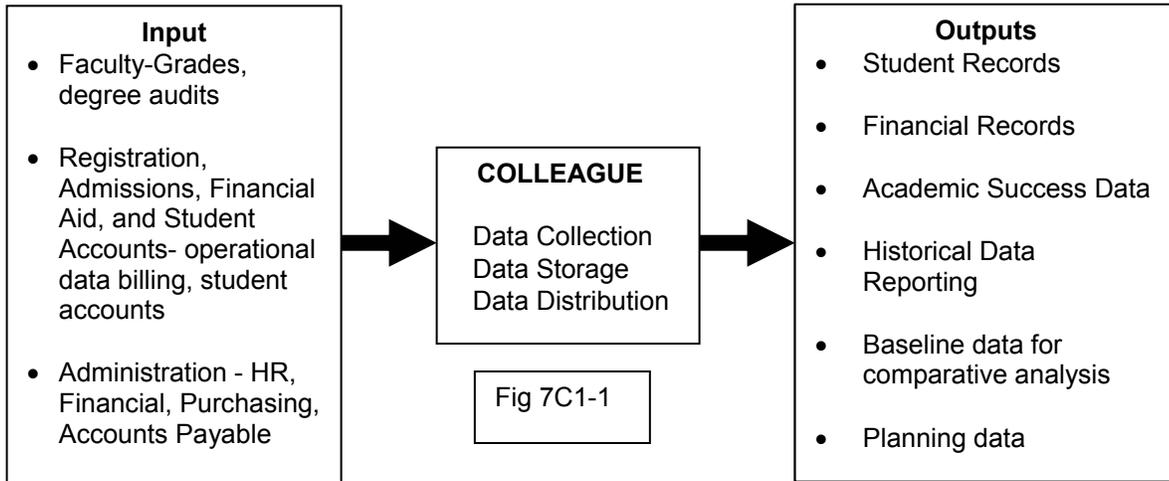


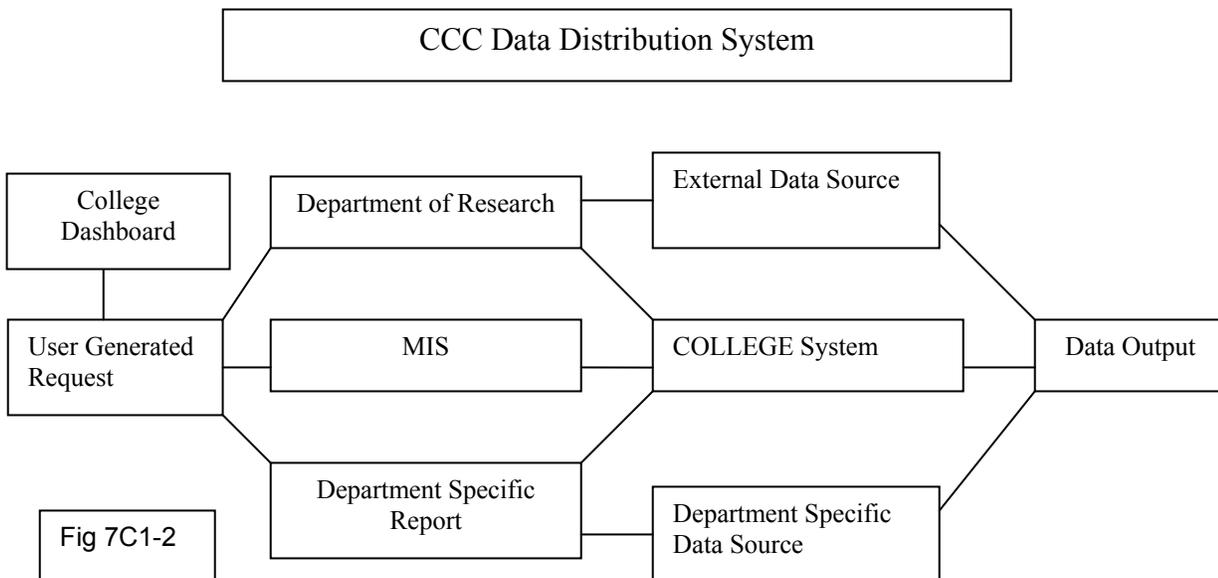
AQIP Category 7: Measuring Effectiveness

7C1 Data Collection, Processing, Storage and Distributes

Central Community College uses Colleague as a centralized data collection depository and retrieval system for information relating to students, human resources, and financial services. Figure 7C1-1 describes the types of data inputs and outputs processed through the Colleague system.



As shown above, the Colleague system serves as the data warehouse for the College. To effectively use the data, the system has the ability to retrieve and distribute the data collected. The data distribution system is somewhat more diverse in its structure (Fig 7C1-2). Based on their needs, requesting stakeholders may access data in multiple ways. The type of data requested determines, in most cases, who should approve access to the needed information. The College is in the process of developing a dashboard system that will provide data users direct access to commonly used data reports.



As indicated in figure 7C1-2, if data is not available on COLLEAGUE or in a department specific database, the College has access to multiple external databases that improve the scope of the data available to decision makers. CCC accesses information from multiple databases including the following:

- National Student Clearing House (NSCH) – student migration and persistence data
- CC Benefits – socioeconomic impact, occupational forecasting, and demographic data
- Community College Survey of Student Engagement (CCSSE) – comparison data on student satisfaction factors
- Community College Benchmark Project (CCBP) – comparison data on key performance data of similar two year colleges in the central United States
- Nebraska Department of Education – demographic data on high school students
- The Nebraska Coordinating Commission – comparison of performance data on other Nebraska postsecondary institutions

7C2 Measures CCC uses for tracking effectiveness?

Figure 7C2-1 indicates the primary data sources CCC uses to analyze and track effectiveness. The College links all key performance measures directly with current planning goals.

PLANNING GOAL FOR 2005/2006	SOURCES USED TO TRACK AND COMPARE DATA				
	Internal or External Surveys	State or National Reporting	Internal Database	External Database	Comparative Database
Goal 1. Revenue Sources - Improve the financial status of Central Community College by identifying new dependable revenue sources.	X	X	X		X
Goal 2. Prioritized Planning - Develop a planning process that prioritizes human resource adjustments, equipment needs, service additions or deletions, and other resources needed to improve the effectiveness, quality, and efficiencies of instructional and support service programs.		X	X	X	X
Goal 3. Enrollment Management – <ul style="list-style-type: none"> • Develop and implement a marketing and recruiting strategy that results in Central Community College becoming central Nebraska’s college of first choice • Develop measures to predict program, course, and service capacities • Identify crucial student retention issues and develop strategies to improve student goal achievement 		X	X		X
Goal 4. Leadership Development - Develop and implement a plan for leadership and professional development for full- and part-time employees.	X	X	X		

Planning Goal for 2005/2006	Internal or External Surveys	State or National Reporting	Internal Database	External Database	Comparative Database
Goal 5. Improving Teaching and Learning - Place greater emphasis on analyzing and improving teaching, learning, diverse cultural and learning styles, and other critical instructional support processes.	X	X	X	X	X
Goal 6. Infrastructure – Assess for effectiveness and efficiency, and develop planning systems to develop and maintain infrastructures and processes designed to adapt to the higher learning needs of a changing society and to achieve the College mission through: <ul style="list-style-type: none"> • Effective learning systems • Responsive student support systems • Employees who contribute fully and effectively • An inviting physical plant. 	X	X	X	X	X

Figure 7C2-1

Central Community College has collected and analyzed data from internal stakeholders throughout its history. This has become even more pronounced since the implementation of the AQIP initiative within the institution. Central Community College uses the College Issues Questionnaire as one of its key performance measures for performance tracking. This internal stakeholder satisfaction survey, along with others, provides a significant amount of data to aid CCC to set its quality improvement goals. These studies directly involve stakeholders and the findings provide vital information central to the data-based decision-making and the planning process at Central Community College. Figure 7P3-1 lists the other primary sets of data to define stakeholder perceptions. These measures, along with other performance indicators (See Sections 1R1/1R2/1R3 and 1R4), form the body of data used in CCC’s data based planning processes.

7P1 Selecting, Managing, and Using Information and Data

Central Community College has developed, and continues to evolve, its data management systems based on both internal and external requirements and the clear existence of a need for data. Since 2002, one of the College’s action projects, Improve Data Based Decision Making, has focused on how to better improve the collection, distribution and use of data. The list below outlines the current requirements that data must meet to be selected for ongoing tracking and integration into college planning and reporting processes:

- Meets a requirement for state level reporting
- Meets a requirement for national level reporting
- Assists in defining processes associated with current or proposed action projects
- Assists in defining the performance of systems supporting the College mission, vision, objectives, and goals
- Assists in defining the current or potential state of processes or systems within the College that have the potential for improvement and can positively impact the College’s stakeholders

During the development of its measures, the College collects input from its internal and external stakeholders to define the need for new measures.

Once the College selects a measure, it is used in one of four primary ways:

- College level mid-range and long-range planning (See Step 1 of the College Planning Model, Figure 5C2-1)
- Campus- and department-level planning
- Quality Improvement activities including action projects
- Supporting the improvement of teaching and student learning (See Section 1R1-4)

To support this process, the College President and the College Cabinet lead the College in using data to drive improvement actions. Various College committees, councils, teams, and individuals identify specific performance measures and establish standards related to improving processes. Additionally, in the past three years the College has revised its college level planning process to require process improvement proposals to be quantified or qualified with supporting data prior to being approved. In this way, the College uses formative data driven process adjustment in selecting institutional objectives and data-based measures for validating appropriateness for actions taken.

7P2 Determining the Information and Data Needs of Departments and Units

The Data-Based Decision Making Team focuses on determining the data needs of departments and divisions within the College and on improving the use and distribution of the data that drives the College's decision making. In the second year of its existence, the team determined that the College had not developed a structured way to decide what data different individuals and departments in the College needed. Prior to the team's development resulting from the strategy forum, the College developed data requirements using a deductive technique which focused on the logical needs of the department in question. The used data focused on supporting internal operations and usually had ties to internal and external reporting processes. During the 2003-2004 college-year, the team surveyed the College departments to determine what current data shortcomings existed. As a result, the College piloted several initiatives in an attempt to improve access to data needed for decision making at all levels in the College. The College has implemented the following college wide actions:

- Distributing the Program Core Performance Indicators
- Distributing the College Key Performance Indicators
- Developing shared folders in Outlook for posting critical data such as the results of the Employee Issues/ Satisfaction Survey
- Posting Quality Improvement Council and other action teams updates on improvement actions
- Developing a College Dashboard to provide access to commonly requested data (Fall 2005)
- Implementing of performance monitoring tools for key decision making committees.

7P3 How CCC determines the needs and priorities for comparative information

As stated in 7P1, CCC determines data needs based on internal or external reporting, College planning, or quality improvement needs. Over the past three years, the College has participated in multiple (See Figure 7P3-1) national and state level standardized studies that provide the College with directly comparable data. The requirements for comparative data are nearly identical to those listed in section 7P1. The two key differences include the need for the data to be collected in an identical fashion at all participating institutions, and that the institutions or organizations participating in the study must have similar characteristics for comparison. The College ties currently collected comparative data to key measurements in the College Key Performance indicators and quantifies aspects of the College's mission and vision. The College categorizes its comparative data into four primary groups:

- Internal comparisons – FTE, headcount, completions, trends analysis, etc.
- State peer data – headcount, awards given, migration to and from other institutions, etc.
- National peer data - Department of Education reports, National Study of Faculty and Students, etc.
- Direct data from College program advisory boards, industry sources, the Presidents advisory board, etc.

The table below shows the major comparative data studies CCC participates in:

CCC Comparative Data		
Status	Data Profile/Name	Data Category
2002-Current	Community College Survey of Student Engagement	National peer and state peer (Consortium)
Current	Faces of the Future	National comparison
2003-Current	National Survey of Faculty and Staff	National comparison
1970-Current	Program Advisory Committees	Direct data from college advisory boards
2002- Current	Employee Issues Survey (Gap analysis)	Internal comparisons/trends analysis
Ongoing	IPEDS	National and state peers
Ongoing	NEEDS	State peer data
2003-Current	Community College Benchmark Project	State and national peers
2004-Current	Legislative Report 174/5	State migration/ collaboration study

Figure 7P3-1

7P4 Analyzes and Sharing Information and Data on Overall Performance

Central Community College outlines its primary methods for analyzing overall performance data in the College planning process (See Category 5). This first step of this planning process defines the current state of the system in question by analyzing data from currently tracked measures of performance. The bulk of the data analyzed comes from the College's Program Core Performance Measures or the Colleges Key Performance Indicators database. The design of these documents uses performance standards identified as widely accepted measures of performance and reflects performance trends over multiple years. Figure 7P4-1 displays various data groupings and the types of analysis used to analyze each against institutional standards.

Analysis Techniques	
Analysis Technique	Representative Measure/Data Set
Trend analysis	Enrollment, FTE, program awards, etc
Gap analysis	Employee Issues Survey
Distribution analysis	Math completion rates, population studies
Point in time analysis	CLARUS marketing study
Design of Experiments and Hypothesis Testing	College Black and Green Belt Six Sigma Projects – Motor Pool Optimization Project
Comparative analysis	National and state data – i.e. CCSSE
Projection analysis	College Socioeconomic Impact Study

Figure 7P4-1

To share the results of the College level data analysis, CCC distributes the information in multiple ways including web based shared files, review of findings in small groups and campus based meetings, monthly and annual reports, and College wide newsletters from the Quality Improvement Council (See Section 7P2). Additionally, 35 percent of all full-time employees and representation from the student body and part-time employees are directly involved on one or more of the College's action project teams or the Quality Improvement Council. This high degree of involvement has improved the understanding of data-based decision making process in general and improved the internal stakeholders understanding of the current performance of the College. To further share data, the College has initiated a project that involves all full-time employees in analyzing college level performance data. Category 8 outlines this process (See SPARKS process). In general, the College designed the SPARKS process to integrate CCC's systems portfolio, the data contained within, and a broad based employee involvement into the College's data analysis and planning process. Additionally, the College publishes monthly and annual reports through the College web page, hard copies, and the College's E-mail system.

7P5 Aligning Data Analysis with Institutional Goals and Objectives

The College uses multiple methods to ensure analysis and data used aligns with CCC's goals for student learning and overall institutional objectives. The College developed its Core Effectiveness Indicators around its strategic processes reported in the College Mission Statement. The Program Key Performance Indicators compile data trends designed to assist in analyzing 11 direct and indirect measures of student learning (See Table 1R1-5 in Category 1). The College Placement Report shares data on indirect measures of student learning. Faculty teams from each program design survey questions that collect student learning related information on their specific program. The College Executive Vice President shares these data and analysis with the College Cabinet, the Educational Services Committee, program administrators and faculty, and other interested persons. The Data Based Decision Making Team acts as an oversight groups to aid other action teams and departments in aligning their use of data. In addition, the College planning team (See Figure 5C2-1) has integrated a specific step in the development of College goals that evaluates how each independent goal supports the nine AQIP criteria, the College mission, and College vision statements. Additionally, the College Executive Vice President provides monthly and annual data updates to the College Board of Governors, the Educational Services Committee, and the College and Campus Cabinets. The College continues to review the process of alignment of data and anticipates greater refinement CCC gains more experience in continuous quality improvement.

7P6 Ensuring the Effectiveness of the CCC Information System

Central Community College reviews its data systems continuously. The MIS director and the information management team continually evaluate and track the need for hardware replacement. The MIS team has developed replacement cycles for all key hardware systems. Additionally, campus based technology teams evaluate local software and hardware upgrade needs for specific applications. For example, the Hasting campus team has been working on expanding the smart classroom project to help integrate data technology into more classroom environments. In addition, the College recently upgraded its network when moving to a new facility and with the acquisition of new servers to increase band width and overall capability. To maintain the integrity of its system, CCC considers security and reliability paramount. The College Cabinet has committed considerable resources to safeguard the systems from hacking and intrusion. The MIS department employs several experts whose primary responsibilities include the constant monitoring of the system for signs of tampering and the integration of software and practices that decrease the College's vulnerability. The MIS team also collaborates with CCC's data systems provider DATATEL to ensure a high degree of security and effective data storage and retrieval. To ensure the accuracy of the database, the College performs an annual audit to check key performance measures warehoused in the College database.

7P7 Ensuring Meaningful Measures of Effectiveness

Central Community College continually reviews its processes to determine the utility of its measures of effectiveness and to ensure acceptable completion of meaningful work. Figure 7P7-1 below provides some of the data sets used to monitor and evaluate effectiveness of current college measurement tools.

Data Set	Reviewed
Student Learning Outcomes	Annually, monthly by Education Services Committee
Employee Interest/Satisfaction Survey	Annually, by College Cabinet, and the Quality Improvement Council
Key Performance Indicators	Ongoing-monthly by all leadership teams
Comparative Performance Studies	Annually
Financial and Student Records	Annually by external auditors

Figure 7P7-1

Additionally, the development of the processes described in Figure 5C2-1 provides internal quality checks assisted by monitoring of the office of Research and College Effectiveness.

7R1 Evidence that the CCC System for Measuring Effectiveness Meets the Institution’s Needs in Accomplishing Its Mission and Goals

Central Community College’s effectiveness measurements system has grown significantly over the past three years. The number of measures the College uses to implement continuous quality improvement has likewise expanded. Table 7R1-1 lists some of the key measures used to measure effectiveness and improvement.

Measure	Data	Out Come
Total FTE	Pending study in year 04/05 (See Category 1)	College enrollment
Math Retention Rates	4% increase in math retention 2002 to 2005.	Student success
Assessment of Student Learning (Rubric Score)	22 Programs achieved mid level or higher (See 1P11)	Student success
GPA of University of Nebraska Transfer Students	Former CCC students who transfer into the state university system constantly have higher GPA’s than the average university student (See 1P12).	Student goal attainment
Placement Rate	<i>Pending study in Spring 05</i>	Student goal attainment

Figure 7R1-1

Central Community College uses the College Issues Questionnaire to determine employees perceptions of how well the internal measurement systems work. The questionnaire contains four questions that ask employees to rate the current an ideal status of the College in regards to measuring the effectiveness and the current state of the College’s data system. Figure 7R1-2 below indicates the average indicated decrease in the gap from the baseline year 2002 to the three year average. Although CCC recognizes the change in gap is relatively small, the overall decrease in gap provides some indication the efforts to date are having a generally positive impact on how employees view the internal measurement systems.

Question 40: My ability to access institutional data

Question 48: The ability of the College to collect store and manage data

Question 49: The value of the tools used to measure institutional effectiveness

Question 52: The ability of employees to measure the effectiveness of processes

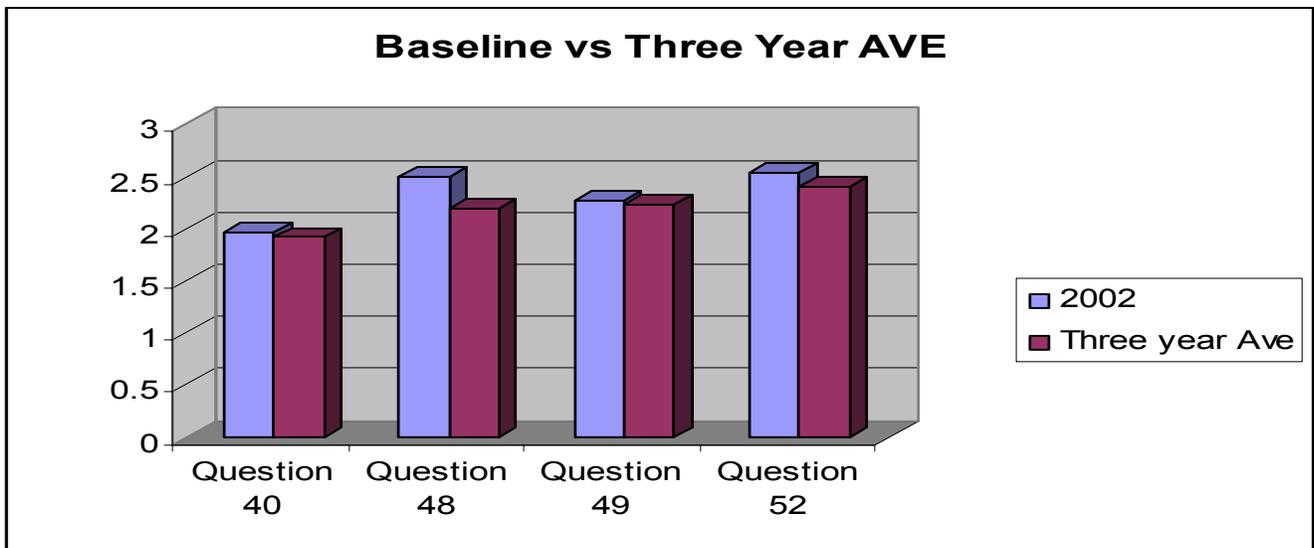


Figure 7R1-2

7R2 Regarding 7R1, How CCC Results Compare to the Results of Other Higher Education Institutions

The College uses the Community College Survey of Student Engagement and the National Community College Benchmark Project as primary comparative data sources to define the effectiveness of its measurement system. Table 7R2-1 below shares excerpts of some of the comparisons CCC from the 2004/2005 CCSSE environmental scan.

Item	CCC	Other Institutions participating in the study
College Activities <i>1=low, 4=high</i>		
Talked about career plans with an instructor or advisor	2.52	2.47
Discussed grades or assignments with an instructor.	2.86	2.68
Opinions About Your School <i>1=Very little, 2=Some, 3=Quite a bit, 4=Very much</i>		
Helping you cope with your non-academic responsibilities (work, family, etc.)	1.94	1.84
Providing the financial support you need to afford your education	2.56	2.36
Quality Relationships 1= unfriendly, unsupportive 7=friendly, supportive		
Relationships with other students	5.42	5.48
Relationships with administrative personnel and offices	5.33	4.91
Student Services Frequency 1=little, 2=some, 3= Quite a bit, 4=Very much Satisfaction 0=N.A., 1=Not at all, 2=Somewhat, 3=Very		
Frequency: Academic advising/planning	1.88	1.71
Frequency: Financial aid advising	2.03	1.82
Frequency: Transfer credit assistance	1.59	1.54
Satisfaction: Academic advising/planning	2.38	2.18
Satisfaction: Career counseling	2.10	2.02
Satisfaction: Job placement assistance	1.94	1.77
Satisfaction: Financial aid advising	2.46	2.19
Satisfaction: Transfer credit assistance	2.18	2.04
Educational and Personal Growth 1=Very little, 2=Some, 3=Quite a bit, 4=Very much		
Acquiring job or work-related knowledge and skills	2.78	2.51
Gaining information about career opportunities	2.66	2.43
College Experienced 1=Poor 4=Excellent		
How would you evaluate your entire educational experience this College	3.18	3.15

Table 7R2-1

Trends in headcount, FTE, first-time first year freshman, part time student status, and full time student status provide some of the most significant pieces of comparative data available. Figure 7R2-2 and 7R2-3 below shows trends in several of Central Community College key measures: first time first year freshmen, full time students, and full time equivalent students. Central Community College typically compares these factors to similar institutions in Nebraska and surrounding states. Central Community College's analysis of this data aided the College in identifying systematic trends and problems specific to CCC.

Please note Figures 7R2-2 and 7R2-3 show that over the past ten years, the cumulative headcount has declined as the total FTE has increased. Increased full time students, the credits they generate, and a declining headcount of part time students has contributed to these conflicting numbers.

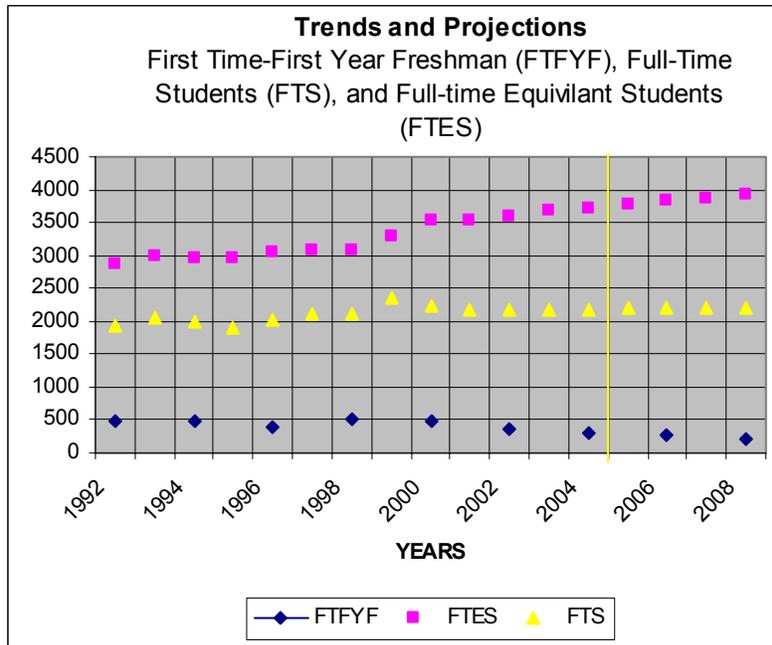


Figure 7R2-2

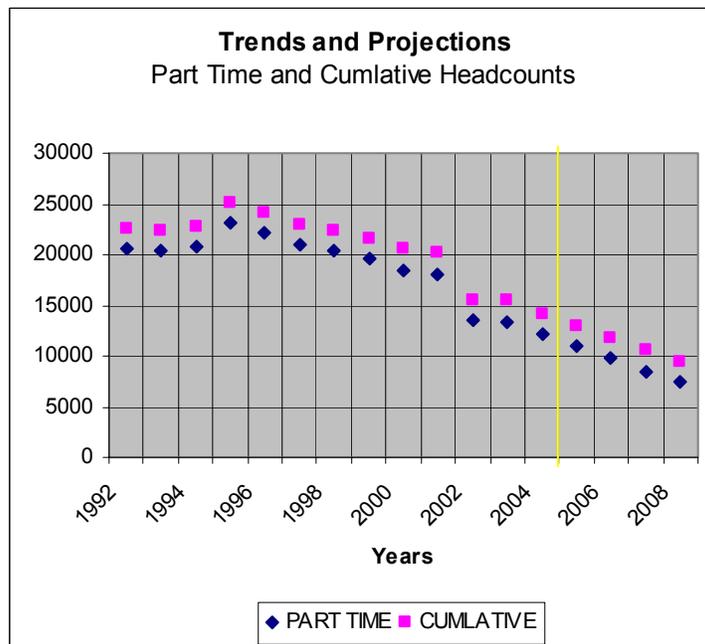


Fig 7R2-3

711 How CCC Improves Its Measurement Processes and Systems

Central Community College used the continuous improvement model as a basis for developing its College Planning Model (See Figure 5C2-1) . This model has designed specific provisions for evaluating current measures of effectiveness and developing new performance measures as needed. The College added the SPARKS process (See Category 8) as the newest component to the College planning process. The College designed this component to provide opportunity for full time employees to use the data contained in the Systems Portfolio to generate suggestions for College process planning and improvement. The institution expects the planning process to continue to evolve along with the Colleges measurements of effectiveness as more internal stakeholders participate in college planning and learn the constructs of the AQIP continuous improvement process.

712 How CCC set targets for improvement

As stated in 711, CCC uses its planning model as the primary process to develop new performance measures. But as more employees participate in the College planning process, including SPARKS, action project teams, etc., the process of selecting new targets for improving college measures will evolve. The College has identified the following improvement initiatives for implementation:

- Implementation of the College Dashboard during fall 2005.
- Pilot the SPARKS process during early fall 2005.
- Participate in new standardized comparable data surveys for student and employee satisfaction and comparative analysis during 2005-2006.