Program Completers' Perceptions of Learning Outcomes and Learning Support: 2017

Collin College

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Table of Contents

Executive Summary	V
Introduction	1
Instrument	2
Participants	3
Data Analysis	5
Results	5
Section I: Respondent Background Information	7
Section II: Perceptions of Learning Outcomes	9
Section III: Perceptions of Learning Outcomes by Demographic and Completer Background Variables	
Perceptions of Learning Outcomes by Age	33
Perceptions of Learning Outcomes by Gender	33
Perceptions of Learning Outcomes by Ethnicity	35
Perceptions of Learning Outcomes by Race	37
Perceptions of Learning Outcomes by Highest Award Received	38
Section IV: Achievement of Educational Objectives	39
Section V: Perceptions of Learning Support	41
Section VI: Verbal Observations and Suggestions for Collin	43
Summary	45
APPENDIX A	48
Open-ended Comments	48
APPENDIX B	54
Questionnaire	54

List of Figures

Figure 1. Achievement of Educational Objectives	.39
Figure 2. Completers' Highest Awarded Degree by Achievement of Educational Objectives	.39
Figure 3. Importance of and Satisfaction with Aspects of Learning Support – Mean Response	s
	.42

List of Tables

Table 1. Respondents Demographic Profile and Collin Completers Profile	6
Table 2. Award Received	7
Table 3. Perceptions of Learning Outcomes: DQP - Specialized Knowledge Subscale	11
Table 4. Perceptions of Learning Outcomes: DQP - Broad and Integrative Knowledge Subsca	ale
	12
Table 5. Perceptions of Learning Outcomes: DQP - Intellectual Skills Subscale	13
Table 6. Perceptions of Learning Outcomes: DQP – Applied and Collaborative Learning	
Subscale	14
Table 7. Perceptions of Learning Outcomes: DQP – Civic and Global Learning Subscale	15
Table 8. Perceptions of Learning Outcomes: Texas Core Objective – Communication Skills	
Subscale	16
Table 9. Perceptions of Learning Outcomes: Texas Core Objective – Critical Thinking Skills	
Subscale	
Table 10. Perceptions of Learning Outcomes: Texas Core Objective – Empirical and Qualitat	
Skills Subscale	18
Table 11. Perceptions of Learning Outcomes: Texas Core Objective – Personal Responsibilit	ies
Subscale	
Table 12. Perceptions of Learning Outcomes: Texas Core Objective – Social Responsibilities	;
Subscale	
Table 13. Perceptions of Learning Outcomes: Texas Core Objective – Teamwork Subscale	
Table 14. Perceptions of Learning Outcomes: SCANS – Basic Skills Subscale	
Table 15. Perceptions of Learning Outcomes: SCANS – Personal Qualities Subscale	
Table 16. Perceptions of Learning Outcomes: SCANS – Thinking Skills Subscale	
Table 17. Perceptions of Learning Outcomes: SCANS – Information Subscale	
Table 18. Perceptions of Learning Outcomes: SCANS – Interpersonal Subscale	
Table 19. Perceptions of Learning Outcomes: SCANS – Resources Subscale	
Table 20. Perceptions of Learning Outcomes: SCANS – Technology Subscale	28
Table 21. Perceptions of Learning Outcomes: Overall Workforce Preparation	
Table 22. Reliability Comparison Between Survey Administrations	31
Table 23. Perception of Learning Outcomes by Gender	
Table 24. Perception of Learning Outcomes by Ethnicity	
Table 25. Perception of Learning Outcomes by Race	37
Table 26. Perception of Learning Outcomes by Highest Award	38

Executive Summary

This report summarizes the results of a pilot test of the revised Completer Follow-Up Survey conducted in fall 2017 by Collin College's Institutional Research Office (IRO). The pilot survey was administered online to 8,015 Collin College certificate, associate degree, and core curriculum completers (henceforth referred to as program completers) of academic years 2016 and 2017 using the Qualtrics survey administration tool.

The survey instrument for this survey was developed by Collin College's Institutional Research Office, with input from the North Texas Community College Consortium's (NTCCC) Research and Institutional Effectiveness Committee (RIE). The goals of the survey development project included:

- Determine students' perceptions of their own learning outcomes
- Collect feedback regarding students' perceptions of an institution's learning support environment
- Provide institutions with opportunities to benchmark against one another
- Allow some degree of customization to the instrument to address individual institutional needs
- Online survey administration

The survey was developed based on the areas of learning from the Lumina Foundation's Degree Qualifications Profile that were deemed appropriate for an associate degree-granting institution, the U.S. Department of Education SCANS skills, and the Texas Higher Education Coordinating Board's core objectives.

Six hundred and twenty-eight program completers responded to the survey, yielding a valid overall response rate of almost 8 percent. Questionnaires were sent only to completers who had valid email addresses in Collin College's Banner Student System. Many of the completers had earned multiple awards; 51 percent had earned AA, AS, or AAT degrees, 19 percent earned AAS degrees, 64 percent were core curriculum completers, and 29 percent had earned certificates.

Program completers' perceptions were measured to assess their perceptions of the degree to which their learning experiences at Collin College contributed to developing or strengthening their knowledge, skills, or abilities related to 53 areas of learning. Scales ranged from 1 to 4, where level 1 meant the learning experience had no effect on their knowledge, skills, or abilities and 4 meant that the learning experience had greatly developed or strengthened their knowledge, skills, or abilities.

The majority of the program completers believed that their learning experience at Collin College had to some extent or greatly (levels 3 or 4) developed or strengthened their knowledge, skills,

or abilities related to the learning outcomes identified in the pilot survey. Expected learning outcomes with the highest mean scores (i.e., most positive perceptions) included:

- Define and properly use the current terminology in my chosen field. (Mean =3.51)
- Appropriately cite multiple information sources in projects, papers, or presentations.
 (3.50)
- Understand and describe practices and theories of my chosen field. (3.46)
- Use effective listening and observational skills. (3.45)
- Know how to acquire and apply new knowledge and skills. (3.45)

Expected learning outcomes with the lowest mean scores (i.e., least positive perceptions) included:

- Maintain and troubleshoot equipment. (Mean =2.95)
- Participate in local, regional, national, or global communities and gain insights into related social issues. (2.97)
- Effective negotiation skills. (2.97)
- Prepare and use budgets, make forecasts, keep records, and make adjustments to meet objectives. (3.01)

The areas of learning outcomes were sub-divided into 19 subscales. The number of items included in each subscale ranged from 1 to 10. Reliability (internal consistency) analysis of the subscales indicated that all the subscales had good or excellent internal reliability, as measured by the Cronbach's alpha.

Responses varied by gender for items related to teamwork and collaboration skills, communication skills, critical thinking and problem-solving skills, specialized and broad integrative knowledge and intellectual skills, personal management, applied learning, personal responsibility and civic learning. Hispanic and non-Hispanic completers differed in terms of their perceptions of learning gains in communication skills, social and interpersonal skills, thinking and problem-solving skills, knowledge of technology and resourcefulness. Racial groups were statistically different in their perceptions of learning gains in teamwork, personal responsibility, integrative knowledge and intellectual skills. The sole item where significant differences were found in highest award received, was "effectively express ideas through written communication to specific audiences."

Completers were also asked whether they had achieved the educational objective for which they had enrolled at Collin College. Three options were provided to measure their responses: yes, completely; yes, partially; not at all. Ninety-nine percent of the completers indicated that they had achieved their educational goals: seventy-six percent indicated they had achieved them completely while 23 percent indicated they had achieved them partially. Differences based on highest award received were found significant: eight-five percent of AAS completers indicated that they had completely achieved their educational objectives in contrast with 61 percent of Core completers.

In addition to the 53 areas of learning, perceptions about the importance of 33 aspects of student learning support were also measured. Dual scales were used to elicit feedback about students' satisfaction with various aspects of student learning support and to determine how important they found the 33 aspects of student learning support. Satisfaction was measured using a five-point scale ranging from 1 (very dissatisfied) to 5 (very satisfied), and importance was measured using a five-point scale ranging from 1 (not very important) to 5 (very important).

Program completers found registration for classes, overall classroom instructional quality, campus safety and security, admission to the college, academic advising service quality, academic advising accuracy of information, and overall lab instructional quality to be the most important aspects of student support, whereas bookstore, student organizations, and student activities/student life were found to be the least important.

Students indicated that they were most satisfied with college buildings and facilities, campus safety and security, library services quality, library resource availability, access to online services, admission to college, and computer labs. They were least satisfied with career counselling service quality and academic advising service quality, academic advising accuracy of information, and career counselling help with job placement.

Differences between students' perceptions of the importance of given student learning support services and their levels of satisfaction with those same support services resulted in some gaps between importance and satisfaction. The largest gaps between perceived importance and satisfaction occurred in academic advising accuracy of information and academic advising service quality. The smallest gaps occurred in the following student support activities and services:

- library resource availability,
- computer labs,
- · access to information technology,
- bookstore,
- instructional tech support, and
- testing services.

Areas where satisfaction exceeded importance were:

- student activities/student life,
- student organizations,
- · opportunities for informal dialog with instructors, and
- college buildings and facilities.

Eighty-three responses were received for the open-ended question that invited completers to share comments and suggestions. The highest number of comments were positive feedback related to Collin facilities, culture, class schedules and services.

The findings of this pilot survey should be interpreted in light of some project limits. The 2015 and 2017 surveys were administered late in November, pushing them very close to the holidays, consequently producing lower response rates than desired. Repeated reminders were sent to boost responses but they may have contributed to survey fatigue and measurement errors. For future administrations of the survey it is advisable to launch the survey earlier to circumvent this problem. In addition, simplifying the language of some of the items may also be explored as some potential respondents expressed frustration with the survey's language complexity.

Program Completers' Perceptions of Learning Outcomes and Learning Support: 2017

Introduction

This report summarizes the results of a pilot test of the second revision of a new Completer Follow-Up Survey conducted in fall 2017 by Collin College's Institutional Research Office (IRO). The survey was designed to elicit feedback from Collin program completers about how much their learning experiences at Collin College had contributed to developing or strengthening their knowledge, skills, or abilities in various areas of learning.

The survey was first developed by Collin College's Institutional Research Office, with input from the North Texas Community College Consortium's (NTCCC) Research and Institutional Effectiveness Committee (RIE) in 2012. The survey was developed in response to a dearth of commercially available measurement tools specifically designed for community colleges that accommodate effective benchmarking and focus on students' perceptions of important learning outcomes.

The key goals of this program completer survey included:

- Provide institutions with the opportunity to benchmark against one another,
- Focus on students' perceptions of their own learning outcomes,
- Provide feedback to institutions related to perceptions of an institution's learning support environment.
- Allow some degree of customization to address individual institutional needs, and
- Make online administration the primary mode of delivery.

The pilot test of the initial draft in 2013 revealed that the survey was too long and that some items needed to be simplified. Furthermore, a new edition of the Lumina Foundation's Degree Qualifications Profile (DQP), a major source for the survey, was released in 2014. Consequently, the survey was shortened and modified, and tested again in 2015. The results of the 2015 iteration warranted additional modifications in the instrument as several potential respondents expressed that the survey was long and the language too complex. Therefore, the instrument was further shortened and several items reworded. One comprehensive item was added to the survey asking students if they had achieved the educational objective for which they had enrolled at Collin. Additionally, in previous surveys the Perceptions of Learning Support section contained 10 blank items to allow students to add any aspects of student support that were important to them but were not included among the 33 support services in the section. In the 2017 iteration, the blank items were replaced with one open-ended question that invited respondents to share any observations or suggestions for Collin College. This was implemented in view of the findings of the 2015 survey where students had either offered verbal comments in the 10 blank spaces or restated the support services that were already among the 33 items offered.

This third edition of the Program Completer Follow-Up survey was piloted online in fall 2017 using the Qualtrics survey administration platform. All certificate, associate degree, and core

curriculum completers (henceforth referred to as program completers) of academic years 2015-2016 and 2016-2017 who had valid email addresses received an email invitation describing the study and including a link to the survey. Five reminders were sent to the participants who had not yet responded before the survey was closed in February.

Instrument

The survey instrument has two sections: "Perceptions of Learning Outcomes" and "Perceptions of Learning Support." The items used in both sections came from different sources.

A total of 53 items (against 58 in 2015, and 76 in the 2013 pilot) were included in the 2017 Perceptions of Learning Outcomes section. In this section, participants were asked to share their perceptions about how much their experiences at Collin College contributed to developing or strengthening their knowledge, skills, or abilities in several areas of learning using four-point semantic differential-type scales ranging from 1 (had no effect on my knowledge, skills, or abilities in this area) to 4 (greatly developed or strengthened my knowledge, skills, or abilities in this area). With the exceptions of those who concurrently completed AAS degrees and core curriculum, or who concurrently completed certificates and core, no one was asked to respond to all of the 53 items. Based on completers' awards, they were asked to respond to items as follows:

- 9 items were appropriate for students who completed any program,
- 13 items were appropriate for those who completed any associate degree or core curriculum.
- 8 items were appropriate for those who completed Associate of Arts (AA), Associate of Arts in Teaching (AAT), Associate of Science (AS) degrees or the core curriculum, and
- 23 items were appropriate for those who completed an Associate of Applied Science (AAS) degree or a certificate.

Three major sources used as bases for developing the items included in the expected general education learning outcomes: the new edition of Lumina Foundation's Degree Qualifications Profile (DQP), Texas' Core Objectives, and The U.S. Department of Education's SCANS skills related to workforce education. The single item measuring general workforce education outcomes, was developed by Collin College's Institutional Research Office and the NTCCC subcommittee. With several items appearing on more than one subscale, the items were grouped into the following subscales:

<u>Degree Qualifications Profile (DQP) for Expected General Education Learning Outcomes (5 subscales)</u>

The elements of the DQP incorporated into the Completer Follow-up Survey describes what students should know and be able to do after earning an associate's degree or a certificate.

- 1. Specialized Knowledge (SK): 4 items
- 2. Broad, Integrative Knowledge (BIK): 4 items
- 3. Intellectual Skills (IS): 10 items
- 4. Applied and Collaborative Learning (ACL): 4 items
- 5. Civic and Global Learning (CGL): 4 items

Texas Core Objectives for General Education Learning Outcomes: 6 subscales

- 1. Communication Skills (CS): 5 items
- 2. Critical Thinking Skills (CTS): 2 items
- 3. Empirical & Quantitative Skills (EQS): 8 items
- 4. Personal Responsibility (PR): 2 items
- 5. Social Responsibility (SR): 6 items
- 6. Teamwork (TW): 4 items

SCANS for workforce education outcomes: 9 subscales

- 1. Foundations:
 - i) Basic Skills (BS): 5 items
 - ii) Personal Qualities (PQ): 5 items
 - iii) Thinking Skills (TS): 7 items
- 2. Workplace Competencies
 - i) Information (INF): 2 items
 - ii) Interpersonal (INT): 8 items
 - iii) Resources (R): 3 items
 - iv) Technology (T): 3 items

The comprehensive item that asked students if they had achieved the educational objective for which they had enrolled at Collin had three response options: yes, completely; yes, partially; and not at all.

The Perceptions of Learning Support section included 33 items. Sources used for the items in this section were interviews with and feedback from student development/student support professionals. All participants were asked to share their perception of the 33 aspects of student support along each of two dimensions: importance and satisfaction. Perceptions of satisfaction were measured using a five-point semantic differential-type scale ranging from 1 (very dissatisfied) to 5 (very satisfied), while perceptions of importance ranged from 1 (not important at all) to 5 (very important). Respondents were asked to leave the satisfaction scale blank and select a value of 6 on the importance scale if they had no experience with a given aspect of the student support.

The open-ended question, which requested completers to share any observations or suggestions for Collin College, was placed at the end of the survey.

Participants

A total of 8,015 questionnaires were distributed to students who had completed instructional programs during the 2015-2016 and 2016-2017 academic years for whom valid email

addresses were available. The first survey invitation was sent out in late November and was followed by five reminders. By the end of the survey period in mid-February, a total of 628 valid responses were collected.

Assuming a representative sample, the overall response numbers allow for generalizations to the population of all program completers with 95 percent confidence plus or minus 4 percent. Since survey response is based on completer type, the response numbers differed from item to item. The numbers of responses for section I (Perceptions of Learning Outcomes) were as follows:

- 628 for items which were appropriate for any completer,
- 556 for items which were appropriate for associates degree and core completers,
- 447 for items which were appropriate for AA, AS, or core completers, and
- 241 for items which were appropriate for AAS or certificate completers.

The minimum sample sizes required for 95% confidence levels with a 5% margin of error were:

- 367 for items which were appropriate for all completers,
- 365 for items which were appropriate for associates degree and core completers,
- 363 for items which were appropriate for AA, AS, or core completers, and
- 330 for items which were appropriate for AAS or certificate completers.

Except for the items appropriate for the AAS/certificate items the number of responses in all areas exceeded the minimum required for 95% confidence level with 5% margin of error. Given the response numbers listed above, the margin of errors ranged from 3.8 for items which were appropriate for all completers to 6.0 for items which were appropriate for AAS or certificate completers.

A total of 466 responses were obtained for the new comprehensive question on the extent to which the students felt they achieved their educational objectives. The minimum sample size requirement of 367 responses (for 95% confidence and 5% margin of error) was met.

The responses for the Perceptions of Learning Support section differed from item to item. Some respondents left satisfaction scales blank, some selected option 6 ("had no experience"), and some responded to the importance scales only. The number of respondents to the satisfaction scales (excluding those who selected "6=no experience" option) ranged from 182 to 418; and the number of respondents to the importance scales (excluding those who selected "6=no opinion" option) ranged from 220 to 353 respectively. The minimum sample size required for 95% confidence level with 5% margin of error for this section was 367. The margins of error for the Perceptions of Learning Support section varied from item to item.

Eighty-three open-ended response were received in response to the question that invited observations or suggestions for Collin College. The results are summarized in Section VI.

Data Analysis

Data for the survey was collected using Qualtrics, a professional online survey administration platform. After downloading the data from Qualtrics, Microsoft Excel Spreadsheet and SPSS were used for analysis.

The Qualtrics survey tool was selected for this survey for its wide range of features and its collaborative design which provides an ability to share the questionnaire with colleagues at other institutions within the North Texas Community College Consortium.

Results

This report presents the data generated by Collin College program completers and core curriculum completers with regard to their perceptions of:

- the contribution of their experience at Collin College in developing or strengthening their knowledge, skills, or abilities related to 53 indicators of expected learning outcomes,
- the extent to which the completers felt they had achieved their educational objectives at Collin, and
- the importance of and satisfaction with learning support activities and services.

The report is divided into six sections. Section I summarizes the background information of the participants in the pilot survey (Tables 1-2). Section II summarizes perceptions of expected learning outcomes measures categorized under their respective subscales (Tables 3-21). Besides presenting means and standard deviations for each item, Tables 3 through 21 also present Cronbach's alpha coefficients to indicate reliability (internal consistency) of items within each subscale. Table 22 of Section II presents a comparison between Cronbach's alpha coefficients for the survey administrations in 2017, 2015 and in 2013.

Section III includes tables 23 through 26 which present results of one-way analysis of variance (ANOVA) tests where there were significant differences among group means within each of the demographic and completer profile variables across perceptions of learning. The tables present only those items where statistically significant differences were found among group means based on the completer background variables of age, gender, ethnicity, race, highest award, and year of graduation.

Section IV summarizes the data on achievement of educational objectives and perceptions of learning support. Figure 1 presents the data on achievement of education objectives, whereas Figure 2 presents results of a cross tabulation between the completers' highest awarded degree and achievement of educational goals. Section V summarizes the data on perceptions of learning support items. Figure 3 presents the mean scores for level of importance, level of satisfaction, and gap between importance and satisfaction for each aspect of student support activities and services. The items are presented in the order of importance to show which items matter most to the program completers. The performance gap for each item identifies areas of learning support where the college is performing well and areas where improvements can be

made. Section VI presents the themes that the 83 open-ended comments are summarized

under.

Section I: Respondent Background Information

Table 1 presents a demographic profile of the survey respondents in comparison with the overall program completer population. All student background data was acquired from Collin College's Banner system. The comparison underscores some variables where the sample data over- or under-represents specific student attributes. Similar to the results of the 2015 pilot test the 18-22 and 23-29 age categories were considerably underrepresented in the sample, and the 30 and over categories were over-represented. Female representation in the sample was five percentage points higher than the population. Respondents who identified themselves as white and those who had not reported their race or had unknown race were slightly underrepresented compared to all other race categories which were either proportional in representation or were slightly over-represented.

Table 1.

Respondents Demographic Profile and Collin Completers Profile

	Survey S	ample	All Comp	leters
	Frequency	Percent	Frequency	Percent
Age Categories				
17 years and younger	1	0%	4	0%
18-22 years	204	32%	3,396	42%
23-29 years	162	26%	2,560	32%
30-35 years	73	12%	800	10%
36-40 years	52	8%	435	5%
41-54 years	104	17%	682	9%
55 years or older	32	5%	138	2%
Total	628	100%	8,015	100%
Gender				
Female	409	65%	4,774	60%
Male	219	35%	3,241	40%
Total	628	100%	8,015	100%
Ethnicity				
Non-Hispanic	509	81%	6,235	78%
Hispanic	105	17%	1,580	20%
Not reported or unknown	14	2%	200	2%
Total	628	100%	8,015	100%
Race				
American Indian or Alaska Native	4	1%	79	1%
Asian	67	11%	840	10%
Black	94	15%	910	11%
Multiracial	32	5%	343	4%
Native Hawaiian or Other Pacific Islander	4	1%	23	0%
White	387	62%	5,112	64%
Not reported or unknown	40	6%	708	9%
Total	628	100%	8,015	100%

Table 2 presents awards received by completers in the sample and in the population. The comparison indicates that AA/AS/AAT and Core completers were underrepresented in the sample whereas AAS and certificate completers were overrepresented.

Table 2.

Award Received

	Survey S	Sample	All Comp	oleters	
	Frequency	Percent	Frequency	Percent	
AA/AS/AAT	323	51%	4,408	55%	
AAS	122	19%	982	12%	
Core	402	64%	5,568	69%	
Certificate	179	29%	1,774	22%	

Note. Several completers had earned multiple awards therefore column totals do not accurately reflect the sample or population aggregates. The associated percentages have been calculated out of the total number of survey respondents and the total number of program completers respectively.

Section II: Perceptions of Learning Outcomes

This section summarizes data for 53 learning outcome indicators which are divided into 19 subscales. Completers were asked to share their perceptions about how much their learning experiences at Collin College had contributed to developing or strengthening their knowledge, skills, or abilities in various areas of learning using a four-point semantic differential-type scale where 1 represents "had no effect on my knowledge, skills, or abilities in this area" and 4 represents "greatly developed or strengthened my knowledge, skills, or abilities in this area." The tables presented in this section show counts, percentages, means, standard deviations and Cronbach's Alpha scores for each item. Cronbach's Alpha is a reliability score that reflects internal consistency of each subscale. The items are also color-coded to indicate which of the completer groups were required to answer them.

- Green items were presented to all completers
- Blue were presented to AAS or certificate completers
- Red were presented to any associates degree or core completers, and
- Brown were presented to AA, AAT, or AS degree or any core completers

In general, the majority of the respondents positively rated the impact of their learning experiences at Collin College on their knowledge, skills or abilities in all learning areas. Students indicated that their knowledge, skills, or abilities in the following learning areas had been developed or strengthened the most due to their learning experiences at Collin College.

- Define and properly use the current terminology in my chosen field. (\bar{x} =3.51)
- Appropriately cite multiple information sources in projects, papers, or presentations. $(\bar{x}=3.50)$
- Understand and describe practices and theories of my chosen field. (\bar{x} =3.46)
- Use effective listening and observational skills. (\bar{x} =3.45)
- Know how to acquire and apply new knowledge and skills. (\bar{x} =3.45)

They indicated that their knowledge, skills, or abilities in the following learning areas had been developed or strengthened the least due to their learning experiences at Collin College.

- Maintain and troubleshoot equipment. (\bar{x} =2.95)
- Participate in local, regional, national, or global communities and gain insights into related social issues. (\bar{x} =2.97)
- Effective negotiation skills. (\bar{x} =2.97)
- Prepare and use budgets, make forecasts, keep records, and make adjustments to meet objectives. (\bar{x} =3.01)

Summarizing the highest and lowest scoring items it may be concluded that the areas where completers perceived that Collin College had contributed most in developing were specialized expertise and knowledge, intellectual skills and specific skills relating to major fields of study.

The broad areas where completers perceived that Collin College had contributed least revolved around resourcefulness, management skills, interpersonal and social skills, and civic learning.

Table 3 through 21 also present Cronbach's alpha scores for each subscale. All the learning outcomes subscales had good or excellent internal consistency as measured by the Cronbach's alpha. Subscales with alpha coefficients greater than or equal to 0.9 are considered to have excellent internal consistency and subscales with coefficients between 0.7 and 0.9 are considered to have good internal consistency. The Empirical & Quantitative Skills (EQS) of the Texas Core Objectives and the Thinking Skills (TS) subscale of the SCANS-Foundation has the largest alpha coefficient (α =0.95). The subscale with smallest alpha coefficient is Personal Responsibility (PR) of the Texas Core Objectives (α =0.81). It is important to note that this subscale includes only two items, and that the number of items has an impact on the size of Cronbach's alpha.

Table 3.

Perceptions of Learning Outcomes: DQP - Specialized Knowledge Subscale

Cronbach's Alpha=0.91 (K=4, n=169)

Extent to which learning experiences at Collin College developed or strengthened knowledge, skills, or abilities in these areas of learning?

	1	2	3	4	Total	Mean	SD
B1- Understand and describe practices and theories of my chosen field.	1.8%	9.4%	30.0%	58.8%	170	3.46	0.74
B2- Define and properly use the current terminology in my chosen field.	2.4%	8.3%	25.4%	63.9%	169	3.51	0.75
B3- Demonstrate proficiency in the use of tools, technologies, and methods within my chosen field.	2.9%	10.0%	32.4%	54.7%	170	3.39	0.78
B4- Use what I learned in my chosen field to successfully solve work-related problems.	2.9%	10.0%	32.9%	54.1%	170	3.38	0.78

Table 4.

Perceptions of Learning Outcomes: DQP - Broad and Integrative Knowledge Subscale

Cronbach's Alpha= 0.93 (K=4, N=379)							
				eriences at (ills, or abilitie			
	1=had no effect on my knowledge, skills, or abilities 4=greatly developed or strengthened my knowledge, skills, or abilities						
	1	2	3	4	Total	Mean	sd
R1- Describe how knowledge evolves in different fields of learning.	7.0%	12.5%	36.1%	44.4%	385	3.18	0.90
R2- Examine and discuss conflicting ideas on key issues within society.	4.4%	13.2%	33.4%	49.0%	386	3.27	0.85
R3- Recognize and apply appropriate methods to solve a problem in different fields of study.	3.9%	10.7%	35.5%	49.9%	383	3.31	0.82
R4- Describe how different fields of learning define and address the same problem.	5.5%	13.6%	34.2%	46.7%	383	3.22	0.88

Table 5.

Perceptions of Learning Outcomes: DQP - Intellectual Skills Subscale

Cronbach's Alpha=0.94 (K=10, n=31)

				riences at C s, or abilities			
	1=had no effect on my knowledge, skills, or abilities 4=greatly developed or strengthened my knowledge, skills, or abiliti						abilities
	1	2	3	4	Total	Mean	sd
G5- Effectively express ideas through written communication to specific audiences.	3.8%	10.1%	35.0%	51.1%	626	3.33	0.81
B6- Organize and process symbols, pictures, graphs, objects, and other information.	4.7%	11.2%	31.2%	52.9%	170	3.32	0.85
R5- Analyze and understand ideas and practical approaches to problems.	4.7%	10.4%	34.0%	50.9%	385	3.31	0.84
R6- Describe how cultural perspectives could affect interpretations of a problem in the arts, politics, or global relations.	7.0%	11.7%	27.9%	53.4%	384	3.28	0.93
Br1- Appropriately cite multiple information sources in projects, papers, or presentations.	2.2%	9.2%	25.2%	63.4%	317	3.50	0.75
Br2- Translate verbal problems into mathematical form, and accurately solve them.	7.0%	16.8%	28.5%	47.8%	316	3.17	0.95
Br3- Effective discussion skills with specific audiences.	4.8%	9.8%	31.8%	53.7%	315	3.34	0.84
Br4- Apply ethical principles to social or personal problems.	7.0%	11.7%	30.4%	51.0%	316	3.25	0.92
Br5- Generate reasonable interpretations of numeric information, and understand calculations used to support them.	6.6%	11.7%	33.1%	48.6%	317	3.24	0.90
Br6- Effective negotiation skills.	13.6%	17.1%	28.2%	41.1%	316	2.97	1.06

Table 6.

Perceptions of Learning Outcomes: DQP – Applied and Collaborative Learning Subscale

Cronbach's Alpha=0.92 (K=4, n=383)

Extent to which learning experiences at Collin College developed or strengthened knowledge, skills, or abilities in these areas of learning?

	1	2	3	1	Total	Mean	
	1		3	4	TOtal	IVICALI	sd
G4- Gather, organize, and evaluate evidence addressing a practical problem in a work or community setting.	3.8%	12.6%	35.0%	48.6%	628	3.28	0.83
R7- Apply learning from the classroom to real-world problems.	6.3%	11.5%	31.3%	51.0%	384	3.27	0.90
R8- Analyze a concept in class based on learning that occurred outside the classroom.	6.0%	12.0%	33.3%	48.7%	384	3.25	0.89
R9- Identify alternate approaches to addressing a practical problem in a work or community setting.	6.5%	13.5%	33.3%	46.8%	385	3.20	0.91

Table 7.

Perceptions of Learning Outcomes: DQP – Civic and Global Learning Subscale

Cronbach's Alpha=0.90 (K=4, n=306)

	Extent to which learning experiences at Collin College developed or strengthened knowledge, skills, or abilities in these areas of learning? 1=had no effect on my knowledge, skills, or abilities 4=greatly developed or strengthened my knowledge, skills, or abilities									
	1	2	3	4	Total	Mean	sd			
R10- Describe my own social and cultural background, including origins, assumptions, and ways of thinking.	9.4%	12.8%	28.1%	49.7%	384	3.18	0.98			
R11- Describe historical and contemporary positions on democratic values and practices, and present my position on a related problem.	8.3%	14.3%	31.4%	46.0%	385	3.15	0.96			
R12- Participate in local, regional, national, or global communities and gain insights into related social issues.	12.0%	18.7%	30.1%	39.2%	385	2.97	1.03			
Br7- Understand and take positions on international, economic, environmental, or public health challenges.	9.5%	17.5%	27.3%	45.7%	315	3.09	1.00			

Table 8.

Perceptions of Learning Outcomes: Texas Core Objective – Communication Skills Subscale

Cronbach's Alpha=0.91 (K=5, n=32)										
				riences at Co s, or abilities						
	1=had no effect on my knowledge, skills, or abilities 4=greatly developed or strengthened my knowledge, skills, or abilities									
	1	2	3	4	Total	Mean	sd			
G5- Effectively express ideas through written communication to specific audiences.	3.8%	10.1%	35.0%	51.1%	626	3.33	0.81			
G6- Effectively express ideas through oral communication to specific audiences.	5.3%	11.4%	34.5%	48.8%	623	3.27	0.86			
G7- Effectively express ideas through visual communication to specific audiences.	5.3%	14.1%	33.9%	46.8%	626	3.22	0.88			
B6- Organize and process symbols, pictures, graphs, objects, and other information.	4.7%	11.2%	31.2%	52.9%	170	3.32	0.85			
Br3- Effective discussion skills with specific audiences.	4.8%	9.8%	31.8%	53.7%	315	3.34	0.84			

Table 9.

Perceptions of Learning Outcomes: Texas Core Objective – Critical Thinking Skills Subscale

Cronbach's Alpha=0.83 (K=2, n=381)				iences at Col s, or abilities i			
				dge, skills, or hened my kn		kills, or abi	lities
	1	2	3	4	Total	Mean	sd
G1- Innovate and think creatively.	3.7%	14.1%	36.9%	45.3%	623	3.24	0.83
R5- Analyze and understand ideas and practical approaches to problems.	4.7%	10.4%	34.0%	50.9%	385	3.31	0.84

Table 10.

Perceptions of Learning Outcomes: Texas Core Objective – Empirical and Qualitative Skills Subscale

Cronbach's Alpha=0.95 (K=8, n=32)

	Extent to which learning experiences at Collin College developed or strengthened knowledge, skills, or abilities in these areas of learning										
	1=had no effect on my knowledge, skills, or abilities 4=greatly developed or strengthened my knowledge, skills, or abilities										
	1	2	3	4	Total	Mean	sd				
G2- Perform accurate calculations and explain their use in real-world problems.	4.5%	14.5%	38.1%	43.0%	628	3.20	0.85				
G4- Gather, organize, and evaluate evidence addressing a practical problem in a work or community setting.	3.8%	12.6%	35.0%	48.6%	628	3.28	0.83				
G8- Draw informed conclusions based on observable facts.	3.7%	12.8%	34.2%	49.3%	625	3.29	0.83				
R9-Identify alternate approaches to addressing a practical problem in a work or community setting.	6.5%	13.5%	33.3%	46.8%	385	3.20	0.91				
R13- Recognize and analyze observable facts.	6.6%	11.0%	28.6%	53.8%	381	3.30	0.91				
Br2- Translate verbal problems into mathematical form, and accurately solve them.	7.0%	16.8%	28.5%	47.8%	316	3.17	0.95				
Br5- Generate reasonable interpretations of numeric information, and understand calculations used to support them.	6.6%	11.7%	33.1%	48.6%	317	3.24	0.90				
B6- Organize and process symbols, pictures, graphs, objects, and other information.	4.7%	11.2%	31.2%	52.9%	170	3.32	0.85				

Table 11.

Perceptions of Learning Outcomes: Texas Core Objective – Personal Responsibilities Subscale

Cronbach's Alpha=0.81 (K=2, n=316)

Extent to which learning experiences at Collin College developed or strengthened knowledge, skills, or abilities in these areas of learning?

	1	2	3	4	Total	Mean	sd
G3- Connect choices, actions, and consequences to ethical decision making.	4.9%	10.5%	36.6%	47.9%	628	3.28	0.84
Br4- Apply ethical principles to social or personal problems.	7.0%	11.7%	30.4%	51.0%	316	3.25	0.92

Table 12.

Perceptions of Learning Outcomes: Texas Core Objective – Social Responsibilities Subscale

Craphach's Alpha-0.03 (K-6, p-205)

Extent to which learning experiences at Collin College developed or strengthened knowledge, skills, or abilities in these areas of learning?										
1=had no effect on my knowledge, skills, or abilities 4=greatly developed or strengthened my knowledge, skills, or abilities										
1	2	3	4	Total	Mean	sd				
7.0%	11.7%	27.9%	53.4%	384	3.28	0.93				
9.4%	12.8%	28.1%	49.7%	384	3.18	0.98				
8.3%	14.3%	31.4%	46.0%	385	3.15	0.96				
12.0%	18.7%	30.1%	39.2%	385	2.97	1.03				
9.5%	17.5%	27.3%	45.7%	315	3.09	1.00				
9.2%	19.7%	28.6%	42.5%	315	3.04	0.99				
	1=had no 4=greatly 1 7.0% 9.4% 8.3% 12.0% 9.5%	strengthened knowle 1=had no effect on m 4=greatly developed 1 2 7.0% 11.7% 9.4% 12.8% 8.3% 14.3% 12.0% 18.7% 9.5% 17.5%	strengthened knowledge, skills, 1=had no effect on my knowled 4=greatly developed or strength 1 2 3 7.0% 11.7% 27.9% 9.4% 12.8% 28.1% 8.3% 14.3% 31.4% 12.0% 18.7% 30.1% 9.5% 17.5% 27.3%	strengthened knowledge, skills, or abilities in 1=had no effect on my knowledge, skills, or 4=greatly developed or strengthened my knowledge and the strengthened my kn	strengthened knowledge, skills, or abilities in these are 1=had no effect on my knowledge, skills, or abilities 4=greatly developed or strengthened my knowledge, sl 1 2 3 4 Total 7.0% 11.7% 27.9% 53.4% 384 9.4% 12.8% 28.1% 49.7% 384 8.3% 14.3% 31.4% 46.0% 385 12.0% 18.7% 30.1% 39.2% 385 9.5% 17.5% 27.3% 45.7% 315	strengthened knowledge, skills, or abilities in these areas of learn 1=had no effect on my knowledge, skills, or abilities 4=greatly developed or strengthened my knowledge, skills, or abilities 1 2 3 4 Total Mean 7.0% 11.7% 27.9% 53.4% 384 3.28 9.4% 12.8% 28.1% 49.7% 384 3.18 8.3% 14.3% 31.4% 46.0% 385 3.15 12.0% 18.7% 30.1% 39.2% 385 2.97 9.5% 17.5% 27.3% 45.7% 315 3.09				

Table 13.

Perceptions of Learning Outcomes: Texas Core Objective – Teamwork Subscale

					kills, or ab	ilities
1	2	3	4	Total	Mean	sd
6.4%	13.8%	30.3%	49.5%	624	3.23	0.91
4.7%	8.8%	25.3%	61.2%	170	3.43	0.84
4.4%	13.2%	33.4%	49.0%	386	3.27	0.85
9.2%	19.7%	28.6%	42.5%	315	3.04	0.99
	1=had no 4=greatly 1 6.4% 4.7% 4.4%	1=had no effect on n 4=greatly developed 1 2 6.4% 13.8% 4.7% 8.8% 4.4% 13.2%	strengthened knowledge, skills 1=had no effect on my knowled 4=greatly developed or strength 1 2 3 6.4% 13.8% 30.3% 4.7% 8.8% 25.3% 4.4% 13.2% 33.4%	strengthened knowledge, skills, or abilities in the strengthened knowledge, skills, or abilities in the strengthened my knowledge, sk	strengthened knowledge, skills, or abilities in these are 1=had no effect on my knowledge, skills, or abilities 4=greatly developed or strengthened my knowledge, states 1 2 3 4 Total 6.4% 13.8% 30.3% 49.5% 624 4.7% 8.8% 25.3% 61.2% 170 4.4% 13.2% 33.4% 49.0% 386	4=greatly developed or strengthened my knowledge, skills, or ab 1 2 3 4 Total Mean 6.4% 13.8% 30.3% 49.5% 624 3.23 4.7% 8.8% 25.3% 61.2% 170 3.43 4.4% 13.2% 33.4% 49.0% 386 3.27

Table 14.

Perceptions of Learning Outcomes: SCANS – Basic Skills Subscale

Cronbach's Alpha=0.91 (K=5, n=168)											
				ences at Co , or abilities							
	1=had no effect on my knowledge, skills, or abilities 4=greatly developed or strengthened my knowledge, skills, or abilities										
	1	2	3	4	Total	Mean	sd				
G2- Perform accurate calculations and explain their use in real-world problems.	4.5%	14.5%	38.1%	43.0%	628	3.20	0.85				
G5- Effectively express ideas through written communication to specific audiences.	3.8%	10.1%	35.0%	51.1%	626	3.33	0.81				
G6- Effectively express ideas through oral communication to specific audiences.	5.3%	11.4%	34.5%	48.8%	623	3.27	0.86				
B19- Locate, understand, and interpret information.	3.0%	11.2%	30.8%	55.0%	169	3.38	0.80				
B20- Use effective listening and observational skills.	4.7%	7.1%	26.6%	61.5%	169	3.45	0.82				

Table 15.

Perceptions of Learning Outcomes: SCANS – Personal Qualities Subscale

Cronbach's Alpha=0.92 (K=5, n=167)

Extent to which learning experiences at Collin College developed or strengthened knowledge, skills, or abilities in these areas of learning?

	1	2	3	4	Total	Mean	sd
G3- Connect choices, actions, and consequences to ethical decision making.	4.9%	10.5%	36.6%	47.9%	628	3.28	0.84
B7- Demonstrate a high level of effort and perseverance toward goal attainment.	5.4%	4.8%	30.4%	59.5%	168	3.44	0.81
B8- Maintain a positive view of myself.	5.9%	9.4%	22.9%	61.8%	170	3.41	0.88
B9- Demonstrate effective social skills in my chosen field.	4.1%	11.2%	30.0%	54.7%	170	3.35	0.84
B10- Set personal goals, monitor progress, and exhibit self-control to attain those goals.	5.3%	7.1%	32.5%	55.0%	169	3.37	0.83

Table 16.

Perceptions of Learning Outcomes: SCANS – Thinking Skills Subscale

Cronbach's Alpha=0.95 (K=7, n=167)											
	Extent to which learning experiences at Collin College developed strengthened knowledge, skills, or abilities in these areas of learning?										
	1=had no effect on my knowledge, skills, or abilities4=greatly developed or strengthened my knowledge, skills, or abilities										
	1	2	3	4	Total	Mean	sd				
G1- Innovate and think creatively.	3.7%	14.1%	36.9%	45.3%	623	3.24	0.83				
G7- Effectively express ideas through visual communication to specific audiences.	5.3%	14.1%	33.9%	46.8%	626	3.22	0.88				
G8- Draw informed conclusions based on observable facts.	3.7%	12.8%	34.2%	49.3%	625	3.29	0.83				
B6- Organize and process symbols, pictures, graphs, objects, and other information.	4.7%	11.2%	31.2%	52.9%	170	3.32	0.85				
B21- Apply effective decision making.	4.7%	8.2%	28.8%	58.2%	170	3.41	0.83				
B22- Recognize problems and solve them.	4.8%	11.9%	26.8%	56.6%	168	3.35	0.87				
B23- Know how to learn to acquire and apply new knowledge and skills.	5.3%	5.9%	27.7%	61.2%	170	3.45	0.83				

Table 17.

Perceptions of Learning Outcomes: SCANS – Information Subscale

Cronbach's Alpha=0.85 (K=2, n=170)

Extent to which learning experiences at Collin College developed or strengthened knowledge, skills, or abilities in these areas of learning?

	1	2	3	4	Total	Mean	sd
G4- Gather, organize, and evaluate evidence addressing a practical problem in a work or community setting.	3.8%	12.6%	35.0%	48.6%	628	3.28	0.83
B16- Effectively use computers, mobile devices, or specialized equipment or technologies in the workplace.	7.1%	10.6%	29.4%	52.9%	170	3.28	0.92

Table 18.

Perceptions of Learning Outcomes: SCANS – Interpersonal Subscale

Cronbach's Alpha=0.94 (K=8, n=32)

Extent to which learning experiences at Collin College developed or strengthened knowledge, skills, or abilities in these areas of learning?

	. 9,						
	1	2	3	4	Total	Mean	sd
G5- Effectively express ideas through written communication to specific audiences.	3.8%	10.1%	35.0%	51.1%	626	3.33	0.81
G6- Effectively express ideas through oral communication to specific audiences.	5.3%	11.4%	34.5%	48.8%	623	3.27	0.86
G7- Effectively express ideas through visual communication to specific audiences.	5.3%	14.1%	33.9%	46.8%	626	3.22	0.88
G9- Collaborate with others to produce work that draws on knowledge from at least two academic subjects.	6.4%	13.8%	30.3%	49.5%	624	3.23	0.91
B14- Teach workplace skills to others.	10.1%	12.4%	27.2%	50.3%	169	3.18	1.00
B15- Work well with men and women from diverse backgrounds.	4.7%	8.8%	25.3%	61.2%	170	3.43	0.84
B18- Satisfy customers' expectations.	10.0%	8.2%	29.4%	52.4%	170	3.24	0.97
Br6- Effective negotiation skills.	13.6%	17.1%	28.2%	41.1%	316	2.97	1.06

Table 19.

Perceptions of Learning Outcomes: SCANS – Resources Subscale

Cronbach's Alpha=0.89 (K=3, n=169)

Extent to which learning experiences at Collin College developed or strengthened knowledge, skills, or abilities in these areas of learning?

1=had no effect on my knowledge, skills, or abilities 4=greatly developed or strengthened my knowledge, skills, or abilities

	1	2	3	4	Total	Mean	sd
B11- Prioritize actions to accomplish goals and prepare and follow schedules.	4.7%	9.4%	29.4%	56.5%	170	3.38	0.84
B12- Prepare and use budgets, make forecasts, keep records, and make adjustments to meet objectives.	11.8%	16.6%	30.8%	40.8%	169	3.01	1.02
B13- Acquire, store, allocate, and use materials and space efficiently.	8.3%	11.8%	33.1%	46.8%	169	3.18	0.94

Table 20.

Perceptions of Learning Outcomes: SCANS – Technology Subscale

Cronbach's Alpha=0.84 (K=3, n=169)							
				ences at Coll or abilities ir			
	1=had no effect on my knowledge, skills, or abilities 4=greatly developed or strengthened my knowledge, skills, or abilities						
	1	2	3	4	Total	Mean	sd
B3- Demonstrate proficiency in the use of tools, technologies, and methods within my chosen field.	2.9%	10.0%	32.4%	54.7%	170	3.39	0.78
B16- Effectively use computers, mobile devices, or specialized equipment or technologies in the workplace.	7.1%	10.6%	29.4%	52.9%	170	3.28	0.92
B17- Maintain and troubleshoot equipment.	16.0%	13.0%	31.4%	39.6%	169	2.95	1.08

Table 21.

Perceptions of Learning Outcomes: Overall Workforce Preparation

Extent to which learning experiences at Collin College developed or strengthened knowledge, skills, or abilities in these areas of learning?

1=had no effect on my knowledge, skills, or abilities 4=greatly developed or strengthened my knowledge, skills, or abilities

	1	2	3	4	Total	Mean	sd
B5- Master entry-level workplace skills necessary to embark on my chosen occupation.	5.3%	12.4%	24.1%	58.2%	170	3.35	0.89

Note. Cronbach's alpha could not be calculated as the subscale only has one item.

Table 22 presents a comparative analysis of reliability scores across the 2013 through 2017 pilot tests. As the survey instrument went from 76 to 58 to 53 items, the corresponding Cronbach's alpha scores also changed. With the exception of the DQP Intellectual Skills (IS), the DQP Applied & Collaborative Learning (ACL) subscales and the Texas Core Objectives' (TCO) Empirical & Quantitative Skills (EQS) subscale, all subscales remained the same in number of items from 2015 to 2017. The SCANS Workplace Competence Information (Inf) subscale posted the greatest positive change (0.12) in alpha scores even though the number of items was the same in both iterations of the survey. This result may be attributed to rephrasing of the two items for this particular subscale for the 2017 survey. TCO's Personal Responsibility (PR) and SCANS Technology (T) subscales posted the greatest negative change in alpha coefficient of -0.03 in each. Neither subscales had changed in the number of items and both remained over 0.80, indicating good internal consistency. Like the 2015 pilot test, the SCANS Workplace Competence Systems (S) subscale is left blank for 2017 as none of the items fell into the category. Overall, Table 22 suggests that all subscales have retained high internal consistency over the three iterations of the survey.

Table 22.
Reliability Comparison Between Survey Administrations 2013 through 2017

	201	13 Pilot	201	5 Pilot	201	17 Pilot	2015 to	2017
Scales	Number	Cronbach's	Number	Cronbach's	Number	Cronbach's	Change	Change
Scales	of Items	Alpha	of Items	Alpha	of Items	Alpha	in items	in Alpha
Degree Qualification Profile (DQP)								
Specialized Knowledge (SK)	9	0.94	4	0.91	4	0.91	0	0.00
Broad, Integrative Knowledge (BIK)	11	0.96	4	0.91	4	0.93	0	0.02
Intellectual Skills (IS)	9	0.93	11	0.96	10	0.94	-1	-0.02
Applied & Collaborative Learning (ACL)	9	0.94	5	0.92	4	0.92	-1	0.00
Civic & Global Learning (CGL)	6	0.94	4	0.91	4	0.90	0	-0.01
Texas Core Objectives								
Communication Skills (CS)	5	0.92	5	0.88	5	0.91	0	0.03
Critical Thinking Skills (CTS)	4	0.87	2	0.81	2	0.83	0	0.02
Empirical & Quantitative Skills (EQS)	6	0.91	9	0.94	8	0.95	-1	0.01
Personal Responsibility (PR)	2	0.77	2	0.84	2	0.81	0	-0.03
Social Responsibility (SR)	8	0.95	6	0.93	6	0.93	0	0.00
Team Work (TW)	5	0.91	4	0.85	4	0.83	0	-0.02
SCANS - Foundation								
Basic Skills (BS)	5	0.91	5	0.91	5	0.91	0	0.00
Personal Qualities (PQ)	5	0.94	5	0.92	5	0.92	0	0.00
Thinking Skills (TS)	7	0.95	7	0.95	7	0.95	0	0.00
								0.00
SCANS - Workplace Competence	_		_		_			
Information (INF)	5	0.91	2	0.73	2	0.85	0	0.12
Interpersonal (INT)	9	0.95	8	0.94	8	0.94	0	0.00
Resources (R)	4	0.92	3	0.91	3	0.89	0	-0.02
Systems (S)	3	0.94	0	- 0.07	0	-	0	-
Technology (T)	3	0.90	3	0.87	3	0.84	0	-0.03

Note. The alpha score for Overall Workforce Preparation subscale could not be computed as it included only one item.

Section III: Perceptions of Learning Outcomes by Demographic and Completer Background Variables

One-way ANOVA tests were carried out to gauge whether there were significant differences among group means within each of the demographic variables. It is important to remember that the means were computed from responses given on a 1-4 scale with 4 representing highest score, and 1 the lowest. Therefore, higher means represent more positive ratings given to Collin on any given item. Tables 23 through 26 present ANOVA results for only those items that exhibited statistically significant differences.

Perceptions of Learning Outcomes by Age

None of the items showed any statistically significant differences based on age. Using the 0.05 cut-off for determining statistical significance suggests there are no differences among means based on age. This indicates a departure from the 2015 finding where there were age-based differences in two items: "Describe how knowledge or practice is developed, tested, and revised in the sciences, social sciences, humanities, and arts" and "Generate informed conclusions based on numerical data and observable facts."

Perceptions of Learning Outcomes by Gender

Gender differences were the most pronounced among all demographic variables. Nineteen of the 53 items resulted in statistically significant gender differences with probabilities (p-values) ranging from 0.000 to 0.041. Consistent with the findings of the 2015 survey, women held more positive perceptions compared to males about Collin's contribution in achieving learning outcomes (Table 23). The highest mean difference between the two genders was for the item "Effective negotiation skills," where the mean rating for women was 3.07 and for men 2.74. The probability of this result being an outcome of chance is 11 in a thousand. The areas where Collin completers differed based on gender can be summarized into teamwork and collaboration skills, communication skills, critical thinking and problem-solving skills, specialized and broad integrative knowledge, intellectual skills, personal management, applied learning, personal responsibility, and civic learning. In every instance where there are significant differences in perceptions of males and females, the male perceptions of their learning outcomes are significantly lower than were the female perceptions. This clearly suggests that there are systematic differences at play here and the college should earnestly explore avenues to mitigate those differences.

Table 23.

Perception of Learning Outcomes by Gender

	Gender	N	Mean	F (df)	p
G1- Innovate and think creatively.	Male	218	3.13	5.864 (1,621)	0.016
	Female	405	3.30		
	Total	623	3.24		
G2- Perform accurate calculations and explain	Male	219	3.08	6.624 (1,626)	0.010
their use in real-world problems.	Female	409	3.26		
	Total	628	3.20		

Table 23.

Perception of Learning Outcomes by Gender (Continued 1)

	Gender	N	Mean	F (df)	р
G3- Connect choices, actions, and	Male	219	3.11	14.106 (1, 626)	0.000
consequences to ethical decision making.	Female	409	3.37		
	Total	628	3.28		
G4- Gather, organize, and evaluate evidence	Male	219	3.16	8.157 (1,626)	0.004
addressing a practical problem in a work or	Female	409	3.35		
community setting.	Total	628	3.28		
G5- Effectively express ideas through written	Male	217	3.21	8.210 (1,624)	0.004
communication to specific audiences.	Female	409	3.40		
	Total	626	3.33		
G7- Effectively express ideas through visual	Male	218	3.10	6.417 (1,624)	0.012
communication to specific audiences.	Female	408	3.29		
	Total	626	3.22		
G8- Draw informed conclusions based on	Male	218	3.18	5.718 (1,623)	0.017
observable facts.	Female	407	3.35		
	Total	625	3.29		
G9- Collaborate with others to produce work	Male	217	3.08	9.146 (1,622)	0.003
that draws on knowledge from at least two	Female	407	3.31		
academic subjects.	Total	624	3.23		
B5- Master entry-level workplace skills	Male	70	3.19	4.251 (1,168)	0.041
necessary to embark on my chosen occupation.	Female	100	3.47		
	Total	170	3.35		
R1- Describe how knowledge evolves in different fields of learning.	Male	128	3.04	4.640 (1,383)	0.032
	Female	257	3.25		
	Total	385	3.18		
R2- Examine and discuss conflicting ideas on	Male	128	3.14	4.407 (1,384)	0.036
key issues within society.	Female	258	3.33		
85.4	Total	386	3.27	4 000 (4 000)	0.000
R5- Analyze and understand ideas and	Male	127	3.18	4.629 (1.383)	0.032
practical approaches to problems.	Female	258	3.38		
D0 D "	Total	385	3.31	0.540 (4.000)	0.000
R6- Describe how cultural perspectives could	Male	127	3.07	9.513 (1,382)	0.002
affect interpretations of a problem in the arts, politics, or global relations.	Female	257	3.38		
<u> </u>	Total	384	3.28	0.055 (4.000)	0.040
R7- Apply learning from the classroom to real-world problems.	Male	126	3.10	6.655 (1,382)	0.010
world problems.	Female	258	3.35		
D40 Day ill and a last to the state of	Total	384	3.27	4 400 (4 000)	0.005
R10- Describe my own social and cultural	Male	127	3.03	4.492 (1,382)	0.035
background, including origins, assumptions, and ways of thinking.	Female	257	3.26		
	Total	384	3.18	E 004 (4 000)	0.000
R11- Describe historical and contemporary	Male	127	2.99	5.264 (1,383)	0.022
positions on democratic values and practices, and present my position on a related problem.	Female	258	3.23		
	Total	385	3.15	7 700 (4 000)	0.00=
R12- Participate in local, regional, national, or	Male	127	2.76	7.768 (1,383)	0.007
global communities and gain insights into related social issues.	Female	258	3.07		
างเลเงน ขบงเลเ เขอนธิข.	Total	385	2.97		

Table 23.

Perception of Learning Outcomes by Gender (Continued 2)

	Gender	N	Mean	F (df)	р
Br4- Apply ethical principles to social or	Male	95	3.06	5.903 (1,314)	0.016
personal problems.	Female	221	3.33		
	Total	316	3.25		
Br6- Effective negotiation skills.	Male	95	2.74	6.561 (1,314)	0.011
	Female	221	3.07		
	Total	316	2.97		

Perceptions of Learning Outcomes by Ethnicity

The data in Table 24 presents 13 items where difference between ethnic groups (Hispanic or non-Hispanic) were found to be statistically significant under the standard probability cut point of 0.05. The results represent a substantial change from the 2015 pilot survey where only two items were found to have significant differences based on ethnicity. With the exception of one item, Hispanic respondents held more positive perceptions regarding Collin's contribution in attaining learning outcomes compared to non-Hispanics. The highest mean difference between the two groups was for the item "*Teach workplace skills to others*," where the mean rating for Hispanics was 3.71 and for non-Hispanics 3.08. The probability of this result being an outcome of chance is 7 in a thousand. The item "*Appropriately cite multiple information sources in projects, papers, or presentations*" was the only one in which non-Hispanic completers had a higher mean rating than Hispanics (3.54 compared to 3.28). The probability of this being a chance occurrence is 27 in a thousand. The items where differences in ethnicity contributed to statistically significant different observations can be summarized as communication skills, social and interpersonal skills, thinking and problem-solving skills, knowledge of technology and resourcefulness.

While the differences between Hispanic and non-Hispanic program completers was not quite as systematic as were the differences by gender, the fact that Hispanics almost exclusively had more positive perceptions of Collin's contribution to their learning outcomes over a range of areas, suggests a need for discussion about how these differences could be mitigated for non-Hispanic students.

Table 24.

Perception of Learning Outcomes by Ethnicity

	Ethnicity	N	Mean	F (df)	р
B6- Organize and process symbols, pictures, graphs, objects, and other information.	Non-Hispanic	146	3.26	4.212 (1,165)	0.042
	Hispanic	21	3.67		
inomation.	Total	167	3.31		
B8- Maintain a positive view of myself.	Non-Hispanic	146	3.33	6.670 (1,165)	0.011
	Hispanic	21	3.86		
	Total	167	3.40		

Table 24.

Perception of Learning Outcomes by Ethnicity (Continued)

<u> </u>					
	Ethnicity	N	Mean	F (df)	р
B9- Demonstrate effective social skills in	Non-Hispanic	146	3.29	4.827 (1,165)	0.029
my chosen field.	Hispanic	21	3.71		
	Total	167	3.34		
B11- Prioritize actions to accomplish goals	Non-Hispanic	146	3.32	4.169 (1,165)	0.043
and prepare and follow schedules.	Hispanic	21	3.71		
	Total	167	3.37		
B14- Teach workplace skills to others.	Non-Hispanic	145	3.08	7.532 (1,164)	0.007
	Hispanic	21	3.71		
	Total	166	3.16		
B15- Work well with men and women from	Non-Hispanic	146	3.36	6.666 (1,165)	0.011
diverse backgrounds.	Hispanic	21	3.86		
	Total	167	3.42		
B16- Effectively use computers, mobile	Non-Hispanic	146	3.21	5.761 (1,165)	0.017
devices, or specialized equipment or	Hispanic	21	3.71		
technologies in the workplace.	Total	167	3.27		
318- Satisfy customers expectations.	Non-Hispanic	146	3.15	7.421 (1,165)	0.007
	Hispanic	21	3.76		
	Total	167	3.23		
B19- Locate, understand, and interpret	Non-Hispanic	145	3.32	4.574 (1,164)	0.034
information.	Hispanic	21	3.71		
	Total	166	3.37		
B20- Use effective listening and	Non-Hispanic	145	3.39	4.918 (1,164)	0.028
observational skills.	Hispanic	21	3.81		
	Total	166	3.44		
B21- Apply effective decision making.	Non-Hispanic	146	3.34	4.729 (1,165)	0.031
	Hispanic	21	3.76		
	Total	167	3.40		
B22- Recognize problems and solve them.	Non-Hispanic	144	3.28	5.801 (1,163)	0.017
	Hispanic	21	3.76		
	Total	165	3.34		
Br1- Appropriately cite multiple information	Non-Hispanic	259	3.54	4.915 (1,307)	0.027
sources in projects, papers, or	Hispanic	50	3.28	, ,	
presentations.	Total	309	3.50		

Perceptions of Learning Outcomes by Race

Table 25 presents items where race-based differences were identified. Probabilities that differences were due to chance ranged from 0.4% to 4%. Mean perceptions of learning outcomes differed among racial group for six of the items. Multiracial and White respondents consistently rated Collin's contribution significantly lower compared to other races. In four of the six items, Asian respondents rated Collin's contribution the highest while Black respondents rated Collin highest in the remaining two. The largest difference was observed in the "Apply ethical principles to social or personal problems" item where multiracial respondents posted the lowest mean rating of 3.00 and Asian respondents posted the highest mean rating at 3.48. The broad learning areas where variations among racial groups contributed to statistically significant differences in results can be summarized into teamwork, personal responsibility, integrative knowledge and intellectual skills.

Table 25.

Perception of Learning Outcomes by Race

	Race	N	Mean	F (df)	р
G3- Connect choices, actions, and	Asian	67	3.48	3.027 (3,584)	0.029
consequences to ethical decision	Black	94	3.39		
making.	Multiracial/Other	40	3.25		
	White	387	3.19		
	Total	588	3.26		
G9- Collaborate with others to produce	Asian	66	3.47	4.418 (3,581)	0.004
work that draws on knowledge from at	Black	93	3.44		
least two academic subjects.	Multiracial/Other	40	3.18		
	White	386	3.14		
	Total	585	3.23		
R2- Examine and discuss conflicting	Asian	47	3.51	2.793 (3,362)	0.040
deas on key issues within society.	Black	66	3.41		
	Multiracial/Other	24	3.17		
	White	229	3.18		
	Total	366	3.26		
R4- Describe how different fields of	Asian	47	3.40	2.959 (3,359)	0.032
learning define and address the same	Black	64	3.45		
problem.	Multiracial/Other	24	3.13		
	White	228	3.14		
	Total	363	3.23		
R5- Analyze and understand ideas and	Asian	47	3.47	3.359 (3,361)	0.019
practical approaches to problems.	Black	66	3.55		
	Multiracial/Other	24	3.08		
	White	228	3.24		
	Total	365	3.32		

Table 26.

Perception of Learning Outcomes by Race (Continued)

	Race	N	Mean	F (df)	р
Br4- Apply ethical principles to social or	Asian	42	3.48	3.040 (3,293)	0.029
personal problems.	Black	55	3.47		
	Multiracial/Other	20	3.00		
	White	180	3.16		
	Total	297	3.25		

Perceptions of Learning Outcomes by Highest Award Received

Table 26 presents the single item where differences based on highest award were statistically significant. This is a considerable reduction from five items that were found to be significant in 2015. For the sole item "Effectively express ideas through written communication to specific audiences," respondents whose highest completed award was an AAS rated Collin's contribution lowest (3.20) and those who completed AA/AS/AAT rated it the highest (3.42). The probability of this being the result of chance is 3.5 percent.

Table 27.

Perception of Learning Outcomes by Highest Award

	Highest Award	N	Mean	F (df)	р
G5- Effectively express ideas through	AA/AS/AAT	321	3.42	2.885 (3,622)	0.035
written communication to specific	AAS	112	3.20	,	
audiences.	Certificate	72	3.32		
	Core	121	3.24		
	Total	626	3.33		

Section IV: Achievement of Educational Objectives

Completers were asked whether they achieved the educational objectives for which they had enrolled at Collin College. More than three quarters of the completers stated that they had achieved their educational goals completely, while 23 percent stated they had met the goals partially. Only one percent of the respondents selected the "Not at all" option. Cross-tabulation of this question with completer profile variables produced one statistically significant result; eighty-five percent of the AAS completers stated that they had "completely" achieved their educational goals compared to 80 percent of AA/AS/AAT completers, 78 percent of certificate completers and 61 percent of core completers (Figure 2). These findings indicate that compared to other award completers, core completers are significantly more likely to say that they had "partially" attained their education goals at Collin. This could be interpreted as an expected outcome, as core completion is not a terminal degree. However, the differences could also be attributed to personality differences, or differences in question interpretation by various program completers.

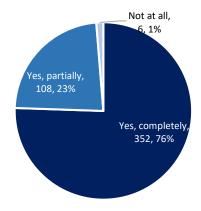


Figure 1. Achievement of Educational Objectives

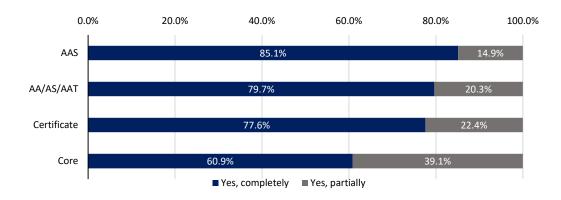


Figure 2. Completers' Highest Awarded Degree by Achievement of Educational Objectives Notes:

- a) Frequency for "Not at all' response option was removed in the analysis in order to achieve adequate cell counts for chisquare test of independence.
- b) The findings were found to be significant with 95% confidence, p-value=0.001 (chi-square=16.93, df=3).

Section V: Perceptions of Learning Support

In this section there were 33 items for which completers were asked to share their perception of the level of importance they placed on each service or activity using a scale of 1 to 5, where 1 represented "not very important" and 5 represented "very important." They were also asked to rate their satisfaction with each service or activity using another five-point scale where 1 represented "very dissatisfied" and 5 represented "very satisfied." When participants had no experience with a given service or activity, they were asked to leave the satisfaction scale blank and select a value of 6 for "no experience" on the importance scale.

Figure 3 compares how important various aspects of student learning support were to program completers with how satisfied they were with those same aspects of learning support. The performance gap is calculated by subtracting the mean satisfaction rating from the mean importance rating. The mean scores for the five-point importance scale ranged from 4.0 to 4.7. The mean scores for the satisfaction scale ranged from 3.9 to 4.5. Based on the mean scores, "Registration for Classes," "Overall Classroom Instructional Quality, "Campus Safety and Security," "Admission to the College," "Academic Advising Service Quality," "Academic Advising Accuracy of Information," and "Overall Lab Instructional Quality" were found to be the most important aspects of student learning support. "Bookstore," "Student Organizations," and "Student Activities/Student Life" were found to be the least important. Students indicated that they were most satisfied with "College Buildings and Facilities," "Campus Safety and Security," "Library Services Quality," "Library Resource Availability," "Access to Online Services," "Admission to College," and "Computer Labs." They were least satisfied with "Career Counselling Service Quality," "Academic Advising Service Quality," "Academic Advising Accuracy of Information," and "Career Counselling Help with Job Placement."

Large positive performance gaps reflect program completers who think the services are important to them, but they are not satisfied with the services they received. Small performance gaps reflect the services for which the importance and satisfaction are more closely aligned with each other; i.e., a given service or activity may be seen as important and satisfaction is high, or satisfaction is lower but the given support service or activity is not viewed as particularly important.

The results of this pilot survey identified "Academic Advising Accuracy of Information" and "Academic Advising Service Quality" as services and activities showing the largest positive performance gaps. Areas with the smallest performance gaps include "Library Resource Availability," "Computer Labs," "Access to Information Technology," "Bookstore," "Instructional Tech Support," and "Testing Services." Areas where satisfaction exceeded importance were "Student Activities/Student Life," "Student Organizations," "Opportunities for Informal Dialog with Instructors," and "College Buildings and Facilities." Identical to the results of the 2015 pilot survey, "Academic Advising Information Accuracy" and "Academic Advising Service Quality" are the aspects of the learning support environment that require the most attention as they are both rated high on importance but exhibit large performance gaps.

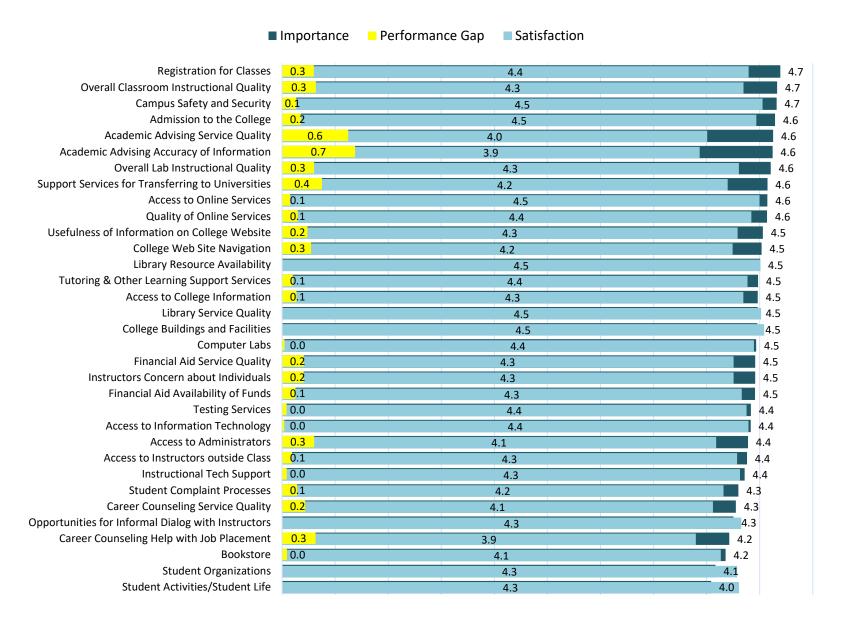


Figure 3. Importance of and Satisfaction with Aspects of Learning Support – Mean Responses

Collin IRO sm; 11/13/2018; Page 42 of 61 J:\IRO\Mirza\Completer Survey\2017\Report\CompleterSurvey2017.docx

Section VI: Verbal Observations and Suggestions for Collin

This section summarizes the comments, suggestions and observations that were shared by the completers. The open-ended question that was added for the first time in the survey elicited 83 responses from the students. Listed below are the broad themes under which the verbal responses have been summarized. The number of comments that the themes are associated with are indicated in parenthesis. Table A of Appendix A presents a list of all the comments under the respective themes that summarize them. Some comments, in which the respondent shared multiple comments, are placed under multiple themes.

- Positive feedback related to Collin facilities, culture, class schedules and services. (31 comments)
- Specific suggestions or complaints regarding classes, services or technology. (16 comments)
- Criticism/disapproval of student services, e.g., advising, counselling, registration, financial aid etc. (13 comments)
- Criticism/disapproval of programs. (8 comments)
- Criticism of faculty or classes. (7 comments)
- Positive feedback related to Collin's teaching and professors. (7 comments)
- General suggestions for improvement of student services. (5 comments)
- Miscellaneous/other comments (8 comments)

Summary

The pilot survey summarized in this report explored how Collin College program completers perceive the impact of their Collin learning experiences on their leaning outcomes. It also provides feedback about how they perceive the College's learning support services and activities. Results obtained indicated that majority of program completers believe that their experiences at Collin College developed or strengthened their knowledge, skills, or abilities in all areas of learning. More specifically, students believe that their knowledge, skills, or abilities had been developed or strengthened the most in learning areas such as:

- Define and properly use the current terminology in my chosen field.
- Appropriately cite multiple information sources in projects, papers, or presentations.
- Understand and describe practices and theories of my chosen field.
- Use effective listening and observational skills.
- Know how to acquire and apply new knowledge and skills.

While still positive, learning areas with lowest perceived outcomes include:

- Maintain and troubleshoot equipment.
- Participate in local, regional, national, or global communities and gain insights into related social issues.
- Effective negotiation skills.
- Prepare and use budgets, make forecasts, keep records, and make adjustments to meet objectives.

The results also indicated moderate to high level of inter-item consistency for each of the subscales. Comparing the reliability scores across the 3 administrations of the survey, the SCANS Workplace Competence Information (Inf) subscale posted the largest improvement in reliability, while Texas Core Objectives' Personal Responsibility (PR), and SCANS Technology (T) subscale posted the posted the greatest decline. The results indicated areas where the survey design might be improved and where the introduction of additional items or rewording of existing items may improve reliability scores in future iterations of the survey.

Responses varied by gender for items related to teamwork and collaboration skills, communication skills, critical thinking and problem-solving skills, specialized and broad integrative knowledge and intellectual skills, personal management, applied learning, personal responsibility and civic learning. Hispanic and non-Hispanic completers differed in terms of their perceptions of learning gains in communication skills, social and interpersonal skills, thinking and problem-solving skills, knowledge of technology and resourcefulness. Racial groups were statistically different in their perceptions of learning gains in teamwork, personal responsibility, integrative knowledge and intellectual skills. The sole item where significant differences were found based on highest award received, was "effectively express ideas through written communication to specific audiences."

Almost all completers indicated that they had completely or partially achieved their educational goals. Differences based on highest award received were found significant in the extent to which the completers felt they had achieved their objectives.

The most important aspects of student support for completers were registration for classes, overall classroom instructional quality, campus safety and security, admission to the college, academic advising service quality, academic advising accuracy of information, and overall lab instructional quality. They indicated that they were most satisfied with college buildings and facilities, campus safety and security, library services quality, library resource availability, access to online services, admission to college, and computer labs.

Student learning support activities and services with the largest performance gaps included academic advising information accuracy and academic advising service quality. Areas with the smallest performance gaps included library resource availability, computer labs, access to information technology, bookstore, instructional tech support, and testing services.

Survey participants also communicated 83 verbal comments in response to the request for observations and suggestions. The largest number of open-ended comments were related to providing positive feedback about Collin facilities, culture, class schedules and services.

The findings of this pilot survey should be interpreted in light of some project limits. Just like the 2015 survey, the 2017 survey was administered very close to the holiday season. This may have contributed to low response rates. Repeated reminders boosted responses but may have contributed to survey fatigue and measurement errors. For future administrations of the survey it is advisable to launch the survey earlier to circumvent this problem. In addition, simplifying the language of some of the items may also be explored as some potential respondents expressed frustration with the survey's language complexity.



APPENDIX A

Open-ended Comments

Table A.

List of Comments by Survey Respondents Summarized Under Respective Themes

Prompt: "Please use the space below to share any observations or suggestions for Collin College:"

Positive feedback related to Collin facilities, culture, class schedules and services. (31 responses)

Overall a good experience I'm an international student so I had to adjust to a different culture.

Great school

Flexible availability for classes made it easier to go to school full time and work full time. Thank you

I look back on my time at Collin fondly, both for the educational experience and the people encountered along the way. What a great place to learn!

The one great thing about Collin college is the diversity of student's that attend and staff...one of the most important aspects of my experience is help with disabilities and how to combat them...

Collin is fantastic. The quality of education I was able to get while working and graduate debt free is astounding.

I have watched Collin College drastically improve function and services over the last 6 years, I am proud to have attended.

Collin College is a great place!!!

I have had a great experience at Collin. Great teachers and flexible tutoring hours. This is a perfect school for working adults. I love the weekend classes and the after 5pm tutoring. I would not have been able to complete my degree without the extended ours offered here. I love it and recommend it to everyone who is thinking about going back to school.

Great institution

Before completing courses at Collin College, I attended two universities. I am the most satisfied with Collin College.

Collin College was very diverse and fair. I appreciated the people and the time the instructor took with each student with aiding on their success while there.

My observations of Collin College overall are good. However, because i was an older adult student/veteran, i would like to thank the members of access office. Specifically, Ms. Jenny Jordan she is always so positive, and up-beat. Collin college needs more people like her!

Overall I have been satisfied with my experience, I did have a couple of professors that wasn't any help but all the other professors made me forget about the bad ones.

I enjoyed my time at Collin College. The only complaint I have is a class that was constructed a year after I enrolled. With that new addition to my degree requirement and its scarce availability, I have yet to earn my Associates Degree. That is only class I have left to complete and it's the one class, due to its requirements, that is difficult to do. I also feel like it's just a repetition of everything you have already completed.

Overall great experience with great teachers and helpful tutors.

I really enjoyed being here. Thank you!

Great school, please encourage student life more especially struggling organizations

Continued 1

I enjoyed my experience at Collin and have good memories associated with it. The most difficult part was the science labs I took because the instructors were not well trained. I would suggest more effort put into choosing lab instructors and making sure they are competent teachers.

I enjoyed my time at Collin college, Spring Creek Campus was always kept clean

Collin has been great. There's not much I can suggest. Keep it up!!

I had an overall great experience with Collin College. It helped prepare me for my field in the hospital and allowed me to push myself and obtain goals I have been working towards for years

Collin College was a very safe environment for me to learn and progress on to university. The Access office was of extreme assistance to me during transition.

Great school! Learned many new things! Thanks!

My time at Collin College prepared me for my current career path. Since I started my professional career, I've found that I've utilized quite a bit of the things I learned in my Certificate program. For that I will be forever grateful. Thank you for being such a wonderful school!

I felt the Collin offered more than some 4 yr. universities. Counseling support was awful.

I transferred to a university to complete my BS. The education I received at Collin College prepared me completely. I believe the education I received at Collin was superior to even my non-transfer cohorts who completed their prerequisite coursework at the university.

The goal of excellence is very visible.

I loved this college. Having more advisors available in a faster way for simple questions would be nice to have.

I work 40 to 60 hours a week; the online classes were very important in allowing me to meet my goal in completing a college degree.

Specific suggestions or complaints regarding classes, services, technology etc. (16 comments)

Scanner in health science computer lab

Better Wi-Fi Connections

Have better dining services. Have much healthier food and variety.

I suggest to create English classes in all Collin college campuses because I can't drive from Top of McKinney to Spring creek for 45 min class.

Tell all teachers when there are events, with time so students can plan ahead

Please give CPC a better veterans lounge and food service area.

Did not get response on request to change bookstore assigned to my login id, this affects my ability to order textbooks online and requires a trip to the correct campus to purchase my textbooks.

Please keeps books for few years and not changing because it's too expensive for students and cannot be used again

Switching of computer systems should have been handled better

Is it possible to inform international students about their change of status about 1 or 2 months earlier so that they have enough time to take action and not find themselves in illegal situation? Thank you.

As a Veteran, I would like for Collin College to ensure that information such as job-training opportunities for Veterans are clearly provided in the future. Overall, Collin College is a great institution and I recommended, thank you.

The student web site needs a serious re-design. The database integration for class enrollment is terrible.

I feel that the on campus cops weren't always around at each campus, especially CPC

Light the parking lots more.

I did not enjoy having my name and address given out to third party agencies. You should not release this data! I am still getting inquiries!

Continued 2

Criticism/disapproval of student services, e.g. advising, counselling, registration, financial aid etc. (13 comments)

The level and degree of political infighting at Collin College is palpable.

Stop using online programs that require students to pay in order to turn in their homework. Quit hiring lazy professors that won't put in the effort to grade a student's assignment themselves.

Did not get response on request to change bookstore assigned to my login id, this affects my ability to order textbooks online and requires a trip to the correct campus to purchase my textbooks.

I enjoyed my time at Collin College. The only complaint I have is a class that was constructed a year after I enrolled. With that new addition to my degree requirement and its scarce availability, I have yet to earn my Associates Degree. That is only class I have left to complete and it's the one class, due to its requirements, that is difficult to do. I also feel like it's just a repetition of everything you have already completed.

It is unfortunate that students have to go to campus to be able to talk to an advisor, admissions or financial aid. Registration is very chaotic here and it's almost impossible to get someone on the phone or to call you back if you leave a message. The best way to contact anyone in advising or financial ad is to email them and even then not all emails are returned. There has to be a better way to make it less of a hassle to register for classes. Why do I need to get ahold of someone to be able to a prerequisite lifted each time I need to register for a class? Why can't they be lifted for all departments, so I can get into a different class if the one I need is filled up? I also had to fight with admissions to get approved for in-state tuition after they said they'd work with me I had to fight with them again because someone screwed up. As much as I love the instructors here and the class set up the hassle of dealing with the registration process is not worth it and I know several students that have the same issues. I understand that every call can't be answered, but each call should be returned in a timely manner.

Great professors, but the school itself needs some internal work, including advising, financial aid, staff, etc.

I regularly met with an advisor [..] at the Frisco campus who put me on a track to transfer with an associate's degree. Not until more than halfway through did she tell me she "thinks" I could transfer to a 4-year university. I personally went to every university I was thinking about transferring to and spoke with an advisor. The classes and degree program she put me in is transferable. Now I am basically starting over and I have no more room to transfer any credits so instead of saving money I will be spending more. Very dissatisfied with the advice I got from her. She has ruined all of my financial advantages by attending CCCC.

Better training for admissions. Having to wait in line again for different depts. is frustrating

I applied for graduation after meeting all of the requirements, and it was simply ignored. Very displeased.

Better online registration; better testing center.

Collin college has more than enough resources for its students. The academic staff is also very knowledgeable. It is a very good economical option. Yet there are several instances when nonacademic staff act carelessly which hurts the good reputation the college has. Thank you. I have met only one instructor that I completely disliked and I did not want to do that course at all and I got a D for it. If you want to learn and you can put the effort but need not depend on anyone else Collin college has all the resources.

I felt the Collin offered more than some 4 yr. universities. Counseling support was awful.

Continued 3

The first time I went to Collin to sign up, I was 18 fresh out of high school. I had no idea where to start. The advisor I met with told me I didn't have the grades to get into Collin. After having a nervous breakdown, I spoke with someone else. Long story short, I was accepted into Collin College. The classes I took the first semester, it seemed as if the professors catered to the older students (30+). If I needed help, the professors wouldn't give me the time of day. If I ever had questions concerning my class schedule, I figured it out on my own. Advising was NO help. I received ZERO funding through scholarships. No, my grades weren't the best, but I worked just as hard as anyone else to get through the program. I recommend this college to any senior in high school because of how cheap it is. But also, the students are getting what they pay for. If you pay for a Walmart brand, you're going to get a Walmart experience.

Criticism/disapproval of programs. (8 comments)

They really need to stop programs with no careers such as hospitality program. Honestly people can get the same job with same pay without wasting their time and money.

The information technology and engineering advisor was rude, inaccessible, and lacked an understanding of real world trends in the field of networking. I was also denied any assistance with job placement despite repeated requests throughout my year or so at the college. The general education part of the college is acceptable, but I would never recommend the information technology program to a friend or colleague.

The Nursing program was the worst experience of my life. Although I passed and went on to graduate from a university with my BSN the experience I had with the Nursing program will forever haunt me. It stripped me of my self-confidence and made me question my self-worth. I was actually told by an instructor I would not make a good Nurse after having an anxiety attack during a test because the stress of having to pass the test was too much. I was told to consider another career path. The test given during the program were full of misspelled words grammatical errors and font issues. I could go on. I have no faith in some of the professors.

For the hospitality program, there are many of us who works full time and agreed Collin needs to have more online or evening classes. There are not enough right now. Also, there are few things the students felt like was pretty pointless such as Capstone binder in the capstone class. It's a matter of hoarding information from the time we started in Collin and does not help us in the real world in anyways. I also think that there should be more full time teacher's verses someone that comes and teach one class per week. Those professors do not seem like they cared much about students. Some particular ones, I feel like they are just there to recruit for their work more than teaching. Overall I think Collin needs to improve on the selection of their professors at least for the Hospitality Program. It has gone down since when I began the program a little over two years ago compared to this very last semester.

Computer science classes need a seriously change of path with the way programming is being taught and topics being covered throughout the semesters, also need available rooms with computers

I did the Paramedic to RN bridge program. It was a disaster. The program changed almost daily. Advisement advise was highly inaccurate. None of us knew what was going on. There was so much false information and false advertisement. The only thing I can compare Collin College's nursing program to is John Steinbeck's Grapes of Wrath. It was such a disappointment. I tell as many people as I can to stay away from Collin's Paramedic to RN bridge program. A lot of the RN instructors there are so self-absorbed and arrogant. Many of them are so far removed from the hospital environment they are clueless and out of touch with reality. I wish I chose a different program. I want those 2+ years of life back.

Nursing department instructors seemed as if they were trapped in middle school. The gossip, bullying, general disdain for their co-workers was very off-putting. I did not enjoy my time at Collin College and felt as if my class was singled out by instructors & administration to feel as if we were beneath them. They only instructors who genuinely cared for us, as a class, left mid-way through our program. We were talked down to and made to feel very unwanted in the nursing program. We were given misinformation multiple times & were not even supplied with correct textbook lists. It was truly a horrible experience, and I do not recommend Collin Nursing to anyone in my field.

Continued 4

Mandatory Service Learning for the Nursing Program was not worth the time and mad eyes it harder to study for my classes. It seemed non beneficial to me as a student and felt like more of an excuse for the college to get tax write offs for it.

Criticism/disapproval of faculty or classes (7 comments)

Stop using online programs that require students to pay in order to turn in their homework. Quit hiring lazy professors that won't put in the effort to grade a student's assignment themselves.

I enjoyed my experience at Collin and have good memories associated with it. The most difficult part was the science labs I took because the instructors were not well trained. I would suggest more effort put into choosing lab instructors and making sure they are competent teachers.

For the hospitality program, there are many of us who works full time and agreed Collin needs to have more online or evening classes. There are not enough right now. Also, there are few things the students felt like was pretty pointless such as Capstone binder in the capstone class. It's a matter of hoarding information from the time we started in Collin and does not help us in the real world in anyways. I also think that there should be more full time teacher's verses someone that comes and teach one class per week. Those professors do not seem like they cared much about students. Some particular ones, I feel like they are just there to recruit for their work more than teaching. Overall I think Collin needs to improve on the selection of their professors at least for the Hospitality Program. It has gone down since when I began the program a little over two years ago compared to this very last semester.

Some online classes weren't helpful, instructor only pointed exercises on book and grade them, I can buy a book for myself no need to pay a class to tell me to follow the instructions on the text book

I had a professor who did a very poor job of teaching. All he did was read off the PowerPoint slides that he made and they were clearly years old. He did very little to help us learn and it was a class I made one of my lower grades in as well. I wish there was an easier way to report teachers who did not do a very good job. He taught marketing.

More availability of expert and very good rated teachers and professors are badly needed for Collin College.

Teacher will do group project and require feedback from students on who deserves which grade. Then proceed to give the best grade to someone who did absolutely no work on the project at all. This should not be an option for any group projects as it is extremely unfair.

Positive feedback related to Collin's teaching and professors (7 comments)

Most of my time spent at Collin was via web classes, however the face-to-face classes I took I thoroughly enjoyed and have recommended those professors to a multitude of people!

Collin College was very diverse and fair. I appreciated the people and the time the instructor took with each student with aiding on their success while there.

Great professors, but the school itself needs some internal work, including advising, financial aid, staff, etc.

I recommend the Paralegal Program to anyone who mentions he/she is interested in pursuing that career. The program run by Marsha Griggs and now Cynthia Gruver is top-notch! I am currently employed as a legal assistant. The paralegal program at Collin College is excellent. It prepared to excel at what I do now as a legal assistant.

Collin college has more than enough resources for its students. The academic staff is also very knowledgeable. It is a very good economical option. Yet there are several instances when nonacademic staff act carelessly which hurts the good reputation the college has. Thank you. I have met only one instructor that I completely disliked and I did not want to do that course at all and I got a D for it. If you want to learn and you can put the effort but need not depend on anyone else Collin college has all the resources.

Continued 5

Quality of education improved from my beginning semester to current year. I felt the professors taught at a 4 yr. University level.

This College was great, I had a lot of great professors that were caring, and intelligent.

General suggestions for improvement of student services (5 comments)

More advisors to shorten lines

Since we have a paralegal studies program, I believe Texas A&M University Commerce should use one of the campuses in Collin County as a satellite location since their Rockwall campus closed nearly a year ago. This would allow students who were reside in the Dallas-Fort Worth Metroplex to attend a closer campus. Besides, other Texas A&M courses are offered on CCCC campuses. Also, both schools are accredited by the American Bar Association, so please encourage A&M to accept more than only four (4) transferred classes from Collin's paralegal program. I believe that Collin College should provide online employment referrals to students because many of us cannot go to the campus to view the job postings tacked on the employment board. Other employment services should also be provided online, such as resume building, practice interviews, Q&As, etc. Lastly, I believe there should be more Financial Aid opportunities provided directly from the school to students based on a range of circumstances. I also believe that books and supplies should NOT cost more than the classes. Otherwise, other options should be provided, such as substitutions, waivers for the costs in excess, or teachers should either choose another course study guide or provide the necessary instruction materials.

I think Collin should require students to come in and talk with Advisors when they have 20 or more credits before taking anymore classes so they can be core complete when they transfer to the university. This will save them money and time.

I loved this college. Having more advisors available in a faster way for simple questions would be nice to have.

To open a day care on each campus. It will be easier to study for moms with kids. And you will get money from day care too.

Miscellaneous/other comments (8 comments)

N/A (5)

You should have left me long. When I did not respond to you

Finding information on the website is often difficult.

I just wanted my two year, I didn't particularly care about quality.

APPENDIX B

Questionnaire

Table B. Questionnaire

B1. Items Presented to All Program Completers

Section I: Perceptions of Learning Outcomes

As you reflect on your time at Collin College, to what extent do you think your learning experiences there developed or strengthened your knowledge, skills, or abilities in the following Areas of Learning?

It is important to understand that you are not being asked to rate yourself or your current abilities within the following areas of learning. Rather, you are being asked to share your perceptions about how much your learning experiences at Collin College contributed to developing or strengthening your knowledge, skills, or abilities.

The items listed on the left are various areas of learning. Please use the 4-point scale on the right to indicate how your experience at Collin had an effect on each area of learning where:

1=had no effect on my knowledge, skills, or abilities in this area 4=greatly developed and strengthened my knowledge, skills, or abilities in this area

Areas of Learning

	1	2	3	4
Innovate and think creatively.				
Perform accurate calculations and explain their use in real-world problems.				
Connect choices, actions, and consequences to ethical decision making.				
Gather, organize, and evaluate evidence addressing a practical problem in a work or community setting.	0	0	0	
Effectively express ideas through written communication to specific audiences.				
Effectively express ideas through oral communication to specific audiences.				
Effectively express ideas through visual communication to specific audiences.				
Draw informed conclusions based on observable facts.				
Collaborate with others to produce work that draws on knowledge from at least two academic subjects.	0	0	0	0

B2. Items Presented to AAS Degree or Certificate Completers

Please use the 4-point scale on the right to indicate how your experience at Collin had an effect on each area of learning where:

1=had no effect on my knowledge, skills, or abilities in this area 4=greatly developed and strengthened my knowledge, skills, or abilities in this area

Areas of Learning

lerstand and describe practices and theories of my chosen field. ine and properly use the current terminology in my chosen field. nonstrate proficiency in the use of tools, technologies, and methods within my sen field. what I learned in my chosen field to successfully solve work-related problems. eter entry-level workplace skills necessary to embark on my chosen occupation. anize and process symbols, pictures, graphs, objects, and other information. nonstrate a high level of effort and perseverance toward goal attainment.		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0
nonstrate proficiency in the use of tools, technologies, and methods within my sen field. what I learned in my chosen field to successfully solve work-related problems. ster entry-level workplace skills necessary to embark on my chosen occupation. anize and process symbols, pictures, graphs, objects, and other information. nonstrate a high level of effort and perseverance toward goal attainment.	0	0	0
sen field. what I learned in my chosen field to successfully solve work-related problems. ster entry-level workplace skills necessary to embark on my chosen occupation. anize and process symbols, pictures, graphs, objects, and other information. nonstrate a high level of effort and perseverance toward goal attainment.	0 0	0	0
ster entry-level workplace skills necessary to embark on my chosen occupation. anize and process symbols, pictures, graphs, objects, and other information. nonstrate a high level of effort and perseverance toward goal attainment.	0	0	0
anize and process symbols, pictures, graphs, objects, and other information. nonstrate a high level of effort and perseverance toward goal attainment.	0		
nonstrate a high level of effort and perseverance toward goal attainment.	0		
ntain a positive view of myself.			
nonstrate effective social skills in my chosen field.			
personal goals, monitor progress, and exhibit self-control to attain those goals.			
ritize actions to accomplish goals and prepare and follow schedules.			
pare and use budgets, make forecasts, keep records, and make adjustments to et objectives.			
uire, store, allocate, and use materials and space efficiently.			
ch workplace skills to others.			
k well with men and women from diverse backgrounds.			
ctively use computers, mobile devices, or specialized equipment or technologies in workplace.			
ntain and troubleshoot equipment.			
sfy customers' expectations.			
ate, understand, and interpret information.			
effective listening and observational skills.			
ly effective decision making.			
ognize problems and solve them.			
w how to learn to acquire and apply new knowledge and skills.			

B3. Items Presented to Associate's Degree or Core Curriculum Completers

Please use the 4-point scale on the right to indicate how your experience at Collin had an effect on each area of learning where:

1=had no effect on my knowledge, skills, or abilities in this area

4-greatly developed and strengthened my knowledge, skills, or abilities in this area

Areas of Learning

	1	2	3	4
Describe how knowledge evolves in different fields of learning.				
Examine and discuss conflicting ideas on key issues within society.	0			
Recognize and apply appropriate methods to solve a problem in different fields of study.	0			
Describe how different fields of learning define and address the same problem.	0			
Analyze and understand ideas and practical approaches to problems.	0			
Describe how cultural perspectives could affect interpretations of a problem in the arts, politics, or global relations.	0		0	
Apply learning from the classroom to real-world problems.				
Analyze a concept in class based on learning that occurred outside the classroom.				
Identify alternate approaches to addressing a practical problem in a work or community setting.	0			
Describe my own social and cultural background, including origins, assumptions, and ways of thinking.	0			
Describe historical and contemporary positions on democratic values and practices, and present my position on a related problem.	0			
Participate in local, regional, national, or global communities and gain insights into related social issues.	0			
Recognize and analyze observable facts.				

B4. Items presented to AA or AS degree or Core Curriculum Completers

Please use the 4-point scale on the right to indicate how your experience at Collin had an effect on each area of learning where:

1=had no effect on my knowledge, skills, or abilities in this area 4=greatly developed and strengthened my knowledge, skills, or abilities in this area

Areas of Learning

	1	2	3	4
Appropriately cite multiple information sources in projects, papers, or presentations.				
Translate verbal problems into mathematical form, and accurately solve them.				
Effective discussion skills with specific audiences.				
Apply ethical principles to social or personal problems.				
Generate reasonable interpretations of numeric information, and understand calculations used to support them.	0	0	0	
Effective negotiation skills.				
Understand and take positions on international, economic, environmental, or public health challenges.	0		0	
Collaborate in developing and implementing an approach to a civic issue.				

B5. Achievement of Educational Goals: Items presented to All Completers

Did	you	achieve the	educational	objective	for which	you e	enrolled	at Collin (College?
	Yes	, completel	y						

Yes, partially

Not at all

B6. Learning Support Environment Items: Presented to All Program Completers

Section II: Learning Support Environment

The items listed in the center column below, identify various aspects of student support at Collin College that are intended to enhance, reinforce, or sustain students' learning experiences and environments.

On the left, please tell us how satisfied you were with each aspect of student support. If you had no experience with a given aspect of student support, select "6=no experience."

On the right, please tell us how important each aspect of student support was for you. If you have no opinion about a given aspect, select "6=no opinion."

<u>Satisfa</u> 1=very dis 5=very s	satisfied					ery	unir	ance mportant portant
1 2 3 4 5	6 = no experience		1	2	3	4	5	6 = no opinion
00000	0	Academic Advising Accuracy of Information	0	0	0	0	0	0
00000	0	2. Academic Advising Service Quality	0	0	0	0		
00000	0	3. Access to Administrators	0		0			
00000	0	4. Admission to the College	0		0			
00000	0	5. Registration for Classes	0					
00000	0	6. Bookstore	0					
00000	0	7. Career Counseling Help with Job Placement	0	0	0	0		0
00000	0	8. Career Counseling Service Quality	0					
00000	0	9. Access to College Information	0		0			
00000	0	10. College Web Site Navigation	0		0			
00000	0	11. Usefulness of Information on College Website	0	0	0	0	0	0
00000	0	12. Computer Labs	0		0			
00000	0	13. Access to Instructors outside Class	0					

00000	0	14. Instructors' Concern about Individuals	00000	
00000	0	15. Opportunities for Informal Dialog with Instructors	0000	0
00000		16. Financial Aid Availability of Funds	00000	
00000		17. Financial Aid Service Quality	00000	
00000		18. Access to Information Technology	00000	
00000		19. Instructional Tech Support	00000	
00000		20. Library Resource Availability	00000	
00000		21. Library Service Quality	00000	
00000		22. Overall Classroom Instructional Quality	00000	
00000		23. Overall Lab Instructional Quality	00000	
00000	0	24. Support Services for Transferring to Universities	0000	0
00000		25. Student Activities/Student Life	00000	
00000		26. Student Complaint Processes	00000	
00000		27. Student Organizations	00000	
00000		28. Testing Services	00000	
00000		29. Tutoring & Other Learning Support Services	0000	0
00000	0	30. Campus Safety and Security	00000	
00000	0	31. College Buildings and Facilities	00000	
00000	0	32. Access to Online Services	00000	
00000	0	33. Quality of Online Services	00000	0

B7. Invitation to Share Any Observations or Suggestions for Collin College

IF YOU ARE READY TO SUBMIT YOUR RESPONSES, PLEASE CLICK ON THE SUBMIT BUTTON BELOW.

If you have any questions about the survey or experience problems submitting your responses, please email smirza@collin.edu.