



National Initiative for Leadership & Institutional Effectiveness

Grand Rapids Community College Grand Rapids, Michigan

Personal Assessment of the College Environment (PACE)
Analysis by Employee Group, Division and Ethnicity

by

Kyle Verbosh
Antonio Bush
Jingjing Zhang

The National Initiative for Leadership
& Institutional Effectiveness

North Carolina State University

November 2011

National Initiative for Leadership and Institutional Effectiveness

Audrey Jaeger, PhD, Co-executive Director
Paul Umbach, PhD, Co-executive Director
Dawn Crotty, Executive Assistant
Jingjing Zhang, Director of Research
Antonio Bush, Researcher
Kyle Verbosh, Researcher

Phone: 919-515-8567
919-515-6289
Fax: 919-515-6305
Web: <http://ced.ncsu.edu/ahe/nilie>

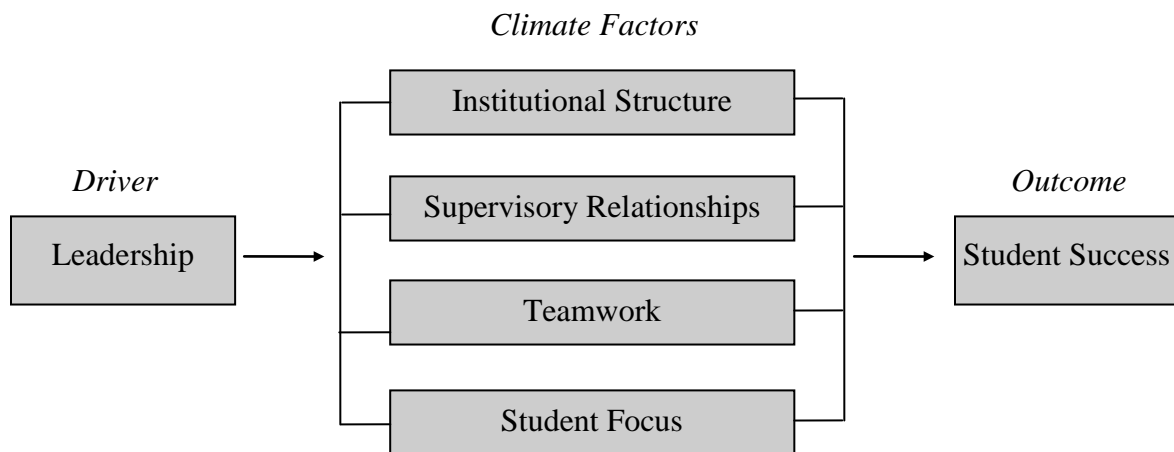
College of Education
North Carolina State University
300 Poe Hall, Box 7801
Raleigh, NC 27695-7801

EXECUTIVE SUMMARY

In November 2011, the Personal Assessment of the College Environment (PACE) survey was administered to 694 employees at Grand Rapids Community College (GRCC). Of those 694 employees, 364 (52.4%) completed and returned the instrument for analysis. The purpose of the survey was to obtain the perceptions of personnel concerning the college climate and to provide data to assist GRCC in promoting more open and constructive communication among faculty, staff, and administrators. Researchers at the National Initiative for Leadership and Institutional Effectiveness (NILIE) and representatives of GRCC collaborated to administer a survey that would capture the opinions of personnel throughout the college.

In the PACE model, the leadership of an institution motivates the Institutional Structure, Supervisory Relationships, Teamwork, and Student Focus climate factors toward an outcome of student success and institutional effectiveness.

Figure 1. The PACE Model



NILIE has synthesized from the literature four leadership or organizational systems ranging from coercive to collaborative. According to Likert (1967), the Collaborative System, which he termed System 4, generally produced better results in terms of productivity, job satisfaction, communication, and overall organizational climate. The other systems were Consultative (System 3), Competitive (System 2) and Coercive (System 1). In agreement with Likert, NILIE has concluded that Collaborative (System 4) is the climate to be sought as opposed to existing naturally in the environment. Likert discovered that most of the organizations he studied functioned at the Competitive or Consultative levels. This has been NILIE's experience as well, with most college climates falling into the Consultative system across the four factors of the climate instrument.

Of the more than 120 studies completed by NILIE, few institutions have been found to achieve a fully Collaborative (System 4) environment, although scores in some categories may fall in this range for some classifications of employees. Thus, if the Collaborative System is the ideal, then this environment is the one to be sought through planning, collaboration, and organizational development.

Employees completed a 46-item PACE instrument organized into four climate factors as follows: Institutional Structure, Supervisory Relationships, Teamwork, and Student Focus. They also completed a Customized section designed specifically for Grand Rapids Community College. Respondents were asked to rate the four factors on a five-point Likert-type scale. The instrument was designed to compare the existing climate at GRCC to a range of four managerial systems found to exist in colleges and to a Norm Base of 60 community colleges across North America. The information generated from the instrument has been developed into a research report that can be used for planning and decision-making in order to improve the existing college climate.

The PACE instrument administered at GRCC included 56 total items. Respondents were asked to rate items on a five-point satisfaction scale from a low of “1” to a high of “5.” Of the 56 items, none fell within the least favorable category identified as the Coercive range (rated between 1 and 2) or within the Competitive range (rated between 2 and 3). Forty-four fell within the Consultative range (rated between 3 and 4), and twelve composite ratings fell within the Collaborative range (rated between 4 and 5).

At GRCC, the overall results from the PACE instrument indicate a healthy campus climate, yielding an overall 3.73 mean score or high Consultative system. The Student Focus category received the highest mean score (4.03), whereas the Institutional Structure category received the lowest mean score (3.38). When respondents were classified according to Division at GRCC, the composite ratings were as follows: Academic and Student Affairs (3.72), Finance & Administration (3.79), Information Technology (3.55), and President's Office (includes College Advancement, Communication, & General Counsel) (3.77). When respondents were classified according to Employee Group Classification at GRCC, the composite ratings were as follows: Meet and Confer (3.85), CEBA (3.67), ESP (3.74), Faculty/Job Training/Preschool (3.59), and Campus Police (3.73). When respondents were classified according to their Race/Ethnicity at GRCC, the composite ratings were as follows: Black, not Hispanic or Latino (3.63), Hispanic or Latino, of any race (3.81), White, not Hispanic or Latino (3.75) and Other (Including American Indian or Alaska Native, not Hispanic or Latino; Asian, not Hispanic or Latino; Native Hawaiian or Other Pacific Islander, not Hispanic or Latino, and Two or more races, not Hispanic or Latino) (3.71).

Of the 46 standard PACE questions, the top mean scores have been identified at Grand Rapids Community College.

- The extent to which I feel my job is relevant to this institution's mission, 4.34 (#8)
- The extent to which students receive an excellent education at this institution, 4.30 (#31)
- The extent to which my supervisor expresses confidence in my work, 4.20 (#2)
- The extent to which this institution prepares students for further learning, 4.17 (#37)
- The extent to which this institution prepares students for a career, 4.12 (#35)
- The extent to which professional development and training opportunities are available, 4.11 (#46)
- The extent to which student ethnic and cultural diversity are important at this institution, 4.08 (#18)

- The extent to which my supervisor is open to the ideas, opinions, and beliefs of everyone, 4.07 (#9)
- The extent to which students are satisfied with their educational experience at this institution, 4.02 (#42)
- The extent to which I am given the opportunity to be creative in my work, 4.00 (#39)

Of the 46 standard PACE questions, the bottom mean scores have been identified as areas in need of improvement at Grand Rapids Community College.

- The extent to which I am able to appropriately influence the direction of this institution, 3.02 (#15)
- The extent to which decisions are made at the appropriate level at this institution, 3.10 (#4)
- The extent to which a spirit of cooperation exists at this institution, 3.15 (#25)
- The extent to which this institution is appropriately organized, 3.16 (#32)
- The extent to which information is shared within this institution, 3.19 (#10)
- The extent to which open and ethical communication is practiced at this institution, 3.22 (#16)
- The extent to which I have the opportunity for advancement within this institution, 3.30 (#38)
- The extent to which institutional teams use problem-solving techniques, 3.35 (#11)
- The extent to which my work is guided by clearly defined administrative processes, 3.38 (#44)
- The extent to which this institution has been successful in positively motivating my performance, 3.42 (#22)

Respondents were also given an opportunity to provide comments about the most favorable aspects and the least favorable aspects of GRCC. The responses provide insight and anecdotal evidence that support the survey questions.

TABLE OF CONTENTS

- Executive Summary1
- Table of Contents4
- List of Tables5
- List of Figures7
- Leadership Research8
- Method12
 - Population12
 - Instrumentation12
 - Reliability and Validity.....13
- Data Analysis14
 - Respondent Characteristics14
 - Comparative Analysis: Overall.....21
 - Comparative Analysis: Division.....26
 - Comparative Analysis: Employee Group35
 - Comparative Analysis: Race/Ethnicity45
- References56

LIST OF TABLES

Table 1. NILIE Four Systems Model.....	9
Table 2. Alpha Coefficients by Climate Category.....	12
Table 3. Response by Self-Selected Division.....	14
Table 4. Response by Self-Selected Employee Group	15
Table 5. Response by Self-Selected Race/Ethnicity	15
Table 6. Proportion of Responses Across Demographic Classifications.....	19
Table 7. Grand Rapids Community College. Climate as Rated by All Employees.....	21
Table 8. Comparative Mean Responses: Institutional Structure.....	23
Table 9. Comparative Mean Responses: Supervisory Relationships.....	24
Table 10. Comparative Mean Responses: Teamwork	24
Table 11. Comparative Mean Responses: Student Focus.....	25
Table 12. Comparative Mean Responses: Customized.....	25
Table 13. Mean Climate Scores as Rated by Division.....	26
Table 14. Priorities for Change: Academic and Student Affairs	32
Table 15. Priorities for Change: Finance & Administration.....	33
Table 16. Priorities for Change: Information Technology.....	33
Table 17. Priorities for Change: President’s Office.....	34
Table 18. Mean Climate Scores as Rated by Employee Group.....	35
Table 19. Priorities for Change: Meet and Confer.....	41
Table 20. Priorities for Change: CEBA	42
Table 21. Priorities for Change: ESP	42
Table 22. Priorities for Change: Faculty/Job Training/Preschool	43
Table 23. Priorities for Change: Police.....	44
Table 24. Mean Climate Scores as Rated by Race/Ethnicity.....	46

Table 25. Priorities for Change: Black, not Hispanic or Latino52

Table 26. Priorities for Change: Hispanic or Latino, of any race53

Table 27. Priorities for Change: White, not Hispanic or Latino54

Table 28. Priorities for Change: Other (Including American Indian or Alaska Native, not Hispanic or Latino; Asian, not Hispanic or Latino; Native Hawaiian or Other Pacific Islander, not Hispanic or Latino, and Two or more races, not Hispanic or Latino)55

LIST OF FIGURES

Figure 1. The PACE Model	1
Figure 2. Proportion of Total Responses by Division.....	16
Figure 3. Proportion of Total Responses by Employee Group.....	17
Figure 4. Proportion of Total Responses by Race/Ethnicity.....	18
Figure 5. GRCC Climate as Rated by All Employees	22
Figure 6. Mean Climate Scores as Rated by Division	26
Figure 7. Mean Scores of the Institutional Structure Climate Factor by Division	27
Figure 8. Mean Scores of the Supervisory Relationships Climate Factor by Division	28
Figure 9. Mean Scores of the Teamwork Climate Factor by Division	29
Figure 10. Mean Scores of the Student Focus Climate Factor by Division.....	30
Figure 11. Mean Scores of the Customized Climate Factor by Division	31
Figure 12. Mean Climate Scores as Rated by Employee Group.....	35
Figure 13. Mean Scores of the Institutional Structure Climate Factor by Employee Group.....	36
Figure 14. Mean Scores of the Supervisory Relationships Climate Factor by Employee Group..	37
Figure 15. Mean Scores of the Teamwork Climate Factor by Employee Group	38
Figure 16. Mean Scores of the Student Focus Climate Factor by Employee Group	39
Figure 17. Mean Scores of the Customized Climate Factor by Employee Group.....	40
Figure 18. Mean Climate Scores as Rated by Race/Ethnicity	45
Figure 19. Mean Scores of the Institutional Structure Climate Factor	47
Figure 20. Mean Scores of the Supervisory Relationships Climate Factor	48
Figure 21. Mean Scores of the Teamwork Climate Factor.....	49
Figure 22. Mean Scores of the Student Focus Climate Factor	50
Figure 23. Mean Scores of the Customized Climate Factor	51

LEADERSHIP RESEARCH

The term culture refers to a total communication and behavioral pattern within an organization. Yukl (2002) defines organizational culture as “the shared values and beliefs of members about the activities of the organization and interpersonal relationships” (p. 108). Schein (2004) observes that culture “points us to phenomena that are below the surface, that are powerful in their impact but invisible and to a considerable degree unconscious. In that sense culture is to a group what personality is to an individual” (p. 8). Culture as a concept, then, is deeply embedded in an organization and relatively difficult to change; yet it has real day-to-day consequences in the life of the organization. According to Baker and Associates (1992), culture is manifest through symbols, rituals, and behavioral norms, and new members of an organization need to be socialized in the culture in order for the whole to function effectively.

Climate refers to the prevailing condition that affects satisfaction (e.g., morale and feelings) and productivity (e.g., task completion or goal attainment) at a particular point in time. Essentially then, climate is a subset of an organization’s culture, emerging from the assumptions made about the underlying value system and finding expression through members’ attitudes and actions (Baker & Associates, 1992).

The way that various individuals behave in an organization influences the climate that exists within that organization. If individuals perceive accepted patterns of behavior as motivating and rewarding their performance, they tend to see a positive environment. Conversely, if they experience patterns of behavior that are self-serving, autocratic, or punishing, then they see a negative climate. The importance of these elements as determiners of quality and productivity and the degree of satisfaction that employees receive from the performance of their jobs have been well documented in the research literature for more than 40 years (Baker & Associates, 1992).

NILIE’s present research examines the value of delegating and empowering others within the organization through an effective management and leadership process. Yukl (2002) defined leadership as “the process of influencing others to understand and agree about what needs to be done and how it can be done effectively, and the process of facilitating individual and collective efforts to accomplish the shared objectives” (p. 7). The concept of leadership has been studied for many years in a variety of work settings, and there is no one theory of management and leadership that is universally accepted (Baker & Associates, 1992). However, organizational research conducted to date shows a strong relationship between leadership processes and other aspects of the organizational culture. Intensive efforts to conceptualize and measure organizational climate began in the 1960s with Rensis Likert’s work at the University of Michigan. A framework of measuring organizational climate was developed by Likert (1967) and has been adapted by others, including McClelland and Atkinson, as reported in Baker and Glass (1993).

The first adaptation of Likert’s climate concepts research to higher education organizations was employed at the various campuses of Miami-Dade Community College, Florida, in 1986. A modified version of the Likert profile of organizations was used in a case study of Miami-Dade Community College and reported by Roueche and Baker (1987).

Results of the Miami-Dade study indicated that Likert's four-system theory worked well when applied to a higher education setting. It showed promise not only for measuring climate and responses to leadership style but also for articulating ways both leadership effectiveness and organizational climate could be improved within the institution. Since the Miami-Dade research project, more than 120 institutions have participated in climate studies conducted by NILIE at North Carolina State University. Various versions of the PACE instrument were field-tested through NILIE's efforts, and several doctoral dissertations.

From Likert's original work and research methods, NILIE identified four leadership models and organizational systems ranging from Coercion to Collaboration. The Collaborative System, referred to as System 4, is generally seen as the ideal climate to be achieved, since it appears to produce better results in terms of productivity, job satisfaction, communication, and overall organizational effectiveness (Likert, 1967). The various NILIE research studies have verified that the Collaborative System is the climate to be sought. NILIE's research supports the conclusion that most organizations function between the Competitive (System 2) and Consultative (System 3) levels across the four climate factors of the instrument (i.e., Institutional Structure, Supervisory Relationships, Teamwork, and Student Focus).

Coercion represents the least desirable climate and constitutes a structured, task-oriented, and highly authoritative leadership management style. This leadership style assumes that followers are inherently lazy, and to make them productive, the manager must keep after them constantly. Interestingly, a few employees in almost all organizations evaluated by NILIE hold this view of the organizational climate. However, as a rule, their numbers are too few to have much effect on the overall institutional averages.

In contrast, a Collaborative model is characterized by leadership behaviors that are change-oriented, where appropriate decisions have been delegated to organizational teams, and leaders seek to achieve trust and confidence in the followers. The followers reciprocate with positive views of the leaders. This model is based on the assumption that work is a source of satisfaction and will be performed voluntarily with self-direction and self-control because people have a basic need to achieve and be productive. It also assumes that the nature of work calls for people to come together in teams and groups in order to accomplish complex tasks. This leadership environment is particularly descriptive of the climate necessary for productivity in a higher education environment, especially in the face of present and near future challenges such as new technologies, demands for accountability and the desire to accurately measure learning outcomes.

As the perceptions of the staff, faculty, and administrators approach the characteristics of the Collaborative environment, better results are achieved in terms of productivity and cost management. Employees are absent from work less often and tend to remain employed in the organization for a longer period of time. The Collaborative model also produces a better organizational climate characterized by excellent communication, higher peer-group loyalty, high confidence and trust, and favorable attitudes toward supervisors (Likert, 1967). In addition, various researchers (Blanchard, 1985; Stewart, 1982; Yukl, 2002) suggest that adapting leadership styles to fit particular situations according to the employees' characteristics and developmental stages and other intervening variables may be appropriate for enhancing productivity. Table 1 is a model of NILIE's four-systems framework based on Likert's original work and modified through NILIE's research conducted between 1992 and the present.

Table 1. NILIE Four Systems Model

System 1	System 2	System 3	System 4
Coercive	Competitive	Consultative	Collaborative
Leaders are seen as having no confidence or trust in employees and seldom involve them in any aspect of the decision-making process.	Leaders are seen as having condescending confidence and trust in employees. Employees are occasionally involved in some aspects of the decision-making process.	Leaders are seen as having substantial but not complete confidence and trust in employees. Employees are significantly involved in the decision-making process.	Leaders are seen as having demonstrated confidence and trust in employees. Employees are involved in appropriate aspects of the decision-making process.
Decisions are made at the top and issued downward.	Some decision-making processes take place in the lower levels, but control is at the top.	More decisions are made at the lower levels, and leaders consult with followers regarding decisions.	Decision making is widely dispersed throughout the organization and is well integrated across levels.
Lower levels in the organization oppose the goals established by the upper levels.	Lower levels in the organization cooperate in accomplishing selected goals of the organization.	Lower levels in the organization begin to deal more with morale and exercise cooperation toward accomplishment of goals.	Collaboration is employed throughout the organization.
Influence primarily takes place through fear and punishment.	Some influence is experienced through the rewards process and some through fear and punishment.	Influence is through the rewards process. Occasional punishment and some collaboration occur.	Employees are influenced through participation and involvement in developing economic rewards, setting goals, improving methods, and appraising progress toward goals.

In addition to Likert, other researchers have discovered a strong relationship between the climate of an organization and the leadership styles of the managers and leaders in the organization.

Astin and Astin (2000) note that the purposes of leadership are based in these values:

- To create a supportive environment where people can grow, thrive, and live in peace with one another;
- To promote harmony with nature and thereby provide sustainability for future generations; and
- To create communities of reciprocal care and shared responsibility where every person matters and each person’s welfare and dignity is respected and supported (p. 11).

Studies of leadership effectiveness abound in the literature. Managers and leaders who plan change strategies for their organizations based on the results of a NILIE climate survey are encouraged to review theories and concepts, such as those listed below, when planning for the future.

- The path-goal theory of House (1971, 1996) in which leader behavior is expressed in terms of the leader's influence in clarifying paths or routes followers travel toward work achievement and personal goal attainment.
- The Vroom/Yetton model for decision procedures used by leaders in which the selected procedure affects the quality of the decision and the level of acceptance by people who are expected to implement the decision (Vroom & Yetton, 1973 as discussed in Yukl, 2002).
- Situational leadership theories (see Northouse, 2004; Yukl, 2002).
- Transformational leadership theory (Burns, 1978; Bass, 1985; Astin & Astin, 2000).
- Emotional intelligence theories (Goleman, 1995; Goleman, McKee & Boyatzis, 2002)

In the context of the modern community college, there is much interest in organizational climate studies and their relation to current thinking about leadership. The times require different assumptions regarding leader-follower relations and the choice of appropriate leadership strategies that lead to achievement of organizational goals. This report may help Grand Rapids Community College understand and improve the overall climate by examining perceptions and estimates of quality and excellence across personnel groups. This report may also provide benchmarks and empirical data that can be systematically integrated into effective planning models and change strategies for Grand Rapids Community College.

METHOD

Population

In November 2011, the Personal Assessment of the College Environment (PACE) survey was administered to the staff, faculty, and administrators of Grand Rapids Community College. Of the 694 employees administered the instrument, 364 (52.4%) completed and returned the instrument for analysis. The purpose of the survey was to obtain the perceptions of personnel concerning the college climate and to provide data to assist GRCC in promoting more open and constructive communication among faculty, staff, and administrators. Researchers at the National Initiative for Leadership and Institutional Effectiveness (NILIE) and the Human Resources Office at GRCC collaborated to administer a survey that would capture the opinions of personnel throughout the college.

Employees of GRCC were invited to participate in the survey through an email that contained the survey link and instructions. Follow-up emails were sent during the response period to encourage participation. The survey was up for three weeks. Completed surveys were submitted online and the data compiled by NILIE. The data were analyzed using the statistical package SAS, version 9.1.

Instrumentation

The PACE instrument is divided into four climate factors: Institutional Structure, Supervisory Relationships, Teamwork, and Student Focus. A Customized section developed by Grand Rapids Community College was also included in the administration of the instrument. A total of 56 items were included in the PACE survey, as well as a series of questions ascertaining the demographic status of respondents.

Respondents were asked to rate the various climate factors through their specific statements on a five-point scale from a low of "1" to a high of "5." The mean scores for all items were obtained and compared. Items with lower scores were considered to be high priority issues for the institution. In this way, the areas in need of improvement were ranked in order of priority, thereby assisting in the process of developing plans to improve the overall performance of the institution.

Reliability and Validity

In previous studies, the overall PACE instrument has shown a coefficient of internal consistency (Cronbach's Alpha) of 0.98. Cronbach's alpha coefficient provides an internal estimate of the instrument's reliability. The high coefficient means that participants responded the same way to similar items. The Cronbach's alpha coefficients of internal consistency from July 2009 to July 2011 are shown in Table 2.

Table 2. Alpha Coefficients by Climate Category for PACEs Completed from July 2009 to July 2011 (n=14,365)

Climate Category	Alpha Coefficient
Institutional Structure	0.95
Supervisory Relationships	0.95
Teamwork	0.93
Student Focus	0.91
Overall (1-46)	0.98

Establishing instrument validity is a fundamental component of ensuring the research effort is assessing the intended phenomenon. To that end, NILIE has worked hard to demonstrate the validity of the PACE instrument through both content and construct validity. Content validity has been established through a rigorous review of the instrument's questions by scholars and professionals in higher education to ensure that the instrument's items capture the essential aspects of institutional effectiveness.

Building on this foundation of content validity, the PACE instrument has been thoroughly tested to ensure construct (climate factors) validity through two separate factor analysis studies (Tiu, 2001; Caison, 2005). Factor analysis is a quantitative technique for determining the intercorrelations between the various items of an instrument. These intercorrelations confirm the underlying relationships between the variables and allow the researcher to determine that the instrument is functioning properly to assess the intended constructs. To ensure the continued validity of the PACE instrument, the instrument is routinely evaluated for both content and construct validity. The recent revision of the PACE instrument reflects the findings of Tiu and Caison.

DATA ANALYSIS

A descriptive analysis of the respondents' demographics is presented, followed by an overall analysis of the item and climate factor means and standard deviations. Similar analyses were applied to the items and climate factors by Division and Employee Group Classification. These analyses generated priorities for change in both demographic groupings.

Respondent Characteristics

Of the 694 GRCC employees administered the survey, 364 (52.4%) completed the PACE survey. Survey respondents classified themselves by both Division, Employee Group, and Race/Ethnicity. Caution should be used when making inferences from the data, particularly for subgroups with return rates of less than 60%. Refer to Tables 3, 4, & 5 and Figures 2, 3, & 4.

Table 3. Response by Self-Selected Division Classification

Division	Population	Surveys Returned for Analysis	Percent of Population Represented
Academic and Student Affairs	455	196	43.1%
Finance & Administration	180	50	27.8%
Information Technology	42	29	69.0%
President's Office (includes College Advancement, Communication, & General Counsel)	17	13	76.5%
Did not respond		76	
Total	694	364	52.4%

Table 4. Response by Self-Selected Employee Group Classification

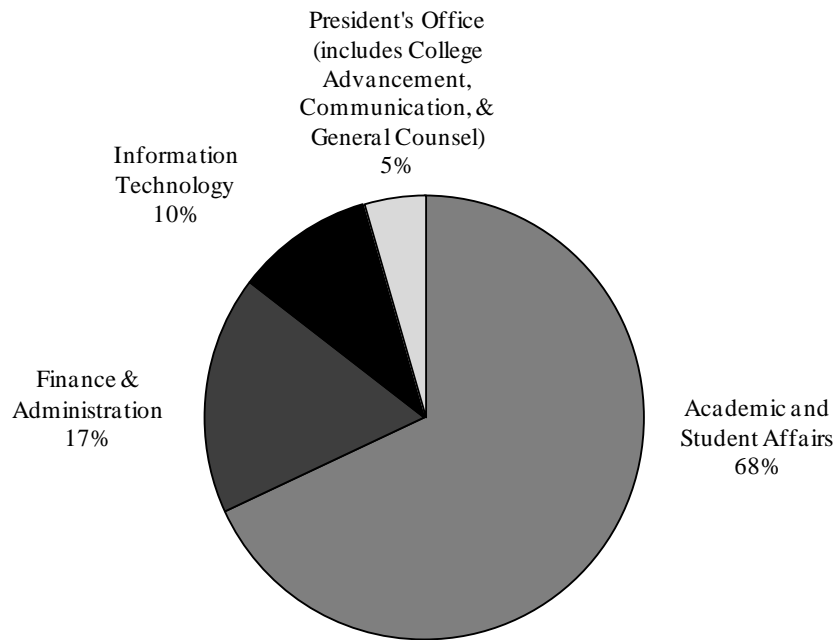
Employee Group	Population	Surveys Returned for Analysis	Percent of Population Represented
Meet and Confer	233	132	56.7%
CEBA	78	24	30.8%
ESP	97	62	63.9%
Faculty/Job Training/Preschool	268	131	48.9%
Campus Police	14	5	35.7%
Executive	4	0	0.0%
Did not respond		10	
Total	694	364	52.4%

Table 5. Response by Self-Selected Race/Ethnicity

Race/Ethnicity	Population	Surveys Returned for Analysis	Percent of Population Represented
Hispanic or Latino, of any race	36	24	66.7%
American Indian or Alaska Native, not Hispanic or Latino	3	1	33.3%
Asian, not Hispanic or Latino	7	2	28.6%
Black, not Hispanic or Latino	78	31	39.7%
White, not Hispanic or Latino	565	275	48.7%
Two or more races, not Hispanic or Latino (Including Native Hawaiian or Other Pacific Islander, not Hispanic or Latino)	5	11	220.0%*
Did not respond		20	
Total	694	364	52.4%

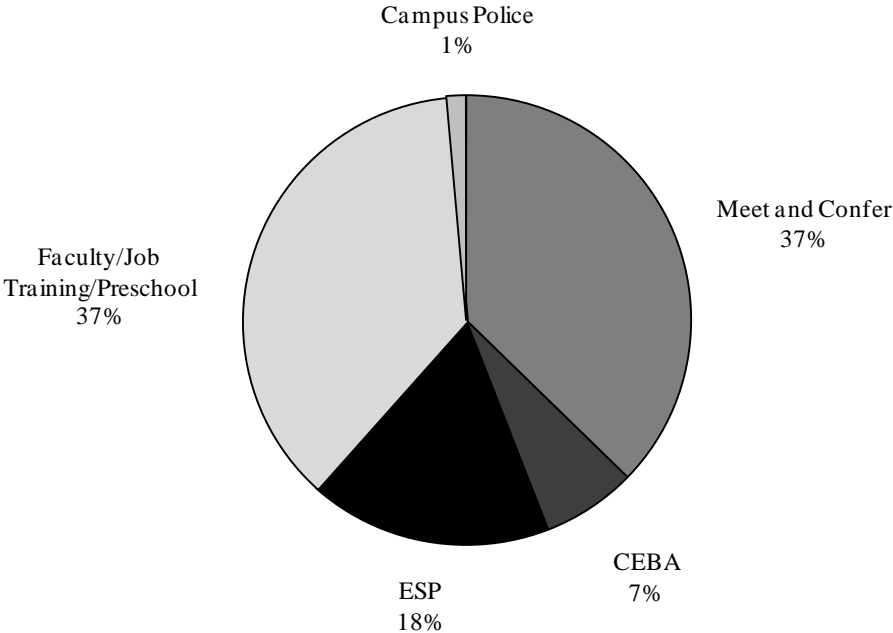
* Self-reported classification resulted in a greater than 100% response for this category.

Figure 2. Proportion of Total Responses by Division



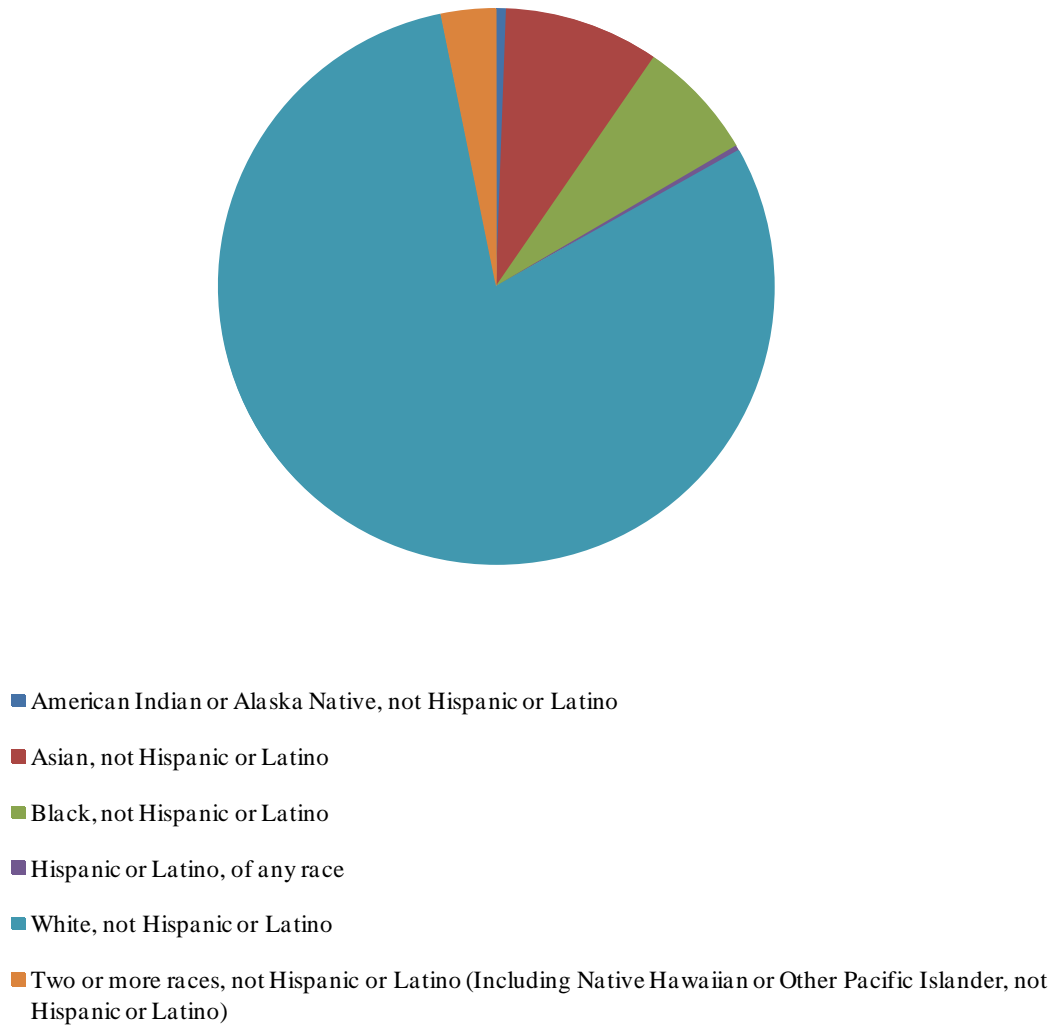
76 individuals did not respond to the Personnel Classification demographic variable.

Figure 3. Proportion of Total Responses by Employee Group



10 individuals did not respond to the Personnel Classification demographic variable.

Figure 4. Proportion of Total Responses by Race/Ethnicity



20 individuals did not respond to the Race/Ethnicity demographic variable.

Table 6 reports the number of respondents across the different demographic classifications and the percentage of the overall responses that each group represents.

Table 6. Proportion of Responses Across Demographic Classifications

Demographic Variable	2011 # of Responses	2011 % of Responses
What is your personnel classification:		
Administrative	48	13.2%
Administrative Support	79	21.7%
Faculty	167	45.9%
Technical/Campus Operations	68	18.7%
Did not respond	2	0.6%
For which division do you work:		
Academic and Student Affairs	196	53.9%
Finance & Administration	50	13.7%
Information Technology	29	8.0%
President's Office (includes College Advancement, Communication, & General Counsel)	13	3.6%
Did not respond	76	20.9%
To which employee group do you belong:		
Meet and Confer	132	36.3%
CEBA	24	6.6%
ESP	62	17.0%
Faculty/Job Training/Preschool	131	36.0%
Campus Police	5	1.4%
Executive	0	0.0%
Did not respond	10	2.8%
What is your length of employment:		
Less than 1 year	36	9.9%
1-4 years	69	19.0%
5-9 years	62	17.0%
10-14 years	83	22.8%
15 or more years	108	29.7%
Did not respond	6	1.7%

Table 6. Continued

Demographic Variable	2011 # of Responses	2011 % of Responses
Please select the race/ethnicity that best describes you:		
Hispanic or Latino, of any race	24	6.6%
American Indian or Alaska Native, not Hispanic or Latino	1	0.3%
Asian, not Hispanic or Latino	2	0.6%
Black, not Hispanic or Latino	31	8.5%
White, not Hispanic or Latino	275	75.6%
Other (including Native Hawaiian or Other Pacific Islander and Two or more races, not Hispanic or Latino)	11	3.0%
Did not respond	20	5.5%
What gender are you:		
Male	152	41.8%
Female	199	54.7%
Did not respond	13	3.6%

Comparative Analysis: Overall

The results from the PACE survey indicate that personnel perceive the composite climate at GRCC to fall toward the upper-range of the Consultative management style. The scale range describes the four systems of management style defined by Likert and adapted by Baker and the NILIE team in their previous in-depth case studies. The four systems are Coercive management style (i.e., a mean score rating between 1.0 and 2.0), Competitive management style (i.e., a mean score rating between 2.0 and 3.0), Consultative management style (i.e., a mean score rating between 3.0 and 4.0), and Collaborative management style (i.e., a mean score rating between 4.0 and 5.0). As previously stated, the Collaborative management style is related to greater productivity, group decision making, and the establishment of higher performance goals when compared to the other three styles. Thus, the Collaborative system is a system to be sought through planning and organizational learning.

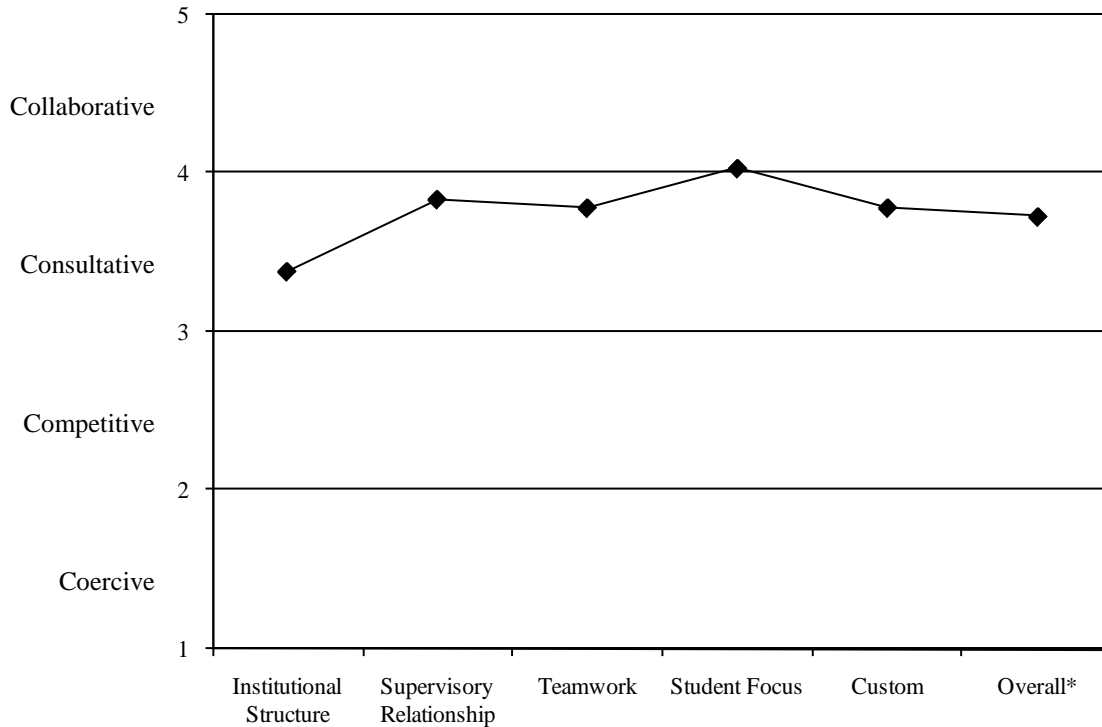
As indicated in Table 7, the Student Focus climate factor received the highest composite rating (4.03), which represented a lower-range Collaborative management environment. The Institutional Structure climate factor received the lowest mean score (3.38) within the middle area of the Consultative management area. Overall, employees rated the management style in the upper-range of the Consultative management area. (See also Figure 5).

Table 7. Grand Rapids Community College Climate as Rated by All Employees

Factor	GRCC
Institutional Structure	3.38
Supervisory Relationships	3.84
Teamwork	3.78
Student Focus	4.03
Customized	3.78
Overall*	3.73

* Overall does not include the customized section developed specifically for GRCC.

Figure 5. Grand Rapids Community College Climate as Rated by All Employees Combined Using Composite Averages



In reviewing each of the items separately, the data shows that of the 56 mean scores, no items fell within the Coercive management style (i.e., a mean score rating between 1.0 and 2.0) or the Competitive management style (i.e., a mean score rating between 2.0 and 3.0). Forty-four fell within a Consultative management style (i.e., a mean score rating between 3.0 and 4.0), and twelve fell within a Collaborative management style (i.e., a mean score rating between 4.0 and 5.0).

The preponderance of Consultative (n=44) scores indicates that the institution has a relatively high level of perceived productivity and satisfaction. Overall results from the survey yielded a mean institutional climate score of 3.73 as indicated in Figure 5.

Tables 8 through 12 report the mean scores of all personnel for each of the 56 items included in the survey instrument. The mean scores and standard deviations presented in this table estimate what the personnel participating in the study at GRCC perceive the climate to be at this particular time in the institution's development. The standard deviation (SD) demonstrates the variation in responses to a given question.

* The overall mean does not reflect the mean scores of the customized items developed specifically for Grand Rapids Community College.

Table 8. Comparative Mean Responses: Institutional Structure

Institutional Structure		Mean (SD)
1	The extent to which the actions of this institution reflect its mission	3.60 (0.97)
4	The extent to which decisions are made at the appropriate level within this institution	3.10 (1.16)
5	The extent to which the institution effectively promotes diversity in the workplace	3.87 (0.98)
6	The extent to which administrative leadership is focused on meeting the needs of students	3.53 (1.13)
10	The extent to which information is shared within the institution	3.19 (1.13)
11	The extent to which institutional teams use problem-solving techniques	3.35 (0.94)
15	The extent to which I am able to appropriately influence the direction of this institution	3.02 (1.14)
16	The extent to which open and ethical communication is practiced at this institution	3.22 (1.14)
22	The extent to which this institution has been successful in positively motivating my performance	3.42 (1.12)
25	The extent to which a spirit of cooperation exists at this institution	3.15 (1.15)
29	The extent to which institution-wide policies guide my work	3.64 (0.89)
32	The extent to which this institution is appropriately organized	3.16 (1.09)
38	The extent to which I have the opportunity for advancement within this institution	3.30 (1.18)
41	The extent to which I receive adequate information regarding important activities at this institution	3.69 (0.96)
44	The extent to which my work is guided by clearly defined administrative processes	3.38 (1.08)
Mean Total		3.38 (0.79)

Table 9. Comparative Mean Responses: Supervisory Relationships

Supervisory Relationships		Mean (SD)
2	The extent to which my supervisor expresses confidence in my work	4.20 (0.96)
9	The extent to which my supervisor is open to the ideas, opinions, and beliefs of everyone	4.07 (1.10)
12	The extent to which positive work expectations are communicated to me	3.69 (0.99)
13	The extent to which unacceptable behaviors are identified and communicated to me	3.66 (0.92)
20	The extent to which I receive timely feedback for my work	3.71 (0.97)
21	The extent to which I receive appropriate feedback for my work	3.75 (0.95)
26	The extent to which my supervisor actively seeks my ideas	3.76 (1.15)
27	The extent to which my supervisor seriously considers my ideas	3.82 (1.14)
30	The extent to which work outcomes are clarified for me	3.69 (0.92)
34	The extent to which my supervisor helps me to improve my work	3.77 (1.08)
39	The extent to which I am given the opportunity to be creative in my work	4.00 (0.97)
45	The extent to which I have the opportunity to express my ideas in appropriate forums	3.59 (1.01)
46	The extent to which professional development and training opportunities are available	4.11 (0.90)
Mean Total		3.84 (0.79)

Table 10. Comparative Mean Responses: Teamwork

Teamwork		Mean (SD)
3	The extent to which there is a spirit of cooperation within my work team	3.73 (1.16)
14	The extent to which my primary work team uses problem-solving techniques	3.80 (0.98)
24	The extent to which there is an opportunity for all ideas to be exchanged within my work team	3.83 (1.02)
33	The extent to which my work team provides an environment for free and open expression of ideas, opinions and beliefs	3.75 (1.08)
36	The extent to which my work team coordinates its efforts with appropriate individuals and teams	3.78 (0.95)
43	The extent to which a spirit of cooperation exists in my department	3.79 (1.14)
Mean Total		3.78 (0.90)

Table 11. Comparative Mean Responses: Student Focus

Student Focus	Mean (SD)
7 The extent to which student needs are central to what we do	3.75 (1.06)
8 The extent to which I feel my job is relevant to this institution's mission	4.34 (0.80)
17 The extent to which faculty meet the needs of students	3.99 (0.79)
18 The extent to which student ethnic and cultural diversity are important at this institution	4.08 (0.90)
19 The extent to which students' competencies are enhanced	3.90 (0.78)
23 The extent to which non-teaching professional personnel meet the needs of the students	3.99 (0.87)
28 The extent to which classified personnel meet the needs of the students	3.76 (0.81)
31 The extent to which students receive an excellent education at this institution	4.30 (0.68)
35 The extent to which this institution prepares students for a career	4.12 (0.73)
37 The extent to which this institution prepares students for further learning	4.17 (0.70)
40 The extent to which students are assisted with their personal development	3.89 (0.78)
42 The extent to which students are satisfied with their educational experience at this institution	4.02 (0.63)
Mean Total	4.03 (0.52)
Overall	3.73 (0.64)

Table 12. Comparative Mean Responses: Customized

Customized	Mean (SD)
47 The extent to which I am empowered to pursue my ideas without formal permission	3.59 (1.07)
48 The extent to which I take on new and challenging projects as part of my job	3.96 (0.87)
49 The extent to which I have tried new things that did not work out, but I still plan to try again	3.97 (0.77)
50 The extent to which I work with others outside of GRCC to solve problems related to my work	3.91 (0.86)
51 The extent to which I am supported to explore my natural curiosity as part of my daily work	3.71 (1.01)
52 The extent to which I feel respected when I share an unpopular belief or opinion	3.29 (1.11)
53 The extent to which I have participated on a cross-functional team while at GRCC	4.01 (0.87)
54 The extent to which I have implemented ideas that were shared with me by students	4.03 (0.75)
55 The extent to which I have the opportunity to hear many points of view before making a decision	3.77 (0.91)
56 The extent to which I have sufficient opportunities to experiment with new ways of doing things in my job	3.81 (1.04)
Mean Total	3.78 (0.70)

Comparative Analysis: Division

Figure 6 reports composite ratings according to the four climate factors and the customized questions for employees by Division. In general, employees in the Finance & Administration Division rated the four normative factors most favorable (3.79), whereas employees from the Information Technology Division rated the four normative factors least favorable (3.55).

Figures 7 through 11 show the ratings of each Division classification for each of the 56 climate items. The data summary for each figure precedes the corresponding figure. This information provides a closer look at the institutional climate ratings and should be examined carefully when prioritizing areas for change among the Division classifications.

Figure 6. Mean Climate Scores as Rated by Division at Grand Rapids Community College.

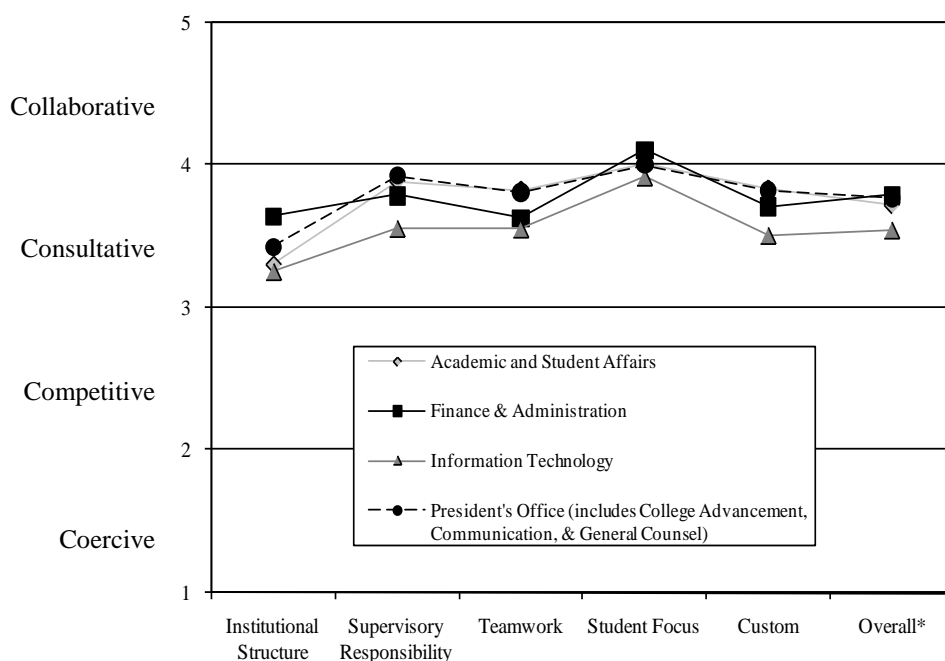


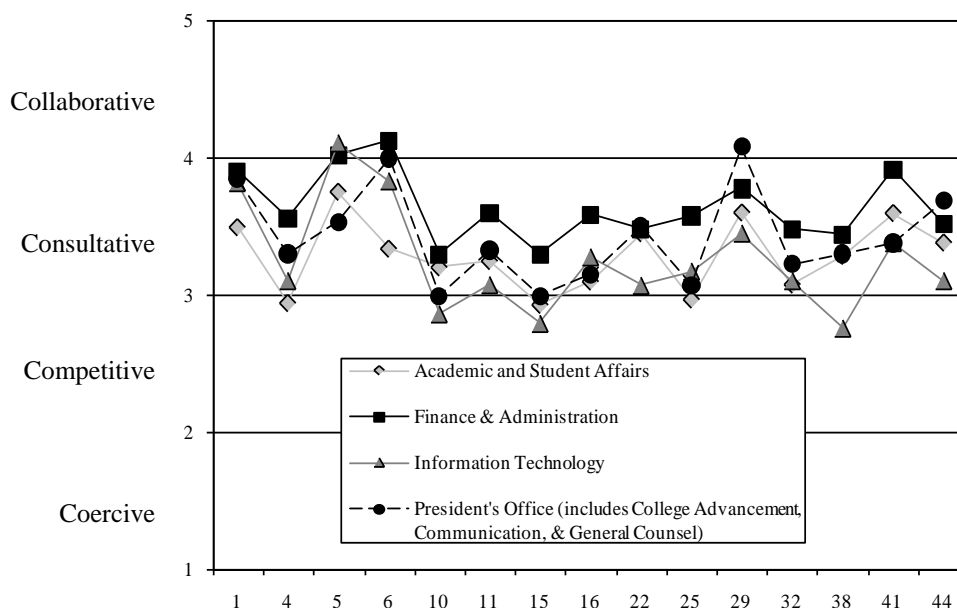
Table 13. Mean Climate Scores as Rated by Division

	Institutional Structure	Supervisory Relationships	Teamwork	Student Focus	Custom	Overall*
Academic and Student Affairs	3.30	3.89	3.83	4.01	3.84	3.72
Finance & Administration	3.64	3.79	3.63	4.11	3.71	3.79
Information Technology	3.26	3.56	3.55	3.92	3.51	3.55
President's Office (includes College Advancement, Communication, & General Counsel)	3.43	3.93	3.81	4.00	3.82	3.77

* The overall mean does not reflect the mean scores of the customized items developed specifically for GRCC.

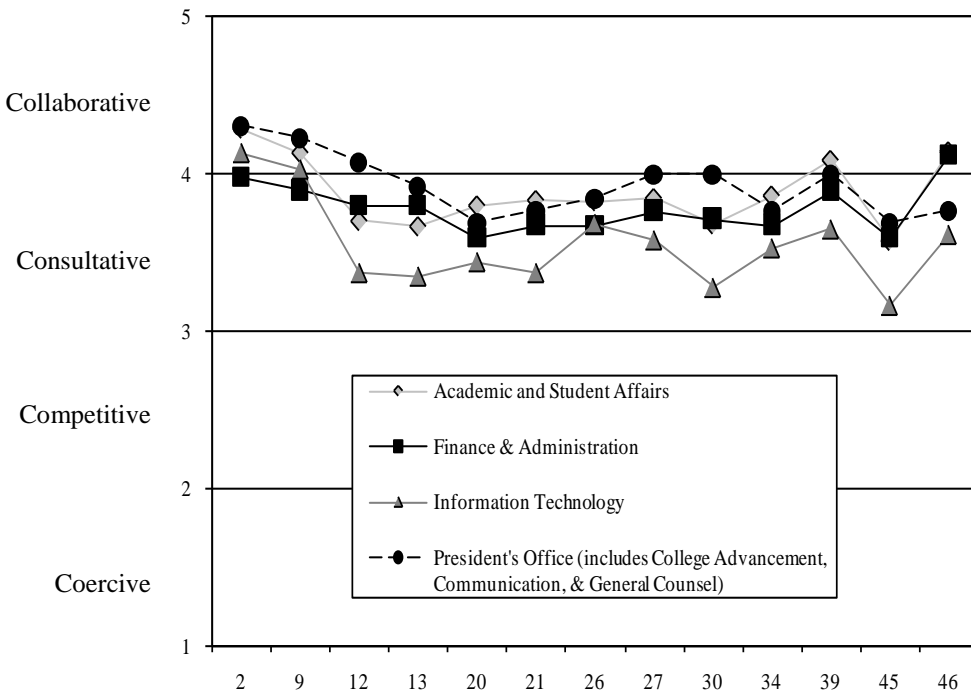
Institutional Structure		Academic and Student Affairs	Finance & Administration	Information Technology	President's Office (includes College Advancement, Communication, & General Counsel)
1	The extent to which the actions of this institution reflect its mission	3.50	3.90	3.81	3.85
4	The extent to which decisions are made at the appropriate level at this institution	2.95	3.56	3.10	3.31
5	The extent to which the institution effectively promotes diversity in the workplace	3.75	4.02	4.10	3.54
6	The extent to which administrative leadership is focused on meeting the needs of students	3.34	4.13	3.83	4.00
10	The extent to which information is shared within this institution	3.21	3.30	2.86	3.00
11	The extent to which institutional teams use problem-solving techniques	3.25	3.60	3.07	3.33
15	The extent to which I am able to appropriately influence the direction of this institution	2.94	3.30	2.79	3.00
16	The extent to which open and ethical communication is practiced at this institution	3.10	3.59	3.28	3.15
22	The extent to which this institution has been successful in positively motivating my performance	3.45	3.48	3.07	3.50
25	The extent to which a spirit of cooperation exists at this institution	2.97	3.58	3.17	3.08
29	The extent to which institution-wide policies guide my work	3.60	3.78	3.45	4.08
32	The extent to which this institution is appropriately organized	3.08	3.48	3.10	3.23
38	The extent to which I have the opportunity for advancement within this institution	3.29	3.45	2.76	3.31
41	The extent to which I receive adequate information regarding important activities at this institution	3.60	3.92	3.38	3.38
44	The extent to which my work is guided by clearly defined administrative processes	3.39	3.52	3.10	3.69

Figure 7. Mean Scores of the Institutional Structure Climate Factor as Rated by Division at Grand Rapids Community College



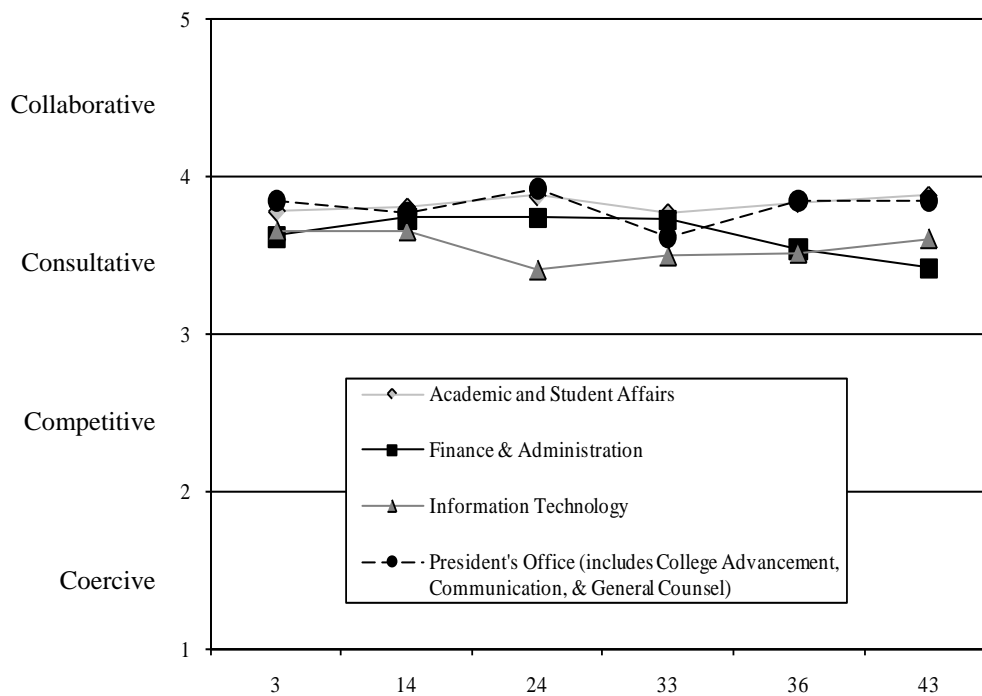
Supervisory Relationships		Academic and Student Affairs	Finance & Administration	Information Technology	President's Office (includes College Advancement, Communication, & General Counsel)
2	The extent to which my supervisor expresses confidence in my work	4.29	3.98	4.14	4.31
9	The extent to which my supervisor is open to the ideas, opinions, and beliefs of everyone	4.13	3.90	4.03	4.23
12	The extent to which positive work expectations are communicated to me	3.70	3.80	3.38	4.08
13	The extent to which unacceptable behaviors are identified and communicated to me	3.67	3.80	3.36	3.92
20	The extent to which I receive timely feedback for my work	3.80	3.60	3.45	3.69
21	The extent to which I receive appropriate feedback for my work	3.84	3.68	3.38	3.77
26	The extent to which my supervisor actively seeks my ideas	3.83	3.67	3.69	3.85
27	The extent to which my supervisor seriously considers my ideas	3.85	3.77	3.59	4.00
30	The extent to which work outcomes are clarified for me	3.68	3.72	3.29	4.00
34	The extent to which my supervisor helps me to improve my work	3.86	3.68	3.54	3.77
39	The extent to which I am given the opportunity to be creative in my work	4.09	3.90	3.66	4.00
45	The extent to which I have the opportunity to express my ideas in appropriate forums	3.58	3.60	3.17	3.69
46	The extent to which professional development and training opportunities are available	4.14	4.12	3.62	3.77

Figure 8. Mean Scores of the Supervisory Relationships Climate Factor as Rated by Division at Grand Rapids Community College



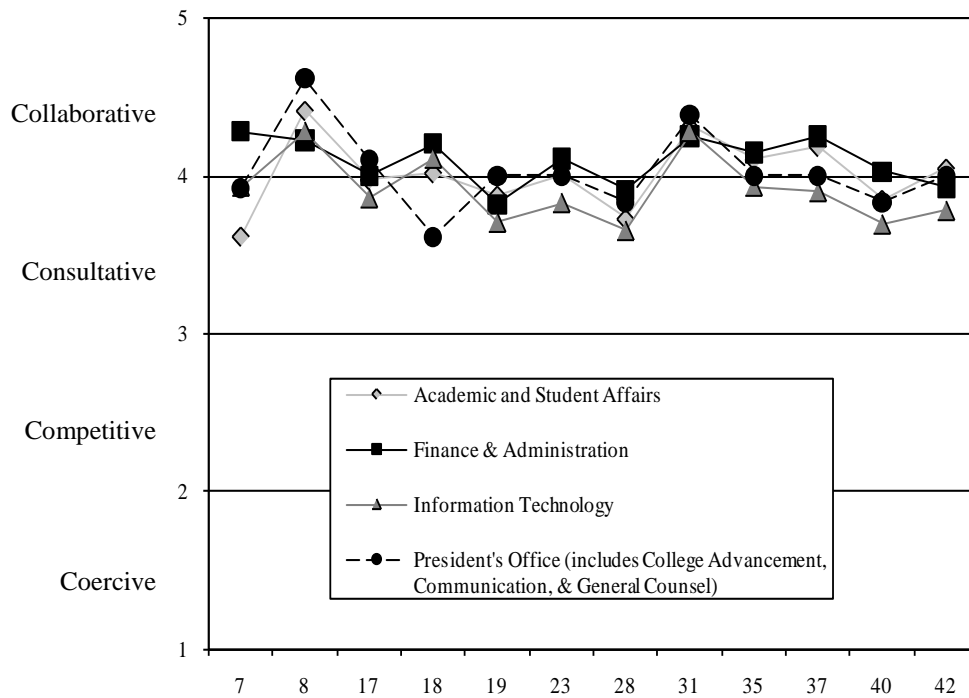
Teamwork		Academic and Student Affairs	Finance & Administration	Information Technology	President's Office (includes College Advancement, Communication, & General Counsel)
3	The extent to which there is a spirit of cooperation within my work team	3.78	3.62	3.66	3.85
14	The extent to which my primary work team uses problem-solving techniques	3.81	3.73	3.66	3.77
24	The extent to which there is an opportunity for all ideas to be exchanged within my work team	3.88	3.74	3.41	3.92
33	The extent to which my work team provides an environment for free and open expression of ideas, opinions, and beliefs	3.77	3.73	3.50	3.62
36	The extent to which my work team coordinates its efforts with appropriate individuals and teams	3.84	3.54	3.52	3.85
43	The extent to which a spirit of cooperation exists in my department	3.88	3.42	3.61	3.85

Figure 9. Mean Scores of the Teamwork Climate Factor as Rated by Division at Grand Rapids Community College



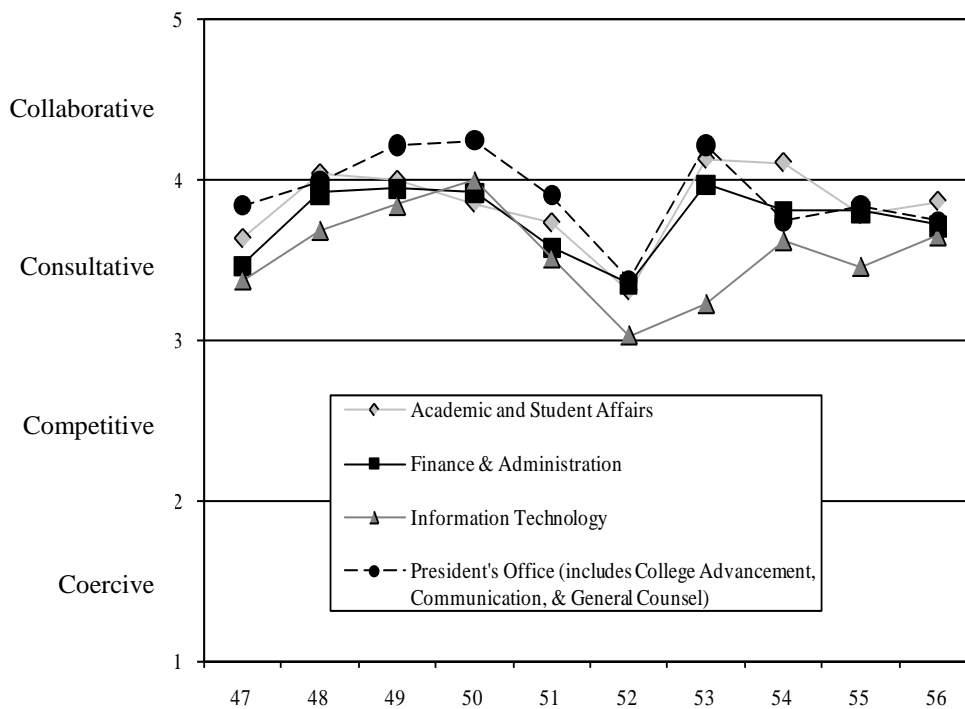
Student Focus		Academic and Student Affairs	Finance & Administration	Information Technology	President's Office (includes College Advancement, Communication, & General Counsel)
7	The extent to which student needs are central to what we do	3.61	4.28	3.93	3.92
8	The extent to which I feel my job is relevant to this institution's mission	4.41	4.22	4.28	4.62
17	The extent to which faculty meet the needs of the students	3.97	4.00	3.86	4.10
18	The extent to which student ethnic and cultural diversity are important at this institution	4.02	4.20	4.11	3.62
19	The extent to which students' competencies are enhanced	3.87	3.82	3.70	4.00
23	The extent to which non-teaching professional personnel meet the needs of the students	4.00	4.11	3.83	4.00
28	The extent to which classified personnel meet the needs of the students	3.72	3.91	3.65	3.83
31	The extent to which students receive an excellent education at this institution	4.31	4.24	4.28	4.38
35	The extent to which this institution prepares students for a career	4.10	4.15	3.93	4.00
37	The extent to which this institution prepares students for further learning	4.18	4.25	3.90	4.00
40	The extent to which students are assisted with their personal development	3.85	4.02	3.69	3.83
42	The extent to which students are satisfied with their educational experience at this institution	4.04	3.93	3.78	4.00

Figure 10. Mean Scores of the Student Focus Climate Factor as Rated by Division at Grand Rapids Community College



Customized		Academic and Student Affairs	Finance & Administration	Information Technology	President's Office (includes College Advancement, Communication, & General Counsel)
47	The extent to which I am empowered to pursue my ideas without formal permission	3.64	3.47	3.38	3.85
48	The extent to which I take on new and challenging projects as part of my job	4.04	3.92	3.69	4.00
49	The extent to which I have tried new things that did not work out, but I still plan to try again	4.00	3.95	3.85	4.22
50	The extent to which I work with others outside of GRCC to solve problems related to my work	3.86	3.93	4.00	4.25
51	The extent to which I am supported to explore my natural curiosity as part of my daily work	3.74	3.58	3.52	3.91
52	The extent to which I feel respected when I share an unpopular belief or opinion	3.31	3.36	3.03	3.38
53	The extent to which I have participated on a cross-functional team while at GRCC	4.13	3.98	3.23	4.22
54	The extent to which I have implemented ideas that were shared with me by students	4.11	3.81	3.63	3.75
55	The extent to which I have the opportunity to hear many points of view before making a decision	3.79	3.81	3.46	3.85
56	The extent to which I have sufficient opportunities to experiment with new ways of doing things in my job	3.87	3.72	3.66	3.75

Figure 11. Mean Scores of the Customized Climate Factor as Rated by Division at Grand Rapids Community College



Tables 14 through 17 contain the top priorities for discussion for each Division classification among the standard PACE items and the top priorities for discussion from the customized items developed specifically for Grand Rapids Community College.

Table 14. Priorities for Change: Academic and Student Affairs

Area to Change		Mean
15	The extent to which I am able to appropriately influence the direction of this institution	2.94
4	The extent to which decisions are made at the appropriate level at this institution	2.95
25	The extent to which a spirit of cooperation exists at this institution	2.97
32	The extent to which this institution is appropriately organized	3.08
16	The extent to which open and ethical communication is practiced at this institution	3.10
10	The extent to which information is shared within this institution	3.21
11	The extent to which institutional teams use problem-solving techniques	3.25
38	The extent to which I have the opportunity for advancement within this institution	3.29
6	The extent to which administrative leadership is focused on meeting the needs of students	3.34
44	The extent to which my work is guided by clearly defined administrative processes	3.39
Area to Change—Customized		Mean
52	The extent to which I feel respected when I share an unpopular belief or opinion	3.31
47	The extent to which I am empowered to pursue my ideas without formal permission	3.64
51	The extent to which I am supported to explore my natural curiosity as part of my daily work	3.74

Table 15. Priorities for Change: Finance & Administration

Area to Change		Mean
10	The extent to which information is shared within this institution	3.30
15	The extent to which I am able to appropriately influence the direction of this institution	3.30
43	The extent to which a spirit of cooperation exists in my department	3.42
38	The extent to which I have the opportunity for advancement within this institution	3.45
32	The extent to which this institution is appropriately organized	3.48
22	The extent to which this institution has been successful in positively motivating my performance	3.48
44	The extent to which my work is guided by clearly defined administrative processes	3.52
36	The extent to which my work team coordinates its efforts with appropriate individuals and teams	3.54
4	The extent to which decisions are made at the appropriate level at this institution	3.56
25	The extent to which a spirit of cooperation exists at this institution	3.58
Area to Change—Customized		
52	The extent to which I feel respected when I share an unpopular belief or opinion	3.36
47	The extent to which I am empowered to pursue my ideas without formal permission	3.47
51	The extent to which I am supported to explore my natural curiosity as part of my daily work	3.58

Table 16. Priorities for Change: Information Technology

Area to Change		Mean
38	The extent to which I have the opportunity for advancement within this institution	2.76
15	The extent to which I am able to appropriately influence the direction of this institution	2.79
10	The extent to which information is shared within this institution	2.86
22	The extent to which this institution has been successful in positively motivating my performance	3.07
11	The extent to which institutional teams use problem-solving techniques	3.07
32	The extent to which this institution is appropriately organized	3.10
4	The extent to which decisions are made at the appropriate level at this institution	3.10
44	The extent to which my work is guided by clearly defined administrative processes	3.10
25	The extent to which a spirit of cooperation exists at this institution	3.17
45	The extent to which I have the opportunity to express my ideas in appropriate forums	3.17
Area to Change—Customized		Mean
52	The extent to which I feel respected when I share an unpopular belief or opinion	3.03
53	The extent to which I have participated on a cross-functional team while at GRCC	3.23
47	The extent to which I am empowered to pursue my ideas without formal permission	3.38

Table 17. Priorities for Change: President's Office (includes College Advancement, Communication, & General Counsel)

Area to Change		Mean
10	The extent to which information is shared within this institution	3.00
15	The extent to which I am able to appropriately influence the direction of this institution	3.00
25	The extent to which a spirit of cooperation exists at this institution	3.08
16	The extent to which open and ethical communication is practiced at this institution	3.15
32	The extent to which this institution is appropriately organized	3.23
4	The extent to which decisions are made at the appropriate level at this institution	3.31
38	The extent to which I have the opportunity for advancement within this institution	3.31
11	The extent to which institutional teams use problem-solving techniques	3.33
41	The extent to which I receive adequate information regarding important activities at this institution	3.38
22	The extent to which this institution has been successful in positively motivating my performance	3.50
Area to Change—Customized		Mean
52	The extent to which I feel respected when I share an unpopular belief or opinion	3.38
54	The extent to which I have implemented ideas that were shared with me by students	3.75
56	The extent to which I have sufficient opportunities to experiment with new ways of doing things in my job	3.75

Comparative Analysis: Employee Group

Figure 12 reports composite ratings according to the four climate factors and the customized questions for employees by Employee Group. In general, the Meet and Confer employees rated the four normative factors most favorable (3.85), whereas the Faculty/Job Training/Preschool employees rated the four normative factors least favorable (3.59).

Figures 13 through 17 show the ratings of each Employee Group for each of the 56 climate items. The data summary for each figure precedes the corresponding figure. This information provides a closer look at the institutional climate ratings and should be examined carefully when prioritizing areas for change among the employee groups.

Figure 12. Mean Climate Scores as Rated by Employee Group at Grand Rapids Community College.

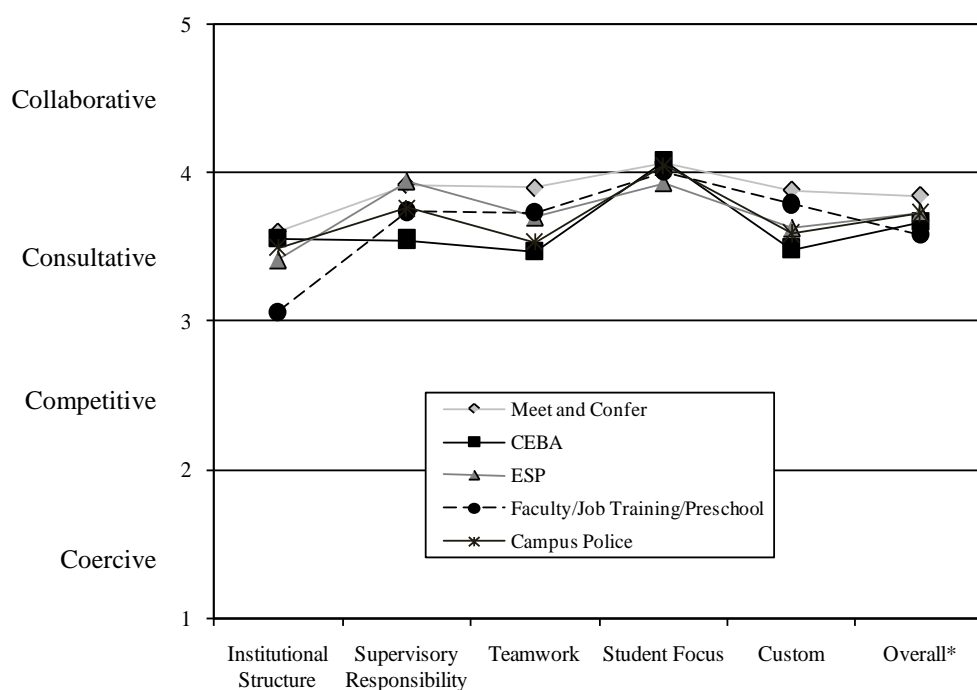


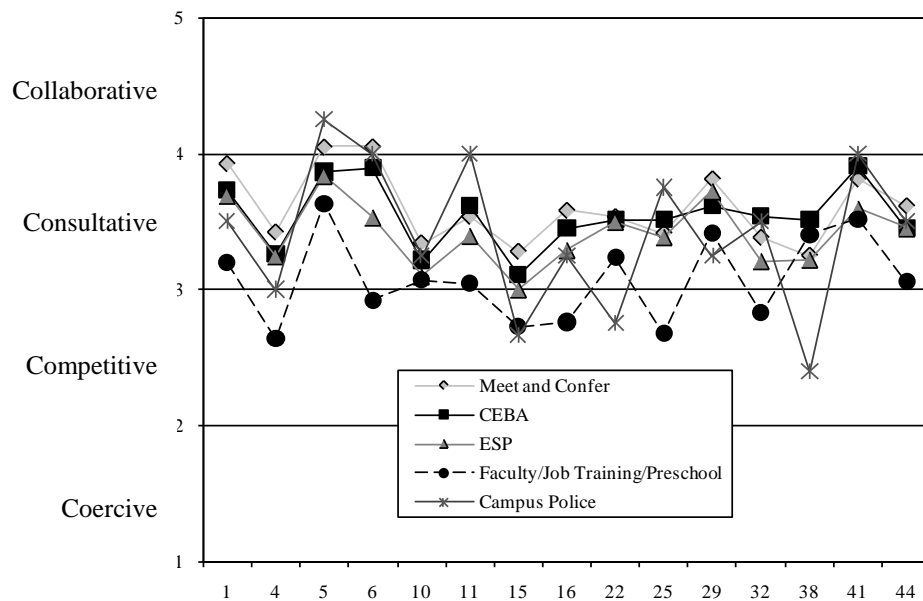
Table 18. Mean Climate Scores as Rated by Employee Group

	Institutional Structure	Supervisory Relationships	Teamwork	Student Focus	Custom	Overall*
Meet and Confer	3.61	3.92	3.90	4.07	3.89	3.85
CEBA	3.56	3.55	3.48	4.08	3.49	3.67
ESP	3.42	3.95	3.71	3.94	3.63	3.74
Faculty/Job Training/Preschool	3.07	3.75	3.74	4.01	3.80	3.59
Campus Police	3.50	3.77	3.54	4.05	3.59	3.73

* The overall mean does not reflect the mean scores of the customized items developed specifically for GRCC.

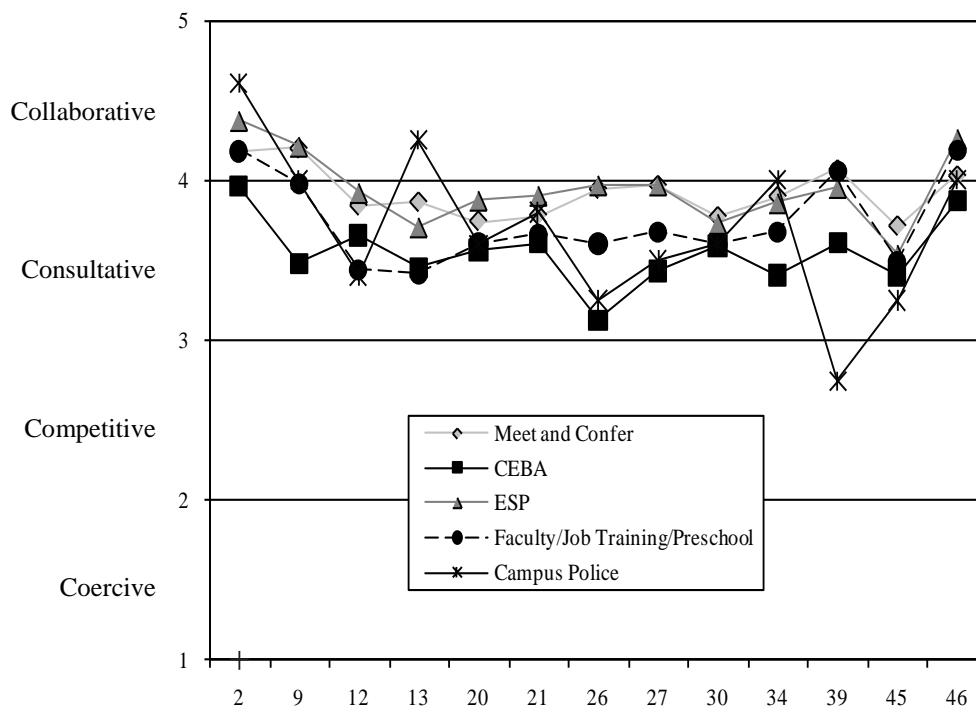
Institutional Structure		Meet and Confer	CEBA	ESP	Faculty/Job Training/Preschool	Campus Police
1	The extent to which the actions of this institution reflect its mission	3.93	3.74	3.69	3.20	3.50
4	The extent to which decisions are made at the appropriate level at this institution	3.42	3.26	3.25	2.64	3.00
5	The extent to which the institution effectively promotes diversity in the workplace	4.05	3.87	3.84	3.64	4.25
6	The extent to which administrative leadership is focused on meeting the needs of students	4.06	3.90	3.53	2.92	4.00
10	The extent to which information is shared within this institution	3.34	3.22	3.10	3.07	3.25
11	The extent to which institutional teams use problem-solving techniques	3.54	3.62	3.40	3.05	4.00
15	The extent to which I am able to appropriately influence the direction of this institution	3.28	3.11	3.00	2.73	2.67
16	The extent to which open and ethical communication is practiced at this institution	3.58	3.45	3.29	2.76	3.25
22	The extent to which this institution has been successful in positively motivating my performance	3.54	3.52	3.50	3.24	2.75
25	The extent to which a spirit of cooperation exists at this institution	3.42	3.52	3.39	2.68	3.75
29	The extent to which institution-wide policies guide my work	3.82	3.62	3.73	3.42	3.25
32	The extent to which this institution is appropriately organized	3.38	3.55	3.21	2.83	3.50
38	The extent to which I have the opportunity for advancement within this institution	3.25	3.52	3.22	3.40	2.40
41	The extent to which I receive adequate information regarding important activities at this institution	3.82	3.91	3.60	3.52	4.00
44	The extent to which my work is guided by clearly defined administrative processes	3.62	3.45	3.45	3.06	3.50

Figure 13. Mean Scores of the Institutional Structure Climate Factor as Rated by Employee Group at Grand Rapids Community College



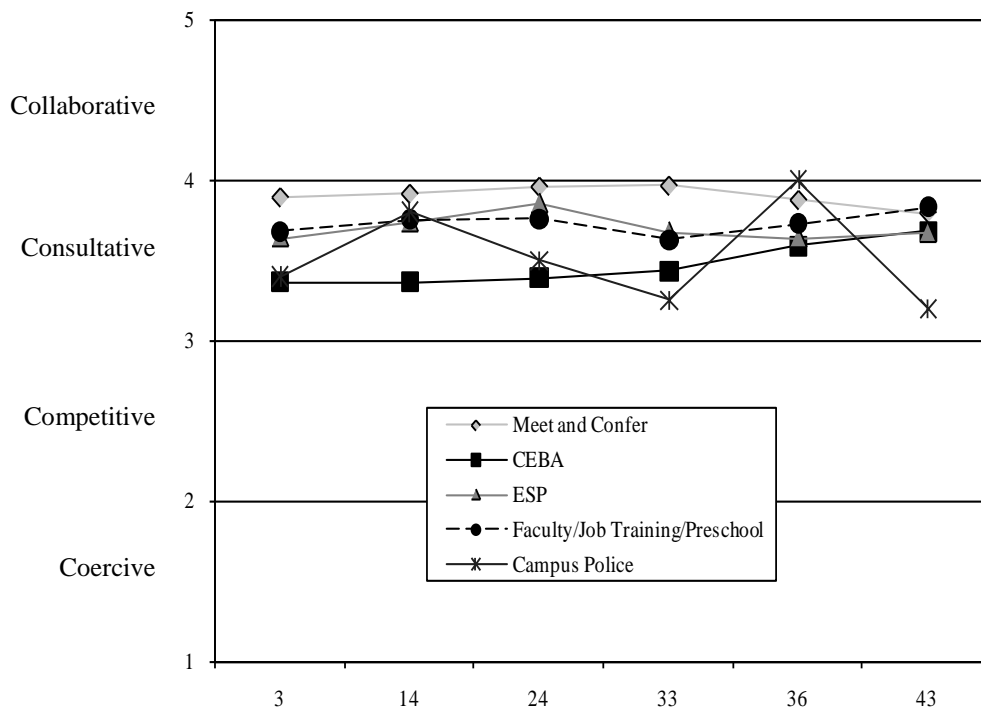
Supervisory Relationships		Meet and Confer	CEBA	ESP	Faculty/Job Training/Preschool	Campus Police
2	The extent to which my supervisor expresses confidence in my work	4.18	3.96	4.37	4.18	4.60
9	The extent to which my supervisor is open to the ideas, opinions, and beliefs of everyone	4.20	3.48	4.21	3.98	4.00
12	The extent to which positive work expectations are communicated to me	3.84	3.65	3.92	3.44	3.40
13	The extent to which unacceptable behaviors are identified and communicated to me	3.86	3.45	3.70	3.41	4.25
20	The extent to which I receive timely feedback for my work	3.74	3.57	3.87	3.60	3.60
21	The extent to which I receive appropriate feedback for my work	3.78	3.61	3.90	3.66	3.80
26	The extent to which my supervisor actively seeks my ideas	3.95	3.13	3.97	3.60	3.25
27	The extent to which my supervisor seriously considers my ideas	3.97	3.43	3.97	3.67	3.50
30	The extent to which work outcomes are clarified for me	3.77	3.59	3.73	3.59	3.60
34	The extent to which my supervisor helps me to improve my work	3.90	3.41	3.85	3.67	4.00
39	The extent to which I am given the opportunity to be creative in my work	4.07	3.61	3.95	4.06	2.75
45	The extent to which I have the opportunity to express my ideas in appropriate forums	3.71	3.41	3.53	3.49	3.25
46	The extent to which professional development and training opportunities are available	4.03	3.87	4.26	4.19	4.00

Figure 14. Mean Scores of the Supervisory Relationships Climate Factor as Rated by Employee Group at Grand Rapids Community College



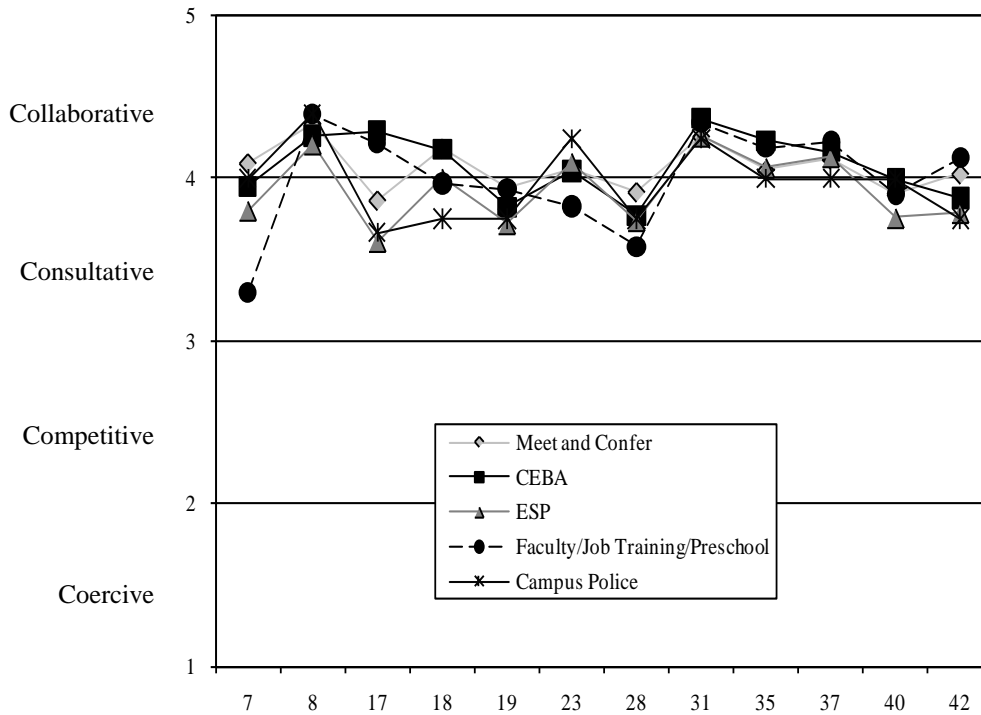
Teamwork		Meet and Confer	CEBA	ESP	Faculty/Job Training/Preschool	Campus Police
3	The extent to which there is a spirit of cooperation within my work team	3.89	3.36	3.65	3.68	3.40
14	The extent to which my primary work team uses problem-solving techniques	3.92	3.36	3.74	3.75	3.80
24	The extent to which there is an opportunity for all ideas to be exchanged within my work team	3.96	3.39	3.85	3.76	3.50
33	The extent to which my work team provides an environment for free and open expression of ideas, opinions, and beliefs	3.97	3.43	3.68	3.63	3.25
36	The extent to which my work team coordinates its efforts with appropriate individuals and teams	3.88	3.59	3.64	3.73	4.00
43	The extent to which a spirit of cooperation exists in my department	3.80	3.68	3.67	3.83	3.20

Figure 15. Mean Scores of the Teamwork Climate Factor as Rated by Employee Group at Grand Rapids Community College



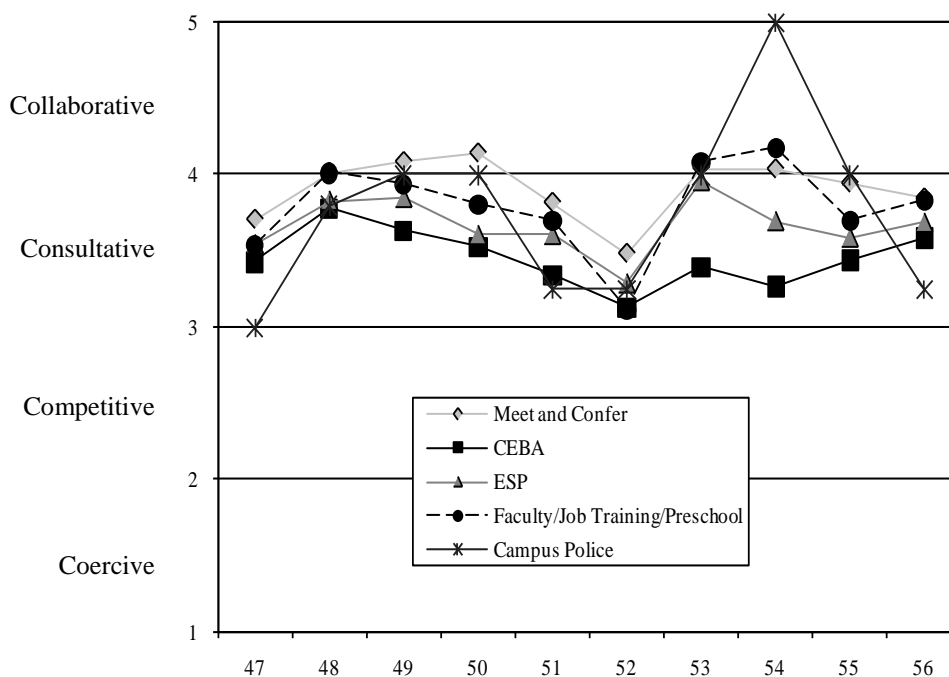
Student Focus		Meet and Confer	CEBA	ESP	Faculty/Job Training/Preschool	Campus Police
7	The extent to which student needs are central to what we do	4.09	3.95	3.80	3.30	4.00
8	The extent to which I feel my job is relevant to this institution's mission	4.34	4.26	4.21	4.40	4.40
17	The extent to which faculty meet the needs of the students	3.86	4.29	3.61	4.22	3.67
18	The extent to which student ethnic and cultural diversity are important at this institution	4.18	4.18	4.00	3.97	3.75
19	The extent to which students' competencies are enhanced	3.94	3.82	3.72	3.94	3.75
23	The extent to which non-teaching professional personnel meet the needs of the students	4.06	4.05	4.10	3.83	4.25
28	The extent to which classified personnel meet the needs of the students	3.91	3.78	3.74	3.58	3.75
31	The extent to which students receive an excellent education at this institution	4.26	4.37	4.26	4.34	4.25
35	The extent to which this institution prepares students for a career	4.05	4.24	4.07	4.19	4.00
37	The extent to which this institution prepares students for further learning	4.12	4.17	4.13	4.23	4.00
40	The extent to which students are assisted with their personal development	3.90	4.00	3.75	3.91	4.00
42	The extent to which students are satisfied with their educational experience at this institution	4.03	3.88	3.79	4.13	3.75

Figure 16. Mean Scores of the Student Focus Climate Factor as Rated by Employee Group at Grand Rapids Community College



Customized		Meet and Confer	CEBA	ESP	Faculty/Job Training/Preschool	Campus Police
47	The extent to which I am empowered to pursue my ideas without formal permission	3.71	3.43	3.55	3.54	3.00
48	The extent to which I take on new and challenging projects as part of my job	4.02	3.78	3.83	4.02	3.80
49	The extent to which I have tried new things that did not work out, but I still plan to try again	4.09	3.64	3.85	3.95	4.00
50	The extent to which I work with others outside of GRCC to solve problems related to my work	4.14	3.53	3.61	3.81	4.00
51	The extent to which I am supported to explore my natural curiosity as part of my daily work	3.82	3.35	3.61	3.70	3.25
52	The extent to which I feel respected when I share an unpopular belief or opinion	3.48	3.14	3.30	3.12	3.25
53	The extent to which I have participated on a cross-functional team while at GRCC	4.04	3.40	3.96	4.09	4.00
54	The extent to which I have implemented ideas that were shared with me by students	4.04	3.27	3.70	4.18	5.00
55	The extent to which I have the opportunity to hear many points of view before making a decision	3.95	3.44	3.59	3.71	4.00
56	The extent to which I have sufficient opportunities to experiment with new ways of doing things in my job	3.85	3.59	3.69	3.84	3.25

Figure 17. Mean Scores of the Customized Climate Factor as Rated by Employee Group at Grand Rapids Community College



Tables 19 through 23 contain the top priorities for discussion for each Employee Group among the standard PACE items and the top priorities for discussion from the customized items developed specifically for Grand Rapids Community College.

Table 19. Priorities for Change: Meet and Confer

Area to Change		Mean
38	The extent to which I have the opportunity for advancement within this institution	3.25
15	The extent to which I am able to appropriately influence the direction of this institution	3.28
10	The extent to which information is shared within this institution	3.34
32	The extent to which this institution is appropriately organized	3.38
25	The extent to which a spirit of cooperation exists at this institution	3.42
4	The extent to which decisions are made at the appropriate level at this institution	3.42
22	The extent to which this institution has been successful in positively motivating my performance	3.54
11	The extent to which institutional teams use problem-solving techniques	3.54
16	The extent to which open and ethical communication is practiced at this institution	3.58
44	The extent to which my work is guided by clearly defined administrative processes	3.62
Area to Change—Customized		Mean
52	The extent to which I feel respected when I share an unpopular belief or opinion	3.48
47	The extent to which I am empowered to pursue my ideas without formal permission	3.71
51	The extent to which I am supported to explore my natural curiosity as part of my daily work	3.82

Table 20. Priorities for Change: CEBA

	Area to Change	Mean
15	The extent to which I am able to appropriately influence the direction of this institution	3.11
26	The extent to which my supervisor actively seeks my ideas	3.13
10	The extent to which information is shared within this institution	3.22
4	The extent to which decisions are made at the appropriate level at this institution	3.26
3	The extent to which there is a spirit of cooperation within my work team	3.36
14	The extent to which my primary work team uses problem-solving techniques	3.36
24	The extent to which there is an opportunity for all ideas to be exchanged within my work team	3.39
34	The extent to which my supervisor helps me to improve my work	3.41
45	The extent to which I have the opportunity to express my ideas in appropriate forums	3.41
27	The extent to which my supervisor seriously considers my ideas	3.43
33	The extent to which my work team provides an environment for free and open expression of ideas, opinions, and beliefs	3.43
Area to Change—Customized		
52	The extent to which I feel respected when I share an unpopular belief or opinion	3.14
54	The extent to which I have implemented ideas that were shared with me by students	3.27
51	The extent to which I am supported to explore my natural curiosity as part of my daily work	3.35

Table 21. Priorities for Change: ESP

	Area to Change	Mean
15	The extent to which I am able to appropriately influence the direction of this institution	3.00
10	The extent to which information is shared within this institution	3.10
32	The extent to which this institution is appropriately organized	3.21
38	The extent to which I have the opportunity for advancement within this institution	3.22
4	The extent to which decisions are made at the appropriate level at this institution	3.25
16	The extent to which open and ethical communication is practiced at this institution	3.29
25	The extent to which a spirit of cooperation exists at this institution	3.39
11	The extent to which institutional teams use problem-solving techniques	3.40
44	The extent to which my work is guided by clearly defined administrative processes	3.45
22	The extent to which this institution has been successful in positively motivating my performance	3.50
Area to Change—Customized		Mean
52	The extent to which I feel respected when I share an unpopular belief or opinion	3.30
47	The extent to which I am empowered to pursue my ideas without formal permission	3.55
55	The extent to which I have the opportunity to hear many points of view before making a decision	3.59

Table 22. Priorities for Change: Faculty/Job Training/Preschool

Area to Change		Mean
4	The extent to which decisions are made at the appropriate level at this institution	2.64
25	The extent to which a spirit of cooperation exists at this institution	2.68
15	The extent to which I am able to appropriately influence the direction of this institution	2.73
16	The extent to which open and ethical communication is practiced at this institution	2.76
32	The extent to which this institution is appropriately organized	2.83
6	The extent to which administrative leadership is focused on meeting the needs of students	2.92
11	The extent to which institutional teams use problem-solving techniques	3.05
44	The extent to which my work is guided by clearly defined administrative processes	3.06
10	The extent to which information is shared within this institution	3.07
1	The extent to which the actions of this institution reflect its mission	3.20
Area to Change—Customized		Mean
52	The extent to which I feel respected when I share an unpopular belief or opinion	3.12
47	The extent to which I am empowered to pursue my ideas without formal permission	3.54
51	The extent to which I am supported to explore my natural curiosity as part of my daily work	3.70

Table 23. Priorities for Change: Campus Police

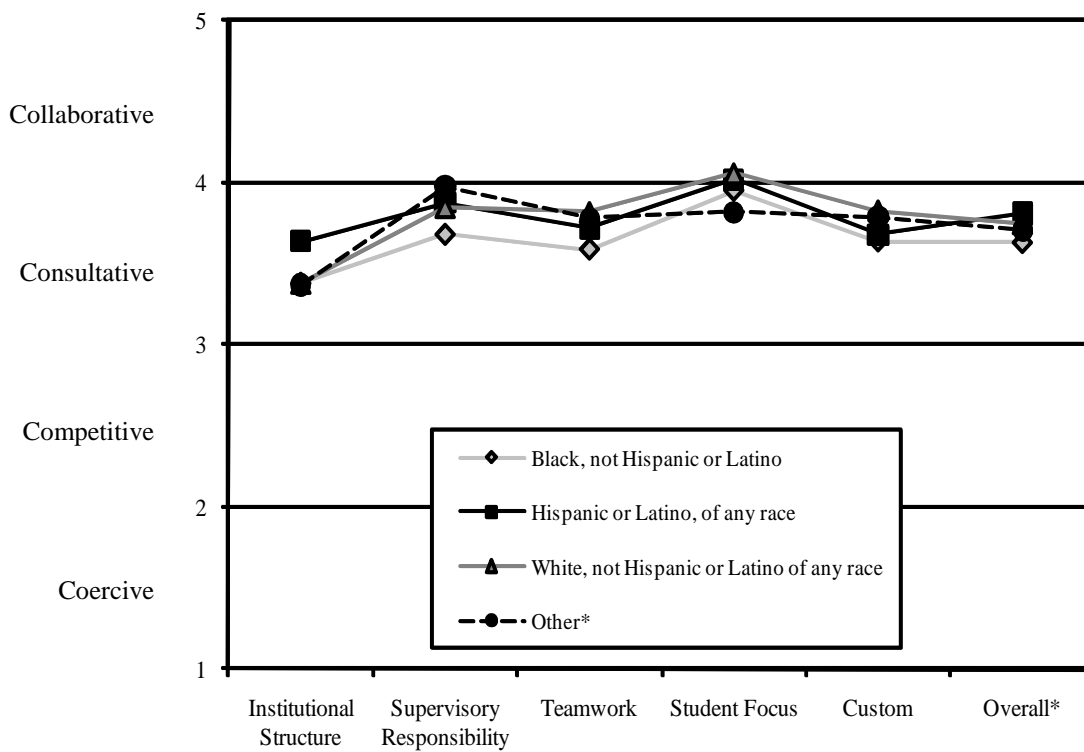
Area to Change	Mean
38 The extent to which I have the opportunity for advancement within this institution	2.40
15 The extent to which I am able to appropriately influence the direction of this institution	2.67
22 The extent to which this institution has been successful in positively motivating my performance	2.75
39 The extent to which I am given the opportunity to be creative in my work	2.75
4 The extent to which decisions are made at the appropriate level at this institution	3.00
43 The extent to which a spirit of cooperation exists in my department	3.20
10 The extent to which information is shared within this institution	3.25
16 The extent to which open and ethical communication is practiced at this institution	3.25
26 The extent to which my supervisor actively seeks my ideas	3.25
29 The extent to which institution-wide policies guide my work	3.25
33 The extent to which my work team provides an environment for free and open expression of ideas, opinions, and beliefs	3.25
45 The extent to which I have the opportunity to express my ideas in appropriate forums	3.25
Area to Change—Customized	Mean
47 The extent to which I am empowered to pursue my ideas without formal permission	3.00
51 The extent to which I am supported to explore my natural curiosity as part of my daily work	3.25
52 The extent to which I feel respected when I share an unpopular belief or opinion	3.25
56 The extent to which I have sufficient opportunities to experiment with new ways of doing things in my job	3.25

Comparative Analysis: Race/Ethnicity

Figure 18 reports composite ratings according to the four climate factors and the customized questions for employees by Race/Ethnicity. In general, the employees identifying as Hispanic or Latino, of any race, rated the four normative factors most favorable (3.81). The Black, not Hispanic or Latino, employees rated the four normative factors least favorable (3.63).

Figures 19 through 23 show the ratings of each employee group for each of the 56 climate items. The data summary for each figure precedes the corresponding figure. This information provides a closer look at the institutional climate ratings and should be examined carefully when prioritizing areas for change among the employee groups.

Figure 18. Mean Climate Scores as Rated by Race/Ethnicity at Grand Rapids Community College.



* Other includes American Indian or Alaska Native, not Hispanic or Latino; Asian, not Hispanic or Latino; Native Hawaiian or Other Pacific Islander, not Hispanic or Latino and Two or more races, not Hispanic or Latino

Table 24. Mean Climate Scores as Rated by Race/Ethnicity

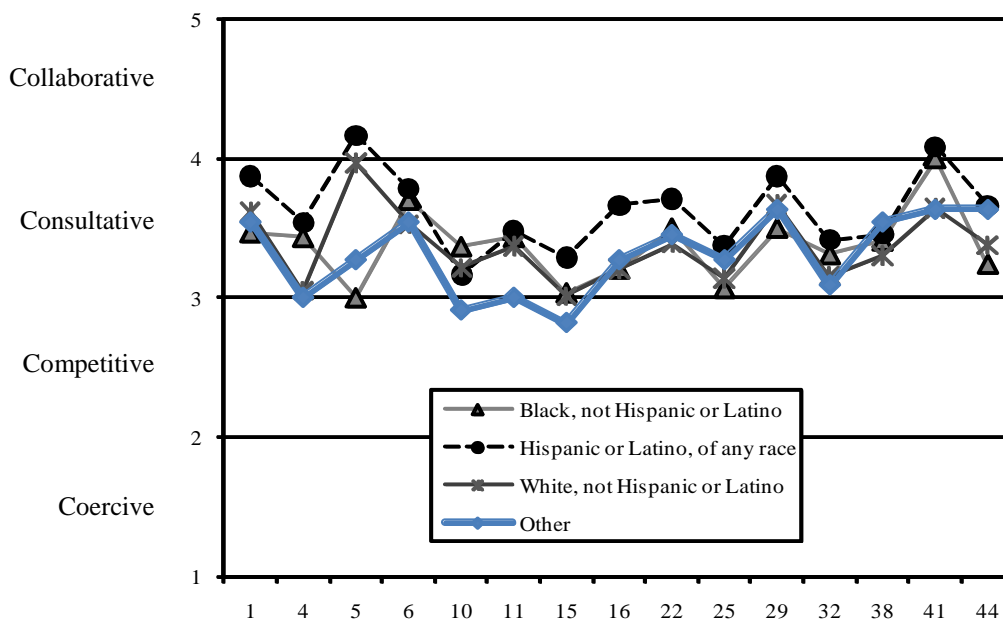
	Institutional Structure	Supervisory Relationships	Teamwork	Student Focus	Custom	Overall*
Black, not Hispanic or Latino	3.37	3.68	3.59	3.95	3.64	3.63
Hispanic or Latino, of any race	3.64	3.88	3.73	4.02	3.68	3.81
White, not Hispanic or Latino	3.38	3.85	3.82	4.06	3.83	3.75
Other (Including American Indian or Alaska Native, not Hispanic or Latino; Asian, not Hispanic or Latino; Native Hawaiian or Other Pacific Islander, not Hispanic or Latino and Two or more races, not Hispanic or Latino)	3.37	3.98	3.78	3.82	3.79	3.71

* The overall mean does not reflect the mean scores of the customized items developed specifically for GRCC.

Institutional Structure		Black, not Hispanic or Latino	Hispanic or Latino, of any race	White, not Hispanic or Latino	Other *
1	The extent to which the actions of this institution reflect its mission	3.47	3.88	3.61	3.55
4	The extent to which decisions are made at the appropriate level at this institution	3.43	3.54	3.05	3.00
5	The extent to which the institution effectively promotes diversity in the workplace	3.00	4.17	3.97	3.27
6	The extent to which administrative leadership is focused on meeting the needs of students	3.70	3.78	3.53	3.55
10	The extent to which information is shared within this institution	3.37	3.17	3.22	2.91
11	The extent to which institutional teams use problem-solving techniques	3.43	3.48	3.37	3.00
15	The extent to which I am able to appropriately influence the direction of this institution	3.04	3.29	3.02	2.82
16	The extent to which open and ethical communication is practiced at this institution	3.21	3.67	3.21	3.27
22	The extent to which this institution has been successful in positively motivating my performance	3.50	3.71	3.39	3.45
25	The extent to which a spirit of cooperation exists at this institution	3.07	3.38	3.14	3.27
29	The extent to which institution-wide policies guide my work	3.50	3.88	3.67	3.64
32	The extent to which this institution is appropriately organized	3.31	3.42	3.16	3.09
38	The extent to which I have the opportunity for advancement within this institution	3.41	3.46	3.30	3.55
41	The extent to which I receive adequate information regarding important activities at this institution	4.00	4.08	3.64	3.64
44	The extent to which my work is guided by clearly defined administrative processes	3.24	3.67	3.38	3.64

* Other includes American Indian or Alaska Native, not Hispanic or Latino; Asian, not Hispanic or Latino; Native Hawaiian or Other Pacific Islander, not Hispanic or Latino and Two or more races, not Hispanic or Latino

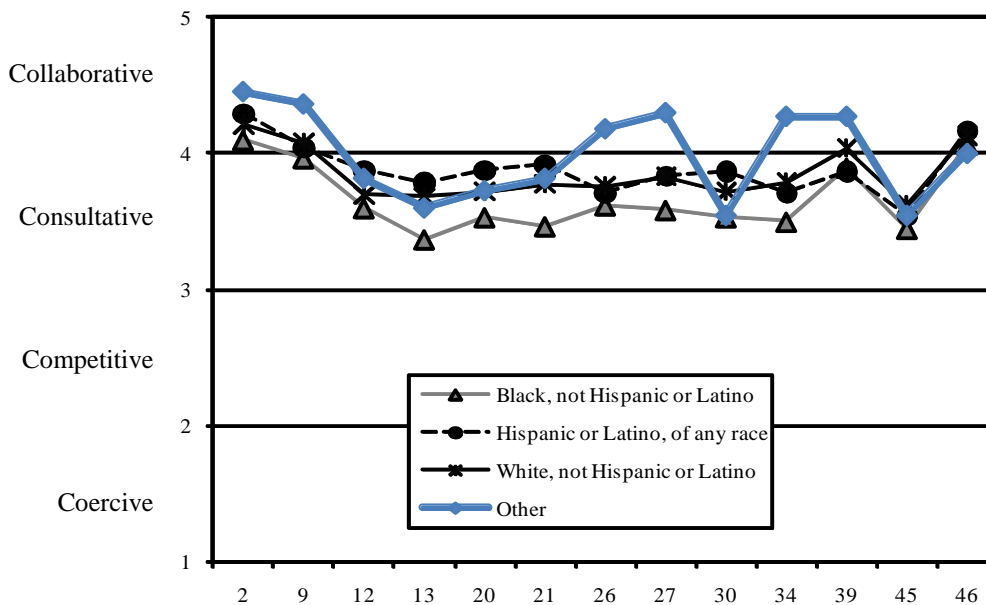
Figure 19. Mean Scores of the Institutional Structure Climate Factor as Rated by Race/Ethnicity at Grand Rapids Community College



Supervisory Relationships		Black, not Hispanic or Latino	Hispanic or Latino, of any race	White, not Hispanic or Latino	Other *
2	The extent to which my supervisor expresses confidence in my work	4.10	4.29	4.22	4.45
9	The extent to which my supervisor is open to the ideas, opinions, and beliefs of everyone	3.97	4.04	4.08	4.36
12	The extent to which positive work expectations are communicated to me	3.60	3.88	3.70	3.82
13	The extent to which unacceptable behaviors are identified and communicated to me	3.37	3.78	3.68	3.60
20	The extent to which I receive timely feedback for my work	3.53	3.88	3.72	3.73
21	The extent to which I receive appropriate feedback for my work	3.47	3.92	3.77	3.82
26	The extent to which my supervisor actively seeks my ideas	3.62	3.71	3.76	4.18
27	The extent to which my supervisor seriously considers my ideas	3.59	3.83	3.83	4.30
30	The extent to which work outcomes are clarified for me	3.53	3.87	3.72	3.55
34	The extent to which my supervisor helps me to improve my work	3.50	3.71	3.79	4.27
39	The extent to which I am given the opportunity to be creative in my work	3.90	3.87	4.04	4.27
45	The extent to which I have the opportunity to express my ideas in appropriate forums	3.45	3.54	3.62	3.55
46	The extent to which professional development and training opportunities are available	4.07	4.17	4.13	4.00

* Other includes American Indian or Alaska Native, not Hispanic or Latino; Asian, not Hispanic or Latino; Native Hawaiian or Other Pacific Islander, not Hispanic or Latino and Two or more races, not Hispanic or Latino

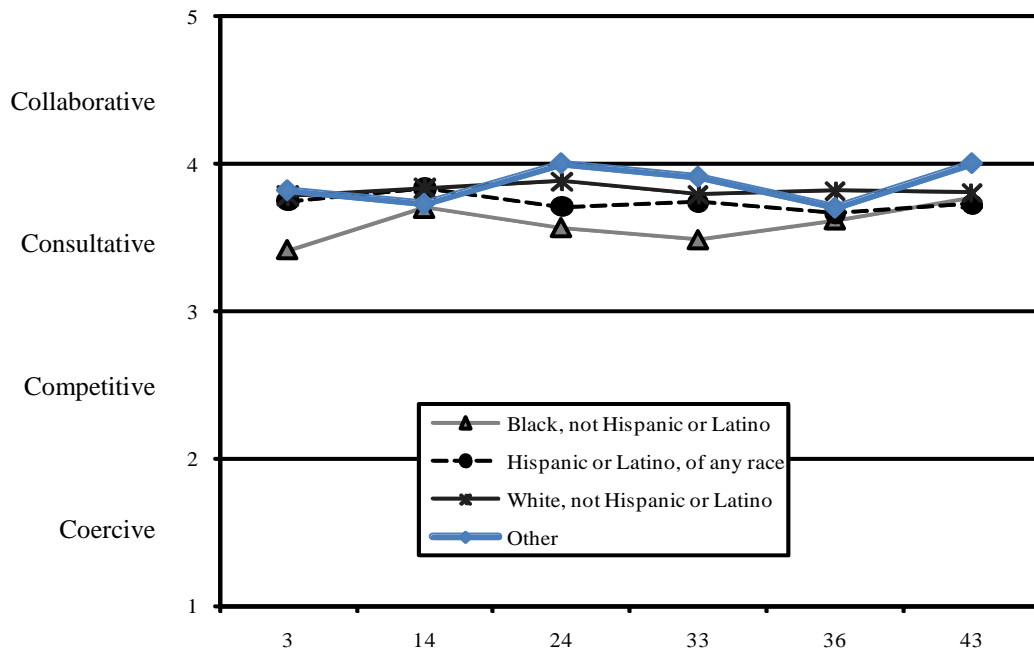
Figure 20. Mean Scores of the Supervisory Relationships Climate Factor as Rated by Race/Ethnicity at Grand Rapids Community College



Teamwork		Black, not Hispanic or Latino	Hispanic or Latino, of any race	White, not Hispanic or Latino	Other*
3	The extent to which there is a spirit of cooperation within my work team	3.41	3.75	3.78	3.82
14	The extent to which my primary work team uses problem-solving techniques	3.70	3.83	3.83	3.73
24	The extent to which there is an opportunity for all ideas to be exchanged within my work team	3.57	3.71	3.88	4.00
33	The extent to which my work team provides an environment for free and open expression of ideas, opinions, and beliefs	3.48	3.74	3.79	3.91
36	The extent to which my work team coordinates its efforts with appropriate individuals and teams	3.62	3.67	3.82	3.70
43	The extent to which a spirit of cooperation exists in my department	3.77	3.73	3.80	4.00

* Other includes American Indian or Alaska Native, not Hispanic or Latino; Asian, not Hispanic or Latino; Native Hawaiian or Other Pacific Islander, not Hispanic or Latino and Two or more races, not Hispanic or Latino

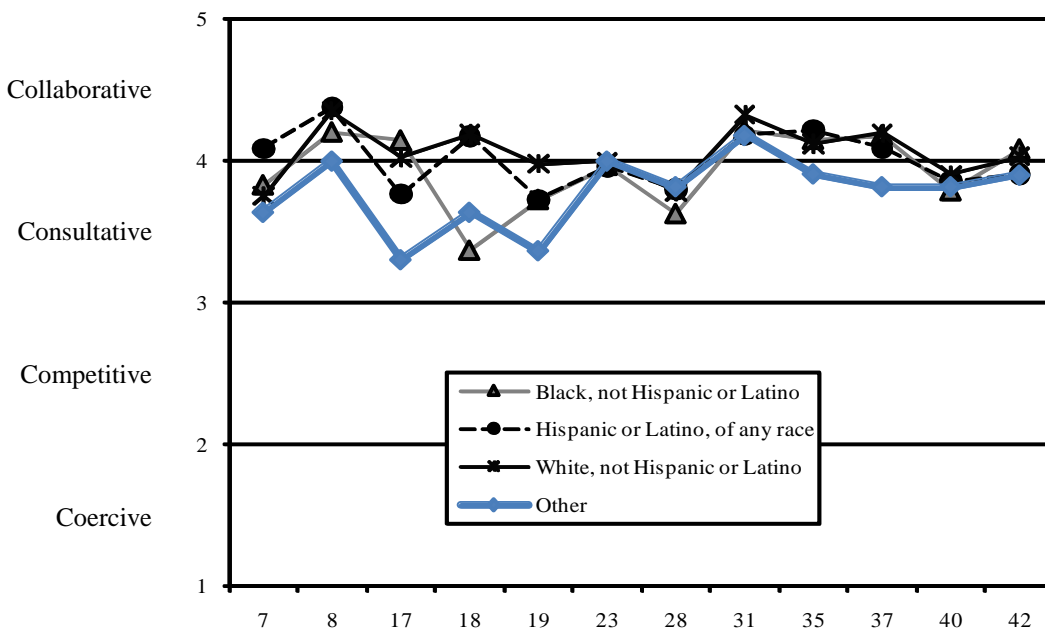
Figure 21. Mean Scores of the Teamwork Climate Factor as Rated by Race/Ethnicity at Grand Rapids Community College



Student Focus	Black, not Hispanic or Latino	Hispanic or Latino, of any race	White, not Hispanic or Latino	Other *
7 The extent to which student needs are central to what we do	3.83	4.09	3.75	3.64
8 The extent to which I feel my job is relevant to this institution's mission	4.20	4.38	4.35	4.00
17 The extent to which faculty meet the needs of the students	4.14	3.76	4.02	3.30
18 The extent to which student ethnic and cultural diversity are important at this institution	3.37	4.17	4.19	3.64
19 The extent to which students' competencies are enhanced	3.72	3.73	3.98	3.36
23 The extent to which non-teaching professional personnel meet the needs of the students	3.96	3.96	3.99	4.00
28 The extent to which classified personnel meet the needs of the students	3.63	3.80	3.78	3.82
31 The extent to which students receive an excellent education at this institution	4.21	4.18	4.32	4.18
35 The extent to which this institution prepares students for a career	4.15	4.22	4.12	3.91
37 The extent to which this institution prepares students for further learning	4.18	4.09	4.20	3.82
40 The extent to which students are assisted with their personal development	3.79	3.86	3.90	3.82
42 The extent to which students are satisfied with their educational experience at this institution	4.08	3.90	4.03	3.90

* Other includes American Indian or Alaska Native, not Hispanic or Latino; Asian, not Hispanic or Latino; Native Hawaiian or Other Pacific Islander, not Hispanic or Latino and Two or more races, not Hispanic or Latino

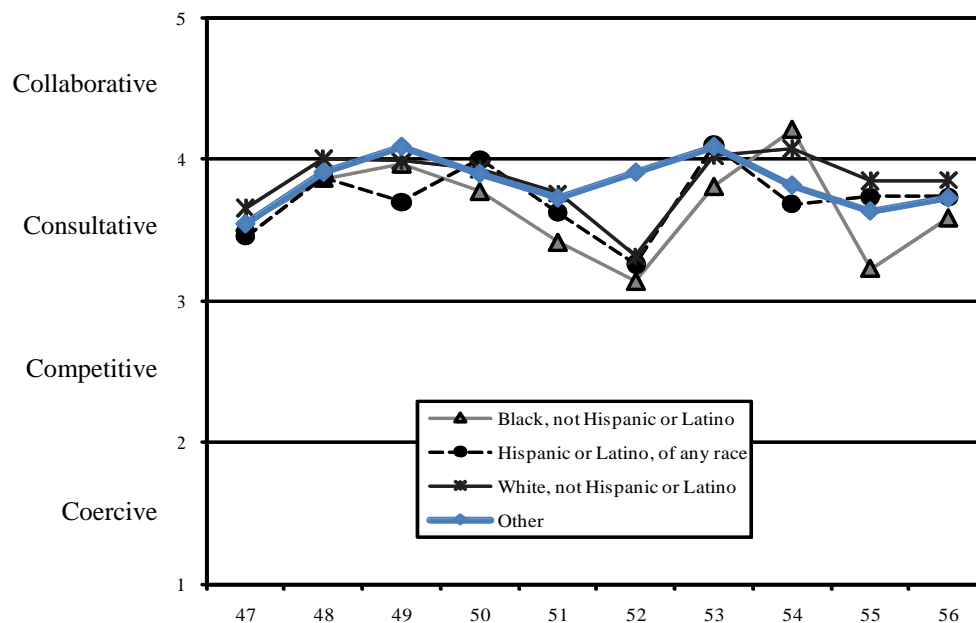
Figure 22. Mean Scores of the Student Focus Climate Factor as Rated by Race/Ethnicity at Grand Rapids Community College



Customized		Black, not Hispanic or Latino	Hispanic or Latino, of any race	White, not Hispanic or Latino	Other*
47	The extent to which I am empowered to pursue my ideas without formal permission	3.55	3.46	3.66	3.55
48	The extent to which I take on new and challenging projects as part of my job	3.87	3.88	4.00	3.91
49	The extent to which I have tried new things that did not work out, but I still plan to try again	3.97	3.70	3.99	4.09
50	The extent to which I work with others outside of GRCC to solve problems related to my work	3.77	4.00	3.93	3.90
51	The extent to which I am supported to explore my natural curiosity as part of my daily work	3.41	3.63	3.76	3.73
52	The extent to which I feel respected when I share an unpopular belief or opinion	3.14	3.26	3.32	3.91
53	The extent to which I have participated on a cross-functional team while at GRCC	3.81	4.10	4.03	4.09
54	The extent to which I have implemented ideas that were shared with me by students	4.21	3.69	4.08	3.82
55	The extent to which I have the opportunity to hear many points of view before making a decision	3.23	3.74	3.85	3.64
56	The extent to which I have sufficient opportunities to experiment with new ways of doing things in my job	3.59	3.74	3.86	3.73

* Other includes American Indian or Alaska Native, not Hispanic or Latino; Asian, not Hispanic or Latino; Native Hawaiian or Other Pacific Islander, not Hispanic or Latino and Two or more races, not Hispanic or Latino

Figure 23. Mean Scores of the Customized Climate Factor as Rated by Race/Ethnicity at Grand Rapids Community College



Tables 25 through 28 contain the top priorities for discussion for each Race/Ethnicity among the standard PACE items and the top priorities for discussion from the customized items developed specifically for Grand Rapids Community College.

Table 25. Priorities for Change: Black, not Hispanic or Latino

	Area to Change	Mean
5	The extent to which the institution effectively promotes diversity in the workplace	3.00
15	The extent to which I am able to appropriately influence the direction of this institution	3.04
25	The extent to which a spirit of cooperation exists at this institution	3.07
16	The extent to which open and ethical communication is practiced at this institution	3.21
44	The extent to which my work is guided by clearly defined administrative processes	3.24
32	The extent to which this institution is appropriately organized	3.31
10	The extent to which information is shared within this institution	3.37
18	The extent to which student ethnic and cultural diversity are important at this institution	3.37
13	The extent to which unacceptable behaviors are identified and communicated to me	3.37
38	The extent to which I have the opportunity for advancement within this institution	3.41
3	The extent to which there is a spirit of cooperation within my work team	3.41
	Area to Change—Customized	Mean
52	The extent to which I feel respected when I share an unpopular belief or opinion	3.14
55	The extent to which I have the opportunity to hear many points of view before making a decision	3.23
51	The extent to which I am supported to explore my natural curiosity as part of my daily work	3.41

Table 26. Priorities for Change: Hispanic or Latino, of any race

Area to Change		Mean
10	The extent to which information is shared within this institution	3.17
15	The extent to which I am able to appropriately influence the direction of this institution	3.29
25	The extent to which a spirit of cooperation exists at this institution	3.38
32	The extent to which this institution is appropriately organized	3.42
38	The extent to which I have the opportunity for advancement within this institution	3.46
11	The extent to which institutional teams use problem-solving techniques	3.48
4	The extent to which decisions are made at the appropriate level at this institution	3.54
45	The extent to which I have the opportunity to express my ideas in appropriate forums	3.54
44	The extent to which my work is guided by clearly defined administrative processes	3.67
16	The extent to which open and ethical communication is practiced at this institution	3.67
36	The extent to which my work team coordinates its efforts with appropriate individuals and teams	3.67
Area to Change—Customized		Mean
52	The extent to which I feel respected when I share an unpopular belief or opinion	3.26
47	The extent to which I am empowered to pursue my ideas without formal permission	3.46
51	The extent to which I am supported to explore my natural curiosity as part of my daily work	3.63

Table 27. Priorities for Change: White, not Hispanic or Latino

Area to Change		Mean
15	The extent to which I am able to appropriately influence the direction of this institution	3.02
4	The extent to which decisions are made at the appropriate level at this institution	3.05
25	The extent to which a spirit of cooperation exists at this institution	3.14
32	The extent to which this institution is appropriately organized	3.16
16	The extent to which open and ethical communication is practiced at this institution	3.21
10	The extent to which information is shared within this institution	3.22
38	The extent to which I have the opportunity for advancement within this institution	3.30
11	The extent to which institutional teams use problem-solving techniques	3.37
44	The extent to which my work is guided by clearly defined administrative processes	3.38
22	The extent to which this institution has been successful in positively motivating my performance	3.39
Area to Change—Customized		Mean
52	The extent to which I feel respected when I share an unpopular belief or opinion	3.32
47	The extent to which I am empowered to pursue my ideas without formal permission	3.66
51	The extent to which I am supported to explore my natural curiosity as part of my daily work	3.76

Table 28. Priorities for Change: Other (Including American Indian or Alaska Native, not Hispanic or Latino; Asian, not Hispanic or Latino; Native Hawaiian or Other Pacific Islander, not Hispanic or Latino and Two or more races, not Hispanic or Latino)

Area to Change		Mean
15	The extent to which I am able to appropriately influence the direction of this institution	2.82
10	The extent to which information is shared within this institution	2.91
4	The extent to which decisions are made at the appropriate level at this institution	3.00
11	The extent to which institutional teams use problem-solving techniques	3.00
32	The extent to which this institution is appropriately organized	3.09
16	The extent to which open and ethical communication is practiced at this institution	3.27
25	The extent to which a spirit of cooperation exists at this institution	3.27
5	The extent to which the institution effectively promotes diversity in the workplace	3.27
17	The extent to which faculty meet the needs of the students	3.30
19	The extent to which students' competencies are enhanced	3.36
Area to Change—Customized		Mean
47	The extent to which I am empowered to pursue my ideas without formal permission	3.55
55	The extent to which I have the opportunity to hear many points of view before making a decision	3.64
56	The extent to which I have sufficient opportunities to experiment with new ways of doing things in my job	3.73
51	The extent to which I am supported to explore my natural curiosity as part of my daily work	3.73

REFERENCES

- Astin, A. W. & Astin, H. S. (2000). *Leadership reconsidered: Engaging higher education in social change*. Battle Creek, MI: W. K. Kellogg Foundation.
- Babbie, E. R. (1990). *Survey research methods* (2nd ed.). Belmont, CA: Wadsworth Publishing.
- Baker, G. A., & Associates. (1992). *Cultural leadership: Inside America's community colleges*. Washington, DC: Community College Press.
- Baker, G. A., & Glass, J. C. (1993). *The McClelland-Atkinson model of motivation*. Unpublished manuscript. University of Texas at Austin.
- Bass, D. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3), 19-31.
- Blanchard, K. (1985). *Situational leadership II*. San Diego: Blanchard Training and Development.
- Bolman, L.G. & Deal, T. E. (1997). *Reframing organizations: Artistry, choice, and leadership* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Caison, A. (2005). *PACE survey instrument exploratory factor analysis*. Report, NILIE, Raleigh, North Carolina.
- Goleman, D. (1995). *Emotional intelligence*. New York: Bantam Books.
- Goleman, D., McKee, A. & Boyatzis, R. E. (2002). *Primal leadership: Realizing the power of emotional intelligence*. Boston: Harvard University Press.
- House, R. J. (1971). A path-goal theory of leader effectiveness. *Administrative Science Quarterly*, 16, 321-338.
- Jago, A. G. (1982). Leadership: Perspectives in theory and research. *Management Science*, 28(3), 315-336.
- Likert, R. (1967). *The human organization: Its management and value*. New York: McGraw-Hill.
- Lipman-Blumen, J. (1996). *Connective leadership: Managing in a changing world*. Oxford, UK: Oxford University Press.
- Northouse, P.G. (2004). *Leadership: Theory and practice* (3rd ed). Thousand Oaks, CA: Sage Publications.
- Roueche, J. E., & Baker, G. A. (1987). *Access and excellence: The open-door college*. Washington DC: Community College Press.
- Schein, E. H. (2004). *Organizational culture and leadership* (3rd ed.). San Francisco, CA: Jossey-Bass.
- Tiu, S. (2001). *Institutional effectiveness in higher education: Factor analysis of the personal assessment of college environment survey instrument*. Unpublished doctoral dissertation, North Carolina State University, Raleigh.
- Yukl, G. S. (2002). *Leadership in organizations* (5th ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.