



**Assessing the Student  
Experience from College  
Entry to College Exit as Part  
of the NCA/AQIP and Baldrige-  
driven Self-Study**

# **Assessing the Student Experience from College Entry through College Exit as Part of the NCA/AQIP and Baldrige-driven Self-Study**

## **Background**

A focus on quality and continuous improvement in higher education means moving away from traditional models of leadership and organization and the “silo” approach to decision-making. A more collaborative approach which creates a learning community dedicated to serving students and staff more effectively and building better relationships becomes transformational for the institution (Sallis, 1994). To be successful, according to Sallis (1994), quality efforts must attend to the core business of teaching and learning, be heuristic in nature allowing the institution to learn from the experiences of its people, and have a common purpose and vision among all constituents. Attention must be given to the experiences of the learner along the educational path, including entry and exit experiences.

Leadership has the responsibility to create an opportunity for new models which support continuous learning and as Deming (1986) has noted, “help people do a better job with less effort.” The processes that impact students in the educational path can also impact their success or failure in the achievement of their goals. Helping students make informed choices as they start their college experience and understand the resources needed to achieve success are vital to reaching effective learning outcomes. The institution is instrumental in helping the student define conditions of satisfaction and learning requirements needed for goal attainment. The “silo” approach to decision-making limits the effectiveness and efficiency of organizational processes and interferes with a smooth transition for students as they progress through the learning experience. Service quality is addressed by creating an environment that supports the human side of change and addresses people-related issues and processes (Canic & McCarthy, 2000).

Quality is a journey and each institution must find it’s own path. For those who have been traveling this path, it is clear that a change in perspective is central. Creative re-invention of management and new ideas about how instruction and services are delivered are part of the commitment to quality (BW Associates, 1992). To begin, one must understand the current blueprint of how workflow processes are currently happening and how the existing structure and procedures are impacting the student, the educational path, and the core business of teaching and learning. “Quality must be built into the process by listening to stakeholders,” according to John Dew (2000) of the University of Alabama; “collecting data and involving the stakeholders in the improvement of processes, one project at a time.”

## **The Challenge**

Making a commitment to participate in the NCA/AQIP re-accreditation process provided an opportunity to draw attention to continuous improvement and begin developing an integrated quality management system. Cincinnati State Technical and Community College has accepted the challenge of working across the organization to improve workflow processes for better service to the college’s 7000+ students. The challenge requires new approaches to studying the work, more collaboration between faculty, staff, and leadership, and a willingness to learn how to be more effective as an institution.

## **Beginning the Journey**

Cincinnati State chose to enter the NCA/AQIP model for re-accreditation which requires a self-study process. This year the College is involved in the state quality award program (the Ohio Award for Excellence, or OAE) as a tool for the self-study. A cross-functional and cross-level study team of nine people was formed to organize the self-study, collect data for the award application, and write the application. The study team began with focus groups of faculty, staff, administration, and students convened around the seven Baldrige Criteria for Performance Excellence in Education as the topics of discussion about the institution. Feedback was summarized and posted on the Intranet. The study team conducted interviews with administrators around key issues related to the approach and deployment of the Baldrige criteria and related workflow processes. The data was charted and used in writing the award application. An advisory team, consisting of faculty, staff, and administrators, was selected to guide a workflow study on processes affecting the student experience from entry to exit. Plans were already being developed to build a one-stop student services center, and the workflow study was expected to provide information important to improving and streamlining entry processes for students. *Workflowdynamics* was selected as the external business partner to conduct the study.

## **The Procedure**

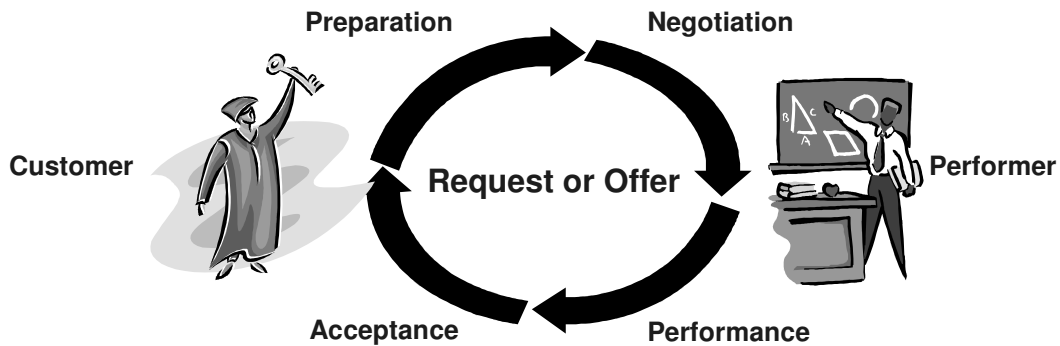
The College's workflow study advisory team met with Workflow Dynamics to discuss the stages of the study and provide feedback on achieving organizational participation and buy-in. Managers were invited to select the appropriate process participants for the study. Fifty processes were identified for study. The college held a meeting with all process participants in the study to discuss the purpose and procedure for the study. Attention was given to how the study supported the NCA/AQIP re-accreditation self-study efforts and the Ohio Award for Excellence application process. Process participants were asked to identify critical success factors for the study as well as possible barriers or constraints that might impede the study.

In this study the processes were mapped using participatory design, the Human Interaction Model, also known as the Atom of Work and Conversation for Action (Harris & Taylor, 1997) and workflow mapping, also referred to as Coordination Mapping and Action Workflow (Harris & Taylor, 1997), which are methods recommended by the Center for Quality of Management. Combined these methods provide a rigorous, customer-focused framework for the analysis and design of work processes, and are rooted in the idea of design as a social process, rather than a technical process.

Participatory design aims to go beyond technical design to address organizational issues and create a shared understanding and knowledge among the individuals who do the work: the process participants. Process participants are typically the people that interact in the process and are most familiar with how the work actually is done. There may be a gap between management's understanding of the process and the way the process really happens. Participatory design explicitly creates opportunities for process participants to come together for collaboration and negotiated decision-making as it relates to the current and future state of the process.

The Human Interaction Model illustrates the interactions between a customer and a performer. Customer means the person who makes a request or receives an offer, nothing more. The performer (or supplier or provider) is the person who makes an offer or to whom a request is made. Customers or performers may be inside or outside of the organization. The request or offer needs to articulate the conditions of satisfaction, which often include requirements and

deliverables. If the conditions of satisfaction are not clear and, subsequently, expectations are not managed, the wrong work is often performed and the customer will not be satisfied.



In workflow mapping each interaction is visually represented by a loop (see above). Each coordinating interaction between a customer and a performer moves through four phases – (1) preparation which leads to the making of a request or offer, (2) negotiation and agreement about the request or offer (or failure to do so), (3) performance of the work requested or offered and determination that the work is complete; and (4) assessment of the work and a declaration of satisfaction or dissatisfaction. The interdependencies among interactions are represented by links drawn between the interaction loops, with the triggers indicated by where the link is connected to the loop. As the interactions are mapped for a current process, what works well and not so well is identified and categorized in recognized patterns of strengths and weaknesses.

Phase I (*Insight*) of the study consisted of *Workflowdynamics* personnel meeting over a two-month period with small groups of people designated as having knowledge about the processes under review – the process participants. Each process was validated in a second meeting of the same group to ensure accuracy in the mapping. Workflow “as-is” blueprints were created and categorized to indicate areas of strength and weakness in each of the fifty processes. Findings were summarized in a report prepared by *Workflowdynamics*. Recommendations for critical process improvement opportunities were summarized. Findings were compared to Student Satisfaction Survey Data over a two-year period, along with college materials such as catalogs. Dissemination of the data and findings began with the participant group first. A presentation to management followed. Unit leaders have begun a more detailed look at the study’s results for planning and process improvement.

## Findings

Process maps were summarized. Strengths and opportunities for improvement were charted. Areas of redundancy, inconsistency and disconnects in workflow process are undergoing additional study. In one specific process, the student ID card, students have to visit three different departments before being able to validate their ID card. The study revealed insight into major and minor breakdowns in processes and gaps in meeting customer service needs and requirements.

## Improvement Stages

Phase II (*Design*) of the study includes prioritizing opportunities for improvement, assigning process owners, setting target measures and implementing cost of quality analysis where appropriate.

Process Improvement Opportunities	1 = Lowest	4 = Highest	Total Score	1 = Highest 4 = Lowest
	* Effectiveness	** Feasibility		Priority (Rank)
			0	
			0	
			0	
			0	
			0	
			0	
			0	

\* Effectiveness: Making this improvement will have a significant impact on the operational effectiveness of the organization (cost management, time utilization, quality management, customer satisfaction)

\*\* Feasibility: Successfully implementing this improvement is possible given existing staffing and time constraints.

### Phase III (*Evolution*)

This phase includes preparing the affected participants and/or the organization for change, and identifies the steps necessary to ensure change is lasting. In addition the details of the new workflow design are defined such as:

- Accountabilities and competencies required, by role and by interaction and determination of competencies of affected process participants
- Communication guidelines for specific interactions
- Document templates for correspondence identified in the redesigned process
- Performance measures for the process itself and participants that will enable proactive intervention or support performance reviews.
- System functions to enable the process to happen more efficiently
- Business rules to ensure that every person involved performs the process consistently.

### Phase IV (*Actualization*)

In the Actualization phase, participants are coached on all facets of project implementation, which could include physical environment, training, system development, organizational development and purchasing to ensure success and integrity of the design.

#### Phase V (*Sustained Improvement*)

In this last phase, individual and process measurements for proactive intervention are monitored. Data is continually collected with periodic audits being performed to facilitate intervention, follow-up training, and coaching. Additional team building is conducted and improvement opportunities are captured.

### **System Impact**

Using this method provides the organization with a tool to realize gains in quality by achieving customer focus and increasing participation among the workforce. Hidden benefits include trust-building, accountability and ownership of the process. In addition, this method enables the discovery of (1) multiple, vague or conflicting goals, (2) commonalities that point to root cause, (3) the discovery of who the customer really is and, and (4) identification of unclear conditions of satisfaction.

The workflow study has provided a model for continuing the study of workflow processes and identifying areas of improvement to enhance services to students and organizational effectiveness. This study was one step in several initiatives tied to the NCA/AQIP re-accreditation process and self-study. Cincinnati State has spent two years identifying and developing a set of *Institutional Values* leading to quality that have been adopted officially by the Board of Trustees and are being used to guide improvements in organizational effectiveness. These values include the college's pledge to a quality education experience centered on teaching and learning, valuing diversity of the college community, honoring the tradition of technical and cooperative education, embracing knowledge gained through experiential learning, encouraging vision that meets the changing needs of the community, focusing on service that exceeds the expectations of students, employers, and the community, supporting personal and professional growth of all who are committed to the college's purpose, and promoting the use and teaching of cutting-edge technology.

The president has appointed a Director of Organizational Effectiveness to lead the college's continuous improvement efforts and co-chair, along with a faculty member, the NCA/AQIP re-accreditation process. A Quality Council led by the President guides the integration of quality efforts and ensures alignment with vision and mission. Cincinnati State has become a member of the Center for Quality of Management and is providing professional development opportunities in quality tools and techniques through the center. Faculty leaders have participated in AQIP leadership training.

The AQIP vital few action projects which guide the college's continuous improvement efforts are being designed to include a re-design of the leadership structure to include all constituent groups in decision-making at a senior leadership level and improving communications, building and deploying a knowledge management system for "front-line" customer service personnel with quick access to accurate information needed to correctly answer questions and direct inquiries to appropriate data sources, and building a system that measures learning competencies of all graduates. In addition, the College's CQIN (Continuous Quality Improvement Network) team facilitates the infusion of the Institutional Values throughout the institution, works to positively impact the organizational culture, and participates in the sharing of best practices.

## References

BW Associates (1992). "Discussion of Policies for Achieving Continuous Improvement in Community Colleges." California Community Colleges. Commission on Innovation, Paper Number 1, Sacramento, Ca., June, 14-20.

Canic, Michael and Patrick McCarthy (2000). "Service Quality and Higher Education Do Mix." *Quality Progress*, September, 41-46.

Deming, W. Edwards (1986). *Out of the Crisis*. Cambridge University Press.

Dew, John. (2000). "Roll Quality Roll, Strategic quality planning at the University of Alabama." *Quality Progress*, September, 54.

Harris, Grant and Steve Taylor (1997). "Escaping From the Box: Using a New Process Model to Support Participation and Improve Coordination." *CQM Journal*, Volume 6, Number 3, 3-11.

Sallis, Edward (1994). "A Framework for Quality Management." *Mendip Papers* (MP 070), The Staff College, Coombe Lodge, Blagdon, Bristol, United Kingdom (ED 381 114).

---

*Jan Donley is Director of Organizational Effectiveness at Cincinnati State Technical and Community College*

*Jackie Messersmith is President of Workflow Dynamics in Cincinnati, Ohio*