This paper outlines a successful, stakeholder driven, continuous improvement process that is currently used at Estrella Mountain Community College, Arizona. The process is designed to address the next step of what to do with institutional effectiveness data after it has been collected and reported. Many institutional effectiveness processes stop with the publishing of data. While this serves accountability purposes, it does little to ensure that data will be used for improvement purposes. To stimulate improvement around the college's core indicators of effectiveness, Estrella Mountain has designed a group interview process with stakeholders responsible for delivering on different aspects of the mission and goals of the college. Using a set of interview questions, the college stakeholders identify standards for the core indicators of effectiveness, develop strategies for improvement, and take ownership of these strategies. The interview approach has been used by the college for 3 years and has resulted in enhanced awareness of the institutional effectiveness process, increased participation by all stakeholders, and the development of concrete improvement strategies that are reviewed on an annual basis. (Author/SM)
Using Institutional Effectiveness Data to Stimulate Improvement … Getting Data Off The Shelf And Into the Hands of Stakeholders

Sandy Hill
Institutional Research Specialist
Estrella Mountain Community College

René G. Willekens
Director of Institutional Planning and Research
Estrella Mountain Community College

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Abstract

This paper outlines a successful, stakeholder driven, continuous improvement process that is currently used at Estrella Mountain Community College. The process is designed to address the next step of what to do with institutional effectiveness data after it has been collected and reported. Many institutional effectiveness processes stop with the publishing of data. While this serves accountability purposes, it does little to ensure that data will be used for improvement purposes.

To stimulate improvement around the College's Core Indicators of Effectiveness, Estrella Mountain has designed a group interview process with the stakeholders responsible for delivering on different aspects on the Mission and Goals of the College. Using a set of interview questions, the College stakeholders identify standards for the Core Indicators of Effectiveness, develop strategies for improvement, and take ownership of these strategies. The interview approach has been used by the College for three years and has resulted in enhanced awareness of the institutional effectiveness process, increased participation by all stakeholders, and the development of concrete improvement strategies that are reviewed on an annual basis.

Background and Purpose

Estrella Mountain Community College is a two-year institution located in Avondale, Arizona. The college began offering classes in 1990 through local high schools and in the fall of 1992 opened a permanent campus.

Estrella Mountain offers both university transfer and multiple occupational programs to a student population of approximately 4,400 credit students. The College serves the greater
southwest portion of the Phoenix Metropolitan area. This service area includes a diverse population of approximately 200,000 residents.

In the fall of 1995, Estrella Mountain developed its first Plan for Institutional Effectiveness. This Plan is patterned after the Core Indicators of Effectiveness for Community Colleges developed by the American Association of Community Colleges (AACC) Community College Roundtable in 1993 (Alfred, 1994). Like the AACC Core Indicators of Effectiveness model, Estrella Mountain’s institutional effectiveness program is directly linked to the achievement of the institution’s Mission. The Plan includes 22 Core Indicators of Effectiveness linked to seven College Mission and Goal areas. These mission areas include: Student Success, Transfer Education, General Education, Developmental Education, Workforce Development, Student Support Services and Community Education. The Estrella Mountain model of Institutional Effectiveness is included as Appendix A.

Estrella Mountain has also developed a separate but related effort for the assessment of student learning. While the purpose of the Plan for Institutional Effectiveness is to evaluate if students and the community are getting what they want from the College, the purpose of the Academic Achievement Plan is to assess if students are learning. Hence, the Plan for Institutional Effectiveness addresses core indicators related to goal attainment, transfer success, job placement, student satisfaction, access, and other related areas. The Student Academic Achievement Plan addresses if students are progressing in General Education abilities such as critical thinking and communication as well as program specific competencies.

This paper addresses a continuous improvement process related to the core indicators of effectiveness found in the College’s Plan for Institutional Effectiveness. It does not address the
processes that are used by the student academic achievement effort to improve student-learning outcomes (this process takes the form of faculty dialogues).

Soon after the adoption of the Plan for Institutional Effectiveness, the College’s planning and research staff collected data for most of the College’s core indicators and related measures. The first use of these data were published and analyzed in the Estrella Mountain 1996 Self-Study conducted for the North Central Association of Colleges and Schools (NCA). The data were very useful in the self-study process and helped to identify some of the College’s strengths, weaknesses and challenge areas. However, the self-study process did less to identify improvement strategies around these core indicators. Also, since accreditation occurs only once every five to ten years, it does not provide a regular forum to review core indicator of effectiveness results. It is for this reason that the College designed and implemented a stakeholder driven continuous improvement system around its core indicators of effectiveness.

**Literature Review on Improvement Processes**

While much is published on the development of effectiveness models, data collection strategies, state accountability mandates, and the development of “Report Cards”, there are fewer examples of how colleges and universities use institutional effectiveness data to stimulate improvement.

The recent movement among some community colleges and universities toward quality-based systems should provide a greater depth of research related to the development of continuous improvement systems in the educational environment. Several state quality award programs and the Malcolm Baldrige National Quality Award Program mandate the use of process improvement. Even accrediting bodies, such as NCA, are beginning to adopt continuous improvement methodology versus episodic site visits. As of April 2000, the North Central
Association of Colleges began a pilot program called the Academic Quality Improvement Project (AQIP). The AQIP process requires institutions to articulate their goals in measurable terms and develop systems to improve the institution’s overall effectiveness on a continuous basis. In this system, colleges are required to provide written updates on their progress to NCA on a continuous basis. The use of site visits (once every seven years) is still used, but the visit is focused on evaluating the quality of the improvement process (AQIP, 2000). The continuous improvement process outlined in this paper can be integrated into various quality programs like the ones mentioned.

**The Estrella Mountain Continuous Improvement Interview Process**

What follows is an outline of the Estrella Mountain Continuous Improvement Interview process.

*Identify the Stakeholders*

The first and most important step in the process is to identify individuals who have a “stake” in each of the College's Mission Goals (mission goals may be referred to as “purposes” at other colleges). These individuals are called “stakeholders.” The list should include both internal stakeholders (employees responsible for delivering on certain aspects of the college mission) and external (students, community members, business owners, etc.). The identification process is accomplished by the Estrella Mountain Institutional Effectiveness Steering Team (already a cross functional team of employee stakeholders). These stakeholders represent the potential participants in the continuous improvement process.

After the master list of stakeholders has been identified, a Lead Stakeholder is assigned to each Mission Goal. The Lead Stakeholder is usually a volunteer staff member that has a job function that is directly related to one of the Mission Goals. The Lead Stakeholder serves as
champion for the goal they are assigned. This staff or faculty member is responsible for inviting other stakeholders to attend one of the annual continuous improvement interviews and following up on the progress of improvement strategies that are identified during the interview. Using a Lead Stakeholder increases stakeholder ownership and positively impacts attendance and participation in the improvement strategies. The Lead Stakeholder role could be administered by one of the research staff, but this is less effective due to decreased ownership in the process.

**Scheduling Improvement Sessions**

Rather than conducting a single session covering all Estrella Mountain’s Mission Goals, the sessions have been divided into separate goal areas. At Estrella Mountain, the improvement sessions have been broken down into: General and Transfer Education, Developmental Education, Workforce Development, Student Support Services, Community Education, and Student Success. These groupings are clustered around the College Mission and Goals statement. The Estrella Mountain Mission Goals statement is included as Appendix B.

The first institutional effectiveness stakeholder interviews were conducted during the spring 1998 semester. The sessions have continued each spring semester since then. Starting in the 2000-2001 school year, interviews will be scheduled during the fall to spread out the interview schedule.

**The Interview**

Once dates have been identified, interviews are conducted with each of the Mission Goal stakeholder groups. Each group generally includes 25-30 stakeholders. The interview requires approximately one and a half to two hours to conduct. The following outlines the major components of the interview. The actual interview questions are included as Appendix C.
**Review of the Institutional Effectiveness Process (15 minutes)**
This portion of the interview includes an overview of the Institutional Effectiveness model and the purpose for the interview. This part of the process is most important for stakeholders that are new to the process.

**Review of Previous Year’s Improvement Strategies (10 Minutes)**
The status of the previous year’s improvement strategies is reviewed. Participants are asked to evaluate which strategies worked well and which ones didn’t work well or were not implemented.

**Overview of Key Findings for the Core Indicators of Effectiveness (25 minutes)**
Prior to the interviews, all stakeholders are provided both an executive summary (3 pages maximum) of key findings related to the core indicator results as well as detailed information for all core indicator measures. During the interviews, a PowerPoint presentation of the key Core Indicator results is conducted and participants are allowed time to review and re-read the Executive Summary. Questions concerning the Core Indicator data are also addressed at this time.

**Identification of Strengths and Improvement Opportunities (25 minutes)**
Stakeholders are asked to identify both strengths and opportunities for improvement based on the review of the Core Indicator results. Good facilitation skills are required during this part of the interview.

**Identification of Improvement Strategies and Volunteers (25 minutes)**
The participants are asked to review the opportunities for improvement and to identify strategies that could be employed to improve on the Core Indicator results. If more than a few strategies are identified, a prioritization technique is used to identify what the group believes are the most critical strategies to be implemented. Volunteers are identified who will “champion” each strategy. Both prioritization and identifying champions are critical components in the process.

**Review and Setting of Core Indicator Standards (10 minutes)**
One goal of the Core Indicator of Effectiveness process is to identify standards for all Core Indicator measures. A standard represents the minimum achievement level for Core Indicator Measures and often is set using national or district level data. For example, standards can be set for items such as transfer rates, retention, job placement, etc. Standards are more difficult to set when benchmarks are not easily identified. The use of standards helps to identify areas that should be addressed via additional research or continuous improvement strategies. Each year, the stakeholders are asked to review the usefulness of the current standards as well as set standards for new measures. If a standard can’t be agreed to, the stakeholders are asked to identify the information they need to be able to set a standard.

**Modifications to Core Indicators and Measures (10 minutes)**
The Core Indicators of Effectiveness and Measures are reviewed by the stakeholder group. Most of the time the Core Indicators and Measures are reaffirmed. Occasionally there will be recommendations to modify Core Indicators and or Measures due to changes in college programs. The changes to the Core Indicators are implemented and brought back to the following year’s continuous improvement interview for adoption.

**Plus/Delta (5 minutes)**
All interviews end with an evaluation of the continuous improvement interview process. Participants are asked to identify what they liked best about the process as well as what can be done to improve the process.
Lessons Learned

The stakeholder interview process has resulted in several lessons learned. The following suggestions provide guidance in building a good continuous improvement process:

- Stakeholder ownership is critical. Stakeholders should to be included in both the development and implementation of the improvement system.

- Obtain senior level administrative support. College deans should actively participate in the improvement process and the college president should endorse the process.

- Always review the purpose of the process, particularly if you have negative data to report. The process should be focused on “continuous improvement” not “assignment of blame”. This process cannot work if employees fear that the data will be used against them.

- During the interview, use the executive summary to its fullest. Keep the findings simple and limit executive summaries to two to three pages. Do provide detailed information, but don’t spend interview time reviewing data “line by line”.

- Divide and conquer. Start with one part of your institutional effectiveness program and pilot the effort. Provide enough time between interviews to allow for adequate preparation. If possible, spread the continuous improvement interviews over an entire semester or academic year. This helps reduce the chance of “burn out” by stakeholders who are part of multiple stakeholder groups.

- Always review progress on the previous year’s improvement strategies. This documents the value of the process (useful for accreditation) and also provides motivation to current stakeholders when they see that their strategies have been accomplished. Even when strategies haven’t been implemented, many employees are motivated by peer pressure to follow up on these strategies during the next year.
• When new improvement strategies are identified, always identify a group of volunteer employees to work on the strategy. It’s also important to prioritize improvement strategies if many are identified.

• Have the Key Stakeholder request progress reports from the volunteer strategy leaders three to four months after the interview. This helps to ensure that progress is made toward the identified strategies.

• Plan for follow up time with the stakeholder groups. Often the group interview will spawn improvement strategies that require a partnership with the research office.

**Future Enhancements to the Process**

Over the next year, The College is considering adding the following to the Stakeholder Continuous Improvement Interview process.

• External stakeholders (students and community members) will be included in the continuous improvement interview process during the 2000-2001 school year.

• WEB-based tools will be used to share core indicator results, exchange ideas outside of the scheduled interviews, and track the progress of improvement strategies. The College is currently adapting the Blackboard course management tool to accomplish this task. While the tool is primarily designed for course delivery, it can be adapted for use in committee work and tasks forces. More information is available on Blackboard at [www.blackboard.com](http://www.blackboard.com).
BIBLIOGRAPHY


Appendix A

Estrella Mountain Community College
Institutional Effectiveness Model

Core Indicators of Effectiveness

Goal Attainment
Overall Completion Rates
Degree/Program Completion Rates
Scholastic Achievement

Student Persistence

Personal Development Goal Achievement
Satisfaction with Courses & Workshops
Responsiveness to Requests
Community Participation Rate

Degree & Certificate Completion
Job Placement & Promotion Rate
Employer Feedback
Goal Attainment of Non-Degree/Certificate Seeking Occupational Students

Successful Transfer
Transfer Degree Completion
Success at Transfer Institution

Successful General Education Completion
Variety and Depth of General Education
Successful Subsequent Performance in Related Coursework
Goal Attainment of Developmental Education Students
Improved Progress & Retention of Dev. Education Students

Student Success

General Education

Community Education

Workforce Development

Mission Goals

Student Support

Developmental Education

External Stakeholders

Faculty, Staff, Administration, Governing Board

Students, Employers, Tax Payers, K-12, 4-Year Colleges, Government Agencies, NCA, etc.

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Appendix B

ESTRELLA ▲ MOUNTAIN ▲ COMMUNITY ▲ COLLEGE

MISSION

Estrella Mountain Community College provides opportunities for our students to achieve success in educational and personal goals.

We are an institution of higher education serving the West Valley communities through:

- General Education
- Transfer Education
- Developmental Education
- Workforce Development
- Community Education
- Student Support Services

GOALS

General Education
To provide the knowledge and abilities that enable students to achieve academic and personal goals.

Transfer Education
To provide quality transfer courses and programs that enable students to achieve success at four-year institutions.

Developmental Education
To provide quality developmental courses and programs that prepare students for educational and personal success.

Workforce Development
To provide specialized quality training, courses and services that meet the needs of businesses and individuals.

Student Support Services
To provide quality services and resources that meet the needs of students and support learning.

Community Education
To provide a wide variety of opportunities that meet the needs of life-long learners.
Appendix C
Estrella Mountain Community College
Continuous Improvement Interview Questions
Spring 2000

After the core indicator of effectiveness data are presented and reviewed, the following interview questions are asked of the key stakeholders.

1. Based on the core indicator results for this Mission Goal, what strengths do you see?

2. Based on the core indicator results for this Mission Goal, what opportunities for improvement do you see?

3. What improvements strategies worked well last year, which ones didn’t work as well or weren’t implemented?

4. What are some actions (improvement strategies) that you might consider implementing in your area to positively improve future core indicator results for this Mission Goal for the coming year? (This list will be prioritized.)

5. For those Core Indicators and Measures that do not have identified standards, what should they be? What additional information would you like to have to set more ideal standards? For those Core Indicators and Measures that do have standards, are they still appropriate?

6. Are there any modifications that should be made to the Core Indicators? What are they?
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