—whether as a faculty or staff member, formal or informal leader, or by stakeholders such as students, prospective students, members of scholarly and professional communities, regulatory and governmental agencies, and the general public. Members of each of these groups make important decisions about a college or university and its programs and services over time, and, ideally, each of these decisions would be enhanced by relevant and well-organized information.

The Excellence in Higher Education (EHE) framework (Ruben, 2016a, 2016b, 2022) is an adaptation of the Malcolm Baldrige model for the culture, challenges, and opportunities of higher education. Component 6 of the EHE framework is focused primarily on *gathering, organizing, and sharing* information internal outcomes and pertinent information from the external environment. Component 7 of the EHE framework focuses on *using* information to formulate strategy, plan, and implement change. Outcomes information also fosters accountability, improves alignment, and can be useful in communicating the organization’s story within the institution and beyond.

More generally, information helps leaders and their colleagues identify reasons to celebrate and causes for concern. Where improvements are needed, outcomes information provides the impetus to guide the organization toward its short- and longer-term aspirations and goals.

For all of these purposes, it is imperative to collect and use information to track and communicate progress, gaps, and accomplishments. This information reveals how these achievements compare to trends and goals, and how they relate to the achievements of peers and aspirational organizations.

## Assessment: Slow to Gain Traction in Higher Education

Higher education has been slower than other sectors to recognize the strategic value of information. Within higher education, concerns about rising costs, accountability, transparency, and the need for innovation—amplified by questions about purpose, perceived complacency, and scarce resources—have ultimately been persuasive influences encouraging colleges and universities to be more purposeful and public in evaluating their performance (ACE, 2012; Massy & Zemsky, 1994; U.S. Department of Education, 2006a).

The term can still be controversial, partly because it was initially used to refer primarily to the evaluation of student learning outcomes (Ruben, 2007b, 2022). This narrow interpretation gave rise to strong reactions: concerns related to perceived intrusions into an area of faculty autonomy; confusion about the distinctions between assessment and traditional grading practices; anxieties about potentially troubling uses that might be made of assessment information; and ambiguities as to whether “assessment” would focus on student learning, faculty performance, or institutional effectiveness (Ruben, 2020c; Ruben, Lewis, et al., 2008).

Within the business community, the push for assessment was framed more broadly to refer to the monitoring and evaluation of outcomes for strategic organizational strategies, goals, programs, services, or processes (Kaplan, 2010; Kaplan & Norton 1992, 2008). The recognized value of collecting, sharing, and using outcomes and environmental information include:

- Stimulating dialogue and clarifying the organization’s mission, aspirations, and priorities.
- Heightening the shared sense of the purposes of programs and services.
- Developing a shared perspective on the appropriate standards and indicators of excellence and effectiveness.
- Identifying current strengths.
- Prioritizing improvement needs.
- Providing meaningful comparisons.
- Heightening personal and collective responsibility.
- Encouraging, monitoring, and documenting progress.
- Providing a foundation for fact-based planning, decision-making, and problem-solving.
- Focusing, energizing, and motivating leaders and their colleagues.

It is interesting to note that disruption and crisis, such as experienced during and following the COVID-19 pandemic, underscores the need to have information systems, processes, and personnel in place prior to a crisis. There simply is not time to put them in place during a crisis.

### Comparisons, Benchmarking, and the Quest for “Best Practices”

Comparing outcomes and achievements over time and with other organizations also requires systematic assessment. Comparisons with similar functions in organizations in other sectors can also be extremely useful. Even when the organizations selected for comparisons may not have educational functions as their primary mission, analogous processes or functions may exist within them that can trigger useful translations into a higher education context. Beyond comparisons across organizations, the ultimate goal is often to identify “best practices”—or at least “effective practices”—that can be adopted or adapted for one’s own school, administrative department, or student affairs unit.

## Environmental Monitoring

Another type of valuable information to support organizational decision-making and improvement comes from environmental scanning by a unit or an institution. Colleges and universities are affected directly or indirectly by a range of regulatory and policy issues emanating from state and federal agencies. They can also be affected by evolving accrediting standards, environmental disruptions, and a broad range of social, economic, and political developments at the community, state, national, and sometimes international levels.

Often, individual leaders establish personalized strategies for acquiring information pertinent to disciplinary, specialty, and environmental developments in areas of interest. These informal “information systems” have considerable value, but the insight and guidance they provide only benefit those who have knowledge of and access to these sources. More systematically structured, centrally coordinated knowledge management platforms can be of great value by enhancing the effective capture and sharing of information from relevant external information sources of all kinds.

### The Concept of Continuously Looping Feedback Systems

Effectively using information requires identifying needs and opportunities for advancement. Outcomes information must also be organized and channeled back to decision makers. This process is often referred to as “closing the loop.” This so-called “looping” process is analogous to the feedback function of a thermostat in a home heating and cooling (HVAC) system, through which information on the current temperature is “fed back” to a thermostat to guide the system.

In HVAC systems, a thermostat makes continuing comparisons between the temperature in a room and the desired temperature. When gaps between the current and desired temperatures are detected, the thermostat activates the heating/cooling unit so that the gap is eliminated. Thus, the HVAC system makes continuous use of information as feedback to guide progress toward established goals. This iterative process is the essence of a continuous quality improvement framework.

Feedback-regulating processes are common in adaptive systems across a wide range of mechanical, biological, and social systems (Beer, 1966; Bertalanffy, 2015; Maruyama, 1960; Ruben, 2003a, 2023; Ruben & Kim, 1975). In an organizational improvement system, leaders function in a role similar to that of a thermostat, monitoring feedback on outcomes and making decisions necessary to advance the project, department, or institutions toward established goals and aspirations. This iterative feedback looping— comparing information on outcomes to goals as the basis for decision-making—is the fundamental mechanism of continuous improvement.

Facilitating leadership information processes, looping, and decision-making is one of the most critical functions in organizational improvement. This process is also one of the most essential functions for information strategists and others whose positions and aspirations are to facilitate and support leadership and organizational advancement.

## The Value of Documentation and the Systematic Use of Outcomes

It is easy to undervalue the disciplined approach to information acquisition, analysis, and use. So often, those who are “in the trenches” feel they have a good sense of what problems must be addressed and what new initiatives are needed. Sometimes these perspectives are informed through systematic data collection, but often not. Cost, time, and sometimes over-confidence in one’s own experience-based perspectives and hunches can be impediments to systematic, knowledge-based decision-making and improvement. Very often, organizational perspectives grow out of daily interactions and anecdotal reports from senior leaders, colleagues, and stakeholders, all of whom are likely to have unique (but potentially limited) views on what priorities are most critical for improvement. Clearly, it is tempting to go with one’s perspective and experience as a guide to decision-making. This can be a way of saving time and money in the short term—but the resulting longer-term costs can be significant.

Leadership decision-making models that favor alternatives such as intuitive, hunch-driven, anecdotally based, or “firefighting” strategies for priority-setting are nearly always a mistake—in the moment and longer term. Without information on outcomes relative to goals and aspirations, and on peers and environmental conditions, how would a leader be able to meaningfully prioritize goals and actions, track progress toward their realization, and reset the agenda for further improvement and innovation over time? Moreover, the rationale for these decisions can be difficult to communicate, making it challenging to mobilize and energize colleagues in the desired directions. Intuitive, anecdotal, and “firefighting” priority-setting approaches diminish the opportunity to engage colleagues and stakeholders in a shared vision of what needs to be done (and why). Additionally, the systematic and colleague-engaged approach helps leaders and their organizations cope more successfully with the disruptive effects of leadership transitions than would otherwise be possible. The value of a knowledge-guided leadership decision-making system becomes particularly important in the wake of changes triggered by external or internal disruptions and when leadership transitions. Decisions regarding the appropriate level of support for particular programs, units or services, for example, would likely be based on factors such potential impact of funding cuts or increases, urgency of action, ease of implementation, the breadth of benefits, stakeholder needs and expectations, the extent to which the improvement is within control of a leader and/or their organization, or any of a number of other considerations (Ruben, 2020b). Without systematic information systems it becomes impossible to provide the needed support for analysis and decision-making in a timely way.

Establishing effective and efficient methods for acquiring, organizing, and circulating information on internal outcomes and external conditions is a significant challenge. The goal, of course, is to have systems and processes in place to assure that needed information is readily available, addresses leadership needs, is communicable, and is structured to reflect specific organizational contexts (Parnell, 2021; Raney, 2021). An information-rich culture of this kind can be indispensable for problem-solving during periods of crisis and routine decision-making, as well as for strategy development and short- and long-term planning. The ultimate goal is the creation of a culture that supports systematic, data-informed, and continuing improvement throughout an institution (Burnette, 2021; Parnell, 2021; Raney, 2021).

## Applications and Case Studies

These dynamic processes and impressive outcomes of looping and knowledge-based decision making are illustrated in any number of case histories, narrative descriptions, and studies of organizational improvement processes and practices in higher education settings in the United States and internationally (Alsaleh, 2016; Benati & Coccia, 2019; Brusoni, et al, 2014; Calvo-Mora et al., 2005; Cartmell, 2014; Hsu et al., 2016; Indumini, 2016; Maciel-Monteon et al., 2020; Middaugh, 2010; Mizikaci, 2006; NACUBO, 2021; Ruben, 1995a, 2016a; Ruben, Mahon, et al., 2021; Teay & Al-Karni (n.d.); Tracy, 2006; Yurkofsky, et al, 2020).

### In Conclusion:

#### Using Information to Guide and Sustain Change is Everyone's Job

For an institution or a department and its leaders, information gained through internal outcomes assessment, analysis, benchmarking, and external comparisons is essential to guide incremental, continuous, and more fundamental change. This information can be used to gauge organizational performance, identify, and recognize advances, highlight areas where change is needed, and communicate progress to internal and external audiences. These kinds of information are also essential to improve the functioning of individual components within the system, to enhance coordination across functions and to promote priority-based resource allocation and greater intentionality in routine decision-making. More generally, the use of insights from organizational and environmental outcomes to inform priority-setting, planning, and change is critical.

As described by Swing & Ross:

The complexity of modern higher education demands investment in leadership and staffing for strategic, tactical, and operational decisions... With greater access to data sources and data tools, and increased department-specific data, institutional research products are widely dispersed across higher education institutions... An increasing number of staff and mid-level administrators are expected to use data to inform decisions...." (Swing, 2016, 12).

The bottom line is that gathering, curating, sharing, and using information is critical to organizational advancement. That said, the necessary knowledge—and especially the skills needed to successfully implement that knowledge—are not obvious. Moreover, they do not automatically come with experience in a leadership role, nor through leadership training. Often because of this, providing the knowledge and facilitation necessary to support effective information processes becomes a responsibility of those prepared, trained, and motivated to bring this kind of valuable expertise and support to the work of leaders and their colleagues. These may be quality improvement staff, information navigators, institutional assessing and effectiveness offices, and others throughout an institution. More fully equipping individuals to provide this kind of support is the precisely the goal of the Nuventive/NCCI program mentioned in the foreword to this article.

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